

EBASCO SERVICES INCORPORATED
FLORIDA POWER & LIGHT COMPANY
PROJECT: TURKEY POINT UNITS 3 & 4

CALCULATION COVER SHEET AND TABLE OF CONTENTS

CALCULATION TITLE 2SB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM		STATUS <input type="checkbox"/> PRELIMINARY <input checked="" type="checkbox"/> FINAL		CALCULATION No. EC-145	
BFI NUMBER 53-20BB/CC		PC/M NUMBER 87-257/258		SUPERSEDED CALCULATION N/A	
<input checked="" type="checkbox"/> SAFETY RELATED		<input type="checkbox"/> QUALITY RELATED		<input type="checkbox"/> NON SAFETY RELATED	
ITEM No.	ITEM DESCRIPTION	SHEET No.	REMARKS		
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2	DESIGN CRITERIA	2			
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REVISION No:	AFFECTED SHEETS (ALSO STATE IF ADDED OR DELETED)	PREPARER	CHECKER	OPT. REVIEW	
		(INITIAL, DATE & PRINT NAME CLEARLY)			
CALCULATION REVISIONS					

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EBASCO SERVICES INCORPORATED
FLORIDA POWER & LIGHT COMPANY
PROJECT: TURKEY POINT UNITS 3 & 4

CALCULATION COVER SHEET AND TABLE OF CONTENTS

CALCULATION TITLE		CALCULATION STATUS		CALCULATION NUMBER	
PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM		<input type="checkbox"/> PRELIMINARY <input checked="" type="checkbox"/> FINAL		EC-145 REVISION 4 JS 3/15/91 SHEET 1A OF 17 SUPERSEDED CALCULATION	
BFI NUMBER	PCM NUMBER	<input checked="" type="checkbox"/> SAFETY RELATED <input type="checkbox"/> QUALITY RELATED <input type="checkbox"/> NON SAFETY RELATED			
53-20BB	87-257/258				
ITEM NO	ITEM DESCRIPTION	SHEET NO	REMARKS		
1	OBJECTIVE	2			
2	DESIGN CRITERIA	2			
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1	10, 11, 12, 13 App 1-2 App 2-24, 68, 10, 12, 13, 17 21 App 3 1, 2 App 4-1, 2 ADDED 10A, 11A, 12A App 2-22A App 4-1A, 3A	J. SOMMA 2/15/90	D. SANDIFORTH 2/15/90	A. SCHILDKRAUT 2/15/90	
0	ALL	J. SOMMA 2/12/90	D. SANDIFORTH 2/12/90	A. SCHILDKRAUT 2/12/90	
REV NO	AFFECTED SHEETS	PREPARED BY/DATE	CHECKED BY/DATE	REVIEWED/APPROVED/DATE (OPTIONAL)	

CALCULATION REVISIONS

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EBASCO SERVICES INCORPORATED

CALCULATION EC-145

BY J SOMMA ^{JS} DATE 3/15/91 Revision 4

SHEET 1B OF 17

CHKD. BY W LEWINGER ^{WR} DATE 3/15/91

OFS NO. 8614.131 DEPT NO. 562

CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

REVISION 2

Sheets Added 1A, 4A, 6A, 9A, 10A, Appendix 9 (Sheet 1 of 1)

Sheets Revised 1 thru 13, Appendix 1 (Sheets 1 thru 3); Appendix 2 (Sheets 1 thru 4, 6, 7, 9-14, 16-23, 26, 27); Appendix 3, Sheets 1 thru 3; Appendix 4, Sheets 1 thru 4; Appendices 5 thru 8.

REVISION 3

Sheets Revised 1, 1A, 2, 6, 6A, 7, 8, 10A, 11A, 12, 12A, 13, Appendix 2, Sheets 1 thru 7, 10 thru 13, 17, 19, 20, Appendices 3 thru 9.

REVISION 4

General Revision Due to the quantity of revised/added/deleted pages, the calculation has been re-paginated in entirety. In addition, due to the quantity and type of revisions to each page, revision bars have not been provided.

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BY J SOMMA ^{JS}

DATE 3/15/91

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SHEET 2 OF 17

CHKD. BY W LEWINGER ^{WL} DATE 3/15/91

OFS NO. 8614.131 DEPT NO. 562

CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

1.0 OBJECTIVE

To demonstrate that the Turkey Point Electrical Auxiliary System will comply with NRC Branch Technical Position PSB-1 and establish a basis for the relay setpoints for the modifications that have been made in the Emergency Power System Enhancement Project due to:

- a. The addition of two new emergency diesel generators (EDGs) and their supporting auxiliaries (Reference 6.26)
- b. The addition of new battery chargers (Reference 6.12 and 6.27)
- c. The addition of new 4.16kV switchgear 3AD & 4AD (References 6.10 and 6.11)
- d. The addition of new 480V swing load centers 3H and 4H and motor control centers 3K, 4D, 4J and 4K (References 6.7, 6.8, 6.9 and 6.26)
- e. Repowering of specific loads required to support failure modes and effects analysis (Reference 6.14)
- f. Increase in size of the Unit 3 EDG air compressors (Reference 6.30)
- g. The addition of motor control centers 3L, 3M, 4L and 4M for the HVAC Upgrade Project (Reference 6.31)
- h. The changeout of load center transformers 3(4) A, B, C and D (Reference 6.40)
- i. The changeout of motor-operated valve motors (Reference 6.33)

2.0 DESIGN CRITERIA

2.1 To comply with PSB-1, the auxiliary system shall:

- a. Have the capability to start and continuously operate all normal and, additionally, all accident equipment (i.e., equipment needed to mitigate an accident that would, in the absence of offsite power, be automatically loaded onto the EDGs), within acceptable voltage limits under worse case conditions.
- b. Be capable of continuously operating all normal and accident equipment without exceeding upper voltage limits.

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BY J SOMMA ^{JS} DATE 3/15/91

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CHKD. BY W LEWINGER ^{WZ} DATE 3/15/91

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SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

2.0 DESIGN CRITERIA (Continued)

2.2 The calculation shall establish the basis for relay settings so that there will be no spurious separation of the plant distribution system from the offsite power source due to actuation of the undervoltage relays.

2.3 The calculation shall be performed with the auxiliary system operating from the start-up transformer (EDG starts but the generator circuit breaker does not close) since upon safety Injection Signal (SIS) the following events will occur:

a. Transfer of loads to startup transformer

b. Trip of Steam Generator Feedwater pump (SGFW)

c. Sequenced start of containment spray (CS), residual heat removal (RHR) and safety injection pumps (SI), emergency containment coolers (ECC), emergency filter fans (ECF), motor operated valves, HVAC loads and EDG auxiliaries required to mitigate an accident.

2.4 Grid shall be at minimum anticipated voltage = 235kV or .983 PU of 239kV (Reference 6.16).

2.5 Based on the present Emergency System Enhancement Project design, there is one (1) Intake Cooling Water (ICW) and one (1) Component Cooling Water (CCW) Pump on each train plus a third service ICW & CCW pump on swing switchgear 4AD (3AD). The plant design only requires one of each of these pumps operating on each train and having the third pump available. However, manual operation of all 3 pumps is possible, so for conservatism 3 ICW and 3 CCW pumps shall be considered running for this analysis.

2.6 Prior to the start of the SI & RHR pump motors, all 4kV motors except the SGFW pump motor shall be running [Condensate Pump (CP), Turbine Cooling Water Pump (TCWP), Circulating Water Pumps (CWP), Heater Drain Pump (HDP), Reactor Coolant Pumps (RCP), Intake Cooling Water Pump (ICW) and Component Cooling Water Pump (CCW) motors].

2.7 480V system running loads prior to SIS shall be based on calculated plant loads per the transformer loading study (Reference 6.3) with an allowance for air conditioning loads of 44.2KW on buses 3B01, 3B04, 4B01, and 4B04 (Reference 6.32).

2.8 After all equipment in Section 2.3.c and 2.6 are running, the system shall be able to re-start the largest motor on the 4.16kV bus, i.e., the SGFWP on "A" Train and the RCP on "B" Train (not simultaneous), while providing sufficient voltage at the running motor terminals.

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BY J. SOMMA ²⁸ DATE 3/15/91 Revision 4 SHEET 4 OF 17
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PROJECT TURKEY POINT PLANT - UNITS 3 & 4
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2.0 DESIGN CRITERIA (Continued)

- 2.9 Minimum voltages at motor terminals (continuous duty and intermittent duty, i.e., MOVs) will be based on the following (References 6.6, 6.19 and 6.22):

<u>4.0KV Motors</u>		<u>460V Motors</u>	
Starting (80%)	3200V	Starting (80%)	368V
Ride-thru (75.5%)	3020V	Ride-thru (72.5%)	333.5V ⁽¹⁾
Steady State (87%)	3480V ⁽²⁾	Steady State (87%)	400V ⁽²⁾

NOTES:

(1) For power plant/industrial use, NEMA design "B" motors are typically used. These motors have a normal starting torque and low starting current. Another NEMA design that may be used is a NEMA design "C" motor which also has a high starting torque and low starting current.

As noted in NEMA MG1-12.38 (Standard 4.5), the breakdown torque of NEMA "B" motors up to 200 HP is 200% minimum. For NEMA design "C" motors the minimum breakdown torque per NEMA MG1-12.38 is 190% minimum. For large motors per NEMA MG1-20.41 breakdown torque is 175% minimum.

Recognizing that torque varies as the square of voltage, utilizing 190% breakdown torque, a running motor 200HP and below will not stall as long as 72.5% of motor rated voltage is available at its terminals. Larger motors require a minimum of 75.5% of motor rated voltage.

(2) As noted in Reference 6.19, continuous operation at 87% (inverse time relay setting) of motor rated voltage and operation for up to 90 seconds at 79.24% (instantaneous relay setting) based on design margin in motors, is acceptable.

- 2.10 During starting transients, contactors at the MCCs shall pickup:

- a. For new MCCs, contactors pickup with 75% of 480V or 360V at the MCC bus (References 6.23 and 6.53 (Note R)).

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BY J. SOMMA ²² DATE 3/15/91

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2.10 (Continued)

- b. For old MCCs Reference 6.18 indicates that tests and calculations show that contactors will pickup with the following voltages at each MCC:

<u>MCC</u>	<u>Unit 3</u>	<u>Unit 4</u>
A	332	386
B	381	381
C	394	332
D	392	-

- 2.11 During starting transients, contactors at the MCCs shall not drop-out. As the drop-out voltage is always less than the pickup voltage, compliance with 2.10 ensures that this criterion will be met.
- 2.12 At light load, with grid voltage at 244kV, minimum 4kV motors running and 1/2 normal load on the 480V buses (Reference 6.2), the motors shall not be subjected to continuous overvoltage (i.e. more than 4400V or 506V).
- 2.13 There are two (2) inverse time single-phase type GE IAV55C undervoltage relays per 480V load center 3(4) A, B, C, and D. It will take 60 ± 30 seconds for the relay to dropout (Reference 6.54). The steady state relay setpoint for degraded voltage conditions shall be based upon 3480V or 400V at motor terminals plus cable voltage drop from motor to 4.16kV switchgear or 480V load center, respectively (running) plus 5 volts (Reference 6.19). An additional margin (in volts) will be added for conservatism and to minimize exposure to future changes.
- 2.14 There are two (2) instantaneous single-phase type ITE-27H undervoltage relays per 480V load center 3(4) A, B, C, and D. The output signal is delayed ten (10) seconds \pm one (1) second (Reference 6.54). The relay setpoint during motor starting for degraded voltage conditions coincident with an SI signal shall be based upon 3169.6V or 364.5 (Reference 6.19) plus cable voltage drop (starting) plus 5 volts. An additional margin (in volts) was added for conservatism and to minimize exposure to future changes (See Appendix 4). Motor-operated valves voltage will be considered for the instantaneous case only, based on the valve changing its state as required.
- 2.15 All low voltage AC (less than 480V) class 1E buses supplying power to vital instrumentation and control circuits are powered by inverters supplied from the 125V dc station batteries (Reference 6.20) and therefore are not affected by the degraded grid condition.

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EBASCO SERVICES INCORPORATED

CALCULATION EC-145

BY J. SOMMA ⁸ DATE 3/15/91

Revision 4

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2.0 DESIGN CRITERIA (Continued)

- 2.16 According to the battery charger vendor, the chargers can tolerate input voltage dips of 25% (360V) for 3 seconds and will return to regulated output when the voltage returns to 85% of nominal (References 6.17 and 6.24). Further, during this transient, the battery charger input breaker will not trip.

3.0 APPLICABLE CODES

None

4.0 APPLICABLE STANDARDS

- 4.1 NRC - Power Systems Branch Technical Position PSB-1 - Adequacy of Station Electric Distribution System Voltages 4/17/81
- 4.2 ANSI C37.010-1979 - Application Guide for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current-Basis
- 4.3 ANSI C37.13-1981 - Low Voltage AC Power Circuit Breakers Used in Enclosures
- 4.4 NEMA AB-1-1975, Revision 3 - 1978 - Molded Case Circuit Breakers
- 4.5 NEMA MG-1-1978 (R1981), Motors and Generators

5.0 ASSUMPTIONS

- 5.1 Unless otherwise noted, the running power factor of motors is assumed to be 0.85 and the operating efficiency 0.92 (References 6.6 and 6.1).
- 5.2 Power factor of starting loads shall be 0.42 for Emergency Containment Coolers, 0.35 for Emergency Containment Filters, 0.15 for Containment Spray Pumps (Reference 6.6), 0.6 for motor operated valves (Reference 6.6), and 0.2 for all other motor loads (Reference 6.1).
- 5.3 Unless otherwise noted starting current shall be 6 times full load amps for motors (Reference 6.1).
- 5.4 All running loads assumed to be constant KVA (Reference 6.1).
- 5.5 The system available MVA for volt drop analysis is at its minimum of 4439 MVA (Reference 6.21).

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6.0 REFERENCES

- 6.1 Ebasco computer program AUXSYS 4078 - 12/31/89
- 6.2 Calculation EC-141, Short Circuit and Voltage Drop Analysis, Revision 2
- 6.3 Calculation EC-138, Load Center Transformer Loading, Revision 3
- 6.4 FPL letter EPP-PTPO-81538 dated June 1, 1981 (C. S. Kent - PPE to R. J. Acosta- PR); Subject - Adequacy of Station Electric Distribution System Voltages
- 6.5 FPL letter JPE PTPO-81-1854 dated November 22, 1982 (C. S. Kent - PPE to W. A. Klein - NE); Subject - Degraded Grid Protection for Class 1E power systems
- 6.6 NRC Letter (S A Varga) to FPL (R E Uhrig) dated October 22, 1982; Subject - NRC Request for Information Concerning Degraded Grid Protection on Class 1E Systems
- 6.7 PC/M 87-257 Load Center 4H and MCC 4D, Revision 3
- 6.8 PC/M 87-258 Load Center 3H and Repowering of MCC D (3D), Revision 3
- 6.9 PC/M 87-264 EDG 3B/4B, EDG 3A/4A and new EDG Building Tie-ins, Revision 3
- 6.10 PC/M 87-265 Swing Swgr 3D and Transfer of ICW & CCW 3C Pumps, Revision 4
- 6.11 PC/M 87-266 Swing Swgr 4D and Transfer of ICW & CCW 4C Pumps, Revision 4
- 6.12 PC/M 87-267 Station Battery Chargers Installation, Revision 1
- 6.13 PC/M 89-069 New Electrical Equipment Room, Revision 4
- 6.14 Report No. 53-20J.5008, Revision 0: 125V D.C., 480 VAC, 4.16 kV Failure Modes and Effects Analysis (FMEA) as transmitted under EBASCO letter PTP-90-071 dated February 2, 1990
- 6.15 Calculation EC-50, MOV Thermal Overload Heater Selection, Revision 1
- 6.16 FPL letter L-79-323 dated November 9, 1979 (R. E. Uhrig - FPL to W. Gammill - NRC); Subject - Clarification of Under Voltage Protection
- 6.17 FPL specification FLO 53-20.2006, Revision 3, Turkey Point Units 3 and 4, 125V Battery Charger

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6.0 REFERENCES (Continued)

- 6.18 FPL letter L-82-211 to NRC dated May 20, 1982 (R. E. Uhrig - FPL to S. A. Varga - NRC); Subject - Analysis of 120 volt AC System
- 6.19 FPL letter L-83-1 dated January 3, 1983 (R. E. Uhrig - FPL to S. A. Varga - NRC); Subject - Modification of Technical Specifications to Include Surveillance Requirements for Loss of Voltage Relays
- 6.20 NRC letter dated October 28, 1982 (S. A. Varga - NRC to R. E. Uhrig - FPL); Subject - Safety and Technical Evaluations concerning Degraded Grid Protection for Class 1E Power Systems
- 6.21 EBASCO letter PTP-90-059 dated January 22, 1990 and FPL response JPN-PTP-90-0311 dated February 21, 1990; Subject - System MVA Contribution
- 6.22 FPL letter EPP-PTOP-82190 dated February 8, 1982 (C. S. Kent - PPE to R. J. Acosta - NE); Subject - Response to NRC Request for Information Concerning Adequacy of System Voltages
- 6.23 FPL Specification FLO 53-20.2005 Revision 2, Turkey Point Units 3 and 4, Motor Control Centers
- 6.24 Ebasco letter ES-VE-90-029 dated February 2, 1990; Subject - Comments to SCI Installation and Operating Manual and Drawings for Battery Charger .
- 6.25 Load Sequencer Logic Sketch SK-53-20.2013-2 Sh. 2 of 2, Revision 2
- 6.26 PC/M 87-263, New EDG Installation, Revision 9
- 6.27 PC/M 88-350, Station Battery Chargers Replacement, Revision 1
- 6.28 Turkey Point Units 3 and 4 CRN-E-9568 dated February 21, 1991; Subject - Raceway Modifications
- 6.29 Calculation No. 5177-326-E-01, Revision 0, Attachment D, Sh. 12 of 33
- 6.30 FPL letter JPN-PTP-90-1774 dated June 12, 1990 - PC/M 90-108 modifications to Unit 3 EDG Air Start systems
- 6.31 PC/Ms 90-070 (Unit 3) and 90-071 (Unit 4) Revisions 0, Load Center and Switchgear Rooms Chilled Water Air Conditioning System
- 6.32 Calculation No. 18712-342-E-02, Revision 0 - Electrical Design Calculation for Switchgear and Load Center Rooms Air Conditioning System

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6.0 REFERENCES (Continued)

- 6.33 FPL letter JPN-PTN-91-5055 dated February 21, 1991 (S. T. Hale - FPL to J. R. Martin - Ebasco); Subject - MOV Modifications
- 6.34 Drawing No. 5613-E-10 Sh. 1/87-257, Revision 1, One Line Diagram MCC's 3A, NV3A, 3B, NV3B, 3C, NV3C
- 6.35 Drawing No. 5610-T-L1 Sh. 27, Revision 3, MOV 750 and 751, Loop C Hot Leg
- 6.36 Drawing No. 5613-E-10 Sh. 1/87-264 Revision 1, One Line Diagram, Motor Control Centers 3A, NV3A, 3B, NV3B, 3C, NV3C
- 6.37 Drawing No. 5610-E-8-51/87-258, Revision 3, MCC 3D Waste Disposal Area 3B08 Schedule
- 6.38 Drawing No. 5614-E-10, Sh. 1/87-264, Revision 1, One Line Diagram, Motor Control Centers 4A, NV4A, 4B, NV4B, 4C, NV4C
- 6.39 Drawing No. 5614-E-10, Sh. 2/87-264, Revision 1, One Line Diagram, Motor Control Center 4D, 4J, and 4K
- 6.40 FPL letter JPNS-D/S-PTN-91-0245 dated February 27, 1991 (S. T. Hale - FPL to J. R. Martin - Ebasco), Replacement Transformer Impedances
- 6.41 Drawing No. PTN-E-87-257-001, Revision 5, Circuit Raceway Schedule
- 6.42 Drawing No. PTN-E-87-258-001, Revision 5, Circuit Raceway Schedule
- 6.43 Drawing No. PTN-E-87-264-001, Revision 5, Circuit Raceway Schedule
- 6.44 Drawing No. PTN-E-87-265-001, Revision 6, Circuit Raceway Schedule
- 6.45 Drawing No. PTN-E-87-266-001, Revision 5, Circuit Raceway Schedule
- 6.46 Drawing No. 5610-E-305, Revision 34, Turkey Point Units 3 and 4, Electric Circuit Schedule
- 6.47 Turkey Point Units 3 and 4 CRN E-7134 dated April 26, 1990, Raceway Modification
- 6.48 Okonite Bulletin EHB-90, "Engineering Data for Copper and Aluminum Conductor Electrical Cables", 1990

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EBASCO SERVICES INCORPORATED

CALCULATION EC-145

BY J. SOMMA ⁸ DATE 3/15/91

Revision 4

SHEET 10 OF 17

CHKD. BY W. LEWINGER ^W DATE 3/15/91

OFS. NO. 8614.131 DEPT NO. 562

CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

6.0 REFERENCES (Continued)

- 6.49 Calculation EC-096, "Cable Ampacity and Voltage Drop", Revision 1
- 6.50 Drawing No. 5610-E-1611 Sh. 2/87-259, Revision 7, Electrical Manholes, Sections and Details, EDG 4A and 4B
- 6.51 Turkey Point Units 3 and 4 CRN-E-7379 dated October 1, 1990, Raceway Modification
- 6.52 Turkey Point Units 3 and 4 CRN-E-6768 dated March 2, 1990, Raceway Modification
- 6.53 Drawing 5614-E-8A-11/87-257, Revision 3, MCC 4D (4B08) Electrical Equipment Room Area
- 6.54 Ebasco Report No. FLO 53-20.5004, Revision 6 - Emergency Power System Relay Coordination Study

7.0 CALCULATION

- 7.1 The calculation is performed by means of an Ebasco computer program AUXSYS 4078 - 12/31/89 which has been verified under EBASCO's QA program.
- 7.2 All calculations are made on a 40MVA base.
- 7.3 All load input data, transformer impedance and tap setting data is the same as used in Calculation EC-141 (Reference 6.2) as modified by References 6.31, 6.32, 6.33 and 6.40 (Note: Replacement load center transformer impedances were not corrected for tap setting 'D' (0.975pu). This represents a slight margin which may be utilized in future reviews). In addition, motor operated valve data is included as developed in Appendix 1, based on Reference 6.15. Cable data used is based on Appendix 2.
- 7.4 The program references certain factors designated K₁ thru K₇. These are defined as follows:
 - K₁ Interrupting duty multiplier for medium voltage motor locked rotor reactance, depending on Hp, speed and type of motor. K₁ fixes K₂ per 5.4.1 of ANSI C37.010-1979.

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7.0 CALCULATION (Continued)

7.4 (Continued)

K₂ Close & latch duty multiplier for medium voltage motor locked rotor reactance - per 5.4.1 of ANSI C37.010-1979.

K₃ Interrupting current offset multiplier for medium voltage circuit breaker per Fig 10 of ANSI C37.010.1979.

K₄ Interrupting current offset multiplier for low voltage circuit breakers per Table 3 of ANSI C37.13-1981.

K₅ Interrupting current offset multiplier for molded case circuit breakers per NEMA AB-1-1975, Rev 3-1978.

K₆ Multiplying factor for subtransient reactance X'' of a low voltage motor (presently standards only allow K₆ = 1).

K₇ Multiplying factor for transient X' of a low voltage motor (presently standards only allow K₇ = 1).

7.5 The tap settings on Load Center Transformers 4A, 4B and 4C have been included at 0.975 of rated voltage. This is the same setting as the existing tap on transformer 4D. Appendix 2 of EC-141 (Reference 6.2) shows that even at very light load conditions this will not result in overvoltage conditions on the 480 volt system equipment when operating from the startup transformer with the system at maximum expected voltage of 244kV.

7.6 Except as noted in Appendix 2, the cable impedances are based on 90°C conductor temperatures with the cables run totally in magnetic conduit which gives the most conservative results for voltage drop.

7.7 For voltage drop, a total of 8 computer runs comprising 88 individual cases were made starting the loads identified in Section 2.3c for:

Unit 3

Unit 4

Startup Transformer

Startup Transformer

The ICW and CCW pumps are modeled as running per Design Criterion 2.5.

BY J. SOMMA JS DATE 3/15/91 Revision 4SHEET 12 OF 17CHKD. BY W. LEWINGER W2 DATE 3/15/91OFS. NO. 8614.131 DEPT. NO. 562CLIENT FLORIDA POWER & LIGHT COMPANYPROJECT TURKEY POINT PLANT - UNITS 3 & 4SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM7.0 CALCULATION (Continued)

7.8 The 11 voltage drop cases for each unit model the following situations. Cases 1-8 match the 8 blocks of the EDG load sequencer, which also controls application of emergency loads on transfer to the startup transformer.

Case 1 - This case represents the plant loaded approximately in accordance with EC-138 (Reference 6.3) and similar to the EDG loading, all emergency MOVs are assumed to start simultaneously. In addition, all the HVAC loads 5 HP and below are assumed to start simultaneously for conservatism. This case includes all 480V loads except CS, ECC, ECF and HVAC over 5 HP.

Case 2 - RHR (P210A & B) and SI (P215A & B) pumps start simultaneously.

Case 3 - Containment spray pumps (P214A & B) and Emergency containment coolers ECC-3V30A & C (4V30B & C on Unit 4) start simultaneously.

Case 4 - ECC-3V30B (4V30A on Unit 4) starts. The sequencer also signals the ICW pumps (P39A, B or C) to start, however, with offsite power available, they have never tripped and hence are already running. Based on this, and Criterion 2.5, ICW pump starts are not included.

Case 5 - No motor starts. The sequencer will signal the CCW pumps (P211A, B or C) to start, however, similar to Case 4, the required number of pumps are already operating and hence no starts are modelled.

Case 6 - Emergency containment filters ECF 3V3A & C (4V3B & C on Unit 4) start.

Case 7 - ECFs 3V3B (Unit 3) and 4V3A (Unit 4) start.

Case 8 - HVAC loads larger than 5 HP with inherent or intentional time delays start. For conservatism, all are modelled starting simultaneously.

Case 9 - This is not part of the normal load sequence. It fulfills the PSB-1 requirement to restart the largest motor on bus AA1 with all loads running - 7000 HP SGFWP (P1).

Case 10 - Same as case 9 except restart largest motor on bus AB1 with all loads running - 6000 HP RCP (P200).

Case 11 - Late start of both containment spray pumps (P214 A & B), assuming that the normal containment coolers (V1A, B, C and D) have tripped.

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7.9 The computer program only prints out motor terminal voltages at

1. The motor which is being started
2. Any other motors which are below preset alarm values. These show as "warnings".

In order to obtain details of the terminal voltage at various motors it is necessary to set high alarm values and hence "warnings". appear in the computer printouts where no problems exist. To provide data for maximum cable volt drops while minimizing data output, alarm values of 96% for safety buses, 90% for non-safety buses (steady state) and 82% for safety buses, 80% for non-safety buses (during starts) are used.

7.10 Inspection of the printouts for individual volt drop cases in Appendices 5 through 12 shows that all motors meet the criteria in Section 2.9 except as noted below:

Unit 4 - No problems identifiedUnit 3 - No problems identified in Cases 1 thru 8 and 10 and 11. For Case 9 see below.Motor DescriptionBus 3B03 (Appendix 7)

3V30B

72.1% during

The ride-thru voltage is very close to the criteria limits (i.e. 72.5%) which are set for NEMA C motors with 190% breakdown torque. 3V30B has a breakdown torque of 263% (Reference 6.29), therefore, this motor can ride-thru at approximately 62% rated voltage. Based on this the motor voltage calculated is considered acceptable.

8.0 COMPUTER PRINTOUTS & INFORMATION

Appendices 5, 7, 9 and 11 show the computer input & output data for Unit 3. Appendices 6, 8, 10 and 12 show the computer input & output data for Unit 4.

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PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

9.0 SUMMARY

9.1 The design has been revised to include the new motor control centers 3L, 3M, 4L and 4M for the HVAC Upgrade project and corresponding load increases (Reference 6.31), the as-built impedances for the replacement load center transformers 3(4) A, B, C, and D (Reference 6.40), the revised motor data for replacement MOV motors (Reference 6.33), updated cable impedances (References 6.41 through 6.47), and miscellaneous other changes.

9.2 All starting motors and MOV terminal voltages meet the criteria of Section 2.9.

9.3 Appendix 4 establishes the relay setting voltages based on criteria 2.13, 2.14 and the motor and bus voltages from Appendices 5, 7, 9 & 11 for Unit 3; and Appendices 6, 8, 10 & 12 for Unit 4. The values tabulated below and used for relay settings include extra margin (in volts) for conservatism and to minimize exposure to future changes:

Unit 3

	3A (3B01)	3B (3B02)	3C (3B03)	3D (3B04)
<u>Load Center</u>				
480V Instantaneous (327H)	430V	438V	434V	434V
480V Inverse Time (327T)	424V	427V	437V	435V

Unit 4

	4A (4B01)	4B (4B02)	4C (4B03)	4D (4B04)
<u>Load Center</u>				
480V Instantaneous (327H)	435V	434V	434V	430V
480V Inverse Time (327T)	430V	436V	434V	434V

Appendix 13 demonstrates the adequacy of these settings to also protect the 4.0kV motors.

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- 9.4 When restarting the largest loads per Criterion 2.8 all motor voltages are in compliance with the limits of Criterion 2.9 except the following motor:

Motor Description Restart 7000HP SGFWP (Appendix 11)

3V30B 72.1% During (Appendix 11, Case 9)

This is not considered to be a problem as noted in Section 7.10 and as the restarts would only occur as a result of operator error since the SGFWP motor is not required for SI. If such a restart occurred it would be tripped again and the motor above would not sustain any damage due to the small deviation in terminal voltage.

The SGFWP is the only 4.0kV motor to trip on SI. Therefore any trip of an RCP motor would be the result of malfunction or a fault and hence restart is not a realistic case for these motors. The setting of the time delay relay for SI conditions will therefore be based on the accelerating time of the SGFWP and not the RCP.

- 9.5 The light load analysis of EC-141 shows no overvoltage with a 10% load on the transformer. This is more conservative than the required 50% load and hence compliance with Criterion 2.12 is also demonstrated.
- 9.6 The transient voltages at the MCCS shown in Appendices 5 through 12 demonstrate compliance with Criterion 2.10 and 2.11 as the minimum values exceed the pickup and dropout values of both the new and old MCCs for all design load applications as follows:

<u>Calculated</u>			<u>Criterion</u>
3A	417	(App 11 Case 3)	332
3B	432	(App 5 Case 6)	381
3C	423	(App 11 Case 6)	394
3D	397	(App 5 Case 3)	392
3K	409	(App 5 Case 3)	360
4A	411	(App 8 Case 3)	386
4B	438	(App 10 Case 6)	381
4C	437	(App 8 Case 7)	332
4D	405	(App 10 Case 3)	360
4J	400	(App 8 Case 1)	360
4K	393	(App 10 Case 1)	360

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SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

9.0 SUMMARY (Continued)

9.6 (Continued)

In the event that the SGFWP is restarted, the transient voltage will not dip low enough to cause dropout, however, a slight delay on pick up would occur on MCCs 3C, 3D, 4A and 4D until the voltage recovers by approximately 10%. This is acceptable as restart of this motor would only occur as a result of operator error. It should be noted that there should be no MCC loads picking up during these SGFWP restart cases.

9.7 Appendix 3 - Comparison of 480V loads with EC-138 demonstrates compliance with Criterion 2.7.

10.0 LIST OF APPENDICES

APPENDIX NO./DESCRIPTION	NO. OF SHEETS	REVISION
1. Motor Operated Valve Data	4	4
2. Cable Resistance and Reactance Data	48	4
3. Comparison of 480V loads with Load Center Transformer Loading (Reference 6.3)	3	4
4. Recommended PSB-1 Relay Settings	10	4
5. Computer Print-out for Unit 3 PSB-1: Bus 3AB2 Aligned to 3AD, Bus 3B50 Aligned to 3B04 (File/AUXSYS/U3APP5.DAT) dated 3/06/91	137	4
6. Computer Print-out for Unit 4 PSB-1: Bus 4AA2 Aligned to 4AD Bus 4B50 Aligned to 4B04 (File/AUXSYS/U4APP6.DAT) dated 3/08/91	140	4
7. Computer Print-out for Unit 3 PSB-1: Bus 3AB2 Aligned to 3AD Bus 3B50 Aligned to 3B03 (File/AUXSYS/U3APP7.DAT) dated 3/06/91	125	4



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<u>APPENDIX NO./DESCRIPTION</u>	<u>NO. OF SHEETS</u>	<u>REVISION</u>
8. . Computer Print-out for Unit 4 PSB-1: Bus 4AA2 Aligned to 4AD Bus 4B50 Aligned to 4B03 (File/AUXSYS/U4APP8.DAT) dated 3/08/91	113	4
9. Computer Print-out for Unit 3 PSB-1: Bus 3AA2 Aligned to 3AD Bus 3B50 Aligned to 3B04 (File/AUXSYS/U3APP9.DAT) dated 3/06/91	134	4
10. Computer Print-out for Unit 4 PSB-1: Bus 4AB2 Aligned to 4AD Bus 4B50 Aligned to 4B04 (File/AUXSYS/U4APP10.DAT) dated 3/08/91	142	4
11. Computer Print-out for Unit 3 PSB-1: Bus 3AA2 Aligned to 3AD Bus 3B50 Aligned to 3B03 (File/AUXSYS/U3APP11.DAT) dated 3/06/91	130	4
12. Computer Print-out for Unit 4 PSB-1: Bus 4AB2 Aligned to 4AD Bus 4B50 Aligned to 4B03 (File/AUXSYS/U4APP12.DAT) dated 3/08/91	109	4
13. Adequacy of Relay Settings on 480V Load Centers to Protect 4.0kV Motors	1	4

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MOTOR OPERATED VALVE DATA

1. Per FPL input to NRC (Reference 6.6), starting power factor (PF) = 0.6
2. Data is based on Attachment 10.1 of Calculation EC-050 (Reference 6.15) except as noted - however, horsepower (HP), efficiency (EFF) or running PF is not given for all MOVs.
3. Program calculates from horsepower, efficiency, and power factor as input data; therefore to develop this data, proceed as follows:
 - a. Determine HP where unknown IFLA is available
and no similar data is shown on list

Average HP/FLA ratios based on EC-50 Attachment 10.1 is:

<u>MOV</u>	<u>HP</u>	<u>FLA</u>	<u>RATIO</u>
6459A	0.36	3.8	0.10
878B	0.5	1.5	0.33
716A	1.3	2.4	0.54
744A	10.5	14.4	0.73
860A	2.6	7.0	0.37
865A	7.9	11.2	0.70
880A	2.0	3.5	0.57
1405	0.72	6.5	0.11
1408	6.6	11.8	0.56
1420	5.2	10.6	<u>0.49</u>

4.50/10 = 0.45 Average

$$HP = I_{FLA} \times 0.45$$

Calculated values are shown
in parentheses () on attached sheets

- b. Determine Efficiency (EFF) - Assume PF running = 0.85
(same as other motors)

$$I_{FLA} = \frac{kVA}{\sqrt{3} \times 0.460} = \frac{HP \times 0.746}{EFF \times PF \times \sqrt{3} \times 0.460} = \frac{HP (1.1)}{EFF}$$

$$EFF = \frac{HP (1.1)}{I_{FLA}}$$

1 2 3 4 5 6 7 8 9 10 11 12



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MOTOR OPERATED VALVE DATA

<u>MOV</u>	<u>HP</u>	<u>FLA</u>	<u>LRA</u>	<u>LRA/FLA</u>	<u>PF RUN</u>	<u>EFF</u>	<u>PF START</u>	
<u>MCC 3B05V (3A)</u>								
3-1400	0.33	0.75	5.5	7.33	0.85	0.48	0.6	Note 2
3-1420	5.2	10.6	60	5.66	0.85	0.54	0.6	
3-1427	(0.25)	0.55	2.7	4.91	0.85	0.50	0.6	
<u>MCC 3B06 (3B)</u>								
3-381	(0.42)	0.95	5	5.26	0.85	0.49	0.6	
3-626	1.0	2.8	16	5.71	0.85	0.39	0.6	Note 2
3-716B	1.3	2.4	9	3.75	0.85	0.6	0.6	
3-730	1.3	2.4	9	3.75	0.85	0.6	0.6	
3-744B	10.3	14.4	104	7.22	0.85	0.8	0.6	
3-750	Note 5							
3-843B	(1.58)	3.5	26	7.43	0.85	0.5	0.6	
3-866B	Note 4							
3-880B	2.0	3.5	13	3.71	0.85	0.63	0.6	
3-1402	0.33	0.75	5.5	7.33	0.85	0.48	0.6	Note 2
3-1418	1.5	2.1	12	5.71	0.85	0.50	0.6	Note 3
3-1425	0.33	0.95	5	5.26	0.85	0.38	0.6	
3-1421	5.3	7.7	66	8.57	0.85	0.76	0.6	
<u>MCC 3B07 (3C)</u>								
3-716A	1.3	2.4	9	3.75	0.85	0.6	0.6	
3-744A	10.5	14.4	104	7.22	0.85	0.8	0.6	
3-751	Note 5							
3-843A	(1.58)	3.5	26	7.43	0.85	0.5	0.6	
3-866A	Note 6							
3-880A	2.0	3.5	13	3.71	0.85	0.63	0.6	
3-1401	0.33	0.75	5.5	7.33	0.85	0.48	0.6	Note 2
3-1426	(0.25)	0.55	2.7	4.91	0.85	0.5	0.6	
3-6386	0.13	0.45	3.2	7.11	0.85	0.32	0.6	
<u>MCC 3B08 (3D)</u>								
3-1404	0.33	2.5	9	3.60	0.85	0.29	0.6	Note 7
3-1417	1.5	2.1	12	5.71	0.85	0.5	0.6	Note 3
3-6552B	0.13	0.45	(3.2)	7.11	0.85	0.32	0.6	Note 8
3-6543B	0.13	0.45	(3.2)	7.11	0.85	0.32	0.6	Note 8

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APPENDIX 1 TO

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MOTOR OPERATED VALVE DATA

<u>MOV</u>	<u>HP</u>	<u>FLA</u>	<u>LRA</u>	<u>LRA/FLA</u>	<u>PF</u> <u>RUN</u>	<u>EFF</u>	<u>PF</u> <u>START</u>	
<u>MCC 4B05V (4A)</u>								
4-1400	0.33	0.75	5.5	7.33	0.85	0.48	0.6	Note 2
4-1420	5.2	10.6	60.0	5.66	0.85	0.54	0.6	
4-1427	(0.25)	0.55	2.7	4.91	0.85	0.50	0.6	
<u>MCC 4B06 (4B)</u>								
4-381	(0.42)	0.95	5	5.26	0.85	0.49	0.6	
4-626	1.0	2.8	16	5.71	0.85	0.39	0.6	Note 2
4-716B	1.3	2.4	9	3.75	0.85	0.6	0.6	
4-730	1.3	2.4	9	3.75	0.85	0.6	0.6	
4-744B	10.5	14.4	104	7.22	0.85	0.8	0.6	
4-750	Note 5							
4-843B	(1.58)	3.5	26	7.43	0.85	0.5	0.6	
4-866B	Note 9							
4-880B	2.0	3.5	13	3.71	0.85	0.63	0.6	
4-1402	0.33	0.75	5.5	7.33	0.85	0.48	0.6	Note 2
4-1418	1.5	2.1	12	5.71	0.85	0.5	0.6	Note 3
4-1421	5.2	10.6	60	5.66	0.85	0.54	0.6	
4-1425	(0.25)	0.55	2.7	4.91	0.85	0.5	0.6	
<u>MCC 4B07 (4C)</u>								
4-1426	(0.25)	0.55	2.7	4.91	0.85	0.5	0.6	
4-6386	0.13	0.45	3.2	7.11	0.85	0.32	0.6	
4-1401	0.33	0.75	5.5	7.33	0.85	0.48	0.6	Note 2
4-880A	2.0	3.5	13	3.71	0.85	0.63	0.6	
4-716A	1.3	2.4	9	3.75	0.85	0.6	0.6	
4-744A	(10.3)	14.4	104	7.22	0.85	0.8	0.6	
4-751	Note 5							
4-843A	(1.58)	3.5	26	7.43	0.85	0.5	0.6	
4-866A	Note 9							
<u>MCC 4B08V (4D)</u>								
4-1417	1.5	2.1	12	5.71	0.85	0.5	0.6	Note 10
4-6552A	0.13	0.45	(3.2)	7.11	0.85	0.32	0.6	Note 11
4-6543A	0.13	0.45	(3.2)	7.11	0.85	0.32	0.6	Note 11
4-1404	0.33	2.5	9	3.60	0.85	0.29	0.6	Note 7
1166E/3								



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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM -
MOTOR OPERATED VALVE DATA

APPENDIX 1 NOTES

- Note 1 Data based on Reference 6.15, Attachment 10.1 except as noted
- Note 2 Data based on Reference 6.33
- Note 3 HP based on similarity to Unit 4, Valve 4-1417, other data from Note 1
- Note 4 MOV locked open per Reference 6.34
- Note 5 MOV locked open per Reference 6.35
- Note 6 MOV locked open per Reference 6.36
- Note 7 HP based on Reference 6.37, other data from Note 1
- Note 8 Data based on similarity to Unit 4 valves V-6552 and V-6543
- Note 9 MOV locked open per Reference 6.38
- Note 10 HP based on Reference 6.39, other data from Note 1
- Note 11 Data based on Reference 6.39



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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN *JLB*
 CHKD. BY: R PRUETT *RP*
 VERIFIED BY: M WALSH *(MWS)*
 DATE: 3-14-91
 DATE: 3/14/91
 DATE: 3/15/91

BY: C BEATTIE *CMB*
 CHKD. BY: A HELMS *AH*
 VERIFIED BY: M WALSH *(MWS)*
 DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3AA1	3X03	3AA05/3AA05-3X03/001	3-1/C #1500	56	—	—	—	—
		3AA05/3AA05-3X03/002	3-1/C #1500	56	—	—	—	—
		3AA05/3AA05-3X03/003	3-1/C #1500	56	0.0106/3 (NOTE 3)	0.0549/3 (NOTE 3)	0.0002	0.0010
3AA1	3X02	3AA02/3AA02-3X02/002	3-1/C #1500	76	—	—	—	—
		3AA02/3AA02-3X02/001	3-1/C #1500	76	—	—	—	—
		3AA02/3AA02-3X02/003	3-1/C #1500	76	0.0106/3 (NOTE 3)	0.0549/3 (NOTE 3)	0.0004	0.0014
3AA1	3P200A	3AA01/3AA01-3J01/001	3-1/C #1250	382	—	—	—	—
		3AA01/3AA01-3J01/002	3-1/C #1250	382	0.0157/2	0.0504/2	—	—
		3AA01/3J01-3P200A/001	3-1/C #750	146	—	—	—	—
		3AA01/3J01-3P200A/002	3-1/C #750	146	0.0224/2	0.0501/2	0.0046	0.0133
3AA1	3P1A	3AA03/3AA03-3P1A/001	3-1/C #750	478	—	—	—	—
		3AA03/3AA03-3P1A/002	3-1/C #750	478	—	—	—	—
		3AA03/3AA03-3P1A/003	3-1/C #750	478	0.0224/3	0.0501/3	0.0036	0.0080
3AA2	3X04	3AA08/3AA08-3X04/001	3-1/C #4/0	51	0.0689	0.0606	0.0035	0.0031
3AA2	3X06	3AA14/3AA14-3X06/001	3-1/C #4/0	36	0.0689	0.0606	0.0025	0.0022
3AA2	3P3A	3AA07/3AA07-3P3A/001	3-1/C #4/0	493	0.0689	0.0606	0.0340	0.0299
3AA2	3P11A	3AA11/3AA11-3P11A/001	3-1/C #4/0	523	0.0689	0.0606	0.0360	0.0317

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN *JB* DATE: 3-14-91
CHKD. BY: R PRUETT *RP* DATE: 3/14/91
VERIFIED BY: M WALSH *(MR)* DATE: 3/15/91

BY: C BEATTIE *CMB* DATE: 3/14/91
CHKD. BY: A HELMS *AH* DATE: 3/14/91
VERIFIED BY: M WALSH *(MR)* DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3AA2	3P211A	3AA12/3AA12-3P211A/001	3-1/C #4/0	543	0.0689	0.0606	0.0374	0.0329
3AA2	3P215A	3AA13/3AA13-3P215A/001	3-1/C #4/0	571	0.0689	0.0606	0.0393	0.0346
3AA2	3P210A	3AA15/3AA15-3P210A/001	3-1/C #4/0	527	0.0689	0.0606	0.0363	0.0319
3AA2	3P7A	3AA16/3AA16-3P7A/001	3-1/C #350	638	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0276	0.0360
3AA2	3P7C	3AA18/3AA18-3P7C/001	3-1/C #350	644	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0278	0.0363
3AA2	3P9A	3AA19/3AA19-3P9A/001	3-1/C #4/0	638	0.0689	0.0606	0.0440	0.0387
3AA2	3P6A	3AA21/3AA21-3P6A/001	3-1/C #350	66	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0029	0.0037
3AA2	DG3A	3AA20/3AA20-3C12A/001	3-1/C #1250	145	—	—	—	—
		DG3A/3E04A-3K4A/002	3-1/C #1250	39	—	—	—	—
		DG3A/3C12A-3K4A/001	3-1/C #1250	64	(NOTE 3)	(NOTE 3)	0.0032	0.0107
3AA2	3AD	3AD01A/3AD01-3AA17/00P	3-1/C #750	639	—	—	—	—
		3AD01A/3AD01-3AA17/00Q	3-1/C #750	639	0.0224/2	0.0501/2	0.0072	0.0160

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JB DATE: 3-14-91
CHKD. BY: R PRUETT RP DATE: 3-14-91
VERIFIED BY: M WALSH MW DATE: 3/15/91

BY: C BEATTIE MB DATE: 3/14/91
CHKD. BY: A HELMS AH DATE: 3/14/91
VERIFIED BY: M WALSH MW DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3AB1	3X03	3AB05/3AB05-3X03/001	3-1/C #1500	86	—	—	—	—
		3AB05/3AB05-3X03/002	3-1/C #1500	86	—	—	—	—
		3AB05/3AB05-3X03/003	3-1/C #1500	86	0.0106/3 (NOTE 3)	0.0549/3 (NOTE 3)	0.0003	0.0016
3AB1	3P200B	3AB01/3AB01-3J02/001	3-1/C #1250	468	—	—	—	—
		3AB01/3AB01-3J02/002	3-1/C #1250	468	0.0157/2	0.0504/2	—	—
		3AB01/3J02-3P200B/001	3-1/C #750	121	—	—	—	—
		3AB01/3J02-3P200B/002	3-1/C #750	121	0.0224/2	0.0501/2	0.0050	0.0148
3AB1	3P200C	3AB06/3AB06-3J02/001	3-1/C #1250	448	—	—	—	—
		3AB06/3AB06-3J02/002	3-1/C #1250	448	0.0157/2	0.0504/2	—	—
		3AB06/3J02-3P200C/001	3-1/C #750	141	—	—	—	—
		3AB06/3J02-3P200C/002	3-1/C #750	141	0.0224/2	0.0501/2	0.0051	0.0148
3AB2	3P3B	3AB10/3AB10-3P3B/001	3-1/C #4/0	398	0.0689	0.0606	0.0274	0.0241
3AB2	3P11B	3AB11/3AB11-3P11B/001	3-1/C #4/0	428	0.0689	0.0606	0.0295	0.0259
3AB2	3P215B	3AB12/3AB12-3P215B/001	3-1/C #4/0	538	0.0689	0.0606	0.0371	0.0326
3AB2	3P211B	3AB13/3AB13-3P211B/001	3-1/C #4/0	538	0.0689	0.0606	0.0371	0.0326
3AB2	3P210B	3AB15/3AB15-3P210B/001	3-1/C #4/0	498	0.0689	0.0606	0.0343	0.0302
3AB2	3P7B	3AB16/3AB16-3P7B/001	3-1/C #350	666	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0288	0.0376

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PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MD

DATE: 3-14-91
DATE: 3/14/91
DATE: 3/15/91

BY: C BEATTIE CMB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH MD

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3AB2	3P9B	3AB17/3AB17-3P9B/001	3-1/C #4/0	652	0.0689	0.0606	0.0449	0.0395
3AB2	3P7D	3AB18/3AB18-3P7D/001	3-1/C #350	676	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0292	0.0381
3AB2	3P6B	3AB21/3AB21-3P6B/001	3-1/C #350	81	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0035	0.0046
3AB2	DG5B	3AB20/3AB20-3C12B/001	3-1/C #1250	147	—	—	—	—
		DG3B/3C12B-3K4B/001	3-1/C #1250	64	—	—	—	—
		DG3B/3E04B-3K4B/002	3-1/C #1250	39	(NOTE 3)	(NOTE 3)	0.0033	0.0110
3AB2	3X02	3AB02/3AB02-3X02/002	3-1/C #1500	46	—	—	—	—
		3AB02/3AB02-3X02/001	3-1/C #1500	46	—	—	—	—
		3AB02/3AB02-3X02/003	3-1/C #1500	46	0.0106/3 (NOTE 3)	0.0549/3 (NOTE 3)	0.0002	0.0008
3AB2	3X05	3AB09/3AB09-3X05/001	3-1/C #4/0	46	0.0689	0.0606	0.0032	0.0028
3AB2	3X07	3AB14/3AB14-3X07/001	3-1/C #4/0	56	0.0689	0.0606	0.0039	0.0034
3AB2	3AD	3AD06B/3AD06-3AB19/00P	3-1/C #750	688	—	—	—	—
		3AD06B/3AD06-3AB19/00Q	3-1/C #750	688	0.0224/2	0.0501/2	0.0077	0.0172
3AD	3P211C	3AD04C/3P211C-3AD04/00P	3-1/C #4/0	554	0.0689	0.0606	0.0382	0.0336

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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB DATE: 3-14-91
 CHKD. BY: R PRUETT R DATE: 3/14/91
 VERIFIED BY: M WALSH (MD) DATE: 3/15/91

BY: C BEATTIE CMB DATE: 3/14/91
 CHKD. BY: A HELMS AH DATE: 3/14/91
 VERIFIED BY: M WALSH (MD) DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3AD	3P9C	3AD05C/3P9C-3AD05/00P	3-1/C #4/0	433	0.0689	0.0606	0.0298	0.0262
3B01	3P201A	3B0105/3B01-3P201A/001	3-1/C #350	587	0.0432	0.0468	0.0254	0.0275
3B01	3S6A	3B0108/3B01-3S6/001	3-1/C #350	556	0.0432	0.0468	0.0240	0.0260
3B01	3P214A	3B0109A/3B01-TB7431/00P	3-1/C #750	712	—	—	—	—
		3B0109A/P214A3B01-TB7431/00Q	3-1/C #750	712	—	—	—	—
		3B0109A/TB7431-3P214A/00R	3-1/C #750	20	(NOTE 3)	(NOTE 3)	0.0065	0.0150
3B01	3B05V	3B0112/3B01-3B05/001	3-1/C #750	119	—	—	—	—
		3B0112/3B01-3B05/002	3-1/C #750	119	0.0224/2	0.0452/2	0.0013	0.0027
3B01	3B05N	3B0103A/3B01-3B05/00Q	3-1/C #350	140	—	—	—	—
		3B0103A/3B01-3B05/00P	3-1/C #350	140	0.0432/2	0.0468/2	0.0030	0.0033
3B01	PH3B12	3B0107/TB3805-3B12/00B	3-1/C #500	361	—	—	—	—
		3B0107/TB3805-3B12/00D	3-1/C #500	361	0.0314/2	0.0454/2	—	—
		3B0107A/3B01-TB3805/00P	3-1/C #500	145	—	—	—	—
		3B0107A/3B01-TB3806/00C	3-1/C #500	145	0.0314/2	0.0454/2	0.0079	0.0115
3B01	3B53	3B0111/3B01-3B53/P	3-1/C #350	72	—	—	—	—
		3B0111/3B01-3B53/Q	3-1/C #350	72	0.0432/2	0.0468/2	0.0016	0.0017
3B02	3P201B	3B0203/MH302-3P201B/00H	3-1/C #350	572	0.0432	0.0468	—	—
		3B0203/3B02-MH302/00G	3-1/C #350	180	0.0432	0.0468	0.0325	0.0352

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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
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BY: J BROWN JTB
 CHKD. BY: R PRUETT RP
 VERIFIED BY: M WALSH (MWS)

DATE: 3-14-91
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BY: C BEATTIE CMB
 CHKD. BY: A HELMS AH
 VERIFIED BY: M WALSH (MWS)

DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B02	3V1B	3B0204/30204-T3P11/00P	3-1/C #4/0	480	0.0689	0.0469	—	—
		3B0204/3V1B-T3P11/00Q	3-1/C #4/0	266	0.0689	0.0469	0.0514	0.0350
3B02	3B06	3B0206/3B02-3B06/001	3-1/C #750	400	—	—	—	—
		3B0206/3B02-3B06/002	3-1/C #750	400	0.0224/2	0.0452/2	0.0045	0.0090
3B03	PH3X09	3B0307/3B03-3X09/001	3-1/C #500	330	—	—	—	—
		3B0307/3B03-3X09/002	3-1/C #500	330	0.0314/2	0.0454/2	0.0052	0.0075
3B03	P39B	3B0311/3B03-N39B/001	3-1/C #750	1092	—	—	—	—
		3B0311/N39B-P39B/001	3-1/C #500	26	(NOTE 3)	(NOTE 3)	0.0184	0.0405
3B03	3B07	3B0306/3B03-3B07/001	3-1/C #750	572	—	—	—	—
		3B0306/3B03-3B07/002	3-1/C #750	572	0.0224/2	0.0452/2	0.0064	0.0129
3B03	3P212	3B0309A/3P212A-3NP212/00Q	3-1/C #4/0	35	0.0689	0.0469	—	—
		3B0309A/3B03-TB3972/00P	3-1/C #4/0	407	0.0689	0.0469	—	—
		3B0309A/3NP212-TB3972/00S	3-1/C #4/0	60	0.0689	0.0469	0.0346	0.0235
3B03	3P32	3B0312/3B03-3P32/001	3-1/C #750	481	0.0224	0.0452	0.0108	0.0217
3B03	3B50	3B5007A/3B50-3B03/00Q	3-1/C #750	650	—	—	—	—
		3B5007A/3B50-3B03/00P	3-1/C #750	650	—	—	—	—
		3B5007A/3B50-3B03/00R	3-1/C #750	650	0.0224/3	0.0452/3	0.0049	0.0098

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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
 CHKD. BY: R PRUETT RP
 VERIFIED BY: M WALSH MW

DATE: 3-14-91
 DATE: 3-14-91
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BY: C BEATTIE CMB
 CHKD. BY: A HELMS AH
 VERIFIED BY: M WALSH MW

DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B04	3B50	3B5001B/3B50-3B04/00Q	3-1/C #750	659	—	—	—	—
		3B5001B/3B50-3B04/00P	3-1/C #750	659	—	—	—	—
		3B5001B/3B50-3B04/00R	3-1/C #750	659	0.0224/3	0.0452/3	0.0049	0.0099
3B04	3S7B	3B0401/3B04-3S7/001	3-1/C #350	457	0.0432	0.0468	0.0197	0.0214
3B04	3P214B	3B0403B/3B04-TB7430/00P	3-1/C #750	833	—	—	—	—
		3B0403B/3B04-TB7430/00Q	3-1/C #750	833	—	—	—	—
		3B0403B/TB7430-3P214B/00R	3-1/C #750	20	(NOTE 3)	(NOTE 3)	0.0077	0.0178
3B04	PH3B13	3B0408/3B04-3B13/001	3-1/C #500	397	—	—	—	—
		3B0408/3B04-3B13/002	3-1/C #500	397	0.0314/2	0.0454/2	0.0062	0.0090
3B04	B08N	3B0411B/3B04-B08/00P	3-1/C #350	610	—	—	—	—
		3B0411B/3B04-B08/00Q	3-1/C #350	610	0.0432/2	0.0468/2	0.0132	0.0143
3B04	3H1	3B0405/3B04-H1/001	3-1/C #4/0	101	0.0689	0.0469	0.0070	0.0047
3B04	3B52	3B0407B/3B04-3B52/00P	3-1/C #750	216	0.0224	0.0452	0.0048	0.0098
3B04	3B54	3B0406/3B04-3B54/00P	3-1/C #350	90	—	—	—	—
		3B0406/3B04-3B54/00Q	3-1/C #350	90	0.0432/2	0.0468/2	0.0019	0.0021
3B05N	3X03	3B0536/3B05-3X03/001	3-1/C #6	192	0.534	0.0585	0.1025	0.0112



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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN *JB*
 CHKD. BY: R. PRUETT *RP*
 VERIFIED BY: M WALSH *MD*

DATE: 3-14-91
 DATE: 3-14-91
 DATE: 3/15/91

BY: C BEATTIE *MB*
 CHKD. BY: A HELMS *AH*
 VERIFIED BY: M WALSH *MD*

DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B05N	3X02	3B0544/3B05-TB3736/001	3-1/C #6	126	0.534	0.0585	—	—
		3B0544/TB3736-3X02/001	3-1/C #6	10	0.534	0.0585	0.0726	0.0080
3B05N	3V5	3B0566/3B05-3V5/001	1-3/C #12	91	2.236	0.0486	0.2035	0.0044
3B05N	3X01	3B0577/3B05-3X01/001	3-1/C #350	128	0.0432	0.0468	0.0055	0.0060
3B05N	3P90C	3B0580/3B05-3N90C/00P	1-3/C #10	320	1.404	0.0447	—	—
		3B0580/3N90C-3P90C/00Q	1-3/C #10	20	1.404	0.0447	0.4774	0.0152
3B05N	3P90B	3B0581/3B05-3N90B/00P	1-3/C #10	326	1.404	0.0447	—	—
		3B0581/3N90B-3P90B/00Q	1-3/C #10	20	1.404	0.0447	0.4858	0.0155
3B05N	3P90A	3B0582/3B05-3N90A/00P	1-3/C #10	326	1.404	0.0447	—	—
		3B0582/3N90A-3P90A/00Q	1-3/C #10	20	1.404	0.0447	0.4858	0.0155
3B05N	3V4	3B0542/3B05-3V4/001	1-3/C #12	259	2.236	0.0486	0.5791	0.0126
3B05N	3P43	3B0543/3B05-3P43/001	1-3/C #12	242	2.236	0.0486	0.5411	0.0118
3B05N	3P4	3B0572/3B05-3P4/001	1-3/C #12	267	2.236	0.0486	0.5970	0.0130
3B05N	3P19D	SEE NOTE 5	1-3/C #12	335	2.236	0.0486	0.7491	0.0163
3B05N	3V6A	3B0570/3B05-3V6A/001	1-3/C #12	120	2.236	0.0486	0.2683	0.0058

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: H WALSH HW

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE MB
CHKD. BY: A HELMS AH
VERIFIED BY: H WALSH HW

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B05N	3P34A	3B0549/3B05-3P34A/001	1-3/C #12	366	2.236	0.0486	0.8184	0.0178
3B05N	3P49	3B0550/3B05-3P49/001	1-3/C #12	122	2.236	0.0486	0.2728	0.0059
3B05N	3V19A	3B0552/3B05-3V19A/001	1-3/C #10	96	1.404	0.0447	0.1348	0.0043
3B05N	P51A	3B0568/3B05-P51A/001	1-3/C #12	335	2.236	0.0486	0.7491	0.0163
3B05N	3P232A	3B0554/3B05-T3P52/002	1-3/C #12	406	2.236	0.0486	—	—
		3B0554/3P232A-T3P52/001	1-3/C #12	286	2.236	0.0486	1.5473	0.0336
3B05N	3P19A	3B0557/3B05-3P19A/001	1-3/C #12	325	2.236	0.0486	0.7267	0.0158
3B05N	3P19B	3B0558/3B05-3P19B/001	1-3/C #12	330	2.236	0.0486	0.7379	0.0160
3B05N	3P19C	3B0559/3B05-3P19C/001	1-3/C #12	335	2.236	0.0486	0.7491	0.0163
3B05N	3V31B	3B0564/3B05-3V31B/001	1-3/C #12	295	2.236	0.0486	0.6596	0.0143
3B05N	3V14A	3B0561/3B05-TB3078/001	1-3/C #12	369	2.236	0.0486	—	—
		3B0561/3V14A-TB3078/001	1-3/C #12	26	2.236	0.0486	0.8832	0.0192
3B05N	3V18	3B0569/3B05-3V18/001	1-3/C #12	212	2.236	0.0486	0.4740	0.0103
3B05N	3P28A	3B0565/3B05-3P28A/001	1-3/C #12	88	2.236	0.0486	0.1968	0.0043

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MW

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE CMB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH MW

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B05N	3V16	3B0560/3B05-3V16/001	1-3/C #12	94	2.236	0.0486	0.2102	0.0046
3B05N	3P15	3B0571/3B05-3P15/001	1-3/C #12	264	2.236	0.0486	0.5903	0.0128
3B05N	3V32B	3B0576/3B05-3V32B/001	1-3/C #12	219	2.236	0.0486	0.4897	0.0106
3B05N	3P5	3B0574/3B05-3P5/001	3-1/C #2	168	0.213	0.0511	0.0358	0.0086
3B05N	3XS75/76	3B0537/3B05-3XS75/00P 3B0537/3XS75-3XS76/00Q	2-1/C #6 2-1/C #6	120 10	0.534x2 0.534x2	0.0585x2 0.0585x2	— 0.1388	— 0.0152
3B05N	3NF20A/B	SEE NOTE 5	1-3/C #10	120	1.404	0.0447	0.1685	0.0054
3B05V	3C1	3B0524/3B05-3C1/001	3-1/C #4/0	344	0.0689	0.0469	0.0237	0.0161
3B05V	3P37	3B0503/3B05-3P37/001	1-3/C #12	109	2.236	0.0486	0.2437	0.0053
3B05V	3C2A	3B0504/3B05-3C2/001	1-3/C #12	240	2.236	0.0486	0.5366	0.0117
3B05V	3P36	3B0505/3B05-3P36/001	3-1/C #6	121	0.534	0.0585	0.0646	0.0071
3B05V	3C13A	3B0514A/3B05-3C13/00P	1-3/C #8	285	0.883	0.0457	0.2517	0.0130
3B05V	3P10	3B0506/3B05-3P10/001	1-3/C #12	251	2.236	0.0486	0.5612	0.0122

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MW

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE CMB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH MW

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B05V	3V1A	3B0518/3B05-T3P21/001	3-1/C #4/0	432	—	—	—	—
		3B0518/3B05-B05VT3P21/002	3-1/C #4/0	432	0.0689/2	0.0469/2	—	—
		3B0518/3V1A-T3P21/001	3-1/C #4/0	226	—	—	—	—
		3B0518/3V1A-T3P21/002	3-1/C #4/0	226	0.0689/2	0.0469/2	0.0453	0.0309
3B05V	3V34	3B0507/3B05-3V34/001	1-3/C #12	215	2.236	0.0486	0.4807	0.0104
3B05V	3P31	3B0510/3B05-3P31/001	3-1/C #2	271	0.213	0.0511	0.0577	0.0138
3B05V	3T08	3B0512/3B05-3T08/001	3-1/C #1/0	119	0.136	0.0512	0.0162	0.0061
3B05V	3P40	3B0533/3B05-3P40/001	1-3/C #10	274	1.404	0.0447	0.3847	0.0122
3B05V	M0V1420	3B0523/3B05-M0V420/001	1-3/C #12	359	2.236	0.0486	0.8027	0.0174
3B05V	M0V1400	3B0525/3B05-M0V400/001	1-3/C #12	270	2.236	0.0486	0.6037	0.0131
3B05V	M0V1427	3B0530/3B05-M0V427/003	1-3/C #12	961	2.236	0.0486	2.1488	0.0467
3B06	3P203B	3B0610B/3B06-3P203B/00P	3-1/C #2	580	0.213	0.0511	0.1235	0.0296
3B06	3V3A	3B0611/3B06-T3P11/001	3-1/C #4/0	192	0.0689	0.0469	—	—
		3B0611/3V3A-T3P11/001	3-1/C #4/0	272	0.0689	0.0469	0.0320	0.0218

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MW

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE MB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH MW

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B06	E16E*	3B0609/3B06-NS-E16E/00P	3-1/C #2	131	0.213	0.0511	—	—
		3B0609/NS-E16E-E16E/00Q	3-1/C #6	20	0.534	0.0585	0.0386	0.0079
3B06	3V2A	SEE NOTE 5	3-1/C #1/0	192	0.136	0.0512	—	—
		3B0629/3V2A-T3P11/001	3-1/C #1/0	206	0.136	0.0512	0.0541	0.0204
3B06	3V9	3B0628/3B06-3V9/001	1-3/C #8	222	0.883	0.0457	0.1960	0.0101
3B06	3V20	3B0663/3B06-3V20/001	1-3/C #8	207	0.883	0.0457	0.1828	0.0095
3B06	3V30A	3B0650/3B06-T3P41/001	3-1/C #6	202	0.534	0.0585	—	—
3B06	3V30A	3B0650/3V30A-T3P41/001	3-1/C #4	256	0.336	0.0538	0.1939	0.0256
3B06	E16A/E17A	3B06368/3B06-S76/00P	3-1/C #6	154	0.534	0.0585	—	—
		S76/S76-N17A/00P	3-1/C #6	35	0.534	0.0585	—	—
		S76/E17A-N17A/001	3-1/C #6	56	0.534	0.0585	0.1308	0.0143
3B06	3V6B	3B0672/3B06-3V6B/001	1-3/C #12	286	2.236	0.0486	0.6395	0.0139
3B06	V8B	3B0652/3B06-V8B/00F	3-1/C #2	336	0.213	0.0511	0.0716	0.0172
3B06	3D25	3B0635/3B06-3D25/00A	3-1/C #2	170	0.213	0.0511	0.0362	0.0087

* PC/M 87-109, DC Equipment/Inverter Rooms HVAC System, Revision 2

EBASCO SERVICES INCORPORATED

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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
 CHKD. BY: R PRUETT RP
 VERIFIED BY: M WALSH MB

DATE: 3-14-91
 DATE: 3-14-91
 DATE: 3/15/91

BY: C BEATTIE CMB
 CHKD. BY: A HELMS AH
 VERIFIED BY: M WALSH MB

DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B06	MOV381	3B0634/3B06-MOV381/001	1-3/C #12	322	2.236	0.0486	0.7200	0.0156
3B06	MOV626	3B0638/3B06-MOV626/001	1-3/C #12	354	2.236	0.0486	0.7915	0.0172
3B06	MOV716B	3B0639/3B06-MOV716B/001	1-3/C #12	298	2.236	0.0486	0.6663	0.0145
3B06	MOV730	3B0637/3B06-MOV730/003	1-3/C #12	356	2.236	0.0486	0.7960	0.0173
3B06	MOV744B	3B0613/M0744B-T3P51/001	1-3/C #12	234	2.236	0.0486	—	—
		3B0613/3B06-T3P51/00P	1-3/C #2	204	0.222	0.408	0.5685	0.0197
3B06	MOV880B	3B0632/3B06-M0880B/001	1-3/C #12	327	2.236	0.0486	0.7312	0.0159
3B06	MOV1402	3B0618/3B06-MOV402/001	1-3/C #12	286	2.236	0.0486	0.6395	0.0139
3B06	MOV1418	3B0624/3B06-MOV418/001	1-3/C #12	317	2.236	0.0486	0.7088	0.0154
3B06	MOV1425	3B0641/3B06-MOV425/001	1-3/C #12	441	2.236	0.0486	0.9861	0.0214
3B06	MOV1421	3B0623/3B06-MOV421/001	1-3/C #12	236	2.236	0.0486	0.5277	0.0115
3B06	MOV843B	3B0622/3B06-M0843B/001	1-3/C #12	366	2.236	0.0486	0.8184	0.0178
3B07	3V2B	3B0727/3B07-T3P12/001	3-1/C #1/0	362	0.136	0.0512	—	—
		3B0727/3V2B-T3P12/001	3-1/C #1/0	121	0.136	0.0512	0.0657	0.0247



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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MW

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE CMB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH MW

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B07	3V30C	3B0729/3B07-T3P43/001	3-1/C #6	395	0.534	0.0585	—	—
		3B0729/3V30C-T3P43/001	3-1/C #4	151	0.336	0.0538	0.2617	0.0312
3B07	3P203A	3B0725/3B07-3P203A/001	3-1/C #2	168	0.213	0.0511	0.0358	0.0086
3B07	3V65A	3B0710A/3B07-3NV65A/00P	1-3/C #10	564	1.404	0.0447	—	—
		3B0710A/3NV65A-3V65A/00Q	1-3/C #10	45	1.404	0.0447	0.8550	0.0272
3B07	3D02	3B0715A/3B07-3D02/00A	3-1/C #4/0	360	0.0689	0.0469	0.0248	0.0169
3B07	P207A	3B0734/3B07-P207A/001	1-3/C #12	117	2.236	0.0486	0.2616	0.0057
3B07	P42A	3B0740/3B07-P42A/00P	1-3/C #10	95	1.404	0.0447	0.1334	0.0042
3B07	3V3C	3B0719/3B07-T3P12/002	3-1/C #4/0	383	0.0689	0.0469	—	—
		3B0719/3V3C-T3P12/001	3-1/C #4/0	136	0.0689	0.0469	0.0358	0.0243
3B07	T206	3B0747/3B07-T206/001	1-3/C #12	263	2.236	0.0486	0.5881	0.0128
3B07	3V1C	3B0742/3B07-T3P12/004	3-1/C #4/0	358	—	—	—	—
		3B0742/3B07-T3P12/005	3-1/C #4/0	358	0.0689/2	0.0469/2	—	—
		3B0742/3V1C-T3P12/001	3-1/C #4/0	156	—	—	—	—
		3B0742/3V1C-T3P12/002	3-1/C #4/0	156	0.0689/2	0.0469/2	0.0177	0.0121
3B07	M0V716A	3B0743/3B07-M0716A/001	1-3/C #12	140	2.236	0.0486	0.3130	0.0068



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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN STB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH (MWR)

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE AMB
CHKD. BY: A HELMS AL
VERIFIED BY: M WALSH (MWR)

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B07	MOV744A	3B0722/MOV744A-T3P53/001 3B0722/3B07-T3P53/00P	1-3/C #12 1-3/C #2	121 510	2.236 0.222	0.0486 0.0408	— 0.3838	— 0.0267
3B07	MOV843A	3B0738/3B07-M0843A/001	1-3/C #12	116	2.236	0.0486	0.2594	0.0056
3B07	MOV880A	3B0741/3B07-M0880A/001	1-3/C #12	125	2.236	0.0486	0.2795	0.0061
3B07	MOV1401	3B0748/3B07-MOV401/001	1-3/C #12	457	2.236	0.0486	1.0219	0.0222
3B07	MOV1426	3B0714/3B07-MOV426/001	1-3/C #12	150	2.236	0.0486	0.3354	0.0073
3B07	MOV6386	3B0723/3B07-T3P53/00P 3B0723/T3P53-MOVCPM3-9/00Q	1-3/C #10 1-3/C #10	357 145	1.404 1.404	0.0447 0.0447	— 0.7048	— 0.0224
3B08V	3V3B	3B0806/3B08-T3P22/001 3B0806/3V3B-T3P22/001	3-1/C #4/0 3-1/C #4/0	322 228	0.0689 0.0689	0.0469 0.0469	— 0.0379	— 0.0258
3B08V	3V30B	3B0820/3B08-T3P42/001 3B0820/3V30B-T3P42/001	3-1/C #6 3-1/C #4	387 126	0.534 0.336	0.0585 0.0538	— 0.2490	— 0.0294
3B08V	3V1D	3B0829/3B08-T3P22/003 3B0829/3V1D-T3P22/001	6-1/C #4/0 6-1/C #4/0	310 156	0.0689/2 0.0689/2	0.0469/2 0.0469/2	— 0.0161	— 0.0109
3B08V	V29B	3B0809/B08-V29B/00P	1-3/C #10	380	1.404	0.0447	0.5335	0.0170

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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB DATE: 3-14-91
 CHKD. BY: R PRUETT RP DATE: 3-14-91
 VERIFIED BY: M WALSH MB DATE: 3/5/91

BY: C BEATTIE CMB DATE: 3/14/91
 CHKD. BY: A HELMS AH DATE: 3/14/91
 VERIFIED BY: M WALSH MB DATE: 3/5/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B08V	E16C/E17C	3B0823/B08-N17C/001	3-1/C #6	286	0.534	0.0585	—	—
		3B0823/E17C-N17C/001	3-1/C #6	66	0.534	0.0585	0.1880	0.0206
3B08V	C1	3B0825/B08-C1/001	3-1/C #4/0	362	0.0689	0.0469	0.0249	0.0170
3B08V	V11	3B0804/3B08-V11/00P	1-3/C #12	91	2.236	0.0486	0.2035	0.0044
3B08V	E16D*	3B0808/B08-E16D/00P	3-1/C #2	125	0.213	0.0511	—	—
		3B0808/E16D-N16D COND/00P	3-1/C #6	40	0.534	0.0585	0.0480	0.0087
3B08V	P42B	80826/TB3790-P42B/001	1-3/C #12	239	2.236	0.0486	—	—
		80826/B08-TB3790/00P	1-3/C #12	61	2.236	0.0486	0.6708	0.0146
3B08V	V77/E231	3B0890C/3B08-E231/00P	1-3/C #2	252	0.222	0.0408	—	—
		3B0890C/E231-V77/00Q	1-3/C #2	96	0.222	0.0408	0.0773	0.0142
3B08V	4D25A	3B0805/3B08-4D25A/00P	3-1/C #2	222	0.213	0.0511	0.0473	0.0113
3B08V	4D02A	3B0828/3B08-4D02A/00P	3-1/C #2/0	212	0.108	0.0492	0.0229	0.0104
3B08V	NS74B	3B0818/3B08-TB7403/00P	3-1/C #2/0	340	0.108	0.0492	—	—
		3B0818/TB7403-NS74B/00P	3-1/C #2/0	300	0.108	0.0492	0.0691	0.0315

* PC/M 87-109, DC Equipment/Inverter Rooms HVAC System, Revision 2

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB DATE: 3-14-91
CHKD. BY: R PRUETT RP DATE: 3-14-91
VERIFIED BY: M WALSH MW DATE: 3/15/91

BY: C BEATTIE CMB DATE: 3/14/91
CHKD. BY: A HELMS AH DATE: 3/14/91
VERIFIED BY: M WALSH MW DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B08V	S77B	3B0893/3B08-TB7403/00Q 3B0893/TB7403-S77B/00P	1-3/C #10 1-3/C #10	340 235	1.404 1.404	0.0447 0.0447	— 0.8073	— 0.0257
3B08V	S78B	3B0830/TB7403-S78B/00P 3B0830/3B08-TB7403/00Q	1-3/C #10 1-3/C #10	170 340	1.404 1.404	0.0447 0.0447	— 0.7160	— 0.0228
3B08V	S75B	3B0895/3B08-TB7403/00Q 3B0895/TB7403-S75B/00P	1-3/C #10 1-3/C #10	340 115	1.404 1.404	0.0447 0.0447	— 0.6388	— 0.0203
3B08V	MOV1417	3B0822/3B08-MOV417/002	1-3/C #12	207	2.236	0.0486	0.4629	0.0101
3B08V	MOV6552B	3B0815/3B08-ND-1/00P 3B0815/ND-1-MOV6552B/00Q	1-3/C #10 1-3/C #10	350 12	1.404 1.404	0.0447 0.0447	— 0.5082	— 0.0162
3B08V	MOV6543B	3B0894C/3B08-MOV6543B/00Q	1-3/C #10	328	1.404	0.0447	0.4605	0.0147
3B08V	MOV1404	3B0833/TB3970-MOV3-1404/00Q 3B0833/3B08-TB3970/00P	1-3/C #10 1-3/C #10	21 400	1.404 1.404	0.0447 0.0447	— 0.5911	— 0.0188
3B50	3P201C	3B5008C/3B50-3P201C/00P	3-1/C #350	476	0.0432	0.0468	0.0206	0.0223
3B50	3B08V	3B5004C/3B50-3B08/00Q 3B5004C/3B50-3B08/00P 3B5004C/3B50-3B08/00R	3-1/C #750 3-1/C #750 3-1/C #750	268 268 268	— — 0.0224/3	— — 0.0452/3	— — 0.0020	— — 0.0040
3B52	3C2B	3B5205B/3B52-3C2B/00P	1-3/C #10	89	1.404	0.0447	0.1250	0.0040

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MWA

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE CMB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH MWA

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
3B52	3V34B	3B5210B/3B52-3V34B/00P	3-1/C #6	39	0.534	0.0585	0.0208	0.0023
3B52	3P10B	3B5211B/3B52-TB4941/00P	1-3/C #10	115	1.404	0.0447	0.1615	0.0051
3B52	3V65B	3B5202B/3B52-3NV65B/00P	1-3/C #10	669	—	—	—	—
		3B5202B/3NV65B-3V65B/00Q	1-3/C #10	45	1.404	0.0447	1.0025	0.0319
3B52	3C13B	3B5204/3B52-3C13B/00P	3-1/C #6	34	0.534	0.0585	0.0182	0.0020
3B52	3S230	3B5207/3B52-3NS230/00P	3-1/C #6	716	0.534	0.0585	—	—
		3B5207/3NS230-3S230/00Q	1-3/C #10	10	1.404	0.0447	0.3964	0.0423
B08N	3P25B	B0860/B08-3P25B/001	1-3/C #12	151	2.236	0.0486	0.3376	0.0073
B08N	P22	B0861/B08-P22/001	1-3/C #12	392	2.236	0.0486	0.8765	0.0191
B08N	P220	B0862/B08-P220/001	1-3/C #12	121	2.236	0.0486	0.2706	0.0059
B08N	4P24B	B0863/B08-4P24B/001	1-3/C #12	211	2.236	0.0486	0.4718	0.0103
B08N	4P25B	B0864/B08-4P25B/001	1-3/C #12	221	2.236	0.0486	0.4942	0.0107
B08N	P84B	B0869/B08-P84B/001	1-3/C #8	132	0.883	0.0457	0.1166	0.0060
B08N	4P16A	B0884/B08-4P16A/001	3-1/C #2	254	0.213	0.0511	0.0541	0.0130
B08N	3P16A	B0885/B08-3P16A/001	3-1/C #2	254	0.213	0.0511	0.0541	0.0130

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MR

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE CMB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH MR

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
B08N	3V36A	B0886/3V36A-B08/001	1-3/C #12	152	2.236	0.0486	0.3399	0.0074
B08N	3P204B	B0851/B08-3P204B/001	1-3/C #12	133	2.236	0.0486	0.2974	0.0065
B08N	3P26B	B0852/B08-3P26B/001	1-3/C #12	166	2.236	0.0486	0.3712	0.0081
B08N	P208	B0853/B08-P208/001	1-3/C #8	135	0.883	0.0457	0.1192	0.0062
B08N	4P26B	B0854/B08-4P26B/001	1-3/C #12	221	2.236	0.0486	0.4942	0.0107
B08N	P84A	B0856/B08-P84A/001	1-3/C #8	131	0.883	0.0457	0.1157	0.0060
B08N	3P24B	B0857/B08-3P24B/001	1-3/C #12	238	2.236	0.0486	0.5322	0.0116
B08N	P20	B0858/B08-P20/001	1-3/C #12	382	2.236	0.0486	0.8542	0.0186
B08N	P21	B0859/B08-P21/001	1-3/C #12	393	2.236	0.0486	0.8787	0.0191
B08N	V78	B0897/B08-NS78/00P	1-3/C #10	186	1.404	0.0447	—	—
		B0897/NS78-V78/00Q	1-3/C #10	23	1.404	0.0447	0.2934	0.0093
B08N	NS233M	B0891/B08-NS233A/00P	1-3/C #2	264	0.222	0.0408	—	—
		B0891/NS233A-TB5547/00Q	1-3/C #8	16	0.883	0.0457	—	—
		B0891/TB5547-NS233S/00T	1-3/C #10	18	1.404	0.0447	—	—
		B0891/NS233S-NS233M/00U	1-3/C #10	13	1.404	0.0447	0.1162	0.0129

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH (MWS)

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE CMB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH (MWS)

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4AA1	4X03	4AA05/4AA05-4X03/002	3-1/C #1500	96	—	—	—	—
		4AA05/4AA05-4X03/001	3-1/C #1500	96	—	—	—	—
		4AA05/4AA05-4X03/003	3-1/C #1500	96	0.0106/3 (NOTE 3)	0.0549/3 (NOTE 3)	0.0005	0.0018
4AA1	4X02	4AA02/4AA02-4X02/001	3-1/C #1500	76	—	—	—	—
		4AA02/4AA02-4X02/002	3-1/C #1500	76	—	—	—	—
		4AA02/4AA02-4X02/003	3-1/C #1500	76	0.0106/3 (NOTE 3)	0.0549/3 (NOTE 3)	0.0004	0.0014
4AA1	4P1A	4AA03/4AA03-4P1A/002	3-1/C #750	373	—	—	—	—
		4AA03/4AA03-4P1A/001	3-1/C #750	373	—	—	—	—
		4AA03/4AA03-4P1A/003	3-1/C #750	373	0.0224/3	0.0501/3	0.0028	0.0062
4AA1	4P200A	4AA01/4AA01-4J01/001	3-1/C #1250	332	—	—	—	—
		4AA01/4AA01-4J01/002	3-1/C #1250	332	0.0157/2	0.0504/2	—	—
		4AA01/4J01-4P200A/001	3-1/C #750	111	—	—	—	—
		4AA01/4J01-4P200A/002	3-1/C #750	111	0.0224/2	0.0501/2	0.0038	0.0111
4AA2	4AD	4AD01A/4AD01-4AA17/00P	3-1/C #750	891	—	—	—	—
		4AD01A/4AD01-4AA17/00Q	3-1/C #750	891	0.0224/2	0.0501/2	0.0100	0.0223
4AA2	4X04	4AA08/4AA08-4X04/001	3-1/C #4/0	51	0.0689	0.0606	0.0035	0.0031
4AA2	4X06	4AA14/4AA14-4X06/001	3-1/C #4/0	36	0.0689	0.0606	0.0025	0.0022

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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
 CHKD. BY: R PRUETT RP
 VERIFIED BY: M WALSH MB

DATE: 3-14-91
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BY: C BEATTIE CMB
 CHKD. BY: A HELMS AH
 VERIFIED BY: M WALSH MB

DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4AA2	4P11A	4AA11/4AA11-4P11A/001	3-1/C #4/0	423	0.0689	0.0606	0.0291	0.0256
4AA2	4P210A	4AA15/4AA15-4P210A/001	3-1/C #4/0	377	0.0689	0.0606	0.0260	0.0228
4AA2	4P211A	4AA12/4AA12-4P211A/001	3-1/C #4/0	422	0.0689	0.0606	0.0291	0.0256
4AA2	4P215A	4AA13/4AA13-4P215A/001	3-1/C #4/0	447	0.0689	0.0606	0.0308	0.0271
4AA2	4P3A	4AA07/4AA07-4P3A/001	3-1/C #4/0	408	0.0689	0.0606	0.0281	0.0247
4AA2	4P6A	4AA21/4AA21-4P6A/001	3-1/C #350	71	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0031	0.0040
4AA2	4P7A	4AA16/4AA16-4P7A/001	3-1/C #350	663	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0286	0.0374
4AA2	4P7C	4AA18/4AA18-4P7C/001	3-1/C #350	645	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0279	0.0364
4AA2	4P9A	4AA19/4AA19-4P9A/001	3-1/C #4/0	657	0.0689	0.0606	0.0453	0.0398
4AA2	DG4A	4AA20/4AA20-4C12D/00P	1-1/C #1250	736	—	—	—	—
		4AA20/4AA20-4C12D/00Q	1-1/C #1250	736	—	—	—	—
		4AA20/4AA20-4C12D/00R	1-1/C #1250	736	—	—	—	—
		DG4A/4C12F-TB4997A/00P	3-1/C #1250	73	(NOTE 3)	(NOTE 3)	0.0111	0.0369

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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
 CHKD. BY: R PRUETT RP
 VERIFIED BY: M WALSH MW

DATE: 3-14-91
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BY: C BEATTIE CMB
 CHKD. BY: A HELMS AH
 VERIFIED BY: M WALSH MW

DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4AB1	4P200B	4AB01/4AB01-4J02/001	3-1/C #1250	323	—	—	—	—
		4AB01/4AB01-4J02/002	3-1/C #1250	323	0.0157/2	0.0504/2	—	—
		4AB01/4J02-4P200B/001	3-1/C #750	61	—	—	—	—
		4AB01/4J02-4P200B/002	3-1/C #750	61	0.0224/2	0.0501/2	0.0032	0.0097
4AB1	4P200C	4AB06/4AB06-4J02/001	3-1/C #1250	303	—	—	—	—
		4AB06/4AB06-4J02/002	3-1/C #1250	303	0.0157/2	0.0504/2	—	—
		4AB06/4J02-4P200C/001	3-1/C #750	236	—	—	—	—
		4AB06/4J02-4P200C/001	3-1/C #750	236	0.0224/2	0.0501/2	0.0050	0.0135
4AB1	4X03	4AB05/4AB05-4X03/001	3-1/C #1500	116	—	—	—	—
		4AB05/4AB05-4X03/002	3-1/C #1500	116	—	—	—	—
		4AB05/4AB05-4X03/003	3-1/C #1500	116	0.0106/3 (NOTE 3)	0.0549/3 (NOTE 3)	0.0005	0.0021
4AB1	4X02	4AB02/4AB02-4X02/001	3-1/C #1500	46	—	—	—	—
		4AB02/4AB02-4X02/002	3-1/C #1500	46	—	—	—	—
		4AB02/4AB02-4X02/003	3-1/C #1500	46	0.0106/3 (NOTE 3)	0.0549/3 (NOTE 3)	0.0002	0.0008
4AB2	4P210B	4AB15/4AB15-4P210B/001	3-1/C #4/0	383	0.0689	0.0606	0.0264	0.0232
4AB2	4P211B	4AB13/4AB13-4P211B/001	3-1/C #4/0	431	0.0689	0.0606	0.0297	0.0261
4AB2	4P215B	4AB12/4AB12-4P215B/001	3-1/C #4/0	468	0.0689	0.0606	0.0322	0.0284
4AB2	4P3B	4AB10/4AB10-4P3B/001	3-1/C #4/0	328	0.0689	0.0606	0.0226	0.0199

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CLIENT FLORIDA POWER & LIGHT COMPANY
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 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

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 VERIFIED BY: M WALSH MW

DATE: 3/14/91
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Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4AB2	4P6B	4AB20/4AB20-4P6B/001	3-1/C #350	66	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0029	0.0037
4AB2	4P7D	4AB18/4AB18-4P7D/001	3-1/C #350	619	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0267	0.0349
4AB2	4P7B	4AB16/4AB16-4P7B/001	3-1/C #350	636	0.0432 (NOTE 3)	0.0564 (NOTE 3)	0.0275	0.0359
4AB2	4P9B	4AB17/4AB17-4P9B/001	3-1/C #4/0	656	0.0689	0.0606	0.0452	0.0398
4AB2	DG48	4AB21/4AB21-4C12E/00Q	1-1/C #1250	1127	—	—	—	—
		4AB21/4AB21-4C12E/00P	1-1/C #1250	1127	—	—	—	—
		4AB21/4AB21-4C12E/00R	1-1/C #1250	1127	—	—	—	—
		DG48/4C12G-TB4998A/00P	3-1/C #1250	73	(NOTE 3)	(NOTE 3)	0.0150	0.0504
4AB2	4P11B	4AB11/4AB11-4P11B/001	3-1/C #4/0	361	0.0689	0.0606	0.0249	0.0219
4AB2	4AD	4AD06B/4AD06-4AB19/00P	3-1/C #750	1108	—	—	—	—
		4AD06B/4AD06-4AB19/00Q	3-1/C #750	1108	0.0224/2	0.0501/2	0.0124	0.0278
4AB2	4X05	4AB09/4AB09-4X05/001	3-1/C #4/0	46	0.0689	0.0606	0.0032	0.0028
4AB2	4X07	4AB14/4AB14-4X07/001	3-1/C #4/0	56	0.0689	0.0606	0.0039	0.0034
4AD	4P211C	4AD04C/4P211C-4AD04/00P	3-1/C #4/0	644	0.0689	0.0606	0.0444	0.0390

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MR

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BY: C BEATTIE MB
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DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4AD	4P9C	4AD05C/4P9C-4AD05/00P	3-1/C #4/0	527	0.0689	0.0606	0.0363	0.0319
4801	4851	480106A/4801-4851/00P	3-1/C #750	970	—	—	—	—
		480106A/4801-4851/00Q	3-1/C #750	970	0.0224/2	0.0452/2	0.0109	0.0219
4801	4805V	480112/4801-4805/001	3-1/C #750	182	—	—	—	—
		480112/4801-4805/002	3-1/C #750	182	0.0224/2	0.0452/2	0.0020	0.0041
4801	4805N	480103A/4801-4805/00P	3-1/C #350	214	—	—	—	—
		480103A/4801-4805/00Q	3-1/C #350	214	0.0432/2	0.0468/2	0.0046	0.0050
4801	4S6A	480108/4801-4S6/001	3-1/C #350	311	0.0432	0.0468	0.0134	0.0146
4801	PH4812	480107/TB4807-4812/00D	3-1/C #500	359	—	—	—	—
		480107/TB4806-4812/00B	3-1/C #500	359	0.0314/2	0.0454/2	—	—
		480107/4801-TB4806/00P	3-1/C #500	88	—	—	—	—
		480107/4801-TB4807/00C	3-1/C #500	88	0.0314/2	0.0454/2	0.0070	0.0101
4801	4P201A	480105/4801-TB5237/00Q	3-1/C #350	95 (NOTE 6)	0.0432	0.0468	—	—
		480105/TB5237-4P201A/00P	3-1/C #350	381	0.0432	0.0468	0.0206	0.0223
4801	4P214A	480109/4801-4P214A/001	3-1/C #750	401	(NOTE 3)	(NOTE 3)	0.0067	0.0148
4801	4853	480111/4801-4853/P	3-1/C #350	84	—	—	—	—
		480111/4801-4853/Q	3-1/C #350	84	0.0432/2	0.0468/2	0.0018	0.0020

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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
 CHKD. BY: R PRUETT RP
 VERIFIED BY: M WALSH MW

DATE: 3-14-91
 DATE: 3-14-91
 DATE: 3/15/91

BY: C BEATTIE CMB
 CHKD. BY: A HELMS AH
 VERIFIED BY: M WALSH MW

DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4B02	4P201B	480203/TB4814-4P201B/00H	3-1/C #350	438	0.0432	0.0468	—	—
		480203/4802-TB4814/00G	3-1/C #350	190	0.0432	0.0468	0.0271	0.0294
4B02	4V1D	480204/T4P12-4B02/00P	3-1/C #4/0	580	0.0689	0.0469	—	—
		480204/4V1D-T4P12/00Q	3-1/C #4/0	256	0.0689	0.0469	0.0576	0.0392
4B02	4B06	480206/4802-4B06/001	3-1/C #750	223	—	—	—	—
		480206/4802-4B06/002	3-1/C #750	223	0.0224/2	0.0452/2	0.0025	0.0050
4B03	4B50	485007A/4850-4B03/00Q	3-1/C #750	353	—	—	—	—
		485007A/4850-4B03/00P	3-1/C #750	353	—	—	—	—
		485007A/4850-4B03/00R	3-1/C #750	353	0.0224/3	0.0452/3	0.0026	0.0053
4B03	4B07	480306/4803-4B07/001	3-1/C #750	331	—	—	—	—
		480306/4803-4B07/002	3-1/C #750	331	0.0224/2	0.0452/2	0.0037	0.0075
4B03	4P212	480309A/4803-TB4992/00P	3-1/C #4/0	577	0.0689	0.0469	—	—
		480309A/4NP212-TB4992/00S	3-1/C #4/0	40	0.0689	0.0469	—	—
		480309A/4P212B-4NP212/00R	3-1/C #4/0	35	0.0689	0.0469	0.0449	0.0306
4B03	4P32	480312/4803-4P32/001	3-1/C #750	497	0.0224	0.0452	0.0111	0.0225
4B03	4K10	480304/4803-4NK10/00P	3-1/C #4/0	275	0.0689	0.0469	—	—
		4IAC01/4NK10-4K10/00P	3-1/C #4/0	40	0.0689	0.0469	0.0217	0.0148

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MW

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE CMB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH MW

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4803	4X09	480307/4803-4X09/001	3-1/C #500	304	—	—	—	—
		480307/4803-4X09/002	3-1/C #500	304	0.0314/2	0.0454/2	0.0048	0.0069
4804	4P214B	480403/4804-4P214B/001	3-1/C #750	340	(NOTE 3)	(NOTE 3)	0.0057	0.0124
4804	4S7B	480401/4804-4S7/001	3-1/C #350	255	0.0432	0.0468	0.0110	0.0119
4804	4B50	485001B/4850-4804/00Q	3-1/C #750	348	—	—	—	—
		485001B/4850-4804/00P	3-1/C #750	348	—	—	—	—
		485001B/4850-4804/00R	3-1/C #750	348	0.0224/3	0.0452/3	0.0026	0.0052
4804	4B52	480407B/4804-4852/00P	3-1/C #750	1060	—	—	—	—
		480407B/4804-4852/00Q	3-1/C #750	1060	0.0224/2	0.0452/2	0.0119	0.0240
4804	PH4B13	480408/4804-4B13/00B	3-1/C #500	348	—	—	—	—
		480408/4804-4B13/00D	3-1/C #500	348	0.0314/2	0.0454/2	0.0055	0.0079
4804	4B54	480406/4804-4B54/P	3-1/C #350	126	—	—	—	—
		480406/4804-4B54/Q	3-1/C #350	126	0.0432/2	0.0468/2	0.0027	0.0029
4805N	4P15	480571/4805-4P15/001	1-3/C #12	218	2.236	0.0486	0.4874	0.0106
4805N	4P19A	480557/4805-4P19A/001	1-3/C #12	194	2.236	0.0486	0.4338	0.0094
4805N	4P19B	480558/4805-4P19B/001	1-3/C #12	204	2.236	0.0486	0.4561	0.0099



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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
 CHKD. BY: R PRUETT RP
 VERIFIED BY: M WALSH (MWB)

DATE: 3-14-91
 DATE: 3-14-91
 DATE: 3/15/91

BY: C BEATTIE CMB
 CHKD. BY: A HELMS AH
 VERIFIED BY: M WALSH (MWB)

DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4805N	4P232B	480554/4P232B-T4P53/001	1-3/C #12	91	2.236	0.0486	—	—
		480554/4805-T4P53/002	1-3/C #12	429	2.236	0.0486	1.1627	0.0253
4805N	4P28A	480565/4805-4P28A/001	1-3/C #12	133	2.236	0.0486	0.2974	0.0065
4805N	4P34A	480549/4805-4P34A/001	1-3/C #12	307	2.236	0.0486	0.6865	0.0149
4805N	4P4	480572/4805-4P4/001	1-3/C #12	221	2.236	0.0486	0.4942	0.0107
4805N	4P43	480543/4805-4P43/001	1-3/C #12	480	2.236	0.0486	1.0733	0.0233
4805N	4P49	480550/4805-4P49/001	1-3/C #12	147	2.236	0.0486	0.3287	0.0071
4805N	4P5	480574/4805-4P5/001	3-1/C #2	474	0.213	0.0511	0.1010	0.0242
4805N	4V14A	480561/4805-TB4078/001	1-3/C #12	314	2.236	0.0486	—	—
		480561/4V14A-TB4078/001	1-3/C #12	24	2.236	0.0486	0.7558	0.0164
4805N	4V5	480566/4805-4V5/001	1-3/C #12	68	2.236	0.0486	0.1520	0.0033
4805N	4V16	480560/4805-4V16/001	1-3/C #12	136	2.236	0.0486	0.3041	0.0066
4805N	4V18	480569/4805-4V18/001	1-3/C #12	198	2.236	0.0486	0.4427	0.0096
4805N	4V19A	480552/4805-4V19A/001	1-3/C #10	83	1.404	0.0447	0.1165	0.0037

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MB

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE CMB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH MB

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4805N	D10	480567/4805-D10/001	3-1/C #6	1721	0.534	0.0585	0.9190	0.1007
4805N	4XS75/76	480541/4805-4XS76/00P 480541/4XS76-4XS75/00Q	2-1/C #6 2-1/C #6	140 30	0.534x2 0.534x2	0.0585x2 0.0585x2	— 0.1816	— 0.0199
4805N	4V31B	480564/4805-4V31B/001	1-3/C #12	323	2.236	0.0486	0.7222	0.0157
4805N	4V32B	480576/4805-4V32B/001	1-3/C #12	490	2.236	0.0486	1.0956	0.0238
4805N	4V4	480542/4805-4V4/001	1-3/C #12	223	2.236	0.0486	0.4986	0.0108
4805N	4V6A	480570/4805-4V6A/001	1-3/C #12	143	2.236	0.0486	0.3197	0.0069
4805N	4C19	480562/4805-4C19/001	1-3/C #12	118	2.236	0.0486	0.2638	0.0057
4805N	4F20A/B	480539/4805-4NF20A/001 480539/4NF20A-4NF20B/001 480539/4NF20B-4F20B/001	1-3/C #10 1-3/C #10 1-3/C #10	223 5 10	1.404 1.404 1.404	0.0447 0.0447 0.0447	— — 0.3342	— — 0.0106
4805N	4T9	480540/4805-4T9/001	3-1/C #6	295	0.534	0.0585	0.1575	0.0173
4805N	4P90A	480580/4805-4N90A/00P 480580/4N90A-4P90A/00Q	1-3/C #10 1-3/C #10	460 25	1.404 1.404	0.0447 0.0447	— 0.6809	— 0.0217
4805N	4P90B	480581/4805-4N90B/00P 480581/4N90B-4P90B/00Q	1-3/C #10 1-3/C #10	460 25	1.404 1.404	0.0447 0.0447	— 0.6809	— 0.0217



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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MB

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE MB
CHKD. BY: A HELMS AH
VERIFIED BY: M WALSH MB

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4805N	4P90C	480582/4805-4N90C/00P 480582/4N90C-4P90C/00Q	1-3/C #10 1-3/C #10	460 25	1.404 1.404	0.0447 0.0447	— 0.6809	— 0.0217
4805V	4P31	480510/4805-4P31/001	3-1/C #2	238	0.213	0.0511	0.0507	0.0122
4805V	4P36	480505/4805-4P36/001	3-1/C #6	103	0.534	0.0585	0.0550	0.0060
4805V	4P37	480503/4805-4P37/001	1-3/C #12	103	2.236	0.0486	0.2303	0.0050
4805V	4P40	480533/4805-4P40/001	1-3/C #10	238	1.404	0.0447	0.3342	0.0106
4805V	4T08	480512/4805-4T08/001	3-1/C #1/0	113	0.136	0.0512	0.0154	0.0058
4805V	4V1C	480518/4V1C-T4P22/001 480518/4V1C-T4P22/002 480518A/4805-T4P22/00P	3-1/C #4/0 3-1/C #4/0 3-1/C #4/0	266 266 370	— 0.0689/2 0.0689	— 0.0469/2 0.0469	— — 0.0347	— — 0.0236
4805V	4V3B	480519/4V3B-T4P22/001 480519/4805-T4P22/003	3-1/C #4/0 3-1/C #4/0	146 330	0.0689 0.0689	0.0469 0.0469	— 0.0328	— 0.0223
4805V	4V30B	480520/4805-T4P42/001 480520/4V30B-T4P42/001	3-1/C #6 3-1/C #4	401 201	0.534 0.336	0.0585 0.0538	— 0.2817	— 0.0343
4805V	4C1	480524/4805-4C1/001	3-1/C #4/0	290	0.0689	0.0469	0.0200	0.0136
4805V	MOV1420	480523/4805-MOV420/001	1-3/C #12	327	2.236	0.0486	0.7312	0.0159

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB DATE: 3-14-91
CHKD. BY: R PRUETT RP DATE: 3-14-91
VERIFIED BY: M WALSH (MR) DATE: 3/15/91

BY: C BEATTIE MB DATE: 3/14/91
CHKD. BY: A HELMS AH DATE: 3/14/91
VERIFIED BY: M WALSH (MR) DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4805V	MOV1400	480525/4805-MOV400/001	1-3/C #12	298	2.236	0.0486	0.6663	0.0145
4805V	MOV1427	480530/4805-MOV427/001	1-3/C #12	577	2.236	0.0486	1.2902	0.0280
4806	4P203B	480696/4806-TB5479/00P	3-1/C #2	384	0.213	0.0511	—	—
		480696/TB5479-4P203B/00Q	3-1/C #2	252	0.213	0.0511	0.1355	0.0325
4806	E16A/17A	480698/4806-S76/00P	1-3/C #6	47	0.555	0.0466	—	—
		S76/S76-N17A/00P	3-1/C #6	35	0.534	0.0585	—	—
		S76/E17A-N17A/001	3-1/C #6	56	0.534	0.0585	0.0747	0.0075
4806	4V36	480678/4806-TB4829/001	1-3/C #12	364	2.236	0.0486	—	—
		480678/4V36-TB4829/001	1-3/C #12	15	2.236	0.0486	0.8474	0.0184
4806	4V20	480663/4806-4V20/001	1-3/C #8	220	0.883	0.0457	0.1943	0.0101
4806	4V2B	480629/4806-T4P12/003	3-1/C #1/0	275	0.136	0.0512	—	—
		480629/4V2B-T4P12/001	3-1/C #1/0	216	0.136	0.0512	0.0668	0.0251
4806	4V30C	480650/4806-T4P43/001	3-1/C #6	249	0.534	0.0585	—	—
		480650/4V30C-T4P43/001	3-1/C #4	291	0.336	0.0538	0.2307	0.0302
4806	4V3C	480611/4806-T4P12/001	3-1/C #4/0	261	0.0689	0.0469	—	—
		480611/4V3C-T4P12/001	3-1/C #4/0	361	0.0689	0.0469	0.0429	0.0292

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB DATE: 3-14-91
CHKD. BY: R PRUETT RP DATE: 3-14-91
VERIFIED BY: M WALSH MR DATE: 3/5/91

BY: C BEATTIE CMB DATE: 3/14/91
CHKD. BY: A HELMS AH DATE: 3/14/91
VERIFIED BY: M WALSH MR DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4806	4D02	480614/4806-4D02/00A	3-1/C #4/0	250	0.0689	0.0469	0.0172	0.0117
4806	4V9	480628/4806-4V9/001	1-3/C #8	246	0.883	0.0457	0.2172	0.0112
4806	E16F*	480625A/4806-NS-E16F/00P 480625A/NS-E16F-E16F/00Q	3-1/C #2 3-1/C #6	204. 24	0.213 0.534	0.0511 0.0585	— 0.0563	— 0.0118
4806	4V19B	480640/4806-4V19B/001	1-3/C #10	323	1.404	0.0447	0.4535	0.0144
4806	MOV381	480634/4806-MOV381/001	1-3/C #12	313	2.236	0.0486	0.6999	0.0152
4806	MOV626	480638/4806-MOV626/001	1-3/C #12	348	2.236	0.0486	0.7781	0.0169
4806	MOV716B	480639/4806-MOV4716B/00P	1-3/C #10	350	1.404	0.0447	0.4914	0.0156
4806	MOV730	480637/4806-MOV730/001	1-3/C #12	318	2.236	0.0486	0.7110	0.0155
4806	MOV744B	480613/MOV744B-T4P52/001 480613/4806-T4P52/00P	1-3/C #12 1-3/C # 6	176 180	2.236 0.555	0.0486 0.0466	— 0.4934	— 0.0169
4806	MOV843B	480622/4806-MOV843B/001	1-3/C #12	308	2.236	0.0486	0.6887	0.0150
4806	MOV880B	480632/4806-MOV880B/001	1-3/C #12	303	2.236	0.0486	0.6775	0.0147

* PC/M 87-109, DC Equipment/Inverter Rooms HVAC System, Revision 2

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CALCULATION NO. EC-145
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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN *JB*
 CHKD. BY: R PRUETT *RP*
 VERIFIED BY: M WALSH *MW*

DATE: 3-14-91
 DATE: 3-14-91
 DATE: 3/15/91

BY: C BEATTIE *MB*
 CHKD. BY: A HELMS *AH*
 VERIFIED BY: M WALSH *MW*

DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4806	MOV1402	480618/4806-MOV402/001	1-3/C #12	295	2.236	0.0486	0.6596	0.0143
4806	MOV1418	480624/4806-TB5554/00P	1-3/C #10	186	1.404	0.0447	—	—
		480624/TB5554-TB5549/00Q	1-3/C #10	35	1.404	0.0447	—	—
		480624/TB5549-MOV4-1418/00R	1-3/C #10	196	1.404	0.0447	0.5855	0.0186
4806	MOV1421	480623/4806-MOV421/001	1-3/C #12	327	2.236	0.0486	0.7312	0.0159
4806	MOV1425	480641/4806-MOV425/001	1-3/C #12	434	2.236	0.0486	0.9704	0.0211
4807	P207B	480734/4807-P207B/001	1-3/C #12	166	2.236	0.0486	0.3712	0.0081
4807	4D25A	480709A/4807-4D25/00P	3-1/C #2	226	0.213	0.0511	0.0481	0.0115
4807	4V2A	480727/4807-TB4828/00P	3-1/C #1/0	20	0.136	0.0512	—	—
		480727/TB4828-T4P11/001	3-1/C #1/0	264	0.136	0.0512	—	—
		480727/4V2A-T4P11/001	3-1/C #4/0	131	0.0689	0.0469	0.0476	0.0207
4807	4P203A	480725/4807-4P203A/001	1-3/C #2	345	0.222	0.0408	0.0766	0.0141
4807	4V1A	480742/4807-T4P11/004	3-1/C #4/0	245	—	—	—	—
		480742/4807-T4P11/005	3-1/C #4/0	245	0.0689/2	0.0469/2	—	—
		480742/4V1A-T4P11/001	3-1/C #4/0	146	—	—	—	—
		480742/4V1A-T4P11/002	3-1/C #4/0	146	0.0689/2	0.0469/2	0.0135	0.0092
4807	MOV1426	480714/4807-MOV426/001	1-3/C #12	190	2.236	0.0486	0.4248	0.0092

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB DATE: 3-14-91
CHKD. BY: R PRUETT RP DATE: 3-14-91
VERIFIED BY: M WALSH (MWS) DATE: 3/15/91

BY: C BEATTIE (MB) DATE: 3/14/91
CHKD. BY: A HELMS AH DATE: 3/14/91
VERIFIED BY: M WALSH (MWS) DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4807	MOV6386	480723/4807-T4P51/00P	1-3/C #10	350	1.404	0.0447	—	—
		480723/T4P51-MOVCPM4-9/00Q	1-3/C #10	190	1.404	0.0447	0.7582	0.0241
4807	MOV1401	480748/4807-MOV401/001	1-3/C #12	661	2.236	0.0486	1.4780	0.0321
4807	MOV880A	480741/4807-M0880A/001	1-3/C #12	134	2.236	0.0486	0.2996	0.0065
4807	MOV716A	480743/4807-M0716A/001	1-3/C #12	145	2.236	0.0486	0.3242	0.0070
4807	MOV744A	480722/M0744A-T4P51/001	1-3/C #12	106	2.236	0.0486	—	—
		480722/4807-T4P51/00P	3-1/C #8	282	0.849	0.0574	0.4764	0.0213
4807	MOV843A	480738/4807-M0843A/001	1-3/C #12	239	2.236	0.0486	0.5344	0.0116
4808	3D25A	480804/4808-3D25A/00P	3-1/C #2	78	0.213	0.0511	0.0166	0.0040
4808	3D02A	480813/4808-3D02A/00P	3-1/C #2/0	69	0.108	0.0492	0.0075	0.0034
4808	V76/E232	480833C/4808-E232/00P	1-3/C #6	40	0.555	0.0466	—	—
		480833C/E232-V76/00Q	1-3/C #6	120	0.555	0.0466	0.0888	0.0075
4808	S77A	480817C/4808-S77A/00Q	1-3/C #10	198	1.404	0.0447	0.2780	0.0089
4808	S78A	480824C/4808-S78A/00Q	1-3/C #10	192	1.404	0.0447	0.2696	0.0086

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB DATE: 3-14-91
CHKD. BY: R PRUETT RP DATE: 3-14-91
VERIFIED BY: M WALSH MB DATE: 3/15/91

BY: C BEATTIE CMB DATE: 3/14/91
CHKD. BY: A HELMS AH DATE: 3/14/91
VERIFIED BY: M WALSH MB DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4808	E16B/E17B	480823/4808-TB5495/00P	1-3/C #6	95	0.555	0.0466	—	—
		480823/TB5495-N17B/00P	3-1/C #6	200	0.534	0.0585	—	—
		480823/E17B-TB3321/001	3-1/C #6	56	0.534	0.0585	—	—
		480823/N17B-TB3321/002	3-1/C #6	17	0.534	0.0585	0.1985	0.0204
4808	4V1B	480827/4808-T4P21/00P	3-1/C #4/0	92	0.0689	0.0469	—	—
		480827/4V1B-T4P21/001	3-1/C #4/0	171	—	—	—	—
		480827/4V1B-T4P21/002	3-1/C #4/0	171	0.0689/2	0.0469/2	0.0122	0.0083
4808	4V30A	480805/4808-T4P41/00P	3-1/C #4	110	0.336	0.0538	—	—
		480805/4V30A-T4P41/001	3-1/C #4	76	0.336	0.0538	0.0625	0.0100
4808	4V3A	480819/4808-T4P21/00P	3-1/C #4/0	92	0.0689	0.0469	—	—
		480819/4V3A-T4P21/001	3-1/C #4/0	191	0.0689	0.0469	0.0195	0.0133
4808	NS74A	480822C/4808-NS74A/00P	3-1/C #2/0	264	0.108	0.0492	0.0285	0.0130
4808	S75A	480825C/4808-S75A/00Q	1-3/C #10	240	1.404	0.0447	0.3370	0.0107
4808	V29A	480831C/4808-TB5473/00Q	1-3/C #10	40	1.404	0.0447	—	—
		480831C/TB5473-V29A/00P	1-3/C #10	178	1.404	0.0447	0.3061	0.0097
4808V	V8A	480815/4808-V8A/00P	3-1/C #2	161	0.213	0.0511	0.0343	0.0082
4808V	V10	480832C/4808-V10/00P	1-3/C #12	266	2.236	0.0486	0.5948	0.0129



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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB DATE: 3-14-91
 CHKD. BY: R PRUETT RP DATE: 3-14-91
 VERIFIED BY: M WALSH MWA DATE: 3/15/91

BY: C BEATTIE MB DATE: 3/14/91
 CHKD. BY: A HELMS AH DATE: 3/14/91
 VERIFIED BY: M WALSH MWA DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4808V	MOV1417	480807/4808-TB7361/00P	1-3/C #10	212	1.404	0.0447	—	—
		480807/TB7361-MOV4-1417/00P	1-3/C #10	50	1.404	0.0447	0.3678	0.0117
4808V	MOV6552A	480834/TB5473-MOV-6552A/00P	1-3/C #10	232	1.404	0.0447	—	—
		480834/4808-TB5473/00Q	1-3/C #10	40	1.404	0.0447	0.3819	0.0122
4808V	MOV6543A	480835/TB5473-MOV-6543A/00P	1-3/C #10	199	1.404	0.0447	—	—
		480835/4808-TB5473/00Q	1-3/C #10	40	1.404	0.0447	0.3356	0.0107
4808V	MOV1404	480806/4808-MOV-4-1404/00P	1-3/C #10	257	1.404	0.0447	0.3608	0.0115
4850	4P201C	485008C/4850-4P201C/00P	3-1/C #350	314	0.0432	0.0468	0.0136	0.0147
4850	4808	485004C/4850-4808/00P	3-1/C #750	40	—	—	—	—
		485004C/4850-4808/00Q	3-1/C #750	40	0.0224/2	0.0452/2	0.0004	0.0009
4851	4P244A	485102A/4851-TB4993B/00P	1-3/C #10	77	1.404	0.0447	0.1081	0.0034
4851	4V63A	485105A/4851-4V63A/00P	1-3/C #10	42	1.404	0.0447	0.0590	0.0019
4851	4V70A	485106/4851-4V70A/00P	1-3/C #10	80	1.404	0.0447	0.1123	0.0036
4851	4V65A	485107A/4851-4V65A/00P	1-3/C #10	53	1.404	0.0447	0.0744	0.0024
4851	4V67A	485109A/4851-4V67A/00P	3-1/C #2/0	85	0.108	0.0492	0.0092	0.0042



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CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
 CHKD. BY: R PRUETT RP
 VERIFIED BY: M WALSH MW

DATE: 3-14-91
 DATE: 3-14-91
 DATE: 3/15/91

BY: C BEATTIE MB
 CHKD. BY: A HELMS AH
 VERIFIED BY: M WALSH MW

DATE: 3/14/91
 DATE: 3/14/91
 DATE: 3/15/91

Bus	Load	"Cable Number"	(Note 2) Cable Size	(Note 2) Length (ft)	(Note 1) Resistance per 1000 ft	(Note 1) Reactance per 1000 ft	Total Resistance L x R/1000 ft	Total Reactance L x X/1000 ft
4B51	4S226A	4B5120/4B51-4S226A/00P	3-1/C #6	140	0.534	0.0585	0.0748	0.0082
4B51	4V64A	4B5111/4B51-4V64A/00P	1-3/C #10	23	1.404	0.0447	0.0323	0.0010
4B51	4P241A	4B5112/4B51-4P241A/00P	1-3/C #10	156	1.404	0.0447	0.2190	0.0070
4B51	4V68A	4B5121A/4B51-4V68A/00P	3-1/C #2/0	95	0.108	0.0492	0.0103	0.0047
4B51	4P245A	4B5122A/4B51-TB4993B/00P	1-3/C #10	77	1.404	0.0447	0.1081	0.0034
4B51	4V69A	4B5125A/4B51-4V69A/00P	3-1/C #2/0	107	0.108	0.0492	0.0116	0.0053
4B51	4S231A	4B5127/4B51-4NS231A/00P	1-3/C #8	78	0.883	0.0457	—	—
		4B5127/4NS231A-4S231A/00Q	1-3/C #8	10	0.883	0.0457	0.0777	0.0040
4B51	4S230	4B5128/4B51-4NS230/00P	1-3/C #10	78	1.404	0.0447	—	—
		4B5128/4NS230-4S230/00Q	1-3/C #10	10	1.404	0.0447	0.1236	0.0039
4B52	4P245B	4B5222B/4B52-TB4994B/00P	1-3/C #10	84	1.404	0.0447	0.1179	0.0038
4B52	4V69B	4B5225B/4B52-4V69B/00P	3-1/C #2/0	103	0.108	0.0492	0.0111	0.0051
4B52	4S231B	4B5227/4B52-4NS231B/00P	1-3/C #8	78	0.883	0.0457	—	—
		4B5227/4NS231B-4S231B/00Q	1-3/C #10	10	1.404	0.0447	0.0829	0.0040
4B52	4P244B	4B5202B/4B52-TB4994B/00P	1-3/C #10	84	1.404	0.0447	0.1179	0.0038

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CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM - CABLE RESISTANCE AND REACTANCES

BY: J BROWN JTB
CHKD. BY: R PRUETT RP
VERIFIED BY: M WALSH MR

DATE: 3-14-91
DATE: 3-14-91
DATE: 3/15/91

BY: C BEATTIE MB
CHKD. BY: A HELMS AK
VERIFIED BY: M WALSH MR

DATE: 3/14/91
DATE: 3/14/91
DATE: 3/15/91

<u>Bus</u>	<u>Load</u>	<u>"Cable Number"</u>	(Note 2) <u>Cable</u> <u>Size</u>	(Note 2) <u>Length</u> <u>(ft)</u>	(Note 1) <u>Resistance</u> <u>per 1000 ft</u>	(Note 1) <u>Reactance</u> <u>per 1000 ft</u>	<u>Total</u> <u>Resistance</u> <u>L x R/1000 ft</u>	<u>Total</u> <u>Reactance</u> <u>L x X/1000 ft</u>
4852	4V63B	485205B/4852-4V63B/00P	1-3/C #10	40	1.404	0.0447	0.0562	0.0018
4852	4V70B	485206/4852-4V70B/00P	1-3/C #10	102	1.404	0.0447	0.1432	0.0046
4852	4V65B	485207B/4852-4V65B/00P	1-3/C #10	46	1.404	0.0447	0.0646	0.0021
4852	4V67B	485209B/4852-4V67B/00P	3-1/C #2/0	78	0.108	0.0492	0.0084	0.0038
4852	4V64B	485211/4852-4V64B/00P	1-3/C #10	23	1.404	0.0447	0.0323	0.0010
4852	4P241B	485212B/4852-4P241B/00P	1-3/C #10	173	1.404	0.0447	0.2429	0.0077
4852	4S226B	485220/4852-4S226B/00P	3-1/C #6	96	0.534	0.0585	0.0513	0.0056
4852	4V68B	485221B/4852-4V68B/00P	3-1/C #2/0	95	0.108	0.0492	0.0103	0.0047

EBASCO SERVICES INCORPORATED

CALCULATION No. EC-145

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APPENDIX 2

PAGE 38 OF 48

BY C BEATTIE *CB* DATE 3/4/91

CHKD BY A HELMS ^{AN} DATE 3/14/91

VERIFIED BY M WALSH 102 DATE 3/15/91

CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT CABLE RESISTANCES AND REACTANCES

Notes:

1. All resistance and reactance values were obtained from Appendix B of EC-096 (Reference 6.49) except as noted on the following pages.
2. The cable lengths for existing cables are based on actual lengths as shown on Reference 6.46. Cable schedule lengths (References 6.37 through 6.39, 6.41 through 6.47, 6.50 through 6.52) for new cable include a 10 foot allowance at each end plus 15 feet at applicable manholes. To allow for installation tolerance for long runs of new cable, the lengths include an additional margin of 20% for design lengths less than 500 feet and 10% for lengths of 500 feet or more. However, due to the 10 foot allowance at each end, short cable runs of approximately 50 feet do not need additional margin.
3. See pages 38 through 48
4. All impedances are based on 90°C conductor temperature except as noted on the following pages.
5. Cable information could not be found for the following Bus/Load pairs and have been estimated as follows:

3B05N/3P19D - Length is based on the route for an adjacent pump cable (3B0559/3B05-3P19C/001) fed from the same bus

EBASCO SERVICES INCORPORATED

CALCULATION No. EC-145

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BY C BEATTIE MB DATE 12/3/91
CHKD BY A HELMS AH DATE 3/14/91
VERIFIED BY M WALSH AH DATE 3/15/91
CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT CABLE RESISTANCES AND REACTANCES

Notes: (Continued)

5. (Continued)

3B06/3V2A - Length for outside Reactor Containment Building portion is based on a spare cable (Spare/3B06-T3P11/003) that prior to being spared, fed this load

3B05N/3NF20A/B - Length is based on a drawing take-off, assuming conduit from motors to tray 3ATA50 and in tray back to MCC 3B05

6. Cable length is incorrectly identified in PC/M 87-257 CCL as 446 feet, which is the length for the existing cable. A cable take-off was performed to confirm the new route length. This takeoff includes an additional 20 feet (10 feet for each equipment end) plus 20% margin.

EBASCO SERVICES INCORPORATED

CALCULATION No. EC-145
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BY C BEATTIE MB DATE 3/14/91
CHKD BY A HELMS AM DATE 3/14/91
VERIFIED BY M WALSH MB DATE 3/15/91
CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT CABLE RESISTANCES AND REACTANCES

1.0 DETERMINATION OF CABLE RESISTANCE AT 40°C

1.1 CONVERSION FACTOR FOR RESISTANCE 90°C TO 40°C (Data in Equation in °C)

$$\frac{234.5 + 40}{234.5 + 90} = 0.8459 \quad (\text{Ref. 6.48, Pg 4})$$

1.2 CABLE RESISTANCE AT 40°C

AC RESISTANCE (ohms/1000ft)

CONDUCTOR SIZE	90°C		40°C	
	NON-MAG	MAG	NON-MAG	MAG
500 kcmil	0.0283	N/R	0.0239	N/R
750 kcmil	0.0192	0.0224	0.0162	0.0189

N/R = Not Required

2.0 DETERMINATION OF CABLE IMPEDANCES UTILIZING SPECIFIC ROUTE INSTALLATION INFORMATION AND 40°C CABLE RESISTANCES

2.1 FIRE PUMP (P39B) FEEDER IMPEDANCE

CABLE SIZE	RACEWAY TYPE	LENGTH(ft)	(ohms/1000ft)		(ohms)	
			R*	X*	R	X
500 kcmil 3-1/C Existing	PVC Conduit	26	0.0239	0.0363	0.0006	0.0009
750 kcmil	PVC	960	0.0162	0.0362	0.0156	0.0348
3-1/C	Cable Tray	30	0.0162	0.0354	0.0005	0.0011
Existing	Manholes	91	0.0162	0.0354	0.0015	0.0032
	Equipment	11	0.0189	0.0452	0.0002	0.0005
		1,092			0.0178	0.0396

TOTAL LENGTH = 1092 + 26 = 1118 feet

TOTAL IMPEDANCE (Z) = (0.0006 + j0.0009) + (0.0178 + j0.0396) = 0.0184 + j0.0405 ohms

* FOR RESISTANCE AND REACTANCE DATA, MANHOLES ARE CONSIDERED
CABLE TRAY AND EQUIPMENT AND BOXES ARE CONSIDERED MAGNETIC DUCT

EBASCO SERVICES INCORPORATED

CALCULATION No. EC-145

REVISION 4

APPENDIX 2

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BY C BEATTIE MB DATE 3/14/91
 CHKD BY A HELMS AA DATE 3/14/91
 VERIFIED BY M WALSH AR DATE 3/15/91
 CLIENT FLORIDA POWER & LIGHT COMPANY
 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT CABLE RESISTANCES AND REACTANCES

2.2 CONTAINMENT SPRAY PUMP (3P214A) FEEDER IMPEDANCE

CABLE SIZE	RACEWAY TYPE	LENGTH(ft)*	(ohms/1000ft)		(ohms)	
			R	X	R	X
750 kcmil 6-1/C	PVC Conduit	402	0.0162/2	0.0362/2	0.0033	0.0073
	Steel Conduit	226	0.0189/2	0.0452/2	0.0021	0.0051
	Manholes	55	0.0162/2	0.0354/2	0.0004	0.0010
	Boxes	7	0.0189/2	0.0452/2	0.0001	0.0002
	Equipment	22	0.0189/2	0.0452/2	0.0002	0.0005
		712			0.0061	0.0141

750 Kcmil 3-1/C	Steel Conduit	20	0.0189	0.0452	0.0004	0.0009
--------------------	---------------	----	--------	--------	--------	--------

TOTAL LENGTH = 712 + 20 = 732 feet

TOTAL IMPEDANCE Z = (0.0061+j0.0141)+(0.0004+j0.0009) = 0.0065 + j0.0150 ohms

* LENGTHS ARE ADJUSTED INDIVIDUALLY
 ASSUMING TOTAL CABLE LENGTH OF GREATER THAN 500 FEET

2.3 CONTAINMENT SPRAY PUMP (3P214B) FEEDER IMPEDANCE

CABLE SIZE	RACEWAY TYPE	LENGTH(ft)*	(ohms/1000ft)		(ohms)	
			R	X	R	X
750 kcmil 6-1/C	PVC Conduit	385	0.0162/2	0.0362/2	0.0031	0.0070
	Steel Conduit	380	0.0189/2	0.0452/2	0.0036	0.0086
	Manholes	40	0.0162/2	0.0354/2	0.0003	0.0007
	Boxes	6	0.0189/2	0.0452/2	0.0001	0.0001
	Equipment	22	0.0189/2	0.0452/2	0.0002	0.0005
		833			0.0073	0.0169

750 Kcmil 3-1/C	Steel Conduit	20	0.0189	0.0452	0.0004	0.0009
--------------------	---------------	----	--------	--------	--------	--------

TOTAL LENGTH = 833 + 20 = 853 feet

TOTAL IMPEDANCE (Z) = (0.0073+j0.0169)+(0.0004+j0.0009) = 0.0077 + j0.0178 ohms

* LENGTHS ARE ADJUSTED INDIVIDUALLY
 ASSUMING TOTAL CABLE LENGTH OF GREATER THAN 500 FEET



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 CHKD BY A HELMS AA DATE 3/19/91
 VERIFIED BY M WALSH AD DATE 3/15/91
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 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT CABLE RESISTANCES AND REACTANCES

2.4 CONTAINMENT SPRAY PUMP (4P214A) FEEDER IMPEDANCE

CABLE SIZE	RACEWAY TYPE	LENGTH(ft)	(ohms/1000ft)		(ohms)	
			R	X	R	X
750 kcmil	PVC Conduit	235	0.0162	0.0362	0.0038	0.0085
3-1/C	Steel Conduit	15	0.0189	0.0452	0.0003	0.0007
Existing	Manholes	60	0.0162	0.0354	0.0010	0.0021
	Equipment	24	0.0189	0.0452	0.0005	0.0011
	Cable Tray	<u>67</u>	0.0162	0.0354	<u>0.0011</u>	<u>0.0024</u>
		401			0.0067	0.0148

TOTAL LENGTH = 401 feet
 TOTAL IMPEDANCE (Z) = 0.0067 + j0.0148 ohms

2.5 CONTAINMENT SPRAY PUMP (4P214B) FEEDER IMPEDANCE

CABLE SIZE	RACEWAY TYPE	LENGTH(ft)	(ohms/1000ft)		(ohms)	
			R	X	R	X
750 kcmil	PVC Conduit	250	0.0162	0.0362	0.0041	0.0091
3-1/C	Manholes	35	0.0162	0.0354	0.0006	0.0012
Existing	Equipment	20	0.0189	0.0452	0.0004	0.0009
	Cable Tray	<u>35</u>	0.0162	0.0354	<u>0.0006</u>	<u>0.0012</u>
		340			0.0057	0.0124

TOTAL LENGTH = 340 feet
 TOTAL IMPEDANCE (Z) = 0.0057 + j0.0124 ohms

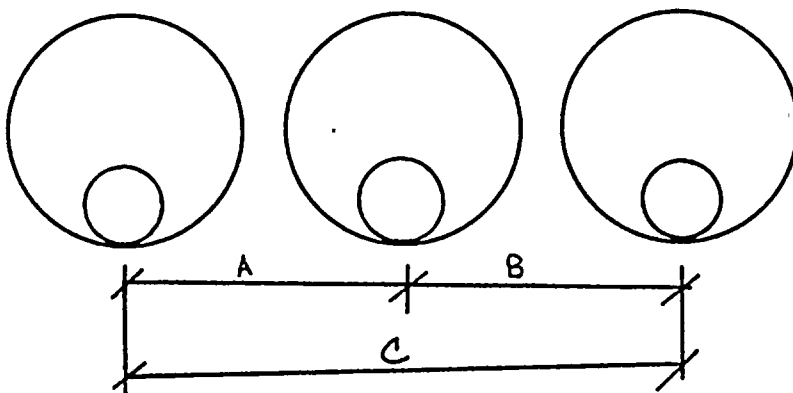
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3.0 RESISTANCES AND REACTANCES FOR 1250 KCMIL AT 90°C

3.1 DETERMINATION OF 1250 KCMIL REACTANCE IN DUCT BANK
 (RESISTANCE DOES NOT DEPEND ON BEING IN DUCT BANK)



$$A=B=8-3/16'' \text{ (Ref. 6.50)}$$

$$C=2A=2B$$

EQUIVALENT SPACING

$$S = (A \times B \times C)^{1/3}$$

$$S = (A \times A \times 2A)^{1/3}$$

$$S = (2A^3)^{1/3}$$

$$S = A(2)^{1/3}$$

$$S = 1.26 \times 8-3/16''$$

$$S = 10.3163''$$

(Ref. 6.48, Pg 13)

DIAMETER OF 1,250 Kcmil CONDUCTOR = 1.289"

(Ref. 6.48, Pg 1)

$$\text{RADIUS} = r = D/2 = \frac{1.289''}{2} = 0.6445''$$

$$X = 2\pi f(0.1404 \log_{10} \frac{S}{r} + 0.0153) \times 10^{-3}$$

(Ref. 6.48, Pg 13)

Where: x = Reactance in ohms/1000 feet
 s = Equivalent Spacing of Conductors in inches
 r = Conductor Radius in inches
 f = Frequency

$$X = 2 \times \pi \times 60 (0.1404 \log_{10} \frac{10.3163}{0.6445} + 0.0153) \times 10^{-3}$$

$$X = 0.0695 \text{ ohms/1000 feet}$$

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 SUBJECT CABLE RESISTANCES AND REACTANCES

3.1 DETERMINATION OF 1250 KCMIL REACTANCE IN DUCT BANK (Continued)

NO FURTHER ADJUSTMENT REQUIRED AS CABLES ARE IN NON-MAGNETIC CONDUIT
 (Ref. 6.48, Pg 13)

RESISTANCE OF 1250 kcmil CABLE (R)

$$R = 0.0122 \text{ ohms/1000 feet} \quad (\text{Ref. 6.49, Sh. 16})$$

$$\text{TOTAL IMPEDANCE (Z)} = 0.0122 + j0.0695 \text{ ohms/1000 ft}$$

3.2 SUMMARY OF RESISTANCES AND REACTANCES FOR 1250 KCMIL at 90°C

	(ohms/1000ft)		(ohms/1000ft)	
	R		X	
	NON-MAGNETIC	MAGNETIC	NON-MAGNETIC	MAGNETIC
Conduit	0.0122	0.0157	0.0403	0.0504
Ladder-Type Tray (Maintained Spacing)	0.0122	N/A	0.0440	N/A
Underground Duct Bank	0.0122	N/A	0.0695	N/A

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 PROJECT TURKEY POINT PLANT - UNITS 3 & 4
 SUBJECT CABLE RESISTANCES AND REACTANCES

3.3 EMERGENCY DIESEL GENERATOR (4A) LEADS IMPEDANCE

CABLE SIZE	RACEWAY TYPE	LENGTH(ft)*	(ohms/1000ft)		(ohms)	
			R	X	R	X
1250 kcmil 3-1/C	PVC	297	0.0122	0.0403	0.0036	0.0120
	Steel	320	0.0157	0.0504	0.0050	0.0161
	Manholes	50	0.0122	0.0440	0.0006	0.0022
	Boxes	31	0.0157	0.0504	0.0005	0.0016
	Equipment	17	0.0157	0.0504	0.0003	0.0009
	Cable Tray	94	0.0122	0.0440	0.0011	0.0041
		809			0.0111	0.0369

TOTAL LENGTH = 809 feet

TOTAL IMPEDANCE (Z) = 0.0111 + j0.0369 ohms

* LENGTHS ARE ADJUSTED INDIVIDUALLY
 ASSUMING TOTAL CABLE LENGTH OF GREATER THAN 500 FEET

3.4 EMERGENCY DIESEL GENERATOR (4B) LEADS IMPEDANCE

CABLE SIZE	RACEWAY TYPE	LENGTH(ft)*	(ohms/1000ft)		(ohms)	
			R	X	R	X
1250 kcmil 3-1/C	PVC Conduit	833	0.0122	0.0403	0.0102	0.0336
	Steel Conduit	52	0.0157	0.0504	0.0008	0.0026
	Manholes	66	0.0122	0.0440	0.0008	0.0029
	Boxes	6	0.0157	0.0504	0.0001	0.0003
	Equipment	44	0.0157	0.0504	0.0007	0.0022
	Cable Tray	199	0.0122	0.0440	0.0024	0.0088
		1200			0.0150	0.0504

TOTAL LENGTH = 1200 feet

TOTAL IMPEDANCE (Z) = 0.0150 + j0.0504 ohms

* LENGTHS ARE ADJUSTED INDIVIDUALLY
 ASSUMING TOTAL CABLE LENGTH OF GREATER THAN 500 FEET

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PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT CABLE RESISTANCES AND REACTANCES

3.5 EMERGENCY DIESEL GENERATOR (3A) LEADS IMPEDANCE

CABLE SIZE	RACEWAY TYPE	LENGTH(ft)	(ohms/1000ft)		(ohms)	
			R	X	R	X
1250 kcmil	PVC Conduit	129	0.0122	0.0403	0.0016	0.0052
3-1/C	Manholes	81	0.0122	0.0440	0.0010	0.0036
Existing	Equipment	38	0.0157	0.0504	0.0006	0.0019
		248			0.0032	0.0107

TOTAL LENGTH = 248 feet

TOTAL IMPEDANCE (Z) = 0.0032 + j0.0107 ohms

3.6 EMERGENCY DIESEL GENERATOR (3B) LEADS IMPEDANCE

CABLE SIZE	RACEWAY TYPE	LENGTH(ft)	(ohms/1000ft)		(ohms)	
			R	X	R	X
1250 kcmil	PVC Conduit	131	0.0122	0.0403	0.0016	0.0055
3-1/C	Manholes	71	0.0122	0.0440	0.0009	0.0031
Existing	Equipment	48	0.0157	0.0504	0.0008	0.0024
		250			0.0033	0.0110

TOTAL LENGTH = 250 feet

TOTAL IMPEDANCE (Z) = 0.0033 + j0.0110 ohms



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PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT CABLE RESISTANCES AND REACTANCES

4.0 DETERMINATION OF CABLE IMPEDANCE FOR 1500 KCMIL 3-1/C IN TRAY AT 90°C

CABLE OUTER DIAMETER = 2.37" (Ref. 6.42)
CONDUCTOR DIAMETER = 1.412" (Ref. 6.44, Pg 1)
CONDUCTOR RADIUS = $D/2 = 0.706"$
IN TRAY, MAINTAINED SPACING = CABLE OUTER DIAMETER

THEREFORE, $S = 1.26 \times 2 \times O.D.$ (Ref. 6.44, Pg 13)
 $S = 1.26 \times 2 \times 2.37$
 $S = 5.9724"$

$X = 2\pi f(0.1404 \log_{10} \frac{5.9724}{0.706} + 0.0153) \times 10^{-3}$ (Ref. 6.48, Pg 13)

$X = 0.0549 \text{ ohms}/1000\text{ft}$

DC RESISTANCE (25°C) = 0.0074 ohms/1000ft (Ref. 6.48, Pg 3)
CONVERSION FACTOR FOR 90°C = 1.250 (Ref. 6.48, Pg 4)
DC RESISTANCE (90°C) = 0.0093 ohms/1000ft
CONVERSION FACTOR FOR AC, 60HZ, NON-MAGNETIC CONDUIT = 1.142 (Ref. 6.48, Pg 5)
AC RESISTANCE (90°C) = 0.0106 ohms/1000ft

$Z = 0.0106 + j0.0549 \text{ ohms}/1000\text{ft}$

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PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT CABLE RESISTANCES AND REACTANCES

5.0 DETERMINATION OF CABLE IMPEDANCE FOR 5kv EXISTING 350 KCMIL 3-1/C at 90°C

CABLE OUTER DIAMETER = 1.359" (Ref. 6.42)

CONDUCTOR DIAMETER = 0.681" (Ref. 6.48, Pg 1)

CONDUCTOR RADIUS = $D/2 = 0.3405"$

$$X = 2\pi f(0.1404 \log_{10} \frac{1.359}{0.3405} + 0.0153) \times 10^{-3} \quad (\text{Ref. 6.48, Pg. 13})$$

$$X = 0.0376 \text{ ohms/1000ft BASE REACTANCE}$$

ADJUSTMENT FACTOR FOR STEEL CONDUIT = 1.5 (Ref. 6.48, Pg. 13)

$$X = 1.5 \times 0.0376 = 0.0564 \text{ ohms/1000 ft}$$

$$R = 0.0432 \text{ ohms/1000 ft} \quad (\text{Ref. 6.49, Sh. 13})$$

$$Z = 0.0432 + j0.0564 \text{ ohms/1000ft}$$

11-1-70



EBASCO SERVICES INCORPORATED

CALCULATION EC-145

BY J SOMMA ⁸ DATE 3/15/91
CHKD. BY A HELMS ^{AN} DATE 3/15/91SHEET 1 OF 3OFS NO. 8614.131 DEPT NO. 562CLIENT FLORIDA POWER & LIGHT COMPANYPROJECT TURKEY POINT PLANT - UNITS 3 & 4SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEMCOMPARISON OF 480V LOADS (CASE 1 PRIOR TO START*) WITH EC-138UNIT 3

BUS	MOTOR		STATIC		EC 138 (Reference 6.3)
	KW	KVAR	KW	KVAR	
3B01	247.0	138.7	0.0	0.0	631.36
3B05V	83.0	51.6	13.7	0.0	
3B05N	215.5	135.0	13.6	0.0	42.4KW @ 0.85 pf = 49.9 A/C Load
3B53	<u>14.6</u>	<u>9.0</u>	<u>27.0</u>	<u>0.0</u>	(Reference 6.31)
	560.1	334.3	54.3	0.0	
TOTAL	614.4	334.3			= <u>699.5KVA</u> <u>681.36 KVA</u>
3B02	207.0	113.4	0.0	0.0	383.85
3B06	<u>104.5</u>	<u>64.1</u>	<u>48.4</u>	<u>0.1</u>	
	311.5	177.5	48.4	0.1	
TOTAL	359.9	177.6			= <u>401.3KVA</u> <u>383.85 KVA</u>
3B03	82.6	51.3	203.7	1.5	511.59
3B07	<u>157.6</u>	<u>97.4</u>	<u>62.5</u>	<u>0.3</u>	
	240.2	148.7	266.2	1.8	
TOTAL	506.4	150.5			= <u>528.3KVA</u> <u>511.59 KVA</u>
3B04	123.5	77.5	0.0	0.0	263.83
B08N	117.9	72.4	21.5	12.7	
3B52	7.4	4.5	0.9	0.0	42.4KW @ 0.85pf = 49.9 A/C Load
3B54	<u>14.6</u>	<u>9.0</u>	<u>25.0</u>	<u>0.0</u>	(Reference 6.31)
	263.4	163.4	47.4	12.7	
TOTAL	310.8	176.1			= <u>357.2KVA</u> <u>313.73 KVA</u>

* UNIT 3 BASED ON APPENDIX 11
UNIT 4 BASED ON APPENDIX 8

EBASCO SERVICES INCORPORATED

CALCULATION EC-145

BY J SOMMA ^{JS} DATE 3/15/91
CHKD. BY A HELMS ^{AN} DATE 3/15/91

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OFS NO. 8614.131 DEPT NO. 562

CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

COMPARISON OF 480V LOADS (CASE 1 PRIOR TO START*) WITH EC-138
(Continued)

BUS	MOTOR		STATIC		EC 138 (Reference 6.3)
	KW	KVAR	KW	KVAR	
3B50	123.4	60.8	0.0	0.0	363.12
3B08V	<u>231.4</u>	<u>142.4</u>	<u>1.7</u>	<u>0.0</u>	
	354.8	203.2	1.7	0.0	
TOTAL	356.5	203.2			
				= <u>410.3 KVA</u>	<u>363.12 KVA</u>

UNIT 4

4B01	245.7	137.3	0.0	0.0	667.65
4B05V	82.6	51.3	0.9	0.0	
4B51	17.9	11.1	0.9	0.0	
4B05N	62.8	40.1	239.6	0.0	42.4kW @ 0.85 pf = 49.9 A/C Load
4B53	<u>14.6</u>	<u>9.0</u>	<u>25.0</u>	<u>0.0</u>	(Reference 6.31)
	423.6	248.8	266.4	0.0	
TOTAL	690.0	248.8			
				= <u>733.5 KVA</u>	<u>717.55 KVA</u>
4B02	206.9	113.0	0.0	0.0	363.98
4B06	<u>104.2</u>	<u>63.8</u>	<u>32.2</u>	<u>0.1</u>	
	311.1	176.8	32.2	0.1	
TOTAL	343.3	176.9			
				= <u>386.2 KVA</u>	<u>363.98 KVA</u>

* UNIT 3 BASED ON APPENDIX 11
UNIT 4 BASED ON APPENDIX 8

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BY J SOMMA ⁸ DATE 3/15/91

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CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

COMPARISON OF 480V LOADS (CASE 1 PRIOR TO START*) WITH EC-138
(Continued)

UNIT 4
(Continued)

BUS	MOTOR		STATIC		EC 138 (Reference 6.3)
	KW	KVAR	KW	KVAR	
4B03	83.0	51.6	270.5	2.4	509.39
4B07	<u>172.8</u>	<u>106.8</u>	<u>1.8</u>	<u>0.0</u>	
	255.8	158.4	272.3	2.4	
TOTAL	528.1	160.8	= <u>552.0 KVA</u>		<u>509.39 KVA</u>
4B04	61.1	38.5	0.0	0.0	59.05
4B52	13.8	8.5	0.0	0.0	
4B54	<u>14.6</u>	<u>9.0</u>	<u>25.4</u>	<u>0.0</u>	42.4KW @ 0.85pf = 49.9 A/C Load
	89.5	56.0	25.4	0.0	(Reference 6.31)
TOTAL	114.9	56.0	= <u>127.8 KVA</u>		<u>108.95 KVA</u>
4B50	122.8	60.2	0.0	0.0	423.01
4B08	<u>231.8</u>	<u>42.6</u>	<u>39.6</u>	<u>0.0</u>	
	354.6	102.8	39.6	0.0	
TOTAL	394.2	102.8	= <u>407.4 KVA</u>		<u>423.01 KVA</u>

* UNIT 3 BASED ON APPENDIX 11
UNIT 4 BASED ON APPENDIX 8

EBASCO SERVICES INCORPORATED

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BY J SOMMA ⁸⁵ DATE 3/15/91

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CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

Unit 3 - Summary of Setpoint Voltages per Criteria 2.13 and 2.14

<u>Load Center</u>	<u>3A</u> <u>(3B01)</u>	<u>3B</u> <u>(3B02)</u>	<u>3C</u> <u>(3B03)</u>	<u>3D</u> <u>(3B04)</u>
480V Instantaneous	430	438	434	434
480V Inverse Time	424	427	437	435

1.0 Alignment 3AA2 to 3AD Summary (See Note)

	<u>(APPENDIX 11)</u> <u>3B03 to 3B50</u>					<u>(APPENDIX 9)</u> <u>3B04 to 3B50</u>			
	<u>3B01</u>	<u>3B02</u>	<u>3B03</u>	<u>3B04</u>		<u>3B01</u>	<u>3B02</u>	<u>3B03</u>	<u>3B04</u>
<u>Inst.</u>	50	66	57	48		51	65	56	56
<u>Inv.</u>	6	16	30	7		6	16	24	30

1.1 Alignment 3AB2 to 3AD Summary (See Note)

	<u>(APPENDIX 7)</u> <u>3B03 to 3B50</u>					<u>(APPENDIX 5)</u> <u>3B04 to 3B50</u>			
	<u>3B01</u>	<u>3B02</u>	<u>3B03</u>	<u>3B04</u>		<u>3B01</u>	<u>3B02</u>	<u>3B03</u>	<u>3B04</u>
<u>Inst.</u>	41	65	58	47		50	65	56	57
<u>Inv.</u>	6	16	31	7		6	16	24	29

1.2 Calculation of Setpoint Voltages

<u>Inst.</u>	<u>3B01</u>	<u>3B02</u>	<u>3B03</u>	<u>3B04</u>	<u>Inv.</u>	<u>3B01</u>	<u>3B02</u>	<u>3B03</u>	<u>3B04</u>
	364.5	364.5	364.5	364.5		400	400	400	400
	+ 5.0	+ 5.0	+ 5.0	+ 5.0		+ 5	+ 5	+ 5	+ 5
	+ 51.0	+ 66.0	+ 58.0	+ 57.0		+ 6	+ 16	+ 31	+ 30
	+ 9.5	+ 2.5	+ 6.5	+ 7.5		+ 13	+ 6	+ 1	+ 0
	430	438	434	434		424	427	437	435

Note: Underlined values denote largest voltage drop

EBASCO SERVICES INCORPORATED

CALCULATION EC-145

BY J SOMMA ⁸⁸ DATE 3/15/91
CHKD. BY W LEWINGER ^W DATE 3/15/91

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CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

Unit 4 - Summary of Setpoint Voltages per Criteria 2.13 and 2.14

Load Center	4A (4B01)	4B (4B02)	4C (4B03)	4D (4B04)
480V Instantaneous	435	434	434	430
480V Inverse Time	430	436	434	434

2.0 Alignment 4AA2 to 4AD Summary (See Note)

	(APPENDIX 8) 4B03 to 4B50				(APPENDIX 6) 4B04 to 4B50			
	4B01	4B02	4B03	4B04	4B01	4B02	4B03	4B04
Inst.	43	<u>57</u>	55	42	<u>64</u>	56	<u>56</u>	52
Inv.	18	15	<u>20</u>	9	<u>18</u>	<u>25</u>	0	<u>20</u>

2.1 Alignment 4AB2 to 4AD Summary (See Note)

	(APPENDIX 12) 4B03 to 4B50				(APPENDIX 10) 4B04 to 4B50			
	4B01	4B02	4B03	4B04	4B01	4B02	4B03	4B04
Inst.	44	55	55	43	44	55	56	42
Inv.	18	16	20	9	18	16	0	20

2.2 Calculation of Setpoint Voltages

Inst.	4B01	4B02	4B03	4B04	Inv.	4B01	4B02	4B03	4B04
	364.5	364.5	364.5	364.5		400	400	400	400
	+ 5.0	+ 5.0	+ 5.0	+ 5.0		+ 5	+ 5	+ 5	+ 5
	+ 64.0	+ 57.0	+ 56.0	+ 52.0		+ 18	+ 25	+ 20	+ 20
	+ <u>1.5</u>	+ <u>7.5</u>	+ <u>8.5</u>	+ <u>8.5</u>		+ <u>7</u>	+ <u>6</u>	+ <u>9</u>	+ <u>9</u>
	435	434	434	430		430	436	434	434

Note: Underlined values denote largest voltage drop

CALCULATION EC-145

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PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

**Largest Volt
Drop for
Setpoint
Inst. Inv.**

LC 3B02

LC 3803

LC 3804

4kV BUS 3AA2

4kV BUS 3AB2

[illegible]

1127E/18

EBASCO SERVICES INCORPORATED

NDIX 4
4

BY J SOMMA JS DATE 3/15/91
CHKD. BY W LEWINGER WL DATE 3/15/91

CALCULATION EC-145

SHEET 4 OF 10

OFS NO. 8614.131 DEPT NO. 562

CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

Unit 3 - Summary of Bus/Motor Voltages - Alignment 3AB2 to 3AD, 3B03 to 3B50 (Appendix 7)

Case During/After	1		2		3		4		5		6		7		8		9		10		11		Largest Volt Drop for Setpoint Inst. Inv.		
	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A			
LC 3801																									
3801 Bus Volts	457	461	446	459	419	455	455	455	455	455	454	455	453	455	455	455	372	447	445	455	422	457			
3801 Min Motor Volts	-	-	-	-	378	449	-	-	-	-	-	-	-	-	-	-	365	441	-	-	381	452			
3805 Min Motor Volts	407	455	-	-	-	-	-	-	-	-	-	-	-	-	-	-	366	441	-	-	-	-			
Max Voltage Drop	40	6			41	6											7	6			41	5	41	6	
LC 3802																									
3802 Bus Volts	454	459	445	458	448	457	457	457	457	445	456	455	455	455	455	444	454	388	454	453	458				
3806 Min Motor Volts	389	(V)	(V)	-	-	408	442	-	-	-	406	440	440	440	440	440	428	439	369	438	-	-			
Max Voltage Drop	65	-			40	15				39	16	15	15	15	15	16	15	19	16			65	16		
LC 3803																									
3803 Bus Volts	455	459	444	457	448	456	452	455	455	455	455	444	454	442	453	453	453	369	444	443	452	453	458		
3807 Min Motor Volts	403	(V)	-	-	393	434	429	433	433	433	396	431	417	429	429	429	429	340	420	418	428	432	437		
3808 Min Motor Volts	431	436	420	434	425	433	394	429	429	429	417	428	387	424	424	424	424	334	415	414	424	427	432		
Max Voltage Drop	53	23	24	23	55	23	58	26	26	26	48	26	55	29	29	29	29	35	29	29	31	26	26	58	31
LC 3804																									
3804 Bus Volts	457	460	445	458	418	454	454	454	454	454	454	454	454	454	454	442	453	386	453	419	454				
3804 Min Motor Volts	-	-	-	-	371	447	-	-	-	-	-	-	-	-	-	-	-	-	-	-	372	447			
3852 Min Motor Volts	454	458	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Max Voltage Drop	3	2			47	7														47	7	47	7		
4kV Bus 3AA2																									
3AA2 Bus Volts	3981	3988	3869	3977	3930	3971	3967	3971	3971	3971	3958	3970	3957	3968	3968	3968	3303	3901	3888	3966	3937	3975			
3AA2 Min Motor Volts	-	-	3849	3973	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Voltage Drop			20	4																					
Voltage Drop (480V Base)			2.3	0.5																			2.3	0.5	
4kV Bus 3AB2																									
3AB2 Bus Volts	3925	3932	3812	3921	3874	3916	3915	3916	3916	3916	3903	3915	3912	3913	3913	3913	3816	3904	3353	3902	3880	3917			
3AB2 Min Motor Volts	-	-	3793	3917	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Voltage Drop			19	4																					
Voltage Drop (480V Base)			2.2	0.5																			2.2	0.5	

(V) = Valve - not used in setting inverse time relay

EBASCO SERVICES INCORPORATED

IX 4

BY J SOMMA ⁸ DATE 3/15/91
CHKD. BY W LEWINGER ^W DATE 3/15/91
CLIENT FLORIDA POWER & LIGHT COMPANY

CALCULATION EC-145
SHEET 5 OF 10
OFS NO. 8614.131 DEPT NO. 562

PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

Unit 3 - Summary of Bus/Motor Voltages - Alignment 3AA2 to 3AD, 3B04 to 3B50 (Appendix 9)

Case During/After	1		2		3		4		5		6		7		8		9		10		11		Largest Volt Drop for Setpoint Inst. Inv.	
	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A		
LC 3B01																								
3B01 Bus Volts	457	460	446	459	418	454	454	454	454	454	453	454	454	454	454	454	372	446	445	454	421	457		
3B01 Min Motor Volts	-	-	-	-	378	448	-	-	-	-	-	-	-	-	-	-	365	440	-	-	380	451		
3B05 Min Motor Volts	406	455	-	-	-	-	-	-	-	-	-	-	-	-	-	-	366	441	-	-	-	-		
Max Voltage Drop	51	5			40	6											7	6			41	6	51	6
LC 3B02																								
3B02 Bus Volts	455	460	445	458	449	457	457	457	457	457	445	456	455	456	456	456	444	445	388	455	454	459		
3B06 Min Motor Volts	390	(V)	-	-	409	442	-	-	-	-	407	441	439	440	440	440	428	439	370	439	-	-		
Max Voltage Drop	65				40	15					38	15	16	16	16	16	16	6	18	16			65	16
LC 3B03																								
3B03 Bus Volts	462	466	451	464	455	463	463	463	463	463	451	462	462	462	462	462	382	454	452	462	460	464		
3B07 Min Motor Volts	410	(V)	-	-	399	441	441	441	441	441	403	439	438	439	439	439	354	430	428	438	-	-		
Max Voltage Drop	52				56	22	22	22	22	22	48	23	24	23	23	23	28	24	24	24			56	24
LC 3B04																								
3B04 Bus Volts	449	453	438	451	411	447	442	446	446	446	445	446	433	444	444	444	432	443	373	443	412	447		
3B04 Min Motor Volts	-	-	-	-	365	440	435	439	439	439	438	439	426	437	437	437	425	436	365	436	365	440		
3B08 Min Motor Volts	425	429	414	428	385	423	386	419	419	419	418	420	379	415	415	415	402	414	338	413	384	421		
3B52 Min Motor Volts	446	451	-	-	-	-	-	-	-	-	-	-	429	440	440	440	428	439	368	439	-	-		
Max Voltage Drop	24	24	24	23	46	24	56	27	27	27	27	26	54	29	29	29	30	29	35	30	47	26	56	30
4kV BUS 3AA2																								
3AA2 Bus Volts	3976	3983	3864	3972	3925	3966	3966	3966	3966	3966	3954	3965	3964	3965	3965	3965	3301	3898	3885	3963	3932	3970		
3AA2 Min Motor Volts	-	-	3844	3968	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Voltage Drop			21	4																				
Voltage Drop (480V Base)			2.4	0.5																			2.4	0.5
4kV BUS 3AB2																								
3AB2 Bus Volts	3930	3938	3817	3927	3880	3921	3917	3920	3920	3920	3907	3919	3905	3916	3916	3916	3819	3907	3355	3905	3885	3922		
3AB2 Min Motor Volts	-	-	3798	3923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Voltage Drop			20	4																			2.3	0.5
Voltage Drop (480V Base)			2.3	0.5																				

(V) = Valve - not used in setting inverse time relay

EBASCO SERVICES INCORPORATED

APPENDIX 4
4

CALCULATION EC-145

SHEET 6 OF 10

OFS NO. 8614.131 DEPT NO. 562

BY J SOMMA 8 DATE 3/15/91
CHKD. BY W LEWINGER W DATE 3/15/91

CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

Unit 3 - Summary of Bus/Motor Voltages - Alignment 3AA2 to 3AD, 3B03 to 3B50 (Appendix 11)

Case During/After	1		2		3		4		5		6		7		8		9		10		11		Largest Volt Drop for Setpoint	
	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	Inst.	Inv.
LC 3801																								
3801 Bus Volts	456	459	445	458	417	453	453	453	453	452	453	452	453	453	453	370	445	443	453	420	456			
3801 Min Motor Volts	-	-	-	-	377	447	-	-	-	-	-	-	-	-	-	363	439	-	-	379	450			
3805V Min Motor Volts	406	454	-	-	-	-	-	-	-	-	-	-	-	-	-	364	440	-	-	-	-			
Max Voltage Drop	50	5			40	6										7	6			41	6	50	6	
LC 3802																								
3802 Bus Volts	456	461	446	459	450	458	458	458	458	446	457	457	457	457	457	445	456	389	456	455	460			
3806 Min Motor Volts	390	(V)	-	-	410	443	-	-	-	408	447	441	441	441	441	429	440	371	440	-	-			
Max Voltage Drop	66	-			40	15				38	10	16	16	16	16	16	16	18	16			66	16	
LC 3803																								
3803 Bus Volts	453	457	443	456	446	455	450	454	454	442	453	440	451	451	451	368	443	441	451	451	456			
3807 Min Motor Volts	401	(V)	-	-	391	432	428	432	432	394	429	416	427	427	427	338	418	417	427	430	435			
3808 Min Motor Volts	429	434	419	433	423	431	393	428	428	415	427	386	422	422	422	332	413	412	422	426	431			
Max Voltage Drop	52	23	24	23	55	24	57	26	26	48	26	54	29	29	29	36	30	29	29	25	25	57	30	
LC 3804																								
3804 Bus Volts	459	461	447	460	420	456	456	456	456	454	456	455	455	455	455	444	454	388	454	421	456			
3804 Min Motor Volts	-	-	-	-	373	449	-	-	-	-	-	-	-	-	-	-	-	-	-	373	449			
3852 Min Motor Volts	455	460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Max Voltage Drop	4	1			47	7														48	7	48	7	
4kV Bus 3AA2																								
3AA2 Bus Volts	3968	3975	3856	3964	3917	3958	3954	3958	3958	3958	3958	3945	3957	3944	3955	3955	3955	3288	3888	3875	3953	3924	3962	
3AA2 Min Motor Volts	-	-	3836	3960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Voltage Drop			20	4																				
Voltage Drop (480V Base)			2.3	0.5																			2.3	0.5
4kV Bus 3AB2																								
3AB2 Bus Volts	3939	3946	3825	3935	3888	3929	3929	3929	3929	3916	3928	3926	3927	3927	3927	3830	3917	3368	3916	3894	3931			
3AB2 Min Motor Volts	-	-	3807	3931	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Voltage Drop			18	4																				
Voltage Drop (480V Base)			2.1	0.5																			2.1	0.5

(V) = Valve - not used in setting inverse time relay

1127E/21

EBASCO SERVICES INCORPORATED

ENDIX 4
4

BY J SOMMA ⁸⁸ DATE 3/15/91
CHKD. BY W LEWINGER ⁴² DATE 3/15/91
CLIENT FLORIDA POWER & LIGHT COMPANY

CALCULATION EC-145
SHEET 7 OF 10
OFS NO. 8614.131 DEPT NO. 562

PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

Unit 4 - Summary of Bus/Motor Voltages - Alignment 4AA2 to 4AD, 4804 to 4850 (Appendix 6)

Case During/After	1		2		3		4		5		6		7		8		9		10		11		Largest Volt Drop for Setpoint Inst. Inv.	
	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A		
LC 4801																								
4801 Bus Volts	437	459	445	458	414	453	453	453	453	453	440	451	451	451	451	451	368	443	441	441	418	454		
4801 Min Motor Volts	-	-	-	-	374	447	-	-	-	-	-	-	-	-	-	-	360	437	-	-	378	448		
4805 Min Motor Volts	393	(V)	-	-	380	436	436	436	436	436	411	434	434	434	434	434	346	425	423	434	400	437		
4851 Min Motor Volts	397	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	356	434	-	-	-	-		
Max Voltage Drop	64	9			40	17	17	17	17	17	29	17	17	17	17	17	22	18	18	17	40	17	64	18
LC 4802																								
4802 Bus Volts	453	460	446	457	449	458	457	458	458	458	446	457	455	457	457	457	444	455	388	455	454	459		
4806 Min Motor Volts	397	(V)	-	-	418	433	-	-	-	-	407	441	440	441	441	441	428	440	370	440	-	-		
Max Voltage Drop	56	-	-	-	31	25					39	16	15	16						15			56	25
LC 4803																								
4803 Bus Volts	459	465	450	463	458	463	463	463	463	463	462	463	463	463	463	463	382	455	453	463	461	465		
4807 Min Motor Volts	403	(V)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Max Voltage Drop	56																						56	0
LC 4804																								
4804 Bus Volts	443	454	440	453	412	449	444	448	448	448	447	448	435	446	446	446	433	445	376	445	413	449		
4804 Min Motor Volts	-	-	-	-	378	444	-	-	-	-	-	-	430	441	441	441	428	440	370	440	379	444		
4808 Min Motor Volts	414	437	421	435	392	431	423	429	429	429	428	430	409	427	427	427	413	425	353	425	393	431		
4852 Min Motor Volts	391	445	-	-	402	440	435	439	439	439	437	439	425	437	437	437	424	436	365	436	403	440		
Max Voltage Drop	52	17	19	18	34	18	21	19	19	19	19	18	26	19	19	19	20	20	23	20	34	18	52	20
4kV BUS 4AA2																								
4AA2 Bus Volts	3952	3978	3858	3967	3920	3961	3961	3961	3961	3961	3948	3960	3959	3960	3960	3960	3287	3892	3875	3958	3927	3965		
4AA2 Min Motor Volts	-	-	3842	3964	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Voltage Drop			16	3																				
Voltage Drop (480V Base)			1.8	0.3																			1.8	0.3
4kV BUS 4AB2																								
4AB2 Bus Volts	3913	3940	3829	3929	3880	3923	3918	3922	3922	3922	3909	3922	3908	3920	3920	3920	3815	3908	3356	3908	3886	3925		
4AB2 Min Motor Volts	-	-	3803	3925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Voltage Drop			16	4																				
Voltage Drop (480V Base)			1.8	0.5																			1.8	0.5

(V) = Valve - not used in setting inverse time relay

1127E/22

EBASCO SERVICES INCORPORATED

IX 4

CALCULATION EC-145

SHEET 8 OF 10

OFS NO. 8614.131 DEPT NO. 562

BY J SOMMA 88 DATE 3/15/91CHKD. BY W LEWINGER W DATE 5/15/91CLIENT FLORIDA POWER & LIGHT COMPANYPROJECT TURKEY POINT PLANT - UNITS 3 & 4SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEMUnit 4 - Summary of Bus/Motor Voltages - Alignment 4AA2 to 4AD, Alignment 4B03 to 4B50 (Appendix 8)

Unit 4 - Summary of Bus/Motor Voltages - Alignment 4AA2 to 4AB, Alignment 4B03 to 4B50 (Appendix C)																							Largest Volt Drop for Setpoint	
Case During/After	1		2		3		4		5		6		7		8		9		10		11		Inst.	Inv.
	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A				
<u>LC 4B01</u>																								
4B01 Bus Volts	436	458	444	457	413	452	451	452	452	452	439	450	449	450	450	450	366	442	440	450	417	453		
4B01 Min Motor Volts	-	-	-	-	373	446	-	-	-	-	-	-	-	-	-	-	359	436	-	-	377	447		
4B05 Min Motor Volts	393	(V)	-	-	379	435	434	435	435	435	410	433	431	433	433	433	344	424	422	432	399	436		
4B51 Min Motor Volts	396	449	-	-	-	-	-	-	-	-	429	441	440	441	441	441	355	432	430	441	-	-		
Max Voltage Drop	43	9			40	17	17	17	17	17	29	17	18	17	17	17	22	18	18	18	40	17	43	18
<u>LC 4B02</u>																								
4B02 Bus Volts	454	461	447	460	450	459	459	459	459	459	447	458	458	458	458	458	445	456	390	456	455	460		
4B06 Min Motor Volts	397	(V)	-	-	418	444	-	-	-	-	408	447	-	-	-	-	429	441	372	441	-	-		
Max Voltage Drop	57	-	-	-	32	15					39	11					16	15	18	15			57	15
<u>LC 4B03</u>																								
4B03 Bus Volts	450	456	441	455	449	454	449	453	453	453	452	454	441	452	452	452	368	444	442	452	452	457		
4B07 Min Motor Volts	395	(V)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4B08 Min Motor Volts	431	438	423	437	431	436	429	435	435	435	434	436	413	438	433	433	345	424	422	433	434	439		
Max Voltage Drop	55	18	18	18	18	18	30	18	18	18	18	18	28	14	19	19	23	20	20	19	18	18	55	20
<u>LC 4B04</u>																								
4B04 Bus Volts	442	463	449	462	421	458	458	458	458	458	456	457	457	457	457	457	445	456	389	456	421	458		
4B04 Min Motor Volts	-	-	-	-	386	453	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	453		
4B52 Min Motor Volts	400	454	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Max Voltage Drop	42	9			35	5															34	5	42	9
<u>4kV Bus 4AA2</u>																								
4AA2 Bus Volts	3944	3970	3850	3959	3912	3953	3948	3953	3953	3953	3939	3952	3939	3950	3950	3950	3274	3881	3865	3948	3919	3957		
4AA2 Min Motor Volts	-	-	3834	3956	-	-	-	-	-	-	-	-	-	-	-	-	3269	3876	-	-	-	-		
Voltage Drop			16	3													5	5						
Voltage Drop (480V Base)			1.8	0.3													0.6	0.6					1.8	0.6
<u>4kV Bus 4AB2</u>																								
4AB2 Bus Volts	3922	3948	3827	3936	3888	3931	3931	3931	3931	3931	3918	3930	3929	3930	3930	3930	3826	3919	3368	3918	3894	3933		
4AB2 Min Motor Volts	-	-	3811	3933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Voltage Drop			16	3																				
Voltage Drop (480V Base)			1.8	0.3																			1.8	0.3

(V) = Valve - not used in setting inverse time relay

1127E/23



CALCULATION EC-145

SHEET 9 OF 10

OFS NO. 8614.131 DEPT NO. 562

CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

Unit 4 - Summary of Relay Setpoint Voltages - Alignment 4AB2 to 4AD, Alignment 4B04 to 4B50 (Appendix 10)

Unit 4 - Summary of Relay Setpoint Voltages - Alignment 4AB2 to 4AB, Alignment 4B54 to 4B56 (Appendix 10)																							Largest Volt Drop for Setpoint	
Case During/After	1		2		3		4		5		6		7		8		9		10		11		Inst.	Inv.
	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A				
LC 4801																								
4801 Bus Volts	439	461	446	459	415	454	454	454	454	454	441	453	453	453	453	453	370	445	443	453	420	456		
4801 Min Motor Volts	-	-	-	-	376	449	-	-	-	-	-	-	-	-	-	-	362	439	-	-	379	450		
4805 Min Motor Volts	395	(V)	-	-	381	438	438	438	438	438	412	436	435	436	436	436	348	427	425	435	402	439		
4851 Min Motor Volts	398	452	-	-	-	-	-	-	-	-	-	-	-	-	-	-	358	435	-	-	-	-		
Max Voltage Drop	44	9			39	16	16	16	16	16	29	17	18	17	17	17	22	18	18	18	41	17	44	18
LC 4802																								
4802 Bus Volts	451	459	444	457	447	456	455	456	456	456	444	455	454	455	455	455	442	454	386	453	453	457		
4806 Min Motor Volts	396	(V)	-	-	416	441	440	441	441	441	406	440	438	439	439	439	426	438	368	438	-	-		
Max Voltage Drop	55				31	15	15	15	15	15	38	15	16	16	16	16	16	16	18	15			55	16
LC 4803																								
4803 Bus Volts	461	466	452	465	459	464	464	464	464	464	463	465	464	465	465	465	384	457	454	464	462	467		
4807 Min Motor Volts	405	(V)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Max Voltage Drop	56																						56	0
LC 4804																								
4804 Bus Volts	432	453	438	451	410	447	442	446	446	446	445	446	433	445	445	445	432	443	374	443	411	447		
4804 Min Motor Volts	-	-	-	-	377	442	437	441	441	441	440	441	428	440	440	440	426	438	368	438	378	442		
4808 Min Motor Volts	413	435	419	433	391	429	422	428	428	428	426	428	407	425	425	425	411	423	350	423	391	429		
4852 Min Motor Volts	390	444	-	-	400	438	433	437	437	437	436	437	424	435	435	435	422	434	363	434	401	438		
Max Voltage Drop	42	18	19	18	37	18	20	18	18	18	19	18	26	20	15	20	21	20	24	20	33	18	42	20
4kV BUS 4AA2																								
4AA2 Bus Volts	3965	3991	3871	3980	3933	3974	3974	3974	3974	3974	3961	3973	3972	3973	3973	3973	3302	3906	3888	3971	3940	3978		
4AA2 Min Motor Volts	-	-	3855	3977	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Voltage Drop			16	3																				
Voltage Drop (480V Base)			1.8	0.3																			1.8	0.3
4kV BUS 4AB2																								
4AB2 Bus Volts	3900	3927	3806	3915	3867	3909	3904	3909	3909	3909	3896	3908	3895	3906	3906	3906	3801	3895	3341	3894	3873	3911		
4AB2 Min Motor Volts	-	-	3789	3912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Voltage Drop			17	3																				
Voltage Drop (480V Base)			2.0	0.3																			2.0	0.3

(V) - Valve - not used in setting inv. time relay

EBASCO SERVICES INCORPORATED

EX 4

CALCULATION EC-145,

SHEET 10 OF 10

OFS NO. 8614.131 DEPT NO. 562

BY J SOMMA 28 DATE 3/15/91
CHKD. BY W LEWINGER 42 DATE 3/15/91

CLIENT FLORIDA POWER & LIGHT COMPANY

PROJECT TURKEY POINT PLANT - UNITS 3 & 4

SUBJECT PSB-1 VOLTAGE ANALYSIS FOR ELECTRICAL AUXILIARY SYSTEM

Unit 4 - Summary of Bus/Motor Voltages - Alignment 4AB2 to 4AD, Alignment 4B03 to 4B50 (Appendix 12)

Case During/After	1		2		3		4		5		6		7		8		9		10		11		Largest Volt Drop for Setpoint Inst. Inv.	
	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A		
LC 4801																								
4801 Bus Volts	438	460	445	458	414	454	453	453	453	453	440	452	450	452	452	452	368	443	441	452	419	455		
4801 Min Motor Volts	-	-	-	-	375	448	-	-	-	-	-	-	-	-	-	-	361	437	-	-	379	449		
4805 Min Motor Volts	394	(V)	-	-	380	437	436	437	437	437	411	435	433	434	434	434	346	426	423	434	401	438		
4851 Min Motor Volts	397	451	-	-	-	-	-	-	-	-	-	-	-	-	-	-	357	434	-	-	-	-		
Max Voltage Drop	44	9			39	17	17	16	16	16	29	17	17	18	18	18	22	17	18	18	40	17	44	18
LC 4802																								
4802 Bus Volts	452	460	445	458	448	457	457	457	457	457	445	456	456	456	456	456	444	455	388	455	454	458		
4806 Min Motor Volts	397	(V)	-	-	417	442	455	455	-	-	407	441	441	441	441	441	428	439	370	439	-	-		
Max Voltage Drop	55	-	-	-	31	15	12	12			38	15	15	15	15	15	16	16	18	16			55	16
LC 4803																								
4803 Bus Volts	451	458	443	456	451	456	451	455	455	455	454	455	442	454	454	454	370	445	443	454	454	458		
4807 Min Motor Volts	396	(V)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4808 Min Motor Volts	433	440	425	439	433	438	430	437	437	437	436	437	416	434	434	434	347	426	424	434	436	441		
Max Voltage Drop	55	18	18	17	18	18	21	18	18	18	18	18	26	20	20	20	23	19	19	20	18	17	55	20
LC 4804																								
4804 Bus Volts	441	461	447	460	419	456	456	456	456	456	454	456	456	456	456	456	443	454	388	454	420	456		
4804 Min Motor Volts	-	-	-	-	385	451	-	-	-	-	-	-	-	-	-	-	-	-	-	-	386	451		
4852 Min Motor Volts	398	452	-	-	-	-	448	448	-	-	-	-	-	-	-	-	-	-	377	445	-	-		
Max Voltage Drop	43	5			34	5	8	8											9	9	34	5	43	9
4kB Bus AA2																								
4AA2 Bus Volts	3957	3983	3863	3972	3925	3966	3962	3966	3966	3966	3952	3965	3952	3963	3963	3963	3290	3895	3878	3961	3932	3970		
4AA2 Min Motor Volts	-	-	3847	3969	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Voltage Drop			16	3																				
Voltage Drop (480V Base)			1.8	0.3																			1.8	0.3
4kV Bus AB2																								
4AB2 Bus Volts	3908	3934	3814	3923	3875	3918	3917	3918	3918	3918	3905	3917	3915	3917	3917	3917	3812	3905	3353	3905	3881	3919		
4AB2 Min Motor Volts	-	-	3797	3919	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	0.5
Voltage Drop			17	4																				
Voltage Drop (480V Base)			2.0	0.5																				

(V) = Valve - not used in setting inverse time relay
1127E/25

EBASCO SERVICES INCORPORATED

CALCULATION EC-145

BY J SOMMA JS DATE 3/15/91 SHEET 1 OF 1
CHKD. BY W LEWINGER WL DATE 3/15/91 OFS NO. 8614.131 DEPT NO. 562
CLIENT FLORIDA POWER & LIGHT COMPANY
PROJECT TURKEY POINT PLANT - UNITS 3 & 4
SUBJECT ADEQUACY OF RELAY SETTINGS ON 480V LOAD CENTERS TO PROTECT 4.0kV MOTORS

From a review of Appendix 4, the worst case voltage drops from the 4.16kV Buses to the 4.0kV motors are:

	<u>During</u>	<u>After</u>
	22V	5V

The lowest voltage setpoints at the 480V Buses listed in Section 9.3 are:

	<u>During</u>	<u>After</u>
	430	424

Ignoring the cable and transformer voltage drops between the 4.16kV bus and the 480V bus for conservatism gives:

	<u>During</u>	<u>After</u>
Relay Voltage	430	424
4.16kV Bus Voltage	3628	3578 (Relay Voltage x 4160/493)
Vdrop from 4.16kV Bus to 4.0kV Motor	<u>(22)</u>	<u>(5)</u>
Voltage at 4.0kV Motor	3606V	3573V

These exceed the 3020V (ride-thru) and 3480V (steady state) values of criterion 2.9 and hence the setpoints are adequate to protect the 4.0kV motors.

EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

JOB ID 3/06/91 WZ
 VERIFICATION BY
 PAGE 1 3/15/91

DATA VERIFICATION

1 2 3 4 5 6 7 8
 123456789012345678901234567890123456789012345678901234567890

FILE: \AUXSYS\U3APP5.DAT
 STEADY STATE SET @ 96% AND STARTING @ 82% FOR SAFETY BUSES
 STEADY STATE SET @ 90% AND STARTING @ 80% FOR NON-SAFETY BUSES
 EBASCO SERVICES INC.
 TURKEY POINT UNIT No 3. ELECTRICAL AUXILIARY SYSTEM DESIGN
 AUX SYS FED THRU THE S/U TRF.PSB-1.
 BUS 3AB2 ALIGNED TO 3AD, BUS 3B50 ALIGNED TO 3B04
 SEQUENCED LOADING FOR CALCULATION EC-145, REV. 4
 (3/06/91)

*A 1-11	1	1	40.00	6.0	6.0	0.85	0.85	0.92	0.92	0.20	0.20
1 3AA1	350.0	4.76	80.00	42.45	4.16	1.10	3.00				
1 3AA2	350.0	4.76	80.00	42.45	4.16	1.10	3.00				
1 3AD	250.0	4.76	80.00	30.3	4.16	1.10	3.00				
2 3B01	30.0	0.48	0.00								
2 3B03	30.0	0.48	0.00								
3 3B05V	25.0	0.48	0.00								
3 3B05N	25.0	0.48	0.00								
3 3B07	25.0	0.48	0.00								
3 3B08V	25.0	0.48	0.00								
1 3AB1	350.0	4.76	80.00	42.45	4.16	1.10	3.00				
1 3AB2	350.0	4.76	80.00	42.45	4.16	1.10	3.00				
2 3B02	30.0	0.48	0.00								
2 3B04	30.0	0.48	0.00								
3 3B06	25.0	0.48	0.00								
3 3B08N	25.0	0.48	0.00								
2 3B50	30.0	0.48	0.00								
3 3B52	25.0	0.48	0.00								
3 3B53	25.0	0.48	0.00								
3 3B54	25.0	0.48	0.00								
9											
3AA1	96.0	82.0	30								
1 3P1A	7000.0	4.0	6.49	0.0	1.0	0.90	0.959			1	.0036 .0080
6 3P1A	1	11111111211									
7 7000.0											
1 3P200A	6000.0	4.0	6.32	0.0	2.0		0.0			1	.0046 .0133
6 3P200A	00000000000	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0
7 5061.0	5061.0	5061.0									
3AA2	96.0	82.0	30								
1 3P11A	400.0	4.0	5.09	0.0	2.0	0.85	0.938			1	.0360 .0317
6 3P11A	00000000000										
7											
1 3P210A	300.0	4.0	6.22	0.0	2.0	0.89	0.934			1	.0363 .0319
6 3P210A	12000000000										
7											
1 3P211A	450.0	4.0	4.74	0.0	2.0		0.0			1	.0374 .0329
6 3P211A	00000000000										
7											
1 3P215A	350.0	4.0	6.4	0.0	1.0	0.88	0.94			1	.0393 .0346

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DATA VERIFICATION

	1	2	3	4	5	6	7	8
123456789012345678901234567890123456789012345678901234567890								
6 3P215A	120000000000							
7								
1 3P3A	800.0	4.0 5.94	0.0	2.0	0.89 0.944		1 .0340 .0299	
6 3P3A	000000000000		700.00 700.00	700.00 700.00	700.00 700.00	700.00 700.00	700.00 700.00	
7 700.00	700.00 700.00							
1 3P6A	2250.0	4.0 7.06	0.0	2.0	0.90 0.958		1 .0029 .0037	
6 3P6A	000000000000		2210.0 2210.0	2210.0 2210.0	2210.0 2210.0	2210.0 2210.0	2210.0 2210.0	
7 2210.0	2210.0 2210.0							
1 3P7A	1250.0	4.0 4.57	0.0	2.0	0.0		1 .0276 .0360	
6 3P7A	000000000000							
7								
1 3P7C	1250.0	4.0 4.57	0.0	2.0	0.0		1 .0278 .0363	
6 3P7C	000000000000							
7								
1 3P9A	325.0	4.0 5.8	0.0	2.0	0.82 0.928		1 .0440 .0387	
6 3P9A	000000000000							
7								
2 0G3A	3.0 4.16 1.000		.270 .405	1.534 30.00			0 .0032 .0107	
6 0G3A	1 111111111111							
7								
3AD	96.0 82.0 30							
1 3P211C	450.0	4.0 4.74	0.0	2.0	0.0		1 .0382 .0336	
6 3P211C	000000000000							
7								
1 3P9C	325.0	4.0 5.8	0.0	2.0	0.82 0.928	0.00	1 .0298 .0262	
6 3P9C	000000000000							
7								
3801	96.0 82.0 30							
1 3P201A	150.0 .460 5.800	0.0	2.0	0.90 .925			1 .0254 .0275	
6 3P201A	000000000000							
7								
1 3P214A	250.0 .460 6.540	0.0	1.0	0.905 0.94 .15			1 .0065 .0150	
6 3P214A	112000000002							
7								
1 3S6A	150.0 .460 6.05	0.0	2.0	0.0			1 .0240 .0260	
6 3S6A	000000000000							
7								
4 PH3812	150.0 .480 1.000	0.0	0.0	0.0			.0079 .0115	
6 PH3812	111111111111							
7								
3803	96.0 82.0 30							
1 3P212	100.0 .460	0.0	2.0	0.0			1 .0346 .0235	
6 3P212	000000000000							
7								
1 3P32	200.0 .460	0.0	2.0	0.0			1 .0108 .0217	
6 3P32	1 111111111111							
7								
1 P39B	250.0 .460 6.490	0.0	2.0	0.89 0.928			1 .0184 .0405	
6 P39B	1 111111111111							
7								

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	1	2	3	4	5	6	7	8
123456789012345678901234567890123456789012345678901234567890								
4 PH3X09	225.0	.480 1.000	0.0	0.0	0.0		.0052	.0075
6 PH3X09	00000000000							
7								
3805V	96.0	82.0 30						
1 3C2A	5.0	.460	0.0	2.0	0.0		1	.5366 .0117
6 3C2A	20000000000							
7								
1 3P10	0.75	.460	0.0	2.0	0.0		1	.5612 .0122
6 3P10	20000000000							
7								
1 3P31	40.0	.460	0.0	2.0	.902		1	.0577 .0138
6 3P31	1 11111111111							
7								
1 3P36	25.0	.460	0.0	2.0	0.0		1	.0646 .0071
6 3P36	1 11111111111							
7								
1 3P37	8.0	.460	0.0	2.0	0.0		1	.2437 .0053
6 3P37	1 11111111111							
7								
1 3P40	15.0	.460	0.0	2.0	0.0		1	.3847 .0122
6 3P40	1 11111111111							
7								
1 3T08	50.0	.460	0.0	2.0	0.0		1	.0162 .0061
6 3T08	1 11111111111							
7								
1 3V1A	100.0	.460 7.75	0.0	2.0	0.0		1	.0453 .0309
6 3V1A	00000000001							
7								
1 3V34	5.0	.460	0.0	2.0	0.0		1	.4807 .0104
6 3V34	20000000000							
7								
1 3C1	75.0	.460	0.0	2.0	0.0		1	.0237 .0161
6 3C1	1 11111111111							
7								
4 3C13A	17.0	.480 1.000	0.0	0.0	0.0			.2517 .0130
6 3C13A	20000000000							
4 STAT1CL	15.0	.480 1.000	0.0	0.0	0.0			
6 STAT1CL	00000000000							
7								
1 MOV1420	5.2	.460 5.66		2.0 0.85	.54 0.6		1	.8027 .0174
6 MOV1420	20000111111							
7								
1 MOV1400	.33	.460 7.33		2.0 0.85	.48 0.6			.6037 .0131
6 MOV1400	20000111111							
7								
1 MOV1427	.25	.460 4.91		2.0 0.85	.5 0.6			2.148 .0467
6 MOV1427	20000111111							
7								
3805W	90.0	80.0 30						
1 3P15	3.0	.460	0.0	2.0	0.0		1	.5903 .0128

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 3P15	1	1111111111						
7								
1 3P19D		0.5 .460	0.0	2.0	0.0		1 .7491 .0163	
6 3P19D	1	1111111111						
7								
1 3P19A		0.5 .460	0.0	2.0	0.0		1 .7267 .0158	
6 3P19A	1	1111111111						
7								
1 3P19B		0.5 .460	0.0	2.0	0.0		1 .7379 .0160	
6 3P19B	1	1111111111						
7								
1 3P19C		0.5 .460	0.0	2.0	0.0		1 .7491 .0163	
6 3P19C		0000000000						
7								
1 3P232A		10.0 .460	0.0	2.0	0.0		1 1.547 .0336	
6 3P232A	1	1111111111						
7								
1 3P28A		3.0 .460	0.0	2.0	0.0		1 .1968 .0043	
6 3P28A	1	1111111111						
7								
1 3P34A		0.75 .460	0.0	2.0	0.0		1 .8184 .0178	
6 3P34A	1	1111111111						
7								
1 3P4		10.0 .460	0.0	2.0	0.0		1 .5970 .0130	
6 3P4	1	1111111111						
7								
1 3P43		5.0 .460	0.0	2.0	0.0		1 .5411 .0118	
6 3P43	1	1111111111						
7								
1 3P49		0.75 .460	0.0	2.0	0.0		1 .2728 .0059	
6 3P49	1	1111111111						
7								
1 3P5		40.0 .460	0.0	2.0	0.0		1 .0358 .0086	
6 3P5	1	1111111111						
7								
1 3V14A		7.5 .460	0.0	2.0	0.0		1 .8832 .0192	
6 3V14A		0000000000						
7								
1 3V16		2.0 .460	0.0	2.0	0.0		1 .2102 .0046	
6 3V16		0000000000						
7								
1 3V18		7.5 .460	0.0	2.0	0.0		1 .4740 .0103	
6 3V18		0000000000						
7								
1 3V19A		15.0 .460	0.0	2.0	0.0		1 .1348 .0043	
6 3V19A		0000000000						
7								
1 3V31B		3.0 .460	0.0	2.0	0.0		1 .6596 .0143	
6 3V31B		0000000000						
7								



EBASCO SERVICES INCORPORATED
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DATA VERIFICATION

	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
1 3V32B	0.75	.460	0.0	2.0	0.0		1	.4897 .0106
6 3V32B	000000000000							
7								
1 3V4	5.0	.460	0.0	2.0	0.0		1	.5791 .0126
6 3V4	000000000000							
7								
1 3V6A	7.5	.460	0.0	2.0	0.0		1	.2683 .0058
6 3V6A	000000000000							
7								
1 P51A	1.0	.460	0.0	2.0	0.0		1	.7491 .0163
6 P51A	000000000000							
7								
1 3X03	7.0	.460	0.0	2.0	0.0		1	.1025 .0112
6 3X03	000000000000							
7								
1 3NF20A/B	1.5	.460	0.0	2.0	0.0		1	.1685 .0054
6 3NF20A/B	000000000000							
7								
1 3X02	9.0	.460	0.0	2.0	0.0		1	.0726 .0080
6 3X02	000000000000							
7								
1 3V5	0.5	.460	0.0	2.0	0.0		1	.2035 .0044
6 3V5	000000000000							
7								
1 3X01	170.0	.460	0.0	2.0	0.0		1	.0055 .0060
6 3X01	000000000000							
7								
1 3P90C	2.0	.460	0.0	2.0	0.0		1	.4774 .0152
6 3P90C	000000000000							
7								
1 3P90B	2.0	.460	0.0	2.0	0.0		1	.4858 .0155
6 3P90B	000000000000							
7								
1 3P90A	2.0	.460	0.0	2.0	0.0		1	.4858 .0155
6 3P90A	000000000000							
7								
1 3XS75/76	20.0	.460	0.0	2.0 0.81	0.0		1	.1388 .0152
6 3XS75/76	000000000000							
7								
4 STAT1CL	15.0	.480 1.000	0.0	0.0	0.0			
6 STAT1CL	000000000000							
7								
3B07	96.0	82.0 30						
1 3P203A	15.0	.460	0.0	2.0	0.0		1	.0358 .0086
6 3P203A	000000000000							
7								
1 3V1C	100.0	.460 7.75	0.0	2.0	0.0		1	.0177 .0121
6 3V1C	000000000001							
7								
1 3V30C	30.0	.460 5.39	0.0	2.0	0.0 0.42		1	.2617 .0312

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	1	2	3	4	5	6	7	8
123456789012345678901234567890123456789012345678901234567890								
6 3V30C	112000000000							
7								
1 3V3C	75.0 .460 6.06	0.0	2.0		0.0 0.35		1 .0358 .0243	
6 3V3C	111112000000							
7								
1 P207A	6.0 .460	0.0	2.0		0.0		1 .2616 .0057	
6 P207A	000000000000							
7								
1 T206	1.5 .460	0.0	2.0		0.0		1 .5881 .0128	
6 T206	000000000000							
7								
1 3V2B	60.0 .460	0.0	2.0		0.0		1 .0657 .0247	
6 3V2B	000000000000							
7								
1 3V65A	2.0 .460	0.0	2.0		0.0		1 .8550 .0272	
6 3V65A	000000000000							
7								
1 P42A	7.5 .460	0.0	2.0		0.0		1 .1334 .0042	
6 P42A	000000000000							
7								
4 3D02	71.0 .480 1.000						.0248 .0169	
6 3D02	000000000000							
4 STAT1CL	1.0 .480 1.000	0.0	0.0		0.0			
6 STAT1CL	111111111111							
7								
1 MOV716A	1.3 .460 3.75		2.0 0.85	.60 0.6			1 .3130 .0068	
6 MOV716A	200001111111							
7								
1 MOV744A	10.5 .460 7.22		2.0 0.85	.80 0.6			1 .3838 .0267	
6 MOV744A	200001111111							
7								
1 MOV843A	1.58 .460 7.43		2.0 0.85	.50 0.6			1 .2594 .0056	
6 MOV843A	200001111111							
7								
1 MOV880A	2.0 .460 3.71		2.0 0.85	.63 0.6			1 .2795 .0061	
6 MOV880A	200001111111							
7								
1 MOV1401	0.33 .460 7.33		2.0 0.85	.48 0.6			1 1.019 .0222	
6 MOV1401	200001111111							
7								
1 MOV1426	0.25 .460 4.91		2.0 0.85	.50 0.6			1 .3354 .0073	
6 MOV1426	200001111111							
7								
1 MOV6386	0.13 .460 7.11		2.0 0.85	.32 0.6			1 .7048 .0224	
6 MOV6386	200001111111							
7								
3853	90.0 80.0 30							
1 HVACHP	18 .460	0.0	2.0		0.0		1	
6 HVACHP	000000000000							
7								

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	1	2	3	4	5	6	7	8
123456789012345678901234567890123456789012345678901234567890								
4 HVACKW	27	.460	1.000	0.0	0.0	0.0	1	
6 HVACKW	000000000000							
7								
3808V	96.0	82.0	30					
1 3V1D	100.0	.460	7.75	0.0	2.0	0.0	1	.0161 .0109
6 3V1D	000000000001							
7								
1 3V308	30.0	.460	5.39	0.0	2.0	0.0 0.42	1	.2490 .0294
6 3V308	111200000000							
7								
1 3V38	75.0	.460	6.06	0.0	2.0	0.0 0.35	1	.0379 .0258
6 3V38	111111200000							
7								
1 V11	10.0	.460		0.0	2.0	0.0	1	.2035 .0044
6 V11	000000000000							
7								
1 V298	1.0	.460		0.0	2.0	0.0	1	.5335 .0170
6 V298	200000000000							
7								
1 E16C/17C	34.0	.460		0.0	2.0	0.0	1	.1880 .0206
6 E16C/17C	000000000000							
7								
1 C1	75.0	.460		0.0	2.0	0.0	1	.0249 .0170
6 C1	1 111111111111							
7								
1 E16D	36.0	.460		0.0	2.0	0.0	1	.0480 .0087
6 E16D	000000000000							
7								
1 P428	3.0	.460		0.0	2.0	0.0	1	.6708 .0146
6 P428	000000000000							
7								
1 V77/E231	36.0	.460		0.0	2.0	0.0	1	.0773 .0142
6 V77/E231	000000000000							
7								
1 NS748	60.0	.460		0.0	2.0	0.0	1	.0691 .0315
6 NS748	000000000000		50.5	50.5	50.5	50.5	50.5	50.5
7 50.5	50.5	50.5						
1 S778	5.0	.460		0.0	2.0	0.0	1	.8073 .0257
6 S778	000000000000		3.4	3.4	3.4	3.4	3.4	3.4
7 3.4	3.4	3.4						
1 S788	5.0	.460		0.0	2.0	0.0	1	.7160 .0228
6 S788	000000000000		3.4	3.4	3.4	3.4	3.4	3.4
7 3.4	3.4	3.4						
1 S758	5.0	.460		0.0	2.0	0.0	1	.6388 .0203
6 S758	000000000000							
7								
4 4D25A	1.0	.480	1.000					.0473 .0113
6 4D25A	000000000000							
4 4D02A	70.6	.480	1.000					.0229 .0104
6 4D02A	111111111111							

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
4 STATICL	1.0	.480	1.000	0.0	0.0	0.0		
6 STATICL	000000000000							
7								
1 MOV1404	0.33	.460	3.60	2.0	0.85	.29	0.6	1 .5911 .0188
6 MOV1404	20000111111							
7								
1 MOV1417	1.5	.460	5.71	2.0	0.85	.50	0.6	1 .4629 .0101
6 MOV1417	20000111111							
7								
1 MOV6552B	0.13	.460	7.11	2.0	0.85	.32	0.6	1 .5082 .0162
6 MOV6552B	20000111111							
7								
1 MOV6543B	0.13	.460	7.11	2.0	0.85	.32	0.6	1 .4605 .0147
6 MOV6543B	20000111111							
7								
3B50	96.0	82.0	30					
1 3P201C	150.0	.460	5.800	0.0	2.0	0.90	0.0	1 .0206 .0223
6 3P201C	000000000000							
7								
3A81	96.0	82.0	30					
1 3P200B	6000.0	4.0	6.32	0.0	2.0	0.0		1 .0050 .0148
6 3P200B	000000000020			5061.0	5061.0	5061.0	5061.0	5061.0 5061.0 5061.0
7 5061.0	6000.0	5061.0						
1 3P200C	6000.0	4.0	6.32	0.0	2.0	0.0		1 .0051 .0148
6 3P200C	1 000000000000			5061.0	5061.0	5061.0	5061.0	5061.0 5061.0 5061.0
7 5061.0	5061.0	5061.0						
3A82	96.0	82.0	30					
1 3P11B	400.0	4.0	5.09	0.0	2.0	0.85	0.938	0.00 0.00 1 .0295 .0259
6 3P11B	000000000000							
7								
1 3P210B	300.0	4.0	6.22	0.0	2.0	0.89	0.934	1 .0343 .0302
6 3P210B	120000000000							
7								
1 3P211B	450.0	4.0	4.74	0.0	2.0	0.0		1 .0371 .0326
6 3P211B	000000000000							
7								
1 3P215B	350.0	4.0	6.4	0.0	1.0	0.88	0.94	1 .0371 .0326
6 3P215B	120000000000							
7								
1 3P3B	800.0	4.0	5.94	0.0	2.0	0.89	0.944	1 .0274 .0241
6 3P3B	000000000000			700.00	700.00	700.00	700.00	700.00 700.00
700.0	700.00							
7 700.00	700.00	700.00						
1 3P6B	2250.0	4.0	7.06	0.0	2.0	0.90	0.958	1 .0035 .0046
6 3P6B	000000000000			2210.0	2210.0	2210.0	2210.0	2210.0 2210.0 2210.0
7 2210.0	2210.0	2210.0						
1 3P7D	1250.0	4.0	4.57	0.0	2.0	0.0		1 .0292 .0381
6 3P7D	000000000000							
7								
1 3P7B	1250.0	4.0	4.57	0.0	2.0	0.0		1 .0288 .0376

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 3P7B		000000000000						
7								
1 3P9B	325.0	4.0 5.8	0.0	2.0	0.82 0.928	0.00	0.00	1 .0449 .0395
6 3P9B		000000000000						
7								
2 DG3B	3.0	4.16 1.000		.270	.405 1.534	30.00	0	.0033 .0110
6 DG3B	1	111111111111						
7								
3B02	96.0	82.0 30						
1 3P201B	150.0	.460 5.800	0.0	2.0	0.90 0.925		1	.0325 .0352
6 3P201B		000000000000						
7								
1 3V1B	100.0	.460 7.75	0.0	2.0	0.0		1	.0514 .0350
6 3V1B		000000000001						
7								
3B04	96.0	82.0 30						
1 3P214B	250.0	.460 6.540	0.0	1.0	0.91 0.94	.15	1	.0077 .0178
6 3P214B		112000000002						
7								
1 3S7B	150.0	.460	0.0	2.0	0.0		1	.0197 .0214
6 3S7B		000000000000						
7								
1 3H1	240.0	.460	0.0	2.0	0.0		1	.0070 .0047
6 3H1	1	111111111111						
7								
4 PH3B13	150.0	.480 1.000	0.0	0.0	0.0			.0062 .0090
6 PH3B13		111111111111						
7								
3B06	96.0	82.0 30						
1 3P203B	15.0	.460	0.0	2.0	0.0		1	.1235 .0296
6 3P203B		000000000000						
7								
1 3V20	20.0	.460	0.0	2.0	0.0		1	.1828 .0095
6 3V20	1	111111111111						
7								
1 3V2A	60.0	.460	0.0	2.0	0.0		1	.0541 .0204
6 3V2A		111111111111						
7								
1 3V30A	30.0	.460 5.39	0.0	2.0	0.0 0.42		1	.1939 .0256
6 3V30A		112000000000						
7								
1 3V3A	75.0	.460 6.06	0.0	2.0	0.0 0.35		1	.0320 .0218
6 3V3A		111112000000						
7								
1 3V9	20.0	.460	0.0	2.0	0.0		1	.1960 .0101
6 3V9	1	111111111111						
7								
1 E16A/17A	34.0	.460	0.0	2.0	0.0		1	.1308 .0143
6 E16A/17A		000000000000						
7								

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
1 E16E	36.0	.460	0.0	2.0	0.0		1	.0386 .0079
6 E16E	00000000000							
7								
1 3V68	2.0	.460	0.0	2.0	0.0		1	.6395 .0139
6 3V68	00000000000							
7								
1 V88	40.0	.460	0.0	2.0	0.0		1	.0716 .0172
6 V88	00000000000							
7								
4 3025	52.4	.480	1.000					.0362 .0087
6 3025	00000000000							
4 STAT1CL	1.0	.480	1.000	0.0	0.0	0.0		
6 STAT1CL	00000000000							
7								
1 MOV381	0.42	.460	5.26	2.0	0.85	.49 0.6	1	.7200 .0156
6 MOV381	20000111111							
7								
1 MOV626	1.0	.460	5.71	2.0	0.85	.39 0.6	1	.7915 .0172
6 MOV626	20000111111							
7								
1 MOV716B	1.3	.460	3.75	2.0	0.85	.60 0.6	1	.6663 .0145
6 MOV716B	20000111111							
7								
1 MOV730	1.3	.460	3.75	2.0	0.85	.60 0.6	1	.7960 .0173
6 MOV730	20000111111							
7								
1 MOV744B	10.3	.460	7.22	2.0	0.85	.80 0.6	1	.5685 .0197
6 MOV744B	20000111111							
7								
1 MOV843B	1.58	.460	7.43	2.0	0.85	.50 0.6	1	.8184 .0178
6 MOV843B	20000111111							
7								
1 MOV880B	2.0	.460	3.71	2.0	0.85	.63 0.6	1	.7312 .0159
6 MOV880B	20000111111							
7								
1 MOV1402	0.33	.460	7.33	2.0	0.85	.48 0.6	1	.6395 .0139
6 MOV1402	20000111111							
7								
1 MOV1418	1.5	.460	5.71	2.0	0.85	.50 0.6	1	.7088 .0154
6 MOV1418	20000111111							
7								
1 MOV1425	0.33	.460	5.26	2.0	0.85	.38 0.6	1	.9861 .0214
6 MOV1425	20000111111							
7								
1 MOV1421	5.3	.460	8.57	2.0	0.85	.76 0.6	1	.5277 .0115
6 MOV1421	20000111111							
7								
B08W	90.0	80.0	30					
1 3P204B	6.0	.460	0.0	2.0	0.0		1	.2974 .0065
6 3P204B	00000000000							

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DATA VERIFICATION

	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
7								
1 3P268		3.0 .460		0.0 2.0		0.0		1 .3712 .0081
6 3P268	1	111111111111						
7								
1 P208		20.0 .460		0.0 2.0		0.0		1 .1192 .0062
6 P208		000000000000						
7								
1 4P268		3.0 .460		0.0 2.0		0.0		1 .4942 .0107
6 4P268	1	111111111111						
7								
1 P84A		20.0 .460		0.0 2.0		0.0		1 .1157 .0060
6 P84A	1	111111111111						
7								
1 3P248		3.0 .460		0.0 2.0		0.0		1 .5322 .0116
6 3P248		000000000000						
7								
1 P20		0.5 .460		0.0 2.0		0.0		1 .8542 .0186
6 P20		000000000000						
7								
1 P21		0.5 .460		0.0 2.0		0.0		1 .8787 .0191
6 P21		000000000000						
7								
1 3P258		3.0 .460		0.0 2.0		0.0		1 .3376 .0073
6 3P258		000000000000						
7								
1 P22		0.5 .460		0.0 2.0		0.0		1 .8765 .0191
6 P22		000000000000						
7								
1 P220		3.0 .460		0.0 2.0		0.0		1 .2706 .0059
6 P220		000000000000						
7								
1 4P248		3.0 .460		0.0 2.0		0.0		1 .4718 .0103
6 4P248	1	111111111111						
7								
1 4P258		3.0 .460		0.0 2.0		0.0		1 .4942 .0107
6 4P258	1	111111111111						
7								
1 P84B		20.0 .460		0.0 2.0		0.0		1 .1166 .0060
6 P84B	1	111111111111						
7								
1 4P16A		50.0 .460		0.0 2.0		0.0		1 .0541 .0130
6 4P16A		000000000000						
7								
1 3P16A		50.0 .460		0.0 2.0		0.0		1 .0541 .0130
6 3P16A		000000000000						
7								
1 3V36A		2.0 .460		0.0 2.0		0.0		1 .3399 .0074
6 3V36A		000000000000						
7								
1 V78		5.0 .460		0.0 2.0		0.0		1 .2934 .0093

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DATA VERIFICATION

	1	2	3	4	5	6	7	8
123456789012345678901234567890123456789012345678901234567890								
6 V78	00000000000							
7								
4 NS233M	27.4 .480 0.85		0.0 0.0		0.0		1 .1162 .0129	
6 NS233M	00000000000							
7								
4 STATICL	1.0 .480 1.000		0.0 0.0		0.0			
6 STATICL	00000000000							
7								
3B52	96.0 82.0 30							
1 3C2B	5.0 .460		0.0 2.0		0.0		1 .1250 .0040	
6 3C2B	20000000000							
7								
1 3V34B	5.0 .460		0.0 2.0		0.0		1 .0208 .0023	
6 3V34B	20000000000							
7								
1 3P10B	0.75 .460		0.0 2.0		0.0		1 .1615 .0051	
6 3P10B	20000000000							
7								
1 3V65B	2.0 .460		0.0 2.0		0.0		1 1.003 .0319	
6 3V65B	00000000000							
7								
1 3S230	7.0 .460		0.0 2.0		0.0		1 .3964 .0423	
6 3S230	00000000000							
7								
4 3C13B	17.0 .480 1.000						.0182 .0020	
6 3C13B	20000000000							
7								
4 STATICL	1.0 .480 1.000		0.0 0.0		0.0			
6 STATICL	00000000000							
7								
3B54	90.0 80.0 30							
1 HVACHP	18.0 .460 1.000		0.0 2.0		0.0		1	
6 HVACHP	00000000000							
7								
4 HVACKW	27.0 .480 1.000		0.0 0.0		0.0		1	
6 HVACKW	00000000000							
7								
2BUS113								
3 SWICHYD	15000 19.21.008 4435							
6 SWICHYD								
9								
C TRLIN H1	2BUS113							
C NONSG X1	3AA1		.0002 .0010					
C NONSG Y1	3AB1		.0003 .0016					
T 3X03 H1	X1 Y1		40.0 233.03 4.16 4.16					
			16.64 0.67 16.90 0.68 30.42 1.22					
R 3AA2 3AA1	3AA2		0.0 0.0 0.04 80.00 0.00 0.00					
C 3AD 3AB2	3AD		.0077 .0172					
C 3B01 X2	3B01		0.0 0.0					
C 3B03 X4	3B03		0.0 0.0					

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1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890							
C 3805V 3801	3805V		.0013	.0027			
C 3805M 3801	3805M		.0030	.0033			
C 3807 3803	3807		.0064	.0129			
C 3808V 3850	3808V		0.002	.0040			
C 3850 3804	3850		.0049	.0099			
C 3X04 3AA2	H2		.0035	.0031			
T 3X04	H2	X2	1.0	4.055	0.48	2.5	
			5.54	0.544			
C 3X06 3AA2	H4		.0025	.0022			
T 3X06	H4	X4	1.0	4.055	0.48	2.5	
			5.62	0.544			
R 3A82 3A81	3A82		0.0	0.0	0.04	80.00	0.00 0.00
C 3802 X3	3802		0.0	0.0			
C 3804 X5	3804		0.0	0.0			
C 3806 3802	3806		.0045	.0090			
C 808N 3804	808N		.0132	.0143			
C 3852 3804	3852		.0048	.0098			
T 3X05	H3	X3	1.0	4.055	0.48	2.5	
			5.71	0.544			
C 3X05 3A82	H3		.0032	.0028			
C 3X07 3A82	H5		.0039	.0034			
C 3853 3801	3853		.0016	.0017			
C 3854 3804	3854		.0019	.0021			
T 3X07	H5	X5	1.0	4.055	0.48	2.5	
			5.71	0.544			

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FILE: \AUXSYS\U3APP5.DAT
STEADY STATE SET @ 96% AND STARTING @ 82% FOR SAFETY BUSES
STEADY STATE SET @ 90% AND STARTING @ 80% FOR NON-SAFETY BUSES
EBASCO SERVICES INC.
TURKEY POINT UNIT No 3. ELECTRICAL AUXILIARY SYSTEM DESIGN
AUX SYS FED THRU THE S/U TRF.PSB-1.
BUS 3AB2 ALIGNED TO 3AD, BUS 3B50 ALIGNED TO 3B04
SEQUENCED LOADING FOR CALCULATION EC-145, REV. 4
(3/06/91)

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EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

JOB ID 3/06/91
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GENERAL INSTRUCTION CARD DATA

NUMBER OF VOLTAGE DROP CASES	S/C CASE 1=YES 2=NO	TYPE OF OUTPUT	BASE MVA
1-11	1	SHORT	40.000

OPTIONAL USER SELECTED ASSUMED DATA

DATA							
LRA/FLA >1KV	LRA/FLA <=1KV	OP PF >1KV	OP PF <=1KV	OP EFF >1KV	OP EFF <=1KV	ST PF >1KV	ST PF <=1KV
6.00	6.00	.85	.85	.92	.92	.20	.20



EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

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T
Y
P
E

SHORT CIRCUIT & REACTANCE SIZING PARAMETERS

1	BUS NAME	MVA CLASS	RATED MAX KV	RATED C&L KA	RATED SC @ MAX KV	HPFV KV	"S" FACTOR	MIN CPT	FIXED K3	PERMISSIBLE INT CAP OF BREAKER KA@ HPFV	ASSYM MULT FOR C&L
2	BUS NAME	INT KA	HPFV KV	FIXED K4	K6 FACTOR	K6 BREAK OFF					
3	BUS NAME	INT KA	HPFV KV	FIXED K5	K7 FACTOR	K7 BREAK OFF					

1	3AA1	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	3AA2	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	3AD	250.00	4.760	80.0	30.30	4.160	1.100	3.000	(*****)	34.67	(1.60)
2	3B01	30.00	.480(*****)	(1.00)	.00						
2	3B03	30.00	.480(*****)	(1.00)	.00						
3	3B05V	25.00	.480(*****)	(1.00)	.00						
3	3B05H	25.00	.480(*****)	(1.00)	.00						
3	3B07	25.00	.480(*****)	(1.00)	.00						
3	3B08V	25.00	.480(*****)	(1.00)	.00						
1	3AB1	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	3AB2	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
2	3B02	30.00	.480(*****)	(1.00)	.00						
2	3B04	30.00	.480(*****)	(1.00)	.00						
3	3B06	25.00	.480(*****)	(1.00)	.00						
3	3B08N	25.00	.480(*****)	(1.00)	.00						
2	3B50	30.00	.480(*****)	(1.00)	.00						
3	3B52	25.00	.480(*****)	(1.00)	.00						
3	3B53	25.00	.480(*****)	(1.00)	.00						
3	3B54	25.00	.480(*****)	(1.00)	.00						

NOTE: TYPE 1 FAULT= MEDIUM VOLTAGE FAULT CALCULATION
 TYPE 2 FAULT= LOW VOLTAGE POWER CIRCUIT BREAKER FAULT CALCULATION
 TYPE 3 FAULT= LOW VOLTAGE MOLDED CASE BREAKER FAULT CALCULATION
 (*****) = COMPUTER WILL CALCULATE K FACTOR

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3AA1	96.00 %	82.00 %	30.0

0=ON
1=OFF
CON
FOR
S/C

VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

1 MOTOR
NAME

2 GEN
NAME

**RATED
HP**

RATED KV	LRA/ FLA
-------------	-------------

**K1
FACTOR**

SPEED
3.6K=1

**PWR
ACTOR**

OP
EFF

ST
OF

OHMS M
-T SY

2 RES

REAC

W
R

VOLTAGE DROP
CONDITION CODES

3 SYSTEM NAME

S/C
HYA

X/R

PU
OP

V/D
HVA

**OHMS
FOR**

**% R/X
FOR**

TRANSF
HVA

REACT
TOL

EAC AM
TOL DE

RES

LE
REAC

W
R

4 STATIC NAME

**RATED
KVA**

RATED KV	RATED PF
-------------	-------------

Abstract

References

RES

LE
REAC

W
R

9 10 11

[illegible]

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

[illegible]

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[illegible]

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

[illegible]

[illegible]

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3B01	96.00 %	82.00 %	30.0

0=ON
1=OFF

	<div style="text-align:center;">***** * LOAD DATA * *****</div>																						
T Y P E																	0=ON 1=OFF	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)					
1 MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1< 3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C											
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT	X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C													
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR %R FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C											
4 STATIC NAME	RATED KVA	RATED KV	RATED PF									CABLE RES REAC	CON FOR S/C										
													1	2	3	4	5	6	7	8	9	10	11

1 3P201A	150.00	.460	5.800	(	1.2)	2.000	.900	.925	(.200)*****(	1.)	.025	.027	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 3P214A	250.00	.460	6.540	(	1.2)	1.000	.900	.940	.150	*****(	1.)	.007	.015	(0)	1	1	2	(0)	(0)	(0)	(0)
1 3S6A	150.00	.460	6.050	(1.2)	2.000	(.850)(.920)(.200)*****(1.)	.024	.026	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)		
4 PH3B12	150.00	.480	1.000	*****	*****	*****	*****	*****	*****	***	.008	.012	(1)	1	1	1	1	1	1	1	1		

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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT											
3803														96.00 %				82.00 %				30.0											

														* LOAD DATA *																			

																						0=ON 1=OFF											
																						VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)											



BUS NAME		MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		# WARNINGS FOR LOW VOLT
3B05V		96.00 % ***** * LOAD DATA * *****		82.00 %		30.0
A/A	K1 FACTOR	SPEED OP PWR 3.6K=1 FACTOR X C&L X INT X GVD	X R/X TRANSF REACT -TOL OR TRANSF KV	R-OHMS T-T HOT SYN=2 IND=1 ANG DEG	CABLE RES REAC COW FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
LT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA REACT +TOL OR TRANSF TOL ANG DEG	CABLE RES REAC COW FOR S/C	
F						
*****	*****	*****	*****	*****	*****	*****
000)(8.0) 2.000 (.850)(.920)(.200)(****)(1.)	.537 .012 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)			
000)(8.0) 2.000 (.850)(.920)(.200)(****)(1.)	.561 .012 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)			
000)(8.0) 2.000 (.850) .900 (.200)(****)(1.)	.058 .014 1	1 1 1 1 1 1 1 1 1 1			
000)(8.0) 2.000 (.850)(.920)(.200)(****)(1.)	.065 .007 1	1 1 1 1 1 1 1 1 1 1			
000)(8.0) 2.000 (.850)(.920)(.200)(****)(1.)	.244 .005 1	1 1 1 1 1 1 1 1 1 1			
000)(8.0) 2.000 (.850)(.920)(.200)(****)(1.)	.385 .012 1	1 1 1 1 1 1 1 1 1 1			
000)(1.2) 2.000 (.850)(.920)(.200)(****)(1.)	.016 .006 1	1 1 1 1 1 1 1 1 1 1			
750)	1.2) 2.000 (.850)(.920)(.200)(****)(1.)	.045 .031 (0)	(0)(0)(0)(0)(0)(0)(0)(0)			
000)(8.0) 2.000 (.850)(.920)(.200)(****)(1.)	.481 .010 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)			
000)(1.2) 2.000 (.850)(.920)(.200)(****)(1.)	.024 .016 1	1 1 1 1 1 1 1 1 1 1			
000 *****	*****	.252 .013 (1)	2 (0)(0)(0)(0)(0)(0)(0)(0)			
000 *****	*****	(.000)(.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)			
660 (8.0) 2.000 .850 .540 .600 (****)(1.)	.803 .017 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1			
330 (8.0) 2.000 .850 .480 .600 (****)(1.)	.604 .013 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1			
910 (8.0) 2.000 .850 .500 .600 (****)(1.)	2.148 .047 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1			

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3B05N	90.00 %	80.00 %	30.0

★ LOAD DATA ★
 ★★★★★★★★★★

0=ON
1=OFF
CON
FOR
S/C

VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

TYPE

ROP CODES

CABLE	CON
RES REAC	FOR
	S/C

1	3P15	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.590	.013	1	1	1	1	1	1	1	1	1	1	1
1	3P19D	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.749	.016	1	1	1	1	1	1	1	1	1	1	1
1	3P19A	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.727	.016	1	1	1	1	1	1	1	1	1	1	1
1	3P19B	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.738	.016	1	1	1	1	1	1	1	1	1	1	1
1	3P19C	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.749	.016	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3P232A	10.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	1.547	.034	1	1	1	1	1	1	1	1	1	1	1
1	3P28A	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.197	.004	1	1	1	1	1	1	1	1	1	1	1
1	3P34A	.75	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.818	.018	1	1	1	1	1	1	1	1	1	1	1
1	3P4	10.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.597	.013	1	1	1	1	1	1	1	1	1	1	1
1	3P43	5.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.541	.012	1	1	1	1	1	1	1	1	1	1	1
1	3P49	.75	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.273	.006	1	1	1	1	1	1	1	1	1	1	1
1	3P5	40.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.036	.009	1	1	1	1	1	1	1	1	1	1	1
1	3V14A	7.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.883	.019	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V16	2.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.210	.005	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V18	7.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.474	.010	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V19A	15.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.135	.004	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V31B	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.660	.014	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V32B	.75	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.490	.011	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V4	5.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.579	.013	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V6A	7.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.268	.006	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	P51A	1.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.749	.016	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3X03	7.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.102	.011	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3NF20A/	1.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.169												

TYPE

* LOAD DATA *

0=ON
1=OFF
CON
FOR
S/C

VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

•

1

S/C	1	2	3	4	5	6	7	8	9	10	11
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[illegible]

JOB ID 3/06/91
VERIFICATION BY
PAGE 25

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3853	90.00 %	80.00 %	30.0

1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	COW FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	COW FOR S/C	
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	COW FOR S/C	
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	COW FOR S/C	1 2 3 4 5 6 7 8 9 10
1	HVACHP	18.00	.460(6.000)(		8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	(.000)(.000)(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)		
4	HVACKW	27.00	.460 1.000	*****	*****	*****	*****	*****	*****	***	(.000)(.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)		



BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3808V	96.00 %	82.00 %	30.0

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          96.00 %
*****
*  LOAD DATA  *
*****

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VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	HOT SYN=2 INO=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
2	GEN NAME	RATED MVA	RATED KV	PV OP VOLT	X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C			
3	SYSTEM NAME	S/C MVA	X/R	PV OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON- FOR S/C	
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10 11
*	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *
1	3V1D	100.00	.460	7.750	(1.2)	2.000	(.850)(.920)(.200)(****)	(1.)	.016	.011	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0) 1	
1	3V30B	30.00	.460	5.390	(8.0)	2.000	(.850)(.920)	.420 (****)	(1.)	.249	.029	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	
1	3V3B	75.00	.460	6.060	(1.2)	2.000	(.850)(.920)	.350 (****)	(1.)	.038	.026	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	
1	V11	10.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.204	.004	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	V29B	1.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.534	.017	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	E16C/17	34.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.188	.021	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	C1	75.00	.460(6.000)(	1.2)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.025	.017	1 1 1 1 1 1 1 1 1 1 1
1	E16D	36.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.048	.009	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	P42B	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.671	.015	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	V77/E23	36.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.077	.014	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	HS74B	60.00	.460(6.000)(	1.2)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.069	.032	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	S77B	5.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.807	.026	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	S78B	5.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.716	.023	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	S75B	5.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.639	.020	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
4	4Q25A	1.00	.480	1.000	*****	*****	*****	*****	*****	***	.047	.011	(1) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	
4	4Q02A	70.60	.480	1.000	*****	*****	*****	*****	*****	***	.023	.010	(1) 1 1 1 1 1 1 1 1 1 1 1	
4	STATCL	1.00	.480	1.000	*****	*****	*****	*****	*****	***	(.000)(.000)	(1) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	
1	MOV1404	.33	.460	3.600	(8.0)	2.000	.850	.290	.600 (****)	(1.)	.591	.019	(0) 2 (0)(0)(0)(0) 1 1 1 1 1 1	
1	MOV1417	1.50	.460	5.700	(8.0)	2.000	.850	.500	.600 (****)	(1.)	.463	.010	(0) 2 (0)(0)(0)(0) 1 1 1 1 1 1	
1	MOV6552	.13	.460	7.100	(8.0)	2.000	.850	.320	.600 (****)	(1.)	.508	.016	(0) 2 (0)(0)(0)(0) 1 1 1 1 1 1	
1	MOV6543	.13	.460	7.100	(8.0)	2.000	.850	.320	.600 (****)	(1.)	.461	.015	(0) 2 (0)(0)(0)(0) 1 1 1 1 1 1	

*CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE

[illegible]



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BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S						MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT
3B50	96.00 % ***** * LOAD DATA * *****						82.00 %		30.0
A/A	K1 FACTOR	SPEED OP PWR 3.6K=1 FACTOR <3.6K=2	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	COM FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
LT	X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C	
LT	V/D MVA	OHMS FOR REACT OR 2% FOR	% R/X FOR REAC OR %R FOR	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C
TED F							CABLE RES REAC	CON FOR S/C	

800 (1.2)	2.000	.900 (.920)(.200)(****)	(1.)	.021	.022 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)



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[illegible][illegible]

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

DEVICE NAME			CASE: 1	2	3	4	5	6	7	8	9	10	11
1	3P200C	RATED HP	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00
1	3P200B	RATED HP	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	6000.00	5061.00



EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

JOB ID 3/06/91
 VERIFICATION BY
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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
3AB2														96.00 %		82.00 %		30.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

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T Y P E	1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

1	3P11B	400.00	4.000	5.090	(1.2)	2.000	.850	.938	(.200)	(****)	(1.)	.030	.026	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

DEVICE NAME	CASE: 1	2	3	4	5	6	7	8	9	10	11
1 3P6B RATED HP	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00
1 3P3B RATED HP	700.00	700.00	700.00	700.00	700.00	700.00	700.00	800.00	800.00	700.00	700.00

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EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX	# WARNINGS FOR LOW VOLT										
3802														96.00 %				82.00 %					30.0										

														* LOAD DATA *																			

																						0=ON											
																						1=OFF											
																						CON	VOLTAGE DROP										
																						FOR	CONDITION CODES										
																						S/C	(0=ON;1=OFF;2=STARTING)										



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BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3804	96.00 %	82.00 %	30.0

0=ON
1=OFF
CON
FOR
S/C

[illegible]



EBASCO SERVICES INCORPORATED
AUXSYS4078-12/31/89
ELECTRICAL AUXILIARY DESIGN

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BUS NAME													MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT										
3B06													96.00 %		82.00 %		30.0										

													* LOAD DATA *														

T Y P E	1 MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)													
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT			X C&L	X INT	X GVD	X/R	ANG DEG		CABLE RES REAC	CON FOR S/C														
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	X R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG		CABLE RES REAC	CON FOR S/C														
4 STATIC NAME	RATED KVA	RATED KV	RATED PF									CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11			

1 3P2038	15.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)(	1.)	.123	.030 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)											
1 3V20	20.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)(	1.)	.183	.009 1	1 1 1 1 1 1 1 1 1 1 1 1											
1 3V2A	60.00	.460(6.000)(	1.2)	2.000 (	.850)(	.920)(	.200)(****)(	1.)	.054	.020 (0)	1 1 1 1 1 1 1 1 1 1 1 1											
1 3V30A	30.00	.460 5.390 (	8.0)	2.000 (	.850)(	.920)	.420 (****)(	1.)	.194	.026 (0)	1 1 2 (0)(0)(0)(0)(0)(0)(0)(0)(0)												
1 3V3A	75.00	.460 6.060 (	1.2)	2.000 (	.850)(	.920)	.350 (****)(	1.)	.032	.022 (0)	1 1 1 1 1 1 2 (0)(0)(0)(0)(0)												
1 3V9	20.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)(	1.)	.196	.010 1	1 1 1 1 1 1 1 1 1 1 1 1											
1 E16A/17	34.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)(	1.)	.131	.014 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)											
1 E16E	36.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)(	1.)	.039	.008 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)											
1 3V6B	2.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)(	1.)	.640	.014 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)											
1 V8B	40.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)(	1.)	.072	.017 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)											
4 3D25	52.40	.480 1.000	*****	*****	*****	*****	*****	*****	***	.036	.009 (1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)															
4 STATICL	1.00	.480 1.000	*****	*****	*****	*****	*****	*****	***	(.000)(.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)															
1 MOV381	.42	.460 5.200 (	8.0)	2.000	.850	.490	.600 (****)(	1.)	.720	.016 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														
1 MOV626	1.00	.460 5.700 (	8.0)	2.000	.850	.390	.600 (****)(	1.)	.791	.017 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														
1 MOV716B	1.30	.460 3.700 (	8.0)	2.000	.850	.600	.600 (****)(	1.)	.666	.014 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														
1 MOV730	1.30	.460 3.700 (	8.0)	2.000	.850	.600	.600 (****)(	1.)	.796	.017 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														
1 MOV744B	10.30	.460 7.200 (	8.0)	2.000	.850	.800	.600 (****)(	1.)	.568	.020 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														
1 MOV843B	1.58	.460 7.400 (	8.0)	2.000	.850	.500	.600 (****)(	1.)	.818	.018 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														
1 MOV880B	2.00	.460 3.700 (	8.0)	2.000	.850	.630	.600 (****)(	1.)	.731	.016 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														
1 MOV1402	.33	.460 7.300 (	8.0)	2.000	.850	.480	.600 (****)(	1.)	.640	.014 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														
1 MOV1418	1.50	.460 5.700 (	8.0)	2.000	.850	.500	.600 (****)(	1.)	.709	.015 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														
1 MOV1425	.33	.460 5.200 (	8.0)	2.000	.850	.380	.600 (****)(	1.)	.986	.021 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														
1 MOV1421	5.30	.460 8.500 (	8.0)	2.000	.850	.760	.600 (****)(	1.)	.528	.012 (0)	2 (0)(0)(0)(0) 1 1 1 1 1 1														



BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
B08N	90.00 %	80.00 %	30.0

★ LOAD DATA ★
 ★★★★★★★★★★★★★★

VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

1	MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 OP PWR FACTOR 3.6K=2	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)												
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C													
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C												
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11	

1	3P204B	6.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.297	.007 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	3P26B	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.371	.008 1	1 1 1 1 1 1 1 1 1 1 1 1									
1	P208	20.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.119	.006 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	4P26B	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.494	.011 1	1 1 1 1 1 1 1 1 1 1 1 1									
1	P84A	20.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.116	.006 1	1 1 1 1 1 1 1 1 1 1 1 1									
1	3P24B	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.532	.012 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	P20	.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.854	.019 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	P21	.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.879	.019 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	3P25B	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.338	.007 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	P22	.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.877	.019 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	P220	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.271	.006 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	4P24B	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.472	.010 1	1 1 1 1 1 1 1 1 1 1 1 1									
1	4P25B	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.494	.011 1	1 1 1 1 1 1 1 1 1 1 1 1									
1	P84B	20.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.117	.006 1	1 1 1 1 1 1 1 1 1 1 1 1									
1	4P16A	50.00	.460(6.000)(	1.2)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.054	.013 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	3P16A	50.00	.460(6.000)(	1.2)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.054	.013 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	3V36A	2.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.340	.007 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1	V78	5.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.293	.009 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
4	NS233H	27.40	.480 .850	*****	*****	*****	*****	*****	*****	.116	.013 (1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)													
4	STATICL	1.00	.480 1.000	*****	*****	*****	*****	*****	*****	*** (.000)(.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)												

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BUS NAME															MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT											
3852															96.00 %				82.00 %				30.0											

															* LOAD DATA *																			

T Y P E	1	MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	HOT SYN=2 IND=1	CABLE RES	REAC	CON FOR S/C	0=ON 1=OFF VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)																		
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG		CABLE RES	REAC	CON FOR S/C																			
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR %R FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG		CABLE RES	REAC	CON FOR S/C																			
4	STATIC NAME	RATED KVA	RATED KV	RATED PF									CABLE RES	REAC	CON FOR S/C																			

1	3C2B	5.00	.460	(6.000)	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.125	.004	(0)	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3V34B	5.00	.460	(6.000)	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.021	.002	(0)	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3P10B	.75	.460	(6.000)	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.162	.005	(0)	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3V65B	2.00	.460	(6.000)	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	1.003	.032	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3S230	7.00	.460	(6.000)	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.396	.042	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
4	3C13B	17.00	.480	1.000	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	.018	.002	(1)	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
4	STATICL	1.00	.480	1.000	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	(.000)	(.000)	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3854	90.00 %	80.00 %	30.0

★ ★ ★ ★ ★
★ LOAD DATA ★
★ ★ ★ ★ ★

0=ON
1=OFF
CON
FOR
S/C

VOLTAGE DROP
CONDITION CODES
(0=ON:1=OFF:2=STARTING)

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VOLTAGE DROP
CONDITION CODES
(0=ON:1=OFF:2=STARTING)

CON
FOR

CON
FOR

REACT OR ZX FOR TRANSF	REAC OR XR FOR TRANS
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100	100

CON
FOR

[illegible]

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BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S						MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT
2BUS113	(90.00) % ***** * LOAD DATA * *****						(70.70) %				(5.0)
A/ A	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)	
LT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C		
LT	V/D MVA	OHMS FOR REACT OR Z% FOR	% R/X FOR REAC OR %R FOR	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C		
TED F								CABLE RES REAC	CON FOR S/C		
008	4435.0	.000	.000	.000	(.000)(	.0)(0.)	(.000)(	.000)(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	



BUS TIE CONNECTION DATA

Y	P TIE	BUS OR	BUS OR	TERM NAME
E NAME	TERM	TERM	AWAY FROM	
	NAME	NAME	CENTRAL	
	TOWARD	AWAY	TRANSF	
	CENTRAL	FROM	(USE THIS	
	TRANSF	CENTRAL	COL FOR	
		TRANSF	3 -WIND	
			TRANSF)	

C				CABLE RESIS	CABLE REAC				
T	(A)	(B)	(C)	TRANSF RATED MVA	TERM (A) RATED VOLT	TERM (B) RATED VOLT	TERM (C) RATED VOLT	TRANSF TOL %	
R				CABLE RESIS	CABLE REAC	OHMS X	REACTOR X/R	+TOL FOR S/C	-TOL FOR V/D

C	TRLIN H1		2BUS113	(.000)	(.000)				
C	NONSG X1		3AA1	.000	.001				
C	NONSG Y1		3AB1	.000	.002				
T	3X03 H1	X1	Y1	40.000	233.000	4.160	4.160	.000	
**	ZH-X=16.640 %	RH-X=	.670 %	ZH-Y=16.900 %	RH-Y=	.680 %	ZX-Y=30.420 %	RX-Y= 1.220 %	
R	3AA2 3AA1	3AA2		(.000)	(.000)	.04	80.0	(.00) (.00)	
C	3AD 3AB2	3AD		.008	.017				
C	3B01 X2	3B01		(.000)	(.000)				
C	3B03 X4	3B03		(.000)	(.000)				
C	3B05V 3B01	3B05V		.001	.003				
C	3B05N 3B01	3B05N		.003	.003				
C	3B07 3B03	3B07		.006	.013				
C	3B08V 3B50	3B08V		.002	.004				
C	3B50 3B04	3B50		.005	.010				
C	3X04 3AA2	H2		.004	.003				
T	3X04 H2	X2		1.000	4.050	.480	.000	2.500	
**	ZH-X= 5.540 %	RH-X=	.544 %						
C	3X06 3AA2	H4		.002	.002				
T	3X06 H4	X4		1.000	4.050	.480	.000	2.500	
**	ZH-X= 5.620 %	RH-X=	.544 %						
R	3AB2 3AB1	3AB2		(.000)	(.000)	.04	80.0	(.00) (.00)	
C	3B02 X3	3B02		(.000)	(.000)				
C	3B04 X5	3B04		(.000)	(.000)				
C	3B06 3B02	3B06		.004	.009				
C	B08W 3B04	B08W		.013	.014				
C	3B52 3B04	3B52		.005	.010				
T	3X05 H3	X3		1.000	4.050	.480	.000	2.500	
**	ZH-X= 5.710 %	RH-X=	.544 %						
C	3X05 3AB2	H3		.003	.003				
C	3X07 3AB2	H5		.004	.003				

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BUS TIE CONNECTION DATA

Y	P TIE	BUS OR	BUS OR	TERM NAME
E NAME	TERM	TERM	AWAY FROM	
	NAME	NAME	CENTRAL	
	TOWARD	AWAY	TRANSF	
	CENTRAL	FROM	(USE THIS	
	TRANSF	CENTRAL	COL FOR	
		TRANSF	3 -WIND	
			TRANSF)	

C 3853	3801	3853	.002	.002				
C 3854	3804	3854	.002	.002				
T 3X07	H5	X5	1.000	4.050	.480	.000	2.500	
**	ZH-X= 5.710 % RH-X=		.544 %					

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SHORT CIRCUIT ANALYSIS

NOTE:

TYPE 1 FAULT= MEDIUM VOLTAGE FAULT CALCULATION
 TYPE 2 FAULT= LOW VOLTAGE POWER CIRCUIT BREAKER FAULT CALCULATION
 TYPE 3 FAULT= LOW VOLTAGE MOLED CASE BREAKER FAULT CALCULATION

BASE MVA = 40.000

TYPE OF FAULT	FAULT BUS NAME	PER UNIT RESISTANCE	PER UNIT INT REACTANCE	PER UNIT C&L REACTANCE	X/R	INT KA	C&L KA	K3	K4	K5	BASE VOLTAGE (KV)
1	3AA1	.00527	.14089	.12803	24.1	42.7	69.4	1.08			4.160
1	3AA2	.00611	.21279	.18922	30.6	29.8	46.9	1.14			4.160
1	3AD	.02318	.25256	.22609	9.6	22.0	39.3	1.00			4.160
2	3B01	.17233	1.68136		9.8	28.7			1.06		.493
2	3B03	.19871	1.97218		9.9	24.5			1.07		.493
3	3B05V	.37478	2.08815		5.6	21.9				1.02	.493
3	3B05N	.54551	2.13669		3.9	20.7				1.00	.493
3	3B07	.89426	3.48214		3.9	12.7				1.00	.493
3	3B08V	.80734	3.11648		3.9	14.2				1.00	.493
1	3AB1	.00543	.14292	.12904	23.6	41.8	68.8	1.08			4.160
1	3AB2	.00623	.21345	.18777	29.6	29.5	47.3	1.14			4.160
2	3B02	.19650	1.90975		9.7	25.3			1.06		.493
2	3B04	.17617	1.67704		9.5	28.7			1.06		.493
3	3B06	.74699	3.01715		4.0	14.7				1.00	.493
3	808N	1.81813	3.73811		2.1	11.0				1.00	.493
2	3B50	.66166	2.71646		4.1	16.3			1.00		.493
3	3B52	.95580	3.26390		3.4	13.4				1.00	.493
3	3B53	.43253	1.95808		4.5	22.7				1.00	.493
3	3B54	.48814	2.02197		4.1	21.9				1.00	.493

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VOLTAGE DROP ANALYSIS CASE #= 1

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.863KV=100.4% OF 233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.833KV=100.4% OF 233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.858KV=100.4% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.033KV= 96.9% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.028KV= 96.8% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.032KV= 96.9% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.967KV= 95.4% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.961KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.966KV= 95.3% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.997KV= 96.1% OF 4.160KV	5253.0	2987.8	.0	.0
3AA2	***DURING***	3.989KV= 95.9% OF 4.160KV	5253.0	2987.8	.0	.0
3AA2	***AFTER***	3.995KV= 96.0% OF 4.160KV	5253.0	2987.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.923KV= 94.3% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.914KV= 94.1% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.922KV= 94.3% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3801	***PRIOR***	.462KV= 93.8% OF .493KV	247.0	138.7	.0	.0
3801	***DURING***	.458KV= 93.0% OF .493KV	247.0	138.7	.0	.0
3801	***AFTER***	.462KV= 93.6% OF .493KV	247.0	138.7	.0	.0



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VOLTAGE DROP ANALYSIS CASE #= 1

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3803	***PRIOR***	.468KV= 94.9% OF	.493KV	82.6	51.3	212.5	1.5
3803	***DURING***	.464KV= 94.1% OF	.493KV	82.6	51.3	209.0	1.5
3803	***AFTER***	.467KV= 94.8% OF	.493KV	82.6	51.3	212.1	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3805V	***PRIOR***	.462KV= 93.7% OF	.493KV	83.0	51.6	13.9	.0
3805V	***DURING***	.457KV= 92.7% OF	.493KV	131.9	144.6	28.8	.0
3805V	***AFTER***	.461KV= 93.5% OF	.493KV	100.2	62.0	29.2	.0

STARTING MOTOR NAME HP

3C2A	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
3C2A	***DURING***	5.0	.449KV= 97.6% OF	.460 KV	
3C2A	***AFTER***	5.0	.456KV= 99.2% OF	.460 KV	

STARTING MOTOR NAME HP

3P10	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
3P10	***DURING***	.8	.456KV= 99.1% OF	.460 KV	
3P10	***AFTER***	.8	.460KV=100.1% OF	.460 KV	

STARTING MOTOR NAME HP

3V34	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V34	***DURING***	5.0	.450KV= 97.8% OF	.460 KV	
3V34	***AFTER***	5.0	.457KV= 99.3% OF	.460 KV	

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VOLTAGE DROP ANALYSIS CASE #= 1

STARTING MOTOR NAME	HP					
MOV1420***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV1420***DURING***	5.2	.408KV=	88.7% OF	.460 KV		
MOV1420***AFTER***	5.2	.449KV=	97.5% OF	.460 KV		

STARTING MOTOR NAME	HP					
MOV1400***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV1400***DURING***	.3	.454KV=	98.6% OF	.460 KV		
MOV1400***AFTER***	.3	.460KV=	100.1% OF	.460 KV		

STARTING MOTOR NAME	HP					
MOV1427***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV1427***DURING***	.3	.451KV=	98.1% OF	.460 KV		
MOV1427***AFTER***	.3	.459KV=	99.9% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B05N	***PRIOR***	.460KV= 93.3% OF	.493KV	215.5	135.0	13.8 .0
3B05N	***DURING***	.456KV= 92.5% OF	.493KV	215.5	135.0	13.5 .0
3B05N	***AFTER***	.459KV= 93.2% OF	.493KV	215.5	135.0	13.7 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B07	***PRIOR***	.462KV= 93.7% OF	.493KV	157.6	97.4	65.2 .3
3B07	***DURING***	.454KV= 92.1% OF	.493KV	235.0	187.0	63.1 .3
3B07	***AFTER***	.461KV= 93.5% OF	.493KV	175.2	108.2	64.9 .3

STARTING MOTOR NAME	HP					
MOV716A***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV716A***DURING***	1.3	.451KV=	98.1% OF	.460 KV		
MOV716A***AFTER***	1.3	.460KV=	99.9% OF	.460 KV		

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STARTING MOTOR NAME	HP				
MOV744A***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV744A***DURING***	10.5	.411KV=	89.4% OF	.460 KV	
MOV744A***AFTER****	10.5	.452KV=	98.3% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV843A***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV843A***DURING***	1.6	.447KV=	97.2% OF	.460 KV	
MOV843A***AFTER****	1.6	.459KV=	99.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV880A***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV880A***DURING***	2.0	.450KV=	97.9% OF	.460 KV	
MOV880A***AFTER****	2.0	.459KV=	99.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1401***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1401***DURING***	.3	.448KV=	97.5% OF	.460 KV	
MOV1401***AFTER****	.3	.460KV=	99.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1426***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1426***DURING***	.3	.453KV=	98.5% OF	.460 KV	
MOV1426***AFTER****	.3	.461KV=	100.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV6386***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV6386***DURING***	.1	.452KV=	98.2% OF	.460 KV	
MOV6386***AFTER****	.1	.460KV=	100.1% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B08V	***PRIOR****	.441KV= 89.4% OF	.493KV	231.4	142.4	1.7 .0
3B08V	***DURING***	.436KV= 88.4% OF	.493KV	245.4	163.9	1.6 .0
3B08V	***AFTER****	.440KV= 89.2% OF	.493KV	236.0	145.2	1.7 .0

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VOLTAGE DROP ANALYSIS CASE #= 1

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V1D	***PRIOR***	100.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***DURING***	100.0	.432KV=	93.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***AFTER***	100.0	.436KV=	94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V11	***PRIOR***	10.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***DURING***	10.0	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***AFTER***	10.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

STARTING MOTOR NAME

		HP							
V29B	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	*	MOTOR NOT STARTED YET *		
V29B	***DURING***	1.0	.434KV=	94.4% OF	.460 KV	*			
V29B	***AFTER***	1.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E16C/17	***PRIOR***	34.0	.428KV=	93.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16C/17	***DURING***	34.0	.423KV=	92.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16C/17	***AFTER***	34.0	.428KV=	93.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E16D	***PRIOR***	36.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16D	***DURING***	36.0	.432KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16D	***AFTER***	36.0	.436KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *



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VOLTAGE DROP ANALYSIS CASE #= 1

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
P42B	***PRIOR***	3.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42B	***DURING***	3.0	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42B	***AFTER***	3.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V77/E23	***PRIOR***	36.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
V77/E23	***DURING***	36.0	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V77/E23	***AFTER***	36.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
NS74B	***PRIOR***	50.5	.433KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74B	***DURING***	50.5	.428KV=	93.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74B	***AFTER***	50.5	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S77B	***PRIOR***	3.4	.436KV=	94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***DURING***	3.4	.431KV=	93.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***AFTER***	3.4	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78B	***PRIOR***	3.4	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***DURING***	3.4	.431KV=	93.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***AFTER***	3.4	.435KV=	94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *



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STARTING MOTOR NAME	HP				
MOV1404***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1404***DURING***	.3	.433KV=	94.2% OF	.460 KV	
MOV1404***AFTER****	.3	.439KV=	95.4% OF	.460 KV	* WARNING WARNING WARNING *
STARTING MOTOR NAME	HP				
MOV1417***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1417***DURING***	1.5	.427KV=	92.8% OF	.460 KV	
MOV1417***AFTER****	1.5	.438KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *
STARTING MOTOR NAME	HP				
MOV6552***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV6552***DURING***	.1	.434KV=	94.4% OF	.460 KV	
MOV6552***AFTER****	.1	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *
STARTING MOTOR NAME	HP				
MOV6543***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV6543***DURING***	.1	.434KV=	94.4% OF	.460 KV	
MOV6543***AFTER****	.1	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B50	***PRIOR****	.443KV= 89.9% OF	.493KV	123.4	60.8	.0
3B50	***DURING***	.439KV= 89.0% OF	.493KV	123.4	60.8	.0
3B50	***AFTER****	.442KV= 89.7% OF	.493KV	123.4	60.8	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3P201C ***PRIOR****	150.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *
3P201C ***DURING***	150.0	.430KV=	93.5% OF	.460 KV	* WARNING WARNING WARNING *
3P201C ***AFTER****	150.0	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR****	3.926KV= 94.4% OF	4.160KV	5253.2	2988.1	.0
3AB2	***DURING***	3.917KV= 94.1% OF	4.160KV	5253.2	2988.1	.0
3AB2	***AFTER****	3.924KV= 94.3% OF	4.160KV	5253.2	2988.1	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3802	***PRIOR***	.459KV= 93.1% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.453KV= 91.9% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.458KV= 92.9% OF	.493KV	207.0	113.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3804	***PRIOR***	.452KV= 91.6% OF	.493KV	123.5	77.5	.0	.0
3804	***DURING***	.448KV= 90.8% OF	.493KV	123.5	77.5	.0	.0
3804	***AFTER***	.451KV= 91.5% OF	.493KV	123.5	77.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3806	***PRIOR***	.456KV= 92.6% OF	.493KV	104.5	64.1	47.9	.1
3806	***DURING***	.446KV= 90.5% OF	.493KV	231.0	204.8	45.8	.1
3806	***AFTER***	.455KV= 92.3% OF	.493KV	133.8	81.9	47.6	.1

STARTING MOTOR NAME HP

MOV381	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV381	***DURING***	.4	.443KV= 96.2% OF	.460 KV	
MOV381	***AFTER***	.4	.454KV= 98.7% OF	.460 KV	

STARTING MOTOR NAME HP

MOV626	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV626	***DURING***	1.0	.433KV= 94.2% OF	.460 KV	
MOV626	***AFTER***	1.0	.452KV= 98.2% OF	.460 KV	

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VOLTAGE DROP ANALYSIS CASE #= 1

STARTING MOTOR NAME	HP				
MOV716B***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV716B***DURING***	1.3	.440KV=	95.7% OF	.460 KV	
MOV716B***AFTER****	1.3	.453KV=	98.4% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV730 ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV730 ***DURING***	1.3	.439KV=	95.4% OF	.460 KV	
MOV730 ***AFTER****	1.3	.452KV=	98.3% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV744B***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV744B***DURING***	10.3	.388KV=	84.4% OF	.460 KV	
MOV744B***AFTER****	10.3	.443KV=	96.3% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV843B***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV843B***DURING***	1.6	.425KV=	92.3% OF	.460 KV	
MOV843B***AFTER****	1.6	.451KV=	98.0% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV880B***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV880B***DURING***	2.0	.437KV=	94.9% OF	.460 KV	
MOV880B***AFTER****	2.0	.451KV=	98.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1402***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1402***DURING***	.3	.443KV=	96.2% OF	.460 KV	
MOV1402***AFTER****	.3	.454KV=	98.7% OF	.460 KV	

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STARTING MOTOR NAME	HP					
MOV1418***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV1418***DURING***	1.5	.433KV=	94.0% OF	.460 KV		
MOV1418***AFTER***	1.5	.451KV=	98.1% OF	.460 KV		

STARTING MOTOR NAME	HP					
MOV1425***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV1425***DURING***	.3	.441KV=	95.9% OF	.460 KV		
MOV1425***AFTER***	.3	.453KV=	98.6% OF	.460 KV		

STARTING MOTOR NAME	HP					
MOV1421***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV1421***DURING***	5.3	.411KV=	89.4% OF	.460 KV		
MOV1421***AFTER***	5.3	.449KV=	97.6% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
B08N	***PRIOR***	.445KV= 90.2% OF	.493KV	117.9	72.4	20.7	12.1
B08N	***DURING***	.441KV= 89.4% OF	.493KV	117.9	72.4	20.3	11.9
B08N	***AFTER***	.444KV= 90.1% OF	.493KV	117.9	72.4	20.6	12.1

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3852	***PRIOR***	.451KV= 91.6% OF	.493KV	7.4	4.5	.9	.0
3852	***DURING***	.446KV= 90.5% OF	.493KV	19.5	61.0	15.5	.0
3852	***AFTER***	.451KV= 91.4% OF	.493KV	16.1	9.9	15.8	.0

STARTING MOTOR NAME	HP					
3C2B	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3C2B	***DURING***	5.0	.444KV=	96.6% OF	.460 KV	
3C2B	***AFTER***	5.0	.449KV=	97.7% OF	.460 KV	

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VOLTAGE DROP ANALYSIS CASE #= 1

STARTING MOTOR NAME	HP					
3V34B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
3V34B ***DURING***	5.0	.446KV=	96.9% OF	.460 KV		
3V34B ***AFTER***	5.0	.450KV=	97.9% OF	.460 KV		

STARTING MOTOR NAME	HP					
3P10B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
3P10B ***DURING***	.8	.446KV=	96.9% OF	.460 KV		
3P10B ***AFTER***	.8	.450KV=	97.9% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3853	***PRIOR***	.462KV= 93.8% OF	.493KV	14.6	9.0	27.3	.0
3853	***DURING***	.458KV= 93.0% OF	.493KV	14.6	9.0	26.8	.0
3853	***AFTER***	.462KV= 93.7% OF	.493KV	14.6	9.0	27.2	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3854	***PRIOR***	.451KV= 91.6% OF	.493KV	14.6	9.0	23.9	.0
3854	***DURING***	.448KV= 90.8% OF	.493KV	14.6	9.0	23.5	.0
3854	***AFTER***	.451KV= 91.5% OF	.493KV	14.6	9.0	23.8	.0

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VOLTAGE DROP ANALYSIS CASE # 2

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.858KV=100.4% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.439KV=100.2% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.814KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.032KV= 96.9% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	3.950KV= 94.9% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.024KV= 96.7% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.966KV= 95.3% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.881KV= 93.3% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.958KV= 95.1% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.995KV= 96.0% OF 4.160KV	5253.0	2987.8	.0	.0
3AA2	***DURING***	3.877KV= 93.2% OF 4.160KV	5955.8	6369.7	.0	.0
3AA2	***AFTER***	3.985KV= 95.8% OF 4.160KV	5770.8	3260.8	.0	.0

STARTING MOTOR NAME

HP

3P210A	***PRIOR***	.0	.000KV= .0% OF 4.000 KV
3P210A	***DURING***	300.0	3.861KV= 96.5% OF 4.000 KV
3P210A	***AFTER***	300.0	3.981KV= 99.5% OF 4.000 KV

* MOTOR NOT STARTED YET *



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VOLTAGE DROP ANALYSIS CASE #= 2

STARTING MOTOR NAME

HP

3P215A ***PRIOR*** .0 .000KV= .0% OF 4.000 KV * MOTOR NOT STARTED YET *
 3P215A ***DURING*** 350.0 3.856KV= 96.4% OF 4.000 KV
 3P215A ***AFTER*** 350.0 3.981KV= 99.5% OF 4.000 KV

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AD	***PRIOR***	3.922KV= 94.3% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.801KV= 91.4% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.910KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3801	***PRIOR***	.462KV= 93.6% OF .493KV	247.0	138.7	.0	.0
3801	***DURING***	.447KV= 90.7% OF .493KV	247.0	138.7	.0	.0
3801	***AFTER***	.460KV= 93.4% OF .493KV	247.0	138.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3803	***PRIOR***	.467KV= 94.8% OF .493KV	82.6	51.3	212.1	1.5
3803	***DURING***	.453KV= 91.9% OF .493KV	82.6	51.3	199.4	1.5
3803	***AFTER***	.466KV= 94.5% OF .493KV	82.6	51.3	210.9	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3805V	***PRIOR***	.461KV= 93.5% OF .493KV	100.2	62.0	29.2	.0
3805V	***DURING***	.447KV= 90.6% OF .493KV	100.2	62.0	27.4	.0
3805V	***AFTER***	.460KV= 93.3% OF .493KV	100.2	62.0	29.1	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3805N	***PRIOR***	.459KV= 93.2% OF .493KV	215.5	135.0	13.7	.0
3805N	***DURING***	.445KV= 90.2% OF .493KV	215.5	135.0	12.9	.0
3805N	***AFTER***	.458KV= 92.9% OF .493KV	215.5	135.0	13.7	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3807	***PRIOR***	.461KV= 93.5% OF .493KV	175.2	108.2	64.9	.3
3807	***DURING***	.446KV= 90.5% OF .493KV	175.2	108.2	60.9	.3
3807	***AFTER***	.459KV= 93.2% OF .493KV	175.2	108.2	64.6	.3



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B08V	***PRIOR***	.440KV= 89.2% OF	.493KV	236.0	145.2	1.7 .0
3B08V	***DURING***	.425KV= 86.1% OF	.493KV	236.0	145.2	1.6 .0
3B08V	***AFTER***	.438KV= 88.9% OF	.493KV	236.0	145.2	1.7 .0
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
3V1D	***PRIOR***	100.0 .436KV= 94.7% OF	.460 KV	*	WARNING	WARNING WARNING *
3V1D	***DURING***	100.0 .420KV= 91.4% OF	.460 KV	*	WARNING	WARNING WARNING *
3V1D	***AFTER***	100.0 .434KV= 94.4% OF	.460 KV	*	WARNING	WARNING WARNING *
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
V11	***PRIOR***	10.0 .436KV= 94.8% OF	.460 KV	*	WARNING	WARNING WARNING *
V11	***DURING***	10.0 .421KV= 91.5% OF	.460 KV	*	WARNING	WARNING WARNING *
V11	***AFTER***	10.0 .435KV= 94.5% OF	.460 KV	*	WARNING	WARNING WARNING *
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
V29B	***PRIOR***	1.0 .439KV= 95.4% OF	.460 KV	*	WARNING	WARNING WARNING *
V29B	***DURING***	1.0 .424KV= 92.1% OF	.460 KV	*	WARNING	WARNING WARNING *
V29B	***AFTER***	1.0 .437KV= 95.1% OF	.460 KV	*	WARNING	WARNING WARNING *
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
E16C/17	***PRIOR***	34.0 .428KV= 93.0% OF	.460 KV	*	WARNING	WARNING WARNING *
E16C/17	***DURING***	34.0 .412KV= 89.6% OF	.460 KV	*	WARNING	WARNING WARNING *
E16C/17	***AFTER***	34.0 .426KV= 92.6% OF	.460 KV	*	WARNING	WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E160 ***PRIOR***	36.0	.436KV=	94.9% OF	.460 KV	* WARNING WARNING WARNING *
E160 ***DURING***	36.0	.421KV=	91.5% OF	.460 KV	* WARNING WARNING WARNING *
E160 ***AFTER***	36.0	.435KV=	94.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P428 ***PRIOR***	3.0	.436KV=	94.8% OF	.460 KV	* WARNING WARNING WARNING *
P428 ***DURING***	3.0	.421KV=	91.5% OF	.460 KV	* WARNING WARNING WARNING *
P428 ***AFTER***	3.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V77/E23***PRIOR***	36.0	.434KV=	94.4% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***DURING***	36.0	.419KV=	91.1% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***AFTER***	36.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
NS74B ***PRIOR***	50.5	.432KV=	93.9% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***DURING***	50.5	.416KV=	90.5% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***AFTER***	50.5	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77B ***PRIOR***	3.4	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***DURING***	3.4	.419KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***AFTER***	3.4	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S78B ***PRIOR***	3.4	.435KV=	94.7% OF	.460 KV	* WARNING WARNING WARNING *
S78B ***DURING***	3.4	.420KV=	91.3% OF	.460 KV	* WARNING WARNING WARNING *
S78B ***AFTER***	3.4	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
S75B ***PRIOR***	5.0	.434KV=	94.4% OF	.460 KV	* WARNING WARNING WARNING *	
S75B ***DURING***	5.0	.419KV=	91.0% OF	.460 KV	* WARNING WARNING WARNING *	
S75B ***AFTER***	5.0	.433KV=	94.0% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
MOV1404***PRIOR***	.3	.439KV=	95.4% OF	.460 KV	* WARNING WARNING WARNING *	
MOV1404***DURING***	.3	.424KV=	92.1% OF	.460 KV	* WARNING WARNING WARNING *	
MOV1404***AFTER***	.3	.437KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
MOV1417***PRIOR***	1.5	.438KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *	
MOV1417***DURING***	1.5	.422KV=	91.8% OF	.460 KV	* WARNING WARNING WARNING *	
MOV1417***AFTER***	1.5	.436KV=	94.8% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
MOV6552***PRIOR***	.1	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *	
MOV6552***DURING***	.1	.424KV=	92.3% OF	.460 KV	* WARNING WARNING WARNING *	
MOV6552***AFTER***	.1	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
MOV6543***PRIOR***	.1	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *	
MOV6543***DURING***	.1	.424KV=	92.3% OF	.460 KV	* WARNING WARNING WARNING *	
MOV6543***AFTER***	.1	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3850	***PRIOR***	.442KV= 89.7% OF	.493KV	123.4	60.8	.0 .0
3850	***DURING***	.427KV= 86.7% OF	.493KV	123.4	60.8	.0 .0
3850	***AFTER***	.441KV= 89.4% OF	.493KV	123.4	60.8	.0 .0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P201C ***PRIOR***	150.0	.434KV=	94.3% OF	.460 KV		* WARNING	WARNING	WARNING	*
3P201C ***DURING***	150.0	.419KV=	91.0% OF	.460 KV		* WARNING	WARNING	WARNING	*
3P201C ***AFTER***	150.0	.432KV=	94.0% OF	.460 KV		* WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.924KV= 94.3% OF	4.160KV	5253.2	2988.1	.0	.0
3AB2	***DURING***	3.804KV= 91.4% OF	4.160KV	5929.2	6244.5	.0	.0
3AB2	***AFTER***	3.913KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0

STARTING MOTOR NAME HP

3P210B ***PRIOR***	.0	.000KV=	.0% OF	4.000 KV		* MOTOR NOT STARTED YET *
3P210B ***DURING***	300.0	3.789KV=	94.7% OF	4.000 KV		
3P210B ***AFTER***	300.0	3.910KV=	97.7% OF	4.000 KV		

STARTING MOTOR NAME HP

3P215B ***PRIOR***	.0	.000KV=	.0% OF	4.000 KV		* MOTOR NOT STARTED YET *
3P215B ***DURING***	350.0	3.785KV=	94.6% OF	4.000 KV		
3P215B ***AFTER***	350.0	3.909KV=	97.7% OF	4.000 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3802	***PRIOR***	.458KV= 92.9% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.444KV= 90.0% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.457KV= 92.6% OF	.493KV	207.0	113.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3804	***PRIOR***	.451KV= 91.5% OF	.493KV	123.5	77.5	.0	.0
3804	***DURING***	.436KV= 88.5% OF	.493KV	123.5	77.5	.0	.0
3804	***AFTER***	.450KV= 91.2% OF	.493KV	123.5	77.5	.0	.0



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3S7B	***PRIOR***	150.0	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S7B	***DURING***	150.0	.427KV=	92.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S7B	***AFTER***	150.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3806	***PRIOR***	.455KV= 92.3% OF	.493KV	133.8	81.9	47.6	.1
3806	***DURING***	.440KV= 89.3% OF	.493KV	133.8	81.9	44.6	.1
3806	***AFTER***	.453KV= 92.0% OF	.493KV	133.8	81.9	47.3	.1

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
MOV744B	***PRIOR***	10.3	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV744B	***DURING***	10.3	.428KV=	93.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV744B	***AFTER***	10.3	.441KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
808M	***PRIOR***	.444KV= 90.1% OF	.493KV	117.9	72.4	20.6	12.1
808M	***DURING***	.429KV= 87.1% OF	.493KV	117.9	72.4	19.3	11.3
808M	***AFTER***	.443KV= 89.8% OF	.493KV	117.9	72.4	20.5	12.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3852	***PRIOR***	.451KV= 91.4% OF	.493KV	16.1	9.9	15.8	.0
3852	***DURING***	.436KV= 88.4% OF	.493KV	16.1	9.9	14.8	.0
3852	***AFTER***	.449KV= 91.1% OF	.493KV	16.1	9.9	15.7	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3853	***PRIOR***	.462KV= 93.7% OF	.493KV	14.6	9.0	27.2	.0
3853	***DURING***	.447KV= 90.7% OF	.493KV	14.6	9.0	25.5	.0
3853	***AFTER***	.460KV= 93.4% OF	.493KV	14.6	9.0	27.1	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3854	***PRIOR***	.451KV= 91.5% OF	.493KV	14.6	9.0	23.8	.0
3854	***DURING***	.436KV= 88.4% OF	.493KV	14.6	9.0	22.3	.0
3854	***AFTER***	.449KV= 91.2% OF	.493KV	14.6	9.0	23.7	.0

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VOLTAGE DROP ANALYSIS CASE # 3

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.814KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.650KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.792KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.024KV= 96.7% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	3.992KV= 96.0% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.020KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.958KV= 95.1% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.925KV= 94.3% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.954KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.985KV= 95.8% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.938KV= 94.7% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.979KV= 95.7% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.910KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.863KV= 92.9% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.904KV= 93.9% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3801	***PRIOR***	.460KV= 93.4% OF .493KV	247.0	138.7	.0	.0
3801	***DURING***	.420KV= 85.1% OF .493KV	437.0	1205.6	.0	.0
3801	***AFTER***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0

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VOLTAGE DROP ANALYSIS CASE # 3

STARTING MOTOR NAME HP

3P214A ***PRIOR*** .0 .000KV= .0% OF .460 KV * MOTOR NOT STARTED YET *
 3P214A ***DURING*** 250.0 .379KV= 82.4% OF .460 KV
 3P214A ***AFTER*** 250.0 .450KV= 97.8% OF .460 KV

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3803	***PRIOR***	.466KV= 94.5% OF	.493KV	82.6	51.3	210.9	1.5
3803	***DURING***	.457KV= 92.6% OF	.493KV	82.6	51.3	202.6	1.5
3803	***AFTER***	.465KV= 94.3% OF	.493KV	82.6	51.3	209.8	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805V	***PRIOR***	.460KV= 93.3% OF	.493KV	100.2	62.0	29.1	.0
3805V	***DURING***	.419KV= 85.0% OF	.493KV	100.2	62.0	24.2	.0
3805V	***AFTER***	.455KV= 92.4% OF	.493KV	100.2	62.0	28.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805N	***PRIOR***	.458KV= 92.9% OF	.493KV	215.5	135.0	13.7	.0
3805N	***DURING***	.417KV= 84.6% OF	.493KV	215.5	135.0	11.3	.0
3805N	***AFTER***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3807	***PRIOR***	.459KV= 93.2% OF	.493KV	175.2	108.2	64.6	.3
3807	***DURING***	.446KV= 90.4% OF	.493KV	246.7	217.0	60.8	.3
3807	***AFTER***	.457KV= 92.8% OF	.493KV	200.5	123.3	64.0	.3

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STARTING MOTOR NAME	HP				
3V30C ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V30C ***DURING***	30.0	.401KV=	87.1% OF	.460 KV	
3V30C ***AFTER****	30.0	.443KV=	96.3% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B08V ***PRIOR****		.438KV= 88.9% OF	.493KV	236.0	145.2	1.7 .0
3B08V ***DURING***		.397KV= 80.6% OF	.493KV	236.0	145.2	1.4 .0
3B08V ***AFTER****		.434KV= 88.0% OF	.493KV	236.0	145.2	1.6 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V1D ***PRIOR****	100.0	.434KV=	94.4% OF	.460 KV	* WARNING WARNING WARNING *
3V1D ***DURING***	100.0	.393KV=	85.3% OF	.460 KV	* WARNING WARNING WARNING *
3V1D ***AFTER****	100.0	.430KV=	93.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V11 ***PRIOR****	10.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *
V11 ***DURING***	10.0	.393KV=	85.4% OF	.460 KV	* WARNING WARNING WARNING *
V11 ***AFTER****	10.0	.430KV=	93.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V29B ***PRIOR****	1.0	.437KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *
V29B ***DURING***	1.0	.396KV=	86.1% OF	.460 KV	* WARNING WARNING WARNING *
V29B ***AFTER****	1.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16C/17***PRIOR****	34.0	.426KV=	92.6% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***	34.0	.384KV=	83.4% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER****	34.0	.421KV=	91.6% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E160	***PRIOR***	36.0	.435KV= 94.6% OF	.460 KV	* WARNING WARNING WARNING *
E160	***DURING***	36.0	.393KV= 85.5% OF	.460 KV	* WARNING WARNING WARNING *
E160	***AFTER***	36.0	.430KV= 93.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P42B	***PRIOR***	3.0	.435KV= 94.5% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***DURING***	3.0	.393KV= 85.5% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***AFTER***	3.0	.430KV= 93.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V77/E23	***PRIOR***	36.0	.433KV= 94.1% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***DURING***	36.0	.391KV= 85.0% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***AFTER***	36.0	.428KV= 93.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
NS74B	***PRIOR***	50.5	.430KV= 93.6% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***DURING***	50.5	.388KV= 84.4% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***AFTER***	50.5	.426KV= 92.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77B	***PRIOR***	3.4	.433KV= 94.2% OF	.460 KV	* WARNING WARNING WARNING *
S77B	***DURING***	3.4	.392KV= 85.1% OF	.460 KV	* WARNING WARNING WARNING *
S77B	***AFTER***	3.4	.429KV= 93.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S78B	***PRIOR***	3.4	.434KV= 94.3% OF	.460 KV	* WARNING WARNING WARNING *
S78B	***DURING***	3.4	.392KV= 85.3% OF	.460 KV	* WARNING WARNING WARNING *
S78B	***AFTER***	3.4	.429KV= 93.3% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S75B ***PRIOR***	5.0	.433KV= 94.0% OF	.460 KV	* WARNING WARNING WARNING *	
S75B ***DURING***	5.0	.391KV= 84.9% OF	.460 KV	* WARNING WARNING WARNING *	
S75B ***AFTER***	5.0	.428KV= 93.0% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
MOV1404***PRIOR***	.3	.437KV= 95.1% OF	.460 KV	* WARNING WARNING WARNING *	
MOV1404***DURING***	.3	.396KV= 86.1% OF	.460 KV	* WARNING WARNING WARNING *	
MOV1404***AFTER***	.3	.433KV= 94.1% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
MOV1417***PRIOR***	1.5	.436KV= 94.8% OF	.460 KV	* WARNING WARNING WARNING *	
MOV1417***DURING***	1.5	.395KV= 85.8% OF	.460 KV	* WARNING WARNING WARNING *	
MOV1417***AFTER***	1.5	.432KV= 93.8% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
MOV6552***PRIOR***	.1	.438KV= 95.2% OF	.460 KV	* WARNING WARNING WARNING *	
MOV6552***DURING***	.1	.397KV= 86.3% OF	.460 KV	* WARNING WARNING WARNING *	
MOV6552***AFTER***	.1	.434KV= 94.3% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
MOV6543***PRIOR***	.1	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING *	
MOV6543***DURING***	.1	.397KV= 86.3% OF	.460 KV	* WARNING WARNING WARNING *	
MOV6543***AFTER***	.1	.434KV= 94.3% OF	.460 KV	* WARNING WARNING WARNING *	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3850	***PRIOR***	.441KV= 89.4% OF	.493KV	123.4	60.8	.0 .0
3850	***DURING***	.400KV= 81.1% OF	.493KV	123.4	60.8	.0 .0
3850	***AFTER***	.436KV= 88.5% OF	.493KV	123.4	60.8	.0 .0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
3P201C ***PRIOR***	150.0	.432KV= 94.0% OF	.460 KV	* WARNING	WARNING	WARNING *
3P201C ***DURING***	150.0	.391KV= 84.9% OF	.460 KV	* WARNING	WARNING	WARNING *
3P201C ***AFTER***	150.0	.428KV= 93.0% OF	.460 KV	* WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.913KV= 94.1% OF 4.160KV	5770.9	3261.1	.0	.0
3AB2	***DURING***	3.866KV= 92.9% OF 4.160KV	5770.9	3261.1	.0	.0
3AB2	***AFTER***	3.907KV= 93.9% OF 4.160KV	5770.9	3261.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B02	***PRIOR***	.457KV= 92.6% OF .493KV	207.0	113.4	.0	.0
3B02	***DURING***	.447KV= 90.7% OF .493KV	207.0	113.4	.0	.0
3B02	***AFTER***	.456KV= 92.4% OF .493KV	207.0	113.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B04	***PRIOR***	.450KV= 91.2% OF .493KV	123.5	77.5	.0	.0
3B04	***DURING***	.409KV= 83.0% OF .493KV	303.1	1063.7	.0	.0
3B04	***AFTER***	.445KV= 90.3% OF .493KV	323.7	171.8	.0	.0

STARTING MOTOR NAME HP

3P214B ***PRIOR***	.0	.000KV= .0% OF .460 KV	* MOTOR NOT STARTED YET *
3P214B ***DURING***	250.0	.363KV= 79.0% OF .460 KV	* WARNING WARNING WARNING *
3P214B ***AFTER***	250.0	.438KV= 95.2% OF .460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
3S7B ***PRIOR***	150.0	.441KV= 95.8% OF	.460 KV	* WARNING	WARNING	WARNING *
3S7B ***DURING***	150.0	.400KV= 86.9% OF	.460 KV	* WARNING	WARNING	WARNING *
3S7B ***AFTER***	150.0	.436KV= 94.8% OF	.460 KV	* WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B06	***PRIOR***	.453KV= 92.0% OF .493KV	133.8	81.9	47.3	.1
3B06	***DURING***	.441KV= 89.5% OF .493KV	201.6	193.9	44.7	.1
3B06	***AFTER***	.452KV= 91.6% OF .493KV	158.8	97.1	46.9	.1

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STARTING MOTOR NAME

HP

3V30A	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V30A	***DURING***	30.0	.407KV= 88.5% OF	.460 KV	
3V30A	***AFTER***	30.0	.441KV= 95.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

HP

MOV744B	***PRIOR***	10.3	.441KV= 96.0% OF	.460 KV	* WARNING WARNING WARNING *
MOV744B	***DURING***	10.3	.429KV= 93.2% OF	.460 KV	* WARNING WARNING WARNING *
MOV744B	***AFTER***	10.3	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
808N	***PRIOR***	.443KV= 89.8% OF	.493KV	117.9	72.4	20.5
808N	***DURING***	.402KV= 81.6% OF	.493KV	117.9	72.4	16.9
808N	***AFTER***	.438KV= 88.9% OF	.493KV	117.9	72.4	20.1

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3852	***PRIOR***	.449KV= 91.1% OF	.493KV	16.1	9.9	15.7
3852	***DURING***	.409KV= 82.9% OF	.493KV	16.1	9.9	13.0
3852	***AFTER***	.445KV= 90.2% OF	.493KV	16.1	9.9	15.4

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

HP

3V65B	***PRIOR***	2.0	.445KV= 96.8% OF	.460 KV	* WARNING WARNING WARNING *
3V65B	***DURING***	2.0	.405KV= 88.0% OF	.460 KV	* WARNING WARNING WARNING *
3V65B	***AFTER***	2.0	.441KV= 95.9% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3S230	***PRIOR***	7.0	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S230	***DURING***	7.0	.403KV=	87.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S230	***AFTER***	7.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3853	***PRIOR***	.460KV=	93.4% OF	.493KV	14.6	9.0	27.1 .0
3853	***DURING***	.420KV=	85.2% OF	.493KV	14.6	9.0	22.5 .0
3853	***AFTER***	.456KV=	92.5% OF	.493KV	14.6	9.0	26.5 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3854	***PRIOR***	.449KV=	91.2% OF	.493KV	14.6	9.0	23.7 .0
3854	***DURING***	.409KV=	83.0% OF	.493KV	14.6	9.0	19.6 .0
3854	***AFTER***	.445KV=	90.3% OF	.493KV	14.6	9.0	23.2 .0

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VOLTAGE DROP ANALYSIS CASE #= 4

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.792KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.784KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.790KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.020KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.020KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.020KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.954KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.951KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.953KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.979KV= 95.7% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.979KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.979KV= 95.7% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.904KV= 93.9% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.900KV= 93.8% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.904KV= 93.8% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3801	***PRIOR***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0
3801	***DURING***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0
3801	***AFTER***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0

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VOLTAGE DROP ANALYSIS CASE #= 4

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3803	***PRIOR***	.465KV= 94.3% OF	.493KV	82.6	51.3	209.8	1.5
3803	***DURING***	.465KV= 94.2% OF	.493KV	82.6	51.3	209.8	1.5
3803	***AFTER***	.465KV= 94.3% OF	.493KV	82.6	51.3	209.8	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805V	***PRIOR***	.455KV= 92.4% OF	.493KV	100.2	62.0	28.5	.0
3805V	***DURING***	.455KV= 92.4% OF	.493KV	100.2	62.0	28.5	.0
3805V	***AFTER***	.455KV= 92.4% OF	.493KV	100.2	62.0	28.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805N	***PRIOR***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0
3805N	***DURING***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0
3805N	***AFTER***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3807	***PRIOR***	.457KV= 92.8% OF	.493KV	200.5	123.3	64.0	.3
3807	***DURING***	.457KV= 92.8% OF	.493KV	200.5	123.3	64.0	.3
3807	***AFTER***	.457KV= 92.8% OF	.493KV	200.5	123.3	64.0	.3

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3808V	***PRIOR***	.434KV= 88.0% OF	.493KV	236.0	145.2	1.6	.0
3808V	***DURING***	.425KV= 86.2% OF	.493KV	300.7	245.1	1.6	.0
3808V	***AFTER***	.432KV= 87.7% OF	.493KV	261.3	160.4	1.6	.0



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VOLTAGE DROP ANALYSIS CASE #= 4

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V1D ***PRIOR****	100.0	.430KV=	93.4% OF	.460 KV	* WARNING WARNING WARNING *
3V1D ***DURING***	100.0	.421KV=	91.5% OF	.460 KV	* WARNING WARNING WARNING *
3V1D ***AFTER****	100.0	.428KV=	93.0% OF	.460 KV	* WARNING WARNING WARNING *

STARTING MOTOR NAME

	HP				
3V30B ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V30B ***DURING***	30.0	.384KV=	83.5% OF	.460 KV	
3V30B ***AFTER****	30.0	.418KV=	90.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V11 ***PRIOR****	10.0	.430KV=	93.5% OF	.460 KV	* WARNING WARNING WARNING *
V11 ***DURING***	10.0	.421KV=	91.6% OF	.460 KV	* WARNING WARNING WARNING *
V11 ***AFTER****	10.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V29B ***PRIOR****	1.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *
V29B ***DURING***	1.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *
V29B ***AFTER****	1.0	.431KV=	93.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16C/17***PRIOR****	34.0	.421KV=	91.6% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***	34.0	.412KV=	89.6% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER****	34.0	.420KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16D ***PRIOR****	36.0	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *
E16D ***DURING***	36.0	.421KV=	91.6% OF	.460 KV	* WARNING WARNING WARNING *
E16D ***AFTER****	36.0	.429KV=	93.2% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
P42B	***PRIOR***	3.0	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42B	***DURING***	3.0	.421KV=	91.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42B	***AFTER***	3.0	.428KV=	93.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V77/E23	***PRIOR***	36.0	.428KV=	93.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
V77/E23	***DURING***	36.0	.419KV=	91.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
V77/E23	***AFTER***	36.0	.426KV=	92.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
HS74B	***PRIOR***	50.5	.426KV=	92.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
HS74B	***DURING***	50.5	.417KV=	90.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
HS74B	***AFTER***	50.5	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S77B	***PRIOR***	3.4	.429KV=	93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***DURING***	3.4	.420KV=	91.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***AFTER***	3.4	.427KV=	92.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78B	***PRIOR***	3.4	.429KV=	93.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***DURING***	3.4	.420KV=	91.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***AFTER***	3.4	.428KV=	93.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.428KV=	93.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.419KV=	91.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.426KV=	92.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV1404***PRIOR***	.3	.433KV=	94.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1404***DURING***	.3	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1404***AFTER***	.3	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV1417***PRIOR***	1.5	.432KV=	93.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1417***DURING***	1.5	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1417***AFTER***	1.5	.430KV=	93.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV6552***PRIOR***	.1	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV6552***DURING***	.1	.425KV=	92.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV6552***AFTER***	.1	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV6543***PRIOR***	.1	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV6543***DURING***	.1	.425KV=	92.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV6543***AFTER***	.1	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3850	***PRIOR***	.436KV= 88.5% OF	.493KV	123.4	60.8	.0 .0
3850	***DURING***	.429KV= 87.0% OF	.493KV	123.4	60.8	.0 .0
3850	***AFTER***	.435KV= 88.2% OF	.493KV	123.4	60.8	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P201C ***PRIOR***	150.0	.428KV=	93.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C ***DURING***	150.0	.420KV=	91.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C ***AFTER***	150.0	.426KV=	92.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.907KV= 93.9% OF	4.160KV	5770.9	3261.1	.0 .0
3AB2	***DURING***	3.903KV= 93.8% OF	4.160KV	5770.9	3261.1	.0 .0
3AB2	***AFTER***	3.906KV= 93.9% OF	4.160KV	5770.9	3261.1	.0 .0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3802	***PRIOR***	.456KV= 92.4% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.455KV= 92.3% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.455KV= 92.4% OF	.493KV	207.0	113.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3804	***PRIOR***	.445KV= 90.3% OF	.493KV	323.7	171.8	.0	.0
3804	***DURING***	.441KV= 89.4% OF	.493KV	323.7	171.8	.0	.0
3804	***AFTER***	.444KV= 90.1% OF	.493KV	323.7	171.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
3P214B	***PRIOR***	250.0	.438KV= 95.2% OF	.460 KV	*	WARNING	WARNING
3P214B	***DURING***	250.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING
3P214B	***AFTER***	250.0	.437KV= 95.1% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
3S7B	***PRIOR***	150.0	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING
3S7B	***DURING***	150.0	.432KV= 93.9% OF	.460 KV	*	WARNING	WARNING
3S7B	***AFTER***	150.0	.435KV= 94.7% OF	.460 KV	*	WARNING	WARNING

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3806	***PRIOR***	.452KV= 91.6% OF	.493KV	158.8	97.1	46.9	.1
3806	***DURING***	.451KV= 91.5% OF	.493KV	158.8	97.1	46.8	.1
3806	***AFTER***	.452KV= 91.6% OF	.493KV	158.8	97.1	46.9	.1

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VOLTAGE DROP ANALYSIS CASE #= 4

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30A	***PRIOR***	30.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30A	***DURING***	30.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30A	***AFTER***	30.0	.440KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
MOV744B	***PRIOR***	10.3	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV744B	***DURING***	10.3	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV744B	***AFTER***	10.3	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
B08N	***PRIOR***	.438KV=	88.9% OF	.493KV	117.9	72.4	20.1 11.8
B08N	***DURING***	.434KV=	88.0% OF	.493KV	117.9	72.4	19.7 11.5
B08N	***AFTER***	.438KV=	88.7% OF	.493KV	117.9	72.4	20.0 11.7

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3852	***PRIOR***	.445KV=	90.2% OF	.493KV	16.1	9.9	15.4 .0
3852	***DURING***	.440KV=	89.3% OF	.493KV	16.1	9.9	15.1 .0
3852	***AFTER***	.444KV=	90.0% OF	.493KV	16.1	9.9	15.4 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V65B	***PRIOR***	2.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V65B	***DURING***	2.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V65B	***AFTER***	2.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3S230	***PRIOR***	7.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S230	***DURING***	7.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S230	***AFTER***	7.0	.439KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3853	***PRIOR***	.456KV=	92.5% OF	.493KV	14.6	9.0	26.5 .0
3853	***DURING***	.456KV=	92.5% OF	.493KV	14.6	9.0	26.5 .0
3853	***AFTER***	.456KV=	92.5% OF	.493KV	14.6	9.0	26.5 .0

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VOLTAGE DROP ANALYSIS CASE #= 4

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3854	***PRIOR***	.445KV= 90.3% OF	.493KV	14.6	9.0	23.2	.0
3854	***DURING***	.441KV= 89.4% OF	.493KV	14.6	9.0	22.8	.0
3854	***AFTER***	.444KV= 90.1% OF	.493KV	14.6	9.0	23.1	.0

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VOLTAGE DROP ANALYSIS CASE #= 5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.790KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.790KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.790KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.020KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.020KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.020KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.953KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.953KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.953KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.979KV= 95.7% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.979KV= 95.7% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.979KV= 95.7% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.904KV= 93.8% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.904KV= 93.8% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.904KV= 93.8% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3B01	***PRIOR***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0
3B01	***DURING***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0
3B01	***AFTER***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0

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VOLTAGE DROP ANALYSIS CASE # 5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3803	***PRIOR***	.465KV= 94.3% OF	.493KV	82.6	51.3	209.8	1.5
3803	***DURING***	.465KV= 94.3% OF	.493KV	82.6	51.3	209.8	1.5
3803	***AFTER***	.465KV= 94.3% OF	.493KV	82.6	51.3	209.8	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805V	***PRIOR***	.455KV= 92.4% OF	.493KV	100.2	62.0	28.5	.0
3805V	***DURING***	.455KV= 92.4% OF	.493KV	100.2	62.0	28.5	.0
3805V	***AFTER***	.455KV= 92.4% OF	.493KV	100.2	62.0	28.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805N	***PRIOR***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0
3805N	***DURING***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0
3805N	***AFTER***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3807	***PRIOR***	.457KV= 92.8% OF	.493KV	200.5	123.3	64.0	.3
3807	***DURING***	.457KV= 92.8% OF	.493KV	200.5	123.3	64.0	.3
3807	***AFTER***	.457KV= 92.8% OF	.493KV	200.5	123.3	64.0	.3

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3808V	***PRIOR***	.432KV= 87.7% OF	.493KV	261.3	160.4	1.6	.0
3808V	***DURING***	.432KV= 87.7% OF	.493KV	261.3	160.4	1.6	.0
3808V	***AFTER***	.432KV= 87.7% OF	.493KV	261.3	160.4	1.6	.0

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VOLTAGE DROP ANALYSIS CASE #= 5

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V1D	***PRIOR***	100.0	.428KV=	93.0% OF	.460 KV	* WARNING WARNING WARNING *
3V1D	***DURING***	100.0	.428KV=	93.0% OF	.460 KV	* WARNING WARNING WARNING *
3V1D	***AFTER***	100.0	.428KV=	93.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V30B	***PRIOR***	30.0	.418KV=	90.8% OF	.460 KV	* WARNING WARNING WARNING *
3V30B	***DURING***	30.0	.418KV=	90.8% OF	.460 KV	* WARNING WARNING WARNING *
3V30B	***AFTER***	30.0	.418KV=	90.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V11	***PRIOR***	10.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *
V11	***DURING***	10.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *
V11	***AFTER***	10.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V29B	***PRIOR***	1.0	.431KV=	93.7% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***DURING***	1.0	.431KV=	93.7% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***AFTER***	1.0	.431KV=	93.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
E16C/17	***PRIOR***	34.0	.420KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17	***DURING***	34.0	.420KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17	***AFTER***	34.0	.420KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
E160	***PRIOR***	36.0	.429KV=	93.2% OF	.460 KV	* WARNING WARNING WARNING *
E160	***DURING***	36.0	.429KV=	93.2% OF	.460 KV	* WARNING WARNING WARNING *
E160	***AFTER***	36.0	.429KV=	93.2% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P42B	***PRIOR***	3.0	.428KV= 93.1% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***DURING***	3.0	.428KV= 93.1% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***AFTER***	3.0	.428KV= 93.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V77/E23	***PRIOR***	36.0	.426KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***DURING***	36.0	.426KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***AFTER***	36.0	.426KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
NS74B	***PRIOR***	50.5	.424KV= 92.2% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***DURING***	50.5	.424KV= 92.2% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***AFTER***	50.5	.424KV= 92.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77B	***PRIOR***	3.4	.427KV= 92.8% OF	.460 KV	* WARNING WARNING WARNING *
S77B	***DURING***	3.4	.427KV= 92.8% OF	.460 KV	* WARNING WARNING WARNING *
S77B	***AFTER***	3.4	.427KV= 92.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S78B	***PRIOR***	3.4	.428KV= 93.0% OF	.460 KV	* WARNING WARNING WARNING *
S78B	***DURING***	3.4	.428KV= 93.0% OF	.460 KV	* WARNING WARNING WARNING *
S78B	***AFTER***	3.4	.428KV= 93.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S75B	***PRIOR***	5.0	.426KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING *
S75B	***DURING***	5.0	.426KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING *
S75B	***AFTER***	5.0	.426KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING *

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VOLTAGE DROP ANALYSIS CASE #= 5

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV1404***PRIOR***	.3	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1404***DURING***	.3	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1404***AFTER***	.3	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV1417***PRIOR***	1.5	.430KV=	93.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1417***DURING***	1.5	.430KV=	93.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1417***AFTER***	1.5	.430KV=	93.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV6552***PRIOR***	.1	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV6552***DURING***	.1	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV6552***AFTER***	.1	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV6543***PRIOR***	.1	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV6543***DURING***	.1	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV6543***AFTER***	.1	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B50	***PRIOR***	.435KV= 88.2% OF	.493KV	123.4	60.8	.0 .0
3B50	***DURING***	.435KV= 88.2% OF	.493KV	123.4	60.8	.0 .0
3B50	***AFTER***	.435KV= 88.2% OF	.493KV	123.4	60.8	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P201C ***PRIOR***	150.0	.426KV=	92.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C ***DURING***	150.0	.426KV=	92.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C ***AFTER***	150.0	.426KV=	92.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.906KV= 93.9% OF	4.160KV	5770.9	3261.1	.0 .0
3AB2	***DURING***	3.906KV= 93.9% OF	4.160KV	5770.9	3261.1	.0 .0
3AB2	***AFTER***	3.906KV= 93.9% OF	4.160KV	5770.9	3261.1	.0 .0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3802	***PRIOR***	.455KV= 92.4% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.455KV= 92.4% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.455KV= 92.4% OF	.493KV	207.0	113.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3804	***PRIOR***	.444KV= 90.1% OF	.493KV	323.7	171.8	.0	.0
3804	***DURING***	.444KV= 90.1% OF	.493KV	323.7	171.8	.0	.0
3804	***AFTER***	.444KV= 90.1% OF	.493KV	323.7	171.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
3P214B	***PRIOR***	250.0	.437KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P214B	***DURING***	250.0	.437KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P214B	***AFTER***	250.0	.437KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
3S7B	***PRIOR***	150.0	.435KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S7B	***DURING***	150.0	.435KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S7B	***AFTER***	150.0	.435KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3806	***PRIOR***	.452KV= 91.6% OF	.493KV	158.8	97.1	46.9	.1
3806	***DURING***	.452KV= 91.6% OF	.493KV	158.8	97.1	46.9	.1
3806	***AFTER***	.452KV= 91.6% OF	.493KV	158.8	97.1	46.9	.1



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VOLTAGE DROP ANALYSIS CASE # 5

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30A	***PRIOR***	30.0	.440KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***DURING***	30.0	.440KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***AFTER***	30.0	.440KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
MOV744B	***PRIOR***	10.3	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744B	***DURING***	10.3	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744B	***AFTER***	10.3	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
808N	***PRIOR***	.438KV= 88.7% OF	.493KV	117.9	72.4	20.0 11.7
808N	***DURING***	.438KV= 88.7% OF	.493KV	117.9	72.4	20.0 11.7
808N	***AFTER***	.438KV= 88.7% OF	.493KV	117.9	72.4	20.0 11.7

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3852	***PRIOR***	.444KV= 90.0% OF	.493KV	16.1	9.9	15.4 .0
3852	***DURING***	.444KV= 90.0% OF	.493KV	16.1	9.9	15.4 .0
3852	***AFTER***	.444KV= 90.0% OF	.493KV	16.1	9.9	15.4 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V65B	***PRIOR***	2.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V65B	***DURING***	2.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V65B	***AFTER***	2.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3S230	***PRIOR***	7.0	.439KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S230	***DURING***	7.0	.439KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S230	***AFTER***	7.0	.439KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3853	***PRIOR***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5 .0
3853	***DURING***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5 .0
3853	***AFTER***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5 .0

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VOLTAGE DROP ANALYSIS CASE # 5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3854	***PRIOR***	.444KV= 90.1% OF	.493KV	14.6	9.0	23.1	.0
3854	***DURING***	.444KV= 90.1% OF	.493KV	14.6	9.0	23.1	.0
3854	***AFTER***	.444KV= 90.1% OF	.493KV	14.6	9.0	23.1	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.794KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.746KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.787KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.021KV= 96.7% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.011KV= 96.4% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.019KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.954KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.944KV= 94.8% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.953KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.980KV= 95.7% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.967KV= 95.4% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.978KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.905KV= 93.9% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.891KV= 93.5% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.903KV= 93.8% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3801	***PRIOR***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0
3801	***DURING***	.455KV= 92.2% OF .493KV	446.9	238.3	.0	.0
3801	***AFTER***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0

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VOLTAGE DROP ANALYSIS CASE # 6

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3803	***PRIOR***	.465KV= 94.4% OF .493KV	82.6	51.3	210.3	1.5
3803	***DURING***	.453KV= 91.8% OF .493KV	82.6	51.3	199.2	1.5
3803	***AFTER***	.464KV= 94.0% OF .493KV	82.6	51.3	208.8	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3805V	***PRIOR***	.456KV= 92.4% OF .493KV	91.9	57.0	28.6	.0
3805V	***DURING***	.454KV= 92.1% OF .493KV	91.9	57.0	28.4	.0
3805V	***AFTER***	.456KV= 92.4% OF .493KV	91.9	57.0	28.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3805N	***PRIOR***	.454KV= 92.1% OF .493KV	215.5	135.0	13.4	.0
3805N	***DURING***	.452KV= 91.8% OF .493KV	215.5	135.0	13.3	.0
3805N	***AFTER***	.454KV= 92.0% OF .493KV	215.5	135.0	13.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3807	***PRIOR***	.458KV= 93.0% OF .493KV	182.9	112.6	64.3	.3
3807	***DURING***	.434KV= 88.0% OF .493KV	324.6	442.8	57.6	.3
3807	***AFTER***	.455KV= 92.3% OF .493KV	244.6	150.9	63.3	.3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP			
3V30C	***PRIOR***	30.0	.444KV= 96.5% OF .460 KV	* WARNING	WARNING WARNING *
3V30C	***DURING***	30.0	.419KV= 91.0% OF .460 KV	* WARNING	WARNING WARNING *
3V30C	***AFTER***	30.0	.440KV= 95.7% OF .460 KV	* WARNING	WARNING WARNING *

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STARTING MOTOR NAME

HP

3V3C	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V3C	***DURING***	75.0	.404KV=	87.9% OF	.460 KV	
3V3C	***AFTER***	75.0	.448KV=	97.4% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B08V	***PRIOR***	.433KV= 87.7% OF	.493KV	257.5	158.1	1.6 .0
3B08V	***DURING***	.431KV= 87.4% OF	.493KV	257.5	158.1	1.6 .0
3B08V	***AFTER***	.432KV= 87.7% OF	.493KV	257.5	158.1	1.6 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

HP

3V1D	***PRIOR***	100.0	.428KV= 93.1% OF	.460 KV	* WARNING WARNING WARNING *
3V1D	***DURING***	100.0	.427KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING *
3V1D	***AFTER***	100.0	.428KV= 93.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

HP

3V30B	***PRIOR***	30.0	.418KV= 90.9% OF	.460 KV	* WARNING WARNING WARNING *
3V30B	***DURING***	30.0	.416KV= 90.5% OF	.460 KV	* WARNING WARNING WARNING *
3V30B	***AFTER***	30.0	.418KV= 90.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

HP

V11	***PRIOR***	10.0	.429KV= 93.2% OF	.460 KV	* WARNING WARNING WARNING *
V11	***DURING***	10.0	.427KV= 92.8% OF	.460 KV	* WARNING WARNING WARNING *
V11	***AFTER***	10.0	.429KV= 93.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

HP

V29B	***PRIOR***	1.0	.432KV= 93.8% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***DURING***	1.0	.430KV= 93.4% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***AFTER***	1.0	.431KV= 93.8% OF	.460 KV	* WARNING WARNING WARNING *

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VOLTAGE DROP ANALYSIS CASE #= 6

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16C/17***PRIOR***	34.0	.420KV=	91.3% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***	34.0	.418KV=	90.9% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER***	34.0	.420KV=	91.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16D ***PRIOR***	36.0	.429KV=	93.3% OF	.460 KV	* WARNING WARNING WARNING *
E16D ***DURING***	36.0	.427KV=	92.9% OF	.460 KV	* WARNING WARNING WARNING *
E16D ***AFTER***	36.0	.429KV=	93.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P42B ***PRIOR***	3.0	.429KV=	93.2% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***DURING***	3.0	.427KV=	92.8% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***AFTER***	3.0	.429KV=	93.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V77/E23***PRIOR***	36.0	.427KV=	92.8% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***DURING***	36.0	.425KV=	92.4% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***AFTER***	36.0	.427KV=	92.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
HS74B ***PRIOR***	50.5	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *
HS74B ***DURING***	50.5	.423KV=	91.9% OF	.460 KV	* WARNING WARNING WARNING *
HS74B ***AFTER***	50.5	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77B ***PRIOR***	3.4	.427KV=	92.9% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***DURING***	3.4	.426KV=	92.5% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***AFTER***	3.4	.427KV=	92.9% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S788	***PRIOR***	3.4	.428KV= 93.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S788	***DURING***	3.4	.426KV= 92.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S788	***AFTER***	3.4	.428KV= 93.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S758	***PRIOR***	5.0	.427KV= 92.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S758	***DURING***	5.0	.425KV= 92.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S758	***AFTER***	5.0	.426KV= 92.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3850	***PRIOR***	.435KV= 88.3% OF	.493KV	123.4	60.8	.0	.0
3850	***DURING***	.434KV= 88.0% OF	.493KV	123.4	60.8	.0	.0
3850	***AFTER***	.435KV= 88.3% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.427KV= 92.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C	***DURING***	150.0	.425KV= 92.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C	***AFTER***	150.0	.427KV= 92.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3A82	***PRIOR***	3.907KV= 93.9% OF	4.160KV	5770.9	3261.1	.0	.0
3A82	***DURING***	3.894KV= 93.6% OF	4.160KV	5770.9	3261.1	.0	.0
3A82	***AFTER***	3.905KV= 93.9% OF	4.160KV	5770.9	3261.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3802	***PRIOR***	.456KV= 92.5% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.444KV= 90.0% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.455KV= 92.2% OF	.493KV	207.0	113.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3804	***PRIOR***	.444KV= 90.2% OF	.493KV	323.7	171.8	.0	.0
3804	***DURING***	.443KV= 89.8% OF	.493KV	323.7	171.8	.0	.0
3804	***AFTER***	.444KV= 90.1% OF	.493KV	323.7	171.8	.0	.0

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VOLTAGE DROP ANALYSIS CASE #= 6

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3P214B	***PRIOR***	250.0	.438KV= 95.1% OF	.460 KV	* WARNING WARNING WARNING *
3P214B	***DURING***	250.0	.436KV= 94.7% OF	.460 KV	* WARNING WARNING WARNING *
3P214B	***AFTER***	250.0	.437KV= 95.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3S7B	***PRIOR***	150.0	.436KV= 94.7% OF	.460 KV	* WARNING WARNING WARNING *
3S7B	***DURING***	150.0	.434KV= 94.3% OF	.460 KV	* WARNING WARNING WARNING *
3S7B	***AFTER***	150.0	.435KV= 94.7% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3806	***PRIOR***	.453KV= 91.9% OF	.493KV	129.5	79.3	47.2 .1
3806	***DURING***	.432KV= 87.6% OF	.493KV	269.4	409.5	42.9 .1
3806	***AFTER***	.450KV= 91.3% OF	.493KV	191.1	117.5	46.6 .1

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3V30A	***PRIOR***	30.0	.442KV= 96.1% OF	.460 KV	* WARNING WARNING WARNING *
3V30A	***DURING***	30.0	.420KV= 91.4% OF	.460 KV	* WARNING WARNING WARNING *
3V30A	***AFTER***	30.0	.439KV= 95.4% OF	.460 KV	* WARNING WARNING WARNING *

STARTING MOTOR NAME HP

3V3A	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V3A	***DURING***	75.0	.405KV= 88.1% OF	.460 KV	
3V3A	***AFTER***	75.0	.444KV= 96.5% OF	.460 KV	

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VOLTAGE DROP ANALYSIS CASE # 6

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E16A/17***PRIOR***	34.0	.445KV= 96.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
E16A/17***DURING***	34.0	.423KV= 92.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
E16A/17***AFTER***	34.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
808W	***PRIOR***	.438KV= 88.8% OF	.493KV	117.9	72.4	20.0	11.7
808W	***DURING***	.436KV= 88.4% OF	.493KV	117.9	72.4	19.9	11.7
808W	***AFTER***	.438KV= 88.7% OF	.493KV	117.9	72.4	20.0	11.7

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3852	***PRIOR***	.444KV= 90.1% OF	.493KV	16.1	9.9	15.4	.0
3852	***DURING***	.442KV= 89.7% OF	.493KV	16.1	9.9	15.3	.0
3852	***AFTER***	.444KV= 90.0% OF	.493KV	16.1	9.9	15.4	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V65B	2.0	.440KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3V65B	2.0	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3V65B	2.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3S230	7.0	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3S230	7.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3S230	7.0	.439KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3853	***PRIOR***	.456KV= 92.6% OF	.493KV	14.6	9.0	26.6	.0
3853	***DURING***	.455KV= 92.2% OF	.493KV	14.6	9.0	26.4	.0
3853	***AFTER***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.6	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3854	***PRIOR***	.445KV= 90.2% OF	.493KV	14.6	9.0	23.2	.0
3854	***DURING***	.443KV= 89.8% OF	.493KV	14.6	9.0	23.0	.0
3854	***AFTER***	.444KV= 90.1% OF	.493KV	14.6	9.0	23.1	.0

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VOLTAGE DROP ANALYSIS CASE # 7

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.783KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.759KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.779KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.019KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.018KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.019KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.951KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.943KV= 94.8% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.950KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.978KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.977KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.978KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.901KV= 93.8% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.889KV= 93.5% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.899KV= 93.7% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3B01	***PRIOR***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0
3B01	***DURING***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0
3B01	***AFTER***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3803	***PRIOR***	.464KV= 94.0% OF	.493KV	82.6	51.3	208.8	1.5
3803	***DURING***	.463KV= 94.0% OF	.493KV	82.6	51.3	208.7	1.5
3803	***AFTER***	.464KV= 94.0% OF	.493KV	82.6	51.3	208.8	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805V	***PRIOR***	.456KV= 92.4% OF	.493KV	91.9	57.0	28.5	.0
3805V	***DURING***	.455KV= 92.4% OF	.493KV	91.9	57.0	28.5	.0
3805V	***AFTER***	.456KV= 92.4% OF	.493KV	91.9	57.0	28.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805N	***PRIOR***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0
3805N	***DURING***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0
3805N	***AFTER***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3807	***PRIOR***	.455KV= 92.3% OF	.493KV	244.6	150.9	63.3	.3
3807	***DURING***	.455KV= 92.2% OF	.493KV	244.6	150.9	63.2	.3
3807	***AFTER***	.455KV= 92.2% OF	.493KV	244.6	150.9	63.3	.3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE					
3V30C	***PRIOR***	30.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING
3V30C	***DURING***	30.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING
3V30C	***AFTER***	30.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3808V	***PRIOR***	.432KV= 87.7% OF	.493KV	257.5	158.1	1.6	.0
3808V	***DURING***	.407KV= 82.5% OF	.493KV	382.4	447.1	1.4	.0
3808V	***AFTER***	.428KV= 86.8% OF	.493KV	319.3	196.4	1.6	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V1D ***PRIOR****	100.0	.428KV=	93.0% OF	.460 KV	* WARNING WARNING WARNING *
3V1D ***DURING***	100.0	.402KV=	87.5% OF	.460 KV	* WARNING WARNING WARNING *
3V1D ***AFTER****	100.0	.424KV=	92.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V30B ***PRIOR****	30.0	.417KV=	90.8% OF	.460 KV	* WARNING WARNING WARNING *
3V30B ***DURING***	30.0	.391KV=	85.1% OF	.460 KV	* WARNING WARNING WARNING *
3V30B ***AFTER****	30.0	.413KV=	89.8% OF	.460 KV	* WARNING WARNING WARNING *

STARTING MOTOR NAME

	HP				
3V3B ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V3B ***DURING***	75.0	.378KV=	82.1% OF	.460 KV	
3V3B ***AFTER****	75.0	.420KV=	91.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V11 ***PRIOR****	10.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *
V11 ***DURING***	10.0	.403KV=	87.6% OF	.460 KV	* WARNING WARNING WARNING *
V11 ***AFTER****	10.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V29B ***PRIOR****	1.0	.431KV=	93.7% OF	.460 KV	* WARNING WARNING WARNING *
V29B ***DURING***	1.0	.406KV=	88.2% OF	.460 KV	* WARNING WARNING WARNING *
V29B ***AFTER****	1.0	.427KV=	92.8% OF	.460 KV	* WARNING WARNING WARNING *

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VOLTAGE DROP ANALYSIS CASE # 7

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16C/17***PRIOR***	34.0	.420KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***	34.0	.394KV=	85.6% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER***	34.0	.415KV=	90.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E160 ***PRIOR***	36.0	.429KV=	93.2% OF	.460 KV	* WARNING WARNING WARNING *
E160 ***DURING***	36.0	.403KV=	87.6% OF	.460 KV	* WARNING WARNING WARNING *
E160 ***AFTER***	36.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P42B ***PRIOR***	3.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***DURING***	3.0	.403KV=	87.6% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***AFTER***	3.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V77/E23***PRIOR***	36.0	.426KV=	92.7% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***DURING***	36.0	.401KV=	87.1% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***AFTER***	36.0	.422KV=	91.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
NS74B ***PRIOR***	50.5	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***DURING***	50.5	.398KV=	86.6% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***AFTER***	50.5	.419KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77B ***PRIOR***	3.4	.427KV=	92.8% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***DURING***	3.4	.401KV=	87.3% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***AFTER***	3.4	.423KV=	91.9% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S788	***PRIOR***	3.4	.428KV=	92.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
S788	***DURING***	3.4	.402KV=	87.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
S788	***AFTER***	3.4	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.401KV=	87.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.422KV=	91.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3850	***PRIOR***	.435KV= 88.2% OF	.493KV	123.4	60.8	.0	.0
3850	***DURING***	.413KV= 83.9% OF	.493KV	123.4	60.8	.0	.0
3850	***AFTER***	.431KV= 87.5% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.426KV=	92.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.404KV=	87.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3A82	***PRIOR***	3.904KV= 93.8% OF	4.160KV	5850.1	3301.8	.0	.0
3A82	***DURING***	3.891KV= 93.5% OF	4.160KV	5850.1	3301.8	.0	.0
3A82	***AFTER***	3.902KV= 93.8% OF	4.160KV	5850.1	3301.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3802	***PRIOR***	.454KV= 92.2% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.453KV= 91.9% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.454KV= 92.1% OF	.493KV	207.0	113.4	.0	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P201B ***PRIOR***	150.0	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201B ***DURING***	150.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201B ***AFTER***	150.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V1B ***PRIOR***	100.0	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V1B ***DURING***	100.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V1B ***AFTER***	100.0	.441KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3804	***PRIOR***	.444KV= 90.1% OF	.493KV	323.7	171.8	.0	.0
3804	***DURING***	.432KV= 87.5% OF	.493KV	323.7	171.8	.0	.0
3804	***AFTER***	.442KV= 89.7% OF	.493KV	323.7	171.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P214B ***PRIOR***	250.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P214B ***DURING***	250.0	.424KV=	92.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P214B ***AFTER***	250.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3S7B ***PRIOR***	150.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S7B ***DURING***	150.0	.422KV=	91.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S7B ***AFTER***	150.0	.433KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3806	***PRIOR***	.450KV= 91.2% OF	.493KV	191.1	117.5	46.5	.1
3806	***DURING***	.448KV= 90.9% OF	.493KV	191.1	117.5	46.2	.1
3806	***AFTER***	.450KV= 91.2% OF	.493KV	191.1	117.5	46.5	.1



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V30A	***PRIOR***	30.0	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***DURING***	30.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***AFTER***	30.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E16A/17	***PRIOR***	34.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16A/17	***DURING***	34.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16A/17	***AFTER***	34.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
B08N	***PRIOR***	.437KV= 88.7% OF	.493KV	117.9	72.4	20.0	11.7
B08N	***DURING***	.425KV= 86.1% OF	.493KV	117.9	72.4	18.9	11.1
B08N	***AFTER***	.435KV= 88.3% OF	.493KV	117.9	72.4	19.8	11.6

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3852	***PRIOR***	.444KV= 90.0% OF	.493KV	16.1	9.9	15.4	.0
3852	***DURING***	.431KV= 87.5% OF	.493KV	16.1	9.9	14.5	.0
3852	***AFTER***	.442KV= 89.6% OF	.493KV	16.1	9.9	15.2	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3C2B	***PRIOR***	5.0	.443KV= 96.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3C2B	***DURING***	5.0	.430KV= 93.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3C2B	***AFTER***	5.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V65B	***PRIOR***	2.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V65B	***DURING***	2.0	.427KV= 92.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V65B	***AFTER***	2.0	.438KV= 95.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3S230	***PRIOR***	7.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S230	***DURING***	7.0	.426KV= 92.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S230	***AFTER***	7.0	.436KV= 94.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3853	***PRIOR***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5	.0
3853	***DURING***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5	.0
3853	***AFTER***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3854	***PRIOR***	.444KV= 90.1% OF	.493KV	14.6	9.0	23.1	.0
3854	***DURING***	.432KV= 87.5% OF	.493KV	14.6	9.0	21.8	.0
3854	***AFTER***	.442KV= 89.7% OF	.493KV	14.6	9.0	22.9	.0

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VOLTAGE DROP ANALYSIS CASE # 8

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS113	***PRIOR***	233.779KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.779KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.779KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AA1	***PRIOR***	4.019KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.019KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.019KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AB1	***PRIOR***	3.950KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.950KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.950KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AA2	***PRIOR***	3.978KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.978KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.978KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AD	***PRIOR***	3.899KV= 93.7% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.899KV= 93.7% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.899KV= 93.7% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B01	***PRIOR***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0
3B01	***DURING***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0
3B01	***AFTER***	.456KV= 92.5% OF .493KV	446.9	238.3	.0	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3803	***PRIOR***	.464KV= 94.0% OF	.493KV	82.6	51.3	208.8	1.5
3803	***DURING***	.464KV= 94.0% OF	.493KV	82.6	51.3	208.8	1.5
3803	***AFTER***	.464KV= 94.0% OF	.493KV	82.6	51.3	208.8	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805V	***PRIOR***	.456KV= 92.4% OF	.493KV	91.9	57.0	28.5	.0
3805V	***DURING***	.456KV= 92.4% OF	.493KV	91.9	57.0	28.5	.0
3805V	***AFTER***	.456KV= 92.4% OF	.493KV	91.9	57.0	28.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805N	***PRIOR***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0
3805N	***DURING***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0
3805N	***AFTER***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3807	***PRIOR***	.455KV= 92.2% OF	.493KV	244.6	150.9	63.3	.3
3807	***DURING***	.455KV= 92.2% OF	.493KV	244.6	150.9	63.3	.3
3807	***AFTER***	.455KV= 92.2% OF	.493KV	244.6	150.9	63.3	.3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
3V30C	***PRIOR***	30.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30C	***DURING***	30.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30C	***AFTER***	30.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3808V	***PRIOR***	.428KV= 86.8% OF	.493KV	319.3	196.4	1.6	.0
3808V	***DURING***	.428KV= 86.8% OF	.493KV	319.3	196.4	1.6	.0
3808V	***AFTER***	.428KV= 86.8% OF	.493KV	319.3	196.4	1.6	.0



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3V1D	***PRIOR***	100.0	.424KV= 92.1% OF	.460 KV	* WARNING WARNING WARNING *
3V1D	***DURING***	100.0	.424KV= 92.1% OF	.460 KV	* WARNING WARNING WARNING *
3V1D	***AFTER***	100.0	.424KV= 92.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3V30B	***PRIOR***	30.0	.413KV= 89.8% OF	.460 KV	* WARNING WARNING WARNING *
3V30B	***DURING***	30.0	.413KV= 89.8% OF	.460 KV	* WARNING WARNING WARNING *
3V30B	***AFTER***	30.0	.413KV= 89.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3V3B	***PRIOR***	75.0	.420KV= 91.4% OF	.460 KV	* WARNING WARNING WARNING *
3V3B	***DURING***	75.0	.420KV= 91.4% OF	.460 KV	* WARNING WARNING WARNING *
3V3B	***AFTER***	75.0	.420KV= 91.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

V11	***PRIOR***	10.0	.424KV= 92.2% OF	.460 KV	* WARNING WARNING WARNING *
V11	***DURING***	10.0	.424KV= 92.2% OF	.460 KV	* WARNING WARNING WARNING *
V11	***AFTER***	10.0	.424KV= 92.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

V29B	***PRIOR***	1.0	.427KV= 92.8% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***DURING***	1.0	.427KV= 92.8% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***AFTER***	1.0	.427KV= 92.8% OF	.460 KV	* WARNING WARNING WARNING *

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VOLTAGE DROP ANALYSIS CASE # 8

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16C/17***PRIOR***	34.0	.415KV=	90.3% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***	34.0	.415KV=	90.3% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER***	34.0	.415KV=	90.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E160 ***PRIOR***	36.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *
E160 ***DURING***	36.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *
E160 ***AFTER***	36.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P42B ***PRIOR***	3.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***DURING***	3.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***AFTER***	3.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V77/E23***PRIOR***	36.0	.422KV=	91.7% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***DURING***	36.0	.422KV=	91.7% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***AFTER***	36.0	.422KV=	91.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
NS74B ***PRIOR***	50.5	.419KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***DURING***	50.5	.419KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***AFTER***	50.5	.419KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77B ***PRIOR***	3.4	.423KV=	91.9% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***DURING***	3.4	.423KV=	91.9% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***AFTER***	3.4	.423KV=	91.9% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78B	***PRIOR***	3.4	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***DURING***	3.4	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***AFTER***	3.4	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.422KV=	91.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.422KV=	91.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.422KV=	91.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3B50	***PRIOR***	.431KV= 87.5% OF	.493KV	123.4	60.8	.0	.0
3B50	***DURING***	.431KV= 87.5% OF	.493KV	123.4	60.8	.0	.0
3B50	***AFTER***	.431KV= 87.5% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3AB2	***PRIOR***	3.902KV= 93.8% OF	4.160KV	5850.1	3301.8	.0	.0
3AB2	***DURING***	3.902KV= 93.8% OF	4.160KV	5850.1	3301.8	.0	.0
3AB2	***AFTER***	3.902KV= 93.8% OF	4.160KV	5850.1	3301.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3802	***PRIOR***	.454KV= 92.1% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.454KV= 92.1% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.454KV= 92.1% OF	.493KV	207.0	113.4	.0	.0



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P201B	***PRIOR***	150.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201B	***DURING***	150.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201B	***AFTER***	150.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V1B	***PRIOR***	100.0	.441KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V1B	***DURING***	100.0	.441KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V1B	***AFTER***	100.0	.441KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3804	***PRIOR***	.442KV= 89.7% OF	.493KV	323.7	171.8	.0 .0
3804	***DURING***	.442KV= 89.7% OF	.493KV	323.7	171.8	.0 .0
3804	***AFTER***	.442KV= 89.7% OF	.493KV	323.7	171.8	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P214B	***PRIOR***	250.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P214B	***DURING***	250.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P214B	***AFTER***	250.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3S7B	***PRIOR***	150.0	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S7B	***DURING***	150.0	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S7B	***AFTER***	150.0	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3806	***PRIOR***	.450KV= 91.2% OF	.493KV	191.1	117.5	46.5 .1
3806	***DURING***	.450KV= 91.2% OF	.493KV	191.1	117.5	46.5 .1
3806	***AFTER***	.450KV= 91.2% OF	.493KV	191.1	117.5	46.5 .1

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V30A	***PRIOR***	30.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***DURING***	30.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***AFTER***	30.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E16A/17	***PRIOR***	34.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16A/17	***DURING***	34.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16A/17	***AFTER***	34.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
B08N	***PRIOR***	.435KV= 88.3% OF	.493KV	117.9	72.4	19.8 11.6
B08N	***DURING***	.435KV= 88.3% OF	.493KV	117.9	72.4	19.8 11.6
B08N	***AFTER***	.435KV= 88.3% OF	.493KV	117.9	72.4	19.8 11.6

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B52	***PRIOR***	.442KV= 89.6% OF	.493KV	16.1	9.9	15.2 .0
3B52	***DURING***	.442KV= 89.6% OF	.493KV	16.1	9.9	15.2 .0
3B52	***AFTER***	.442KV= 89.6% OF	.493KV	16.1	9.9	15.2 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3C2B	***PRIOR***	5.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3C2B	***DURING***	5.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3C2B	***AFTER***	5.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V65B	***PRIOR***	2.0	.438KV= 95.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V65B	***DURING***	2.0	.438KV= 95.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V65B	***AFTER***	2.0	.438KV= 95.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3S230	***PRIOR***	7.0	.436KV= 94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S230	***DURING***	7.0	.436KV= 94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S230	***AFTER***	7.0	.436KV= 94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3853	***PRIOR***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5	.0
3853	***DURING***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5	.0
3853	***AFTER***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3854	***PRIOR***	.442KV= 89.7% OF	.493KV	14.6	9.0	22.9	.0
3854	***DURING***	.442KV= 89.7% OF	.493KV	14.6	9.0	22.9	.0
3854	***AFTER***	.442KV= 89.7% OF	.493KV	14.6	9.0	22.9	.0



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VOLTAGE DROP ANALYSIS CASE # 9

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.783KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	231.885KV= 99.5% OF 233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.572KV=100.2% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.019KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	3.366KV= 80.9% OF 4.160KV	9681.0	29221.5	.0	.0
3AA1	***AFTER***	3.954KV= 95.0% OF 4.160KV	9564.0	5218.3	.0	.0

STARTING MOTOR NAME

HP

3P1A	***PRIOR***	.0	.000KV= .0% OF 4.000 KV	* MOTOR NOT STARTED YET *
3P1A	***DURING***	7000.0	3.297KV= 82.4% OF 4.000 KV	
3P1A	***AFTER***	7000.0	3.943KV= 98.6% OF 4.000 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.951KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.853KV= 92.6% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.941KV= 94.7% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.978KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.316KV= 79.7% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.912KV= 94.0% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.901KV= 93.8% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.802KV= 91.4% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.890KV= 93.5% OF 4.160KV	626.8	409.1	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B01	***PRIOR***	.456KV= 92.5% OF	.493KV	446.9	238.3	.0	.0
3B01	***DURING***	.374KV= 75.8% OF	.493KV	446.9	238.3	.0	.0
3B01	***AFTER***	.448KV= 90.8% OF	.493KV	446.9	238.3	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3P201A	***PRIOR***	150.0	.446KV= 97.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201A	***DURING***	150.0	.362KV= 78.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201A	***AFTER***	150.0	.438KV= 95.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3P214A	***PRIOR***	250.0	.450KV= 97.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P214A	***DURING***	250.0	.367KV= 79.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P214A	***AFTER***	250.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3S6A	***PRIOR***	150.0	.445KV= 96.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S6A	***DURING***	150.0	.361KV= 78.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S6A	***AFTER***	150.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B03	***PRIOR***	.464KV= 94.0% OF	.493KV	82.6	51.3	208.8	1.5
3B03	***DURING***	.384KV= 77.8% OF	.493KV	82.6	51.3	143.0	1.0
3B03	***AFTER***	.456KV= 92.4% OF	.493KV	82.6	51.3	201.7	1.5



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P212	***PRIOR***	100.0	.455KV=	98.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P212	***DURING***	100.0	.373KV=	81.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P212	***AFTER***	100.0	.447KV=	97.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B05V	***PRIOR***	.456KV= 92.4% OF	.493KV	91.9	57.0	28.5	.0
3B05V	***DURING***	.373KV= 75.7% OF	.493KV	91.9	57.0	19.2	.0
3B05V	***AFTER***	.447KV= 90.7% OF	.493KV	91.9	57.0	27.5	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3C2A	***PRIOR***	5.0	.451KV=	98.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3C2A	***DURING***	5.0	.368KV=	79.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3C2A	***AFTER***	5.0	.443KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P10	***PRIOR***	.8	.455KV=	98.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P10	***DURING***	.8	.373KV=	81.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P10	***AFTER***	.8	.447KV=	97.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V1A	***PRIOR***	100.0	.444KV=	96.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1A	***DURING***	100.0	.360KV=	78.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1A	***AFTER***	100.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V34	***PRIOR***	5.0	.451KV=	98.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V34	***DURING***	5.0	.368KV=	80.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V34	***AFTER***	5.0	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B05N	***PRIOR***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0
3B05N	***DURING***	.371KV= 75.3% OF	.493KV	215.5	135.0	9.0	.0
3B05N	***AFTER***	.446KV= 90.4% OF	.493KV	215.5	135.0	12.9	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V14A	***PRIOR***	7.5	.442KV=	96.1% OF	.460 KV	* WARNING WARNING WARNING *
3V14A	***DURING***	7.5	.357KV=	77.6% OF	.460 KV	* WARNING WARNING WARNING *
3V14A	***AFTER***	7.5	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V18	***PRIOR***	7.5	.447KV=	97.3% OF	.460 KV	* WARNING WARNING WARNING *
3V18	***DURING***	7.5	.363KV=	79.0% OF	.460 KV	* WARNING WARNING WARNING *
3V18	***AFTER***	7.5	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V19A	***PRIOR***	15.0	.450KV=	97.8% OF	.460 KV	* WARNING WARNING WARNING *
3V19A	***DURING***	15.0	.367KV=	79.7% OF	.460 KV	* WARNING WARNING WARNING *
3V19A	***AFTER***	15.0	.442KV=	96.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V31B	***PRIOR***	3.0	.450KV=	97.9% OF	.460 KV	* WARNING WARNING WARNING *
3V31B	***DURING***	3.0	.367KV=	79.8% OF	.460 KV	* WARNING WARNING WARNING *
3V31B	***AFTER***	3.0	.442KV=	96.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V4	***PRIOR***	5.0	.449KV=	97.5% OF	.460 KV	* WARNING WARNING WARNING *
3V4	***DURING***	5.0	.365KV=	79.3% OF	.460 KV	* WARNING WARNING WARNING *
3V4	***AFTER***	5.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V6A	***PRIOR***	7.5	.450KV=	97.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V6A	***DURING***	7.5	.367KV=	79.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V6A	***AFTER***	7.5	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3X01	***PRIOR***	170.0	.451KV=	98.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3X01	***DURING***	170.0	.368KV=	80.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3X01	***AFTER***	170.0	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3XS75/7	***PRIOR***	20.0	.448KV=	97.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3XS75/7	***DURING***	20.0	.365KV=	79.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
3XS75/7	***AFTER***	20.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3807	***PRIOR***	.455KV= 92.2% OF	.493KV	244.6	150.9	63.3 .3
3807	***DURING***	.373KV= 75.7% OF	.493KV	244.6	150.9	42.6 .2
3807	***AFTER***	.447KV= 90.6% OF	.493KV	244.6	150.9	61.0 .3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P203A	***PRIOR***	15.0	.454KV=	98.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P203A	***DURING***	15.0	.372KV=	80.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P203A	***AFTER***	15.0	.446KV=	96.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V1C	***PRIOR***	100.0	.450KV=	97.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1C	***DURING***	100.0	.368KV=	80.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1C	***AFTER***	100.0	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V30C ***PRIOR***	30.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *
3V30C ***DURING***	30.0	.356KV=	77.3% OF	.460 KV	* WARNING WARNING WARNING *
3V30C ***AFTER***	30.0	.432KV=	93.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V3C ***PRIOR***	75.0	.448KV=	97.4% OF	.460 KV	* WARNING WARNING WARNING *
3V3C ***DURING***	75.0	.365KV=	79.4% OF	.460 KV	* WARNING WARNING WARNING *
3V3C ***AFTER***	75.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P207A ***PRIOR***	6.0	.452KV=	98.3% OF	.460 KV	* WARNING WARNING WARNING *
P207A ***DURING***	6.0	.370KV=	80.4% OF	.460 KV	* WARNING WARNING WARNING *
P207A ***AFTER***	6.0	.444KV=	96.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
T206 ***PRIOR***	1.5	.453KV=	98.5% OF	.460 KV	* WARNING WARNING WARNING *
T206 ***DURING***	1.5	.371KV=	80.7% OF	.460 KV	* WARNING WARNING WARNING *
T206 ***AFTER***	1.5	.445KV=	96.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V2B ***PRIOR***	60.0	.446KV=	97.0% OF	.460 KV	* WARNING WARNING WARNING *
3V2B ***DURING***	60.0	.363KV=	78.9% OF	.460 KV	* WARNING WARNING WARNING *
3V2B ***AFTER***	60.0	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V65A ***PRIOR***	2.0	.452KV=	98.2% OF	.460 KV	* WARNING WARNING WARNING *
3V65A ***DURING***	2.0	.370KV=	80.3% OF	.460 KV	* WARNING WARNING WARNING *
3V65A ***AFTER***	2.0	.444KV=	96.4% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
P42A	***PRIOR***	7.5	.453KV=	98.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42A	***DURING***	7.5	.371KV=	80.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42A	***AFTER***	7.5	.445KV=	96.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B08V	***PRIOR***	.428KV= 86.8% OF	.493KV	319.3	196.4	1.6 .0
3B08V	***DURING***	.415KV= 84.2% OF	.493KV	319.3	196.4	1.5 .0
3B08V	***AFTER***	.427KV= 86.5% OF	.493KV	319.3	196.4	1.6 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V1D	***PRIOR***	100.0	.424KV=	92.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***DURING***	100.0	.411KV=	89.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***AFTER***	100.0	.422KV=	91.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30B	***PRIOR***	30.0	.413KV=	89.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***DURING***	30.0	.400KV=	87.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***AFTER***	30.0	.412KV=	89.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V3B	***PRIOR***	75.0	.421KV=	91.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3B	***DURING***	75.0	.407KV=	88.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3B	***AFTER***	75.0	.419KV=	91.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V11	***PRIOR***	10.0	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***DURING***	10.0	.411KV=	89.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***AFTER***	10.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V29B	***PRIOR***	1.0	.427KV=	92.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29B	***DURING***	1.0	.414KV=	90.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29B	***AFTER***	1.0	.426KV=	92.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E16C/17	***PRIOR***	34.0	.415KV=	90.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16C/17	***DURING***	34.0	.402KV=	87.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16C/17	***AFTER***	34.0	.414KV=	90.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E16D	***PRIOR***	36.0	.424KV=	92.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16D	***DURING***	36.0	.412KV=	89.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16D	***AFTER***	36.0	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
P42B	***PRIOR***	3.0	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42B	***DURING***	3.0	.411KV=	89.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42B	***AFTER***	3.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V77/E23	***PRIOR***	36.0	.422KV=	91.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
V77/E23	***DURING***	36.0	.409KV=	89.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
V77/E23	***AFTER***	36.0	.421KV=	91.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
NS74B	***PRIOR***	50.5	.420KV=	91.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74B	***DURING***	50.5	.407KV=	88.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74B	***AFTER***	50.5	.418KV=	90.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S77B	***PRIOR***	3.4	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***DURING***	3.4	.410KV=	89.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***AFTER***	3.4	.421KV=	91.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78B	***PRIOR***	3.4	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***DURING***	3.4	.410KV=	89.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***AFTER***	3.4	.422KV=	91.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.422KV=	91.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.409KV=	88.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.421KV=	91.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3850	***PRIOR***	.432KV= 87.5% OF	.493KV	123.4	60.8	.0	.0
3850	***DURING***	.419KV= 85.0% OF	.493KV	123.4	60.8	.0	.0
3850	***AFTER***	.430KV= 87.3% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.410KV=	89.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.422KV=	91.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3AB2	***PRIOR***	3.904KV= 93.8% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***DURING***	3.804KV= 91.5% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***AFTER***	3.893KV= 93.6% OF	4.160KV	5770.9	3261.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3802	***PRIOR***	.454KV= 92.2% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.442KV= 89.7% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.453KV= 91.9% OF	.493KV	207.0	113.4	.0	.0

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VOLTAGE DROP ANALYSIS CASE # 9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P201B ***PRIOR****	150.0	.441KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201B ***DURING***	150.0	.429KV=	93.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201B ***AFTER****	150.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V1B ***PRIOR****	100.0	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V1B ***DURING***	100.0	.429KV=	93.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V1B ***AFTER****	100.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3804	***PRIOR****	.442KV= 89.7% OF	.493KV	323.7	171.8	.0 .0
3804	***DURING***	.430KV= 87.2% OF	.493KV	323.7	171.8	.0 .0
3804	***AFTER****	.441KV= 89.5% OF	.493KV	323.7	171.8	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P214B ***PRIOR****	250.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P214B ***DURING***	250.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P214B ***AFTER****	250.0	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3S7B ***PRIOR****	150.0	.433KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S7B ***DURING***	150.0	.421KV=	91.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3S7B ***AFTER****	150.0	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3806	***PRIOR****	.450KV= 91.2% OF	.493KV	191.1	117.5	46.5 .1
3806	***DURING***	.438KV= 88.8% OF	.493KV	191.1	117.5	44.0 .1
3806	***AFTER****	.448KV= 91.0% OF	.493KV	191.1	117.5	46.2 .1



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VOLTAGE DROP ANALYSIS CASE # 9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V30A	***PRIOR***	30.0	.439KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***DURING***	30.0	.426KV= 92.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***AFTER***	30.0	.437KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E16A/17	***PRIOR***	34.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16A/17	***DURING***	34.0	.429KV= 93.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16A/17	***AFTER***	34.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
B08N	***PRIOR***	.436KV= 88.4% OF	.493KV	117.9	72.4	19.8	11.6
B08N	***DURING***	.423KV= 85.8% OF	.493KV	117.9	72.4	18.7	11.0
B08N	***AFTER***	.434KV= 88.1% OF	.493KV	117.9	72.4	19.7	11.6

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3852	***PRIOR***	.442KV= 89.7% OF	.493KV	16.1	9.9	15.2	.0
3852	***DURING***	.430KV= 87.2% OF	.493KV	16.1	9.9	14.4	.0
3852	***AFTER***	.441KV= 89.4% OF	.493KV	16.1	9.9	15.2	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3C2B	***PRIOR***	5.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3C2B	***DURING***	5.0	.428KV= 93.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3C2B	***AFTER***	5.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

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VOLTAGE DROP ANALYSIS CASE #= 9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
3V34B	***PRIOR***	5.0	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING
3V34B	***DURING***	5.0	.429KV=	93.4% OF	.460 KV	*	WARNING	WARNING
3V34B	***AFTER***	5.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
3P10B	***PRIOR***	.8	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING
3P10B	***DURING***	.8	.429KV=	93.4% OF	.460 KV	*	WARNING	WARNING
3P10B	***AFTER***	.8	.440KV=	95.8% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
3V65B	***PRIOR***	2.0	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING
3V65B	***DURING***	2.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING
3V65B	***AFTER***	2.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
3S230	***PRIOR***	7.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING
3S230	***DURING***	7.0	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING
3S230	***AFTER***	7.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3853	***PRIOR***	.456KV= 92.5% OF .493KV	14.6	9.0	26.5	.0
3853	***DURING***	.374KV= 75.9% OF .493KV	14.6	9.0	17.9	.0
3853	***AFTER***	.448KV= 90.9% OF .493KV	14.6	9.0	25.6	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3854	***PRIOR***	.442KV= 89.7% OF .493KV	14.6	9.0	22.9	.0
3854	***DURING***	.430KV= 87.2% OF .493KV	14.6	9.0	21.7	.0
3854	***AFTER***	.441KV= 89.5% OF .493KV	14.6	9.0	22.8	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.974KV=100.4% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	232.228KV= 99.7% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.746KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.029KV= 96.8% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	3.941KV= 94.7% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.017KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	4.014KV= 96.5% OF 4.160KV	4111.2	2564.9	.0	.0
3AB1	***DURING***	3.397KV= 81.7% OF 4.160KV	9257.3	27241.6	.0	.0
3AB1	***AFTER***	3.939KV= 94.7% OF 4.160KV	8986.7	5610.4	.0	.0

STARTING MOTOR NAME

HP

3P2008	***PRIOR***	.0	.000KV= .0% OF 4.000 KV	* MOTOR NOT STARTED YET *
3P2008	***DURING***	6000.0	3.282KV= 82.1% OF 4.000 KV	
3P2008	***AFTER***	6000.0	3.922KV= 98.0% OF 4.000 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.987KV= 95.9% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.898KV= 93.7% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.976KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.964KV= 95.3% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.337KV= 80.2% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.889KV= 93.5% OF 4.160KV	626.8	409.1	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3801	***PRIOR***	.457KV= 92.7% OF	.493KV	446.9	238.3	.0	.0
3801	***DURING***	.446KV= 90.5% OF	.493KV	446.9	238.3	.0	.0
3801	***AFTER***	.456KV= 92.4% OF	.493KV	446.9	238.3	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3803	***PRIOR***	.465KV= 94.3% OF	.493KV	82.6	51.3	209.8	1.5
3803	***DURING***	.454KV= 92.1% OF	.493KV	82.6	51.3	200.3	1.5
3803	***AFTER***	.463KV= 94.0% OF	.493KV	82.6	51.3	208.6	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3805V	***PRIOR***	.457KV= 92.6% OF	.493KV	91.9	57.0	28.7	.0
3805V	***DURING***	.446KV= 90.4% OF	.493KV	91.9	57.0	27.3	.0
3805V	***AFTER***	.455KV= 92.3% OF	.493KV	91.9	57.0	28.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3805N	***PRIOR***	.455KV= 92.3% OF	.493KV	215.5	135.0	13.5	.0
3805N	***DURING***	.444KV= 90.0% OF	.493KV	215.5	135.0	12.8	.0
3805N	***AFTER***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3807	***PRIOR***	.456KV= 92.5% OF	.493KV	244.6	150.9	63.6	.3
3807	***DURING***	.445KV= 90.3% OF	.493KV	244.6	150.9	60.6	.3
3807	***AFTER***	.455KV= 92.2% OF	.493KV	244.6	150.9	63.2	.3

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VOLTAGE DROP ANALYSIS CASE #10

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30C	***PRIOR***	30.0	.441KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30C	***DURING***	30.0	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30C	***AFTER***	30.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B08V	***PRIOR***	.436KV= 88.5% OF	.493KV	319.3	196.4	1.7 .0
3B08V	***DURING***	.354KV= 71.8% OF	.493KV	319.3	196.4	1.1 .0
3B08V	***AFTER***	.426KV= 86.5% OF	.493KV	319.3	196.4	1.6 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V1D	***PRIOR***	100.0	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***DURING***	100.0	.349KV=	75.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***AFTER***	100.0	.422KV=	91.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30B	***PRIOR***	30.0	.422KV=	91.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***DURING***	30.0	.336KV=	73.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***AFTER***	30.0	.412KV=	89.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V3B	***PRIOR***	75.0	.429KV=	93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3B	***DURING***	75.0	.345KV=	74.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3B	***AFTER***	75.0	.419KV=	91.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V11	***PRIOR***	10.0	.432KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***DURING***	10.0	.349KV=	75.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***AFTER***	10.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
V29B	***PRIOR***	1.0	.435KV=	94.6% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***DURING***	1.0	.353KV=	76.7% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***AFTER***	1.0	.425KV=	92.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
E16C/17	***PRIOR***	34.0	.424KV=	92.1% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17	***DURING***	34.0	.339KV=	73.6% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17	***AFTER***	34.0	.414KV=	90.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
E16D	***PRIOR***	36.0	.433KV=	94.0% OF	.460 KV	* WARNING WARNING WARNING *
E16D	***DURING***	36.0	.350KV=	76.0% OF	.460 KV	* WARNING WARNING WARNING *
E16D	***AFTER***	36.0	.423KV=	91.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
P42B	***PRIOR***	3.0	.432KV=	94.0% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***DURING***	3.0	.349KV=	75.9% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***AFTER***	3.0	.423KV=	91.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
V77/E23	***PRIOR***	36.0	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***DURING***	36.0	.347KV=	75.4% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***AFTER***	36.0	.421KV=	91.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
NS74B	***PRIOR***	50.5	.428KV=	93.0% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***DURING***	50.5	.344KV=	74.7% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***AFTER***	50.5	.418KV=	90.9% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S77B	***PRIOR***	3.4	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***DURING***	3.4	.348KV=	75.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***AFTER***	3.4	.421KV=	91.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78B	***PRIOR***	3.4	.432KV=	93.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***DURING***	3.4	.348KV=	75.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***AFTER***	3.4	.422KV=	91.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.347KV=	75.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.420KV=	91.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3850	***PRIOR***	.440KV= 89.2% OF	.493KV	123.4	60.8	.0 .0
3850	***DURING***	.358KV= 72.7% OF	.493KV	123.4	60.8	.0 .0
3850	***AFTER***	.430KV= 87.2% OF	.493KV	123.4	60.8	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.348KV=	75.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.421KV=	91.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3A82	***PRIOR***	3.967KV= 95.3% OF	4.160KV	5770.9	3261.1	.0 .0
3A82	***DURING***	3.340KV= 80.3% OF	4.160KV	5770.9	3261.1	.0 .0
3A82	***AFTER***	3.891KV= 93.5% OF	4.160KV	5770.9	3261.1	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3802	***PRIOR***	.462KV= 93.7% OF	.493KV	207.0	113.4	.0 .0
3802	***DURING***	.386KV= 78.3% OF	.493KV	207.0	113.4	.0 .0
3802	***AFTER***	.453KV= 91.9% OF	.493KV	207.0	113.4	.0 .0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P201B ***PRIOR****	150.0	.449KV= 97.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3P201B ***DURING***	150.0	.371KV= 80.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3P201B ***AFTER****	150.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V1B ***PRIOR****	100.0	.449KV= 97.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3V1B ***DURING***	100.0	.371KV= 80.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3V1B ***AFTER****	100.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3804	***PRIOR****	.450KV= 91.3% OF	.493KV	323.7	171.8	.0 .0
3804	***DURING***	.371KV= 75.3% OF	.493KV	323.7	171.8	.0 .0
3804	***AFTER****	.441KV= 89.4% OF	.493KV	323.7	171.8	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P214B ***PRIOR****	250.0	.443KV= 96.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3P214B ***DURING***	250.0	.363KV= 78.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3P214B ***AFTER****	250.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3S7B ***PRIOR****	150.0	.441KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3S7B ***DURING***	150.0	.361KV= 78.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3S7B ***AFTER****	150.0	.432KV= 93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3806	***PRIOR****	.457KV= 92.8% OF	.493KV	191.1	117.5	48.1 .1
3806	***DURING***	.381KV= 77.2% OF	.493KV	191.1	117.5	33.3 .1
3806	***AFTER****	.448KV= 90.9% OF	.493KV	191.1	117.5	46.2 .1

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3P203B	***PRIOR***	15.0	.454KV= 98.6% OF	.460 KV	* WARNING WARNING WARNING *
3P203B	***DURING***	15.0	.376KV= 81.8% OF	.460 KV	* WARNING WARNING WARNING *
3P203B	***AFTER***	15.0	.444KV= 96.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3V30A	***PRIOR***	30.0	.446KV= 97.1% OF	.460 KV	* WARNING WARNING WARNING *
3V30A	***DURING***	30.0	.368KV= 79.9% OF	.460 KV	* WARNING WARNING WARNING *
3V30A	***AFTER***	30.0	.437KV= 95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

3V3A	***PRIOR***	75.0	.451KV= 98.1% OF	.460 KV	* WARNING WARNING WARNING *
3V3A	***DURING***	75.0	.374KV= 81.2% OF	.460 KV	* WARNING WARNING WARNING *
3V3A	***AFTER***	75.0	.442KV= 96.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

E16A/17	***PRIOR***	34.0	.449KV= 97.6% OF	.460 KV	* WARNING WARNING WARNING *
E16A/17	***DURING***	34.0	.371KV= 80.6% OF	.460 KV	* WARNING WARNING WARNING *
E16A/17	***AFTER***	34.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

V88	***PRIOR***	40.0	.452KV= 98.2% OF	.460 KV	* WARNING WARNING WARNING *
V88	***DURING***	40.0	.374KV= 81.3% OF	.460 KV	* WARNING WARNING WARNING *
V88	***AFTER***	40.0	.442KV= 96.2% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
B08W	***PRIOR***	.444KV= 90.0% OF	.493KV	117.9	72.4	20.6	12.1
B08W	***DURING***	.363KV= 73.7% OF	.493KV	117.9	72.4	13.8	8.1
B08W	***AFTER***	.434KV= 88.0% OF	.493KV	117.9	72.4	19.7	11.5



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3P204B ***PRIOR***	6.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *
3P204B ***DURING***	6.0	.359KV=	78.1% OF	.460 KV	* WARNING WARNING WARNING *
3P204B ***AFTER***	6.0	.431KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P208 ***PRIOR***	20.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
P208 ***DURING***	20.0	.358KV=	77.8% OF	.460 KV	* WARNING WARNING WARNING *
P208 ***AFTER***	20.0	.430KV=	93.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3P24B ***PRIOR***	3.0	.441KV=	95.8% OF	.460 KV	* WARNING WARNING WARNING *
3P24B ***DURING***	3.0	.360KV=	78.2% OF	.460 KV	* WARNING WARNING WARNING *
3P24B ***AFTER***	3.0	.431KV=	93.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P20 ***PRIOR***	.5	.443KV=	96.3% OF	.460 KV	* WARNING WARNING WARNING *
P20 ***DURING***	.5	.363KV=	78.8% OF	.460 KV	* WARNING WARNING WARNING *
P20 ***AFTER***	.5	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P21 ***PRIOR***	.5	.443KV=	96.2% OF	.460 KV	* WARNING WARNING WARNING *
P21 ***DURING***	.5	.363KV=	78.8% OF	.460 KV	* WARNING WARNING WARNING *
P21 ***AFTER***	.5	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *



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VOLTAGE DROP ANALYSIS CASE #=10

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3P25B ***PRIOR***	3.0	.442KV=	96.0% OF	.460 KV	* WARNING WARNING WARNING *
3P25B ***DURING***	3.0	.361KV=	78.5% OF	.460 KV	* WARNING WARNING WARNING *
3P25B ***AFTER***	3.0	.432KV=	94.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P22 ***PRIOR***	.5	.443KV=	96.2% OF	.460 KV	* WARNING WARNING WARNING *
P22 ***DURING***	.5	.363KV=	78.8% OF	.460 KV	* WARNING WARNING WARNING *
P22 ***AFTER***	.5	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P220 ***PRIOR***	3.0	.442KV=	96.1% OF	.460 KV	* WARNING WARNING WARNING *
P220 ***DURING***	3.0	.362KV=	78.6% OF	.460 KV	* WARNING WARNING WARNING *
P220 ***AFTER***	3.0	.433KV=	94.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P16A ***PRIOR***	50.0	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *
4P16A ***DURING***	50.0	.357KV=	77.5% OF	.460 KV	* WARNING WARNING WARNING *
4P16A ***AFTER***	50.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3P16A ***PRIOR***	50.0	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *
3P16A ***DURING***	50.0	.357KV=	77.5% OF	.460 KV	* WARNING WARNING WARNING *
3P16A ***AFTER***	50.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V36A ***PRIOR***	2.0	.442KV=	96.2% OF	.460 KV	* WARNING WARNING WARNING *
3V36A ***DURING***	2.0	.362KV=	78.7% OF	.460 KV	* WARNING WARNING WARNING *
3V36A ***AFTER***	2.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V78	***PRIOR***	5.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
V78	***DURING***	5.0	.360KV=	78.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
V78	***AFTER***	5.0	.431KV=	93.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B52	***PRIOR***	.450KV= 91.3% OF	.493KV	16.1	9.9	15.8 .0
3B52	***DURING***	.371KV= 75.2% OF	.493KV	16.1	9.9	10.7 .0
3B52	***AFTER***	.441KV= 89.4% OF	.493KV	16.1	9.9	15.1 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3C2B	***PRIOR***	5.0	.449KV=	97.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3C2B	***DURING***	5.0	.370KV=	80.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
3C2B	***AFTER***	5.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V34B	***PRIOR***	5.0	.450KV=	97.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V34B	***DURING***	5.0	.371KV=	80.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V34B	***AFTER***	5.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P10B	***PRIOR***	.8	.450KV=	97.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P10B	***DURING***	.8	.371KV=	80.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P10B	***AFTER***	.8	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V65B	***PRIOR***	2.0	.446KV=	97.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V65B	***DURING***	2.0	.366KV=	79.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V65B	***AFTER***	2.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3S230	***PRIOR***	7.0	.445KV= 96.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S230	***DURING***	7.0	.365KV= 79.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S230	***AFTER***	7.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3853	***PRIOR***	.457KV= 92.8% OF	.493KV	14.6	9.0	26.7	.0
3853	***DURING***	.446KV= 90.5% OF	.493KV	14.6	9.0	25.4	.0
3853	***AFTER***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3854	***PRIOR***	.450KV= 91.3% OF	.493KV	14.6	9.0	23.8	.0
3854	***DURING***	.371KV= 75.3% OF	.493KV	14.6	9.0	16.2	.0
3854	***AFTER***	.441KV= 89.4% OF	.493KV	14.6	9.0	22.8	.0

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VOLTAGE DROP ANALYSIS CASE #=11

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.820KV=100.4% OF 233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.673KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.801KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.026KV= 96.8% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	3.997KV= 96.1% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.023KV= 96.7% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.959KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.929KV= 94.4% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.955KV= 95.1% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.987KV= 95.8% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.945KV= 94.8% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.983KV= 95.7% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.911KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.869KV= 93.0% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.906KV= 93.9% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3B01	***PRIOR***	.463KV= 93.8% OF .493KV	247.0	138.7	.0	.0
3B01	***DURING***	.423KV= 85.7% OF .493KV	439.5	1219.7	.0	.0
3B01	***AFTER***	.458KV= 93.0% OF .493KV	446.9	238.3	.0	.0

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STARTING MOTOR NAME

HP

3P214A ***PRIOR**** .0 .000KV= .0% OF .460 KV * MOTOR NOT STARTED YET *
 3P214A ***DURING*** 250.0 .381KV= 82.9% OF .460 KV
 3P214A ***AFTER**** 250.0 .452KV= 98.4% OF .460 KV

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3803	***PRIOR****	.467KV= 94.6% OF .493KV	82.6	51.3	211.5	1.5
3803	***DURING***	.461KV= 93.6% OF .493KV	82.6	51.3	206.9	1.5
3803	***AFTER****	.466KV= 94.5% OF .493KV	82.6	51.3	211.0	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3805V	***PRIOR****	.463KV= 93.8% OF .493KV	8.8	5.4	29.4	.0
3805V	***DURING***	.423KV= 85.7% OF .493KV	8.8	5.4	24.6	.0
3805V	***AFTER****	.459KV= 93.0% OF .493KV	8.8	5.4	28.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3805N	***PRIOR****	.460KV= 93.4% OF .493KV	215.5	135.0	13.8	.0
3805N	***DURING***	.420KV= 85.2% OF .493KV	215.5	135.0	11.5	.0
3805N	***AFTER****	.456KV= 92.5% OF .493KV	215.5	135.0	13.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3807	***PRIOR****	.460KV= 93.4% OF .493KV	162.8	100.1	64.8	.3
3807	***DURING***	.455KV= 92.4% OF .493KV	162.8	100.1	63.4	.3
3807	***AFTER****	.460KV= 93.3% OF .493KV	162.8	100.1	64.7	.3

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3808V	***PRIOR****	.439KV= 88.9% OF .493KV	237.5	145.7	1.7	.0
3808V	***DURING***	.398KV= 80.7% OF .493KV	237.5	145.7	1.4	.0
3808V	***AFTER****	.434KV= 88.0% OF .493KV	237.5	145.7	1.6	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V30B	***PRIOR***	30.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *
3V30B	***DURING***	30.0	.382KV=	83.0% OF	.460 KV	* WARNING WARNING WARNING *
3V30B	***AFTER***	30.0	.419KV=	91.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V3B	***PRIOR***	75.0	.431KV=	93.7% OF	.460 KV	* WARNING WARNING WARNING *
3V3B	***DURING***	75.0	.390KV=	84.7% OF	.460 KV	* WARNING WARNING WARNING *
3V3B	***AFTER***	75.0	.427KV=	92.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V11	***PRIOR***	10.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *
V11	***DURING***	10.0	.394KV=	85.6% OF	.460 KV	* WARNING WARNING WARNING *
V11	***AFTER***	10.0	.430KV=	93.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V29B	***PRIOR***	1.0	.438KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***DURING***	1.0	.397KV=	86.2% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***AFTER***	1.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
E16C/17***PRIOR***		34.0	.426KV=	92.6% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***		34.0	.384KV=	83.5% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER***		34.0	.422KV=	91.6% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
E160	***PRIOR***	36.0	.435KV=	94.6% OF	.460 KV	* WARNING WARNING WARNING *
E160	***DURING***	36.0	.394KV=	85.6% OF	.460 KV	* WARNING WARNING WARNING *
E160	***AFTER***	36.0	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
P42B	***PRIOR***	3.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***DURING***	3.0	.394KV=	85.6% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***AFTER***	3.0	.430KV=	93.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V77/E23	***PRIOR***	36.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***DURING***	36.0	.392KV=	85.1% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***AFTER***	36.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
NS74B	***PRIOR***	50.5	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***DURING***	50.5	.389KV=	84.5% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***AFTER***	50.5	.426KV=	92.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
S77B	***PRIOR***	3.4	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *
S77B	***DURING***	3.4	.392KV=	85.2% OF	.460 KV	* WARNING WARNING WARNING *
S77B	***AFTER***	3.4	.429KV=	93.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
S78B	***PRIOR***	3.4	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *
S78B	***DURING***	3.4	.393KV=	85.4% OF	.460 KV	* WARNING WARNING WARNING *
S78B	***AFTER***	3.4	.429KV=	93.4% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.433KV= 94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S75B	***DURING***	5.0	.391KV= 85.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S75B	***AFTER***	5.0	.428KV= 93.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3850	***PRIOR***	.441KV= 89.5% OF	.493KV	123.4	60.8	.0	.0
3850	***DURING***	.401KV= 81.3% OF	.493KV	123.4	60.8	.0	.0
3850	***AFTER***	.437KV= 88.6% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.433KV= 94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C	***DURING***	150.0	.391KV= 85.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C	***AFTER***	150.0	.428KV= 93.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.914KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***DURING***	3.871KV= 93.1% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***AFTER***	3.909KV= 94.0% OF	4.160KV	5770.9	3261.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3802	***PRIOR***	.457KV= 92.8% OF	.493KV	123.7	61.6	.0	.0
3802	***DURING***	.452KV= 91.8% OF	.493KV	123.7	61.6	.0	.0
3802	***AFTER***	.457KV= 92.7% OF	.493KV	123.7	61.6	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3804	***PRIOR***	.450KV= 91.2% OF	.493KV	123.5	77.5	.0	.0
3804	***DURING***	.410KV= 83.2% OF	.493KV	303.7	1066.8	.0	.0
3804	***AFTER***	.445KV= 90.3% OF	.493KV	323.7	171.8	.0	.0



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STARTING MOTOR NAME

HP

3P214B	***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3P214B	***DURING***	250.0	.364KV=	79.1% OF	.460 KV	* WARNING WARNING WARNING *
3P214B	***AFTER****	250.0	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3S7B	***PRIOR****	150.0	.441KV=	95.9% OF	.460 KV	* WARNING WARNING WARNING *
3S7B	***DURING***	150.0	.400KV=	87.1% OF	.460 KV	* WARNING WARNING WARNING *
3S7B	***AFTER****	150.0	.436KV=	94.9% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3806	***PRIOR****	.453KV= 91.8% OF	.493KV	191.1	117.5	47.1 .1
3806	***DURING***	.448KV= 90.8% OF	.493KV	191.1	117.5	46.1 .1
3806	***AFTER****	.452KV= 91.7% OF	.493KV	191.1	117.5	47.0 .1

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V30A	***PRIOR****	30.0	.442KV=	96.0% OF	.460 KV	* WARNING WARNING WARNING *
3V30A	***DURING***	30.0	.436KV=	94.9% OF	.460 KV	* WARNING WARNING WARNING *
3V30A	***AFTER****	30.0	.441KV=	95.9% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
808M	***PRIOR****	.443KV= 89.8% OF	.493KV	117.9	72.4	20.5 12.0
808M	***DURING***	.403KV= 81.7% OF	.493KV	117.9	72.4	17.0 9.9
808M	***AFTER****	.438KV= 88.9% OF	.493KV	117.9	72.4	20.1 11.8

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3852	***PRIOR****	.449KV= 91.1% OF	.493KV	16.1	9.9	15.7 .0
3852	***DURING***	.410KV= 83.1% OF	.493KV	16.1	9.9	13.1 .0
3852	***AFTER****	.445KV= 90.2% OF	.493KV	16.1	9.9	15.4 .0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V65B	***PRIOR***	2.0	.446KV=	96.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V65B	***DURING***	2.0	.406KV=	88.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V65B	***AFTER***	2.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3S230	***PRIOR***	7.0	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S230	***DURING***	7.0	.404KV=	87.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3S230	***AFTER***	7.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3853	***PRIOR***	.463KV= 93.8% OF	.493KV	14.6	9.0	27.3	.0
3853	***DURING***	.423KV= 85.7% OF	.493KV	14.6	9.0	22.8	.0
3853	***AFTER***	.459KV= 93.0% OF	.493KV	14.6	9.0	26.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3854	***PRIOR***	.450KV= 91.2% OF	.493KV	14.6	9.0	23.7	.0
3854	***DURING***	.410KV= 83.2% OF	.493KV	14.6	9.0	19.7	.0
3854	***AFTER***	.445KV= 90.3% OF	.493KV	14.6	9.0	23.2	.0

*****END OF JOB*****

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DATA VERIFICATION
 #####

1 2 3 4 5 6 7 8
1234567890123456789012345678901234567890123456789012345678901234567890

FILE: \AUXSYS\U4APP6.DAT
STEADY STATE SET @ 96% AND STARTING @ 82% FOR SAFETY BUSES
STEADY STATE SET @ 90% AND STARTING @ 80% FOR NON-SAFETY BUSES
EBASCO SERVICES INC.
TURKEY POINT UNIT NO. 4. ELECTRICAL AUXILIARY SYSTEM DESIGN
AUX SYS FED THRU THE S/U TRF. PSB-1.
BUS 4AA2 ALIGNED TO 4AD, BUS 4B50 ALIGNED TO 4B04
SEQUENCED LOADING FOR CALCULATION EC-145, REV. 4
(3/08/91)

*A	(S)	(C)	(T)
1-11	1	1	40.00 6.0 6.0 0.85 0.85 0.92 0.92 0.20 0.20
1	4AA1	350.0	4.76 80.00 42.45 4.16 1.10 3.00
1	4AA2	350.0	4.76 80.00 42.45 4.16 1.10 3.00
1	4AD	250.0	4.76 80.00 30.3 4.16 1.10 3.00
2	4B01	30.0	0.48 0.00
2	4B03	30.0	0.48 0.00
3	4B05V	25.0	0.48 0.00
3	4B05N	25.0	0.48 0.00
3	4B07	25.0	0.48 0.00
3	4B08	25.0	0.48 0.00
2	4B50	30.0	0.48 0.00
1	4AB1	350.0	4.76 80.00 42.45 4.16 1.10 3.00
1	4AB2	350.0	4.76 80.00 42.45 4.16 1.10 3.00
2	4B02	30.0	0.48 0.00
2	4B04	30.0	0.48 0.00
3	4B06	25.0	0.48 0.00
3	4B52	25.0	0.48 0.00
3	4B51	25.0	0.48 0.00
3	4B53	25.0	0.48 0.00
3	4B54	25.0	0.48 0.00
9			

[illegible]

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
7								
1 4P3A	800.0	4.0	5.94	0.0	2.0	0.89	0.944	1 .0281 .0247
6 4P3A	00000000000			700.00	700.00	700.00	700.00	700.00 700.00 700.00
7 700.00	700.00	700.00						
1 4P6A	2250.0	4.0	7.06	0.0	2.0	0.90	0.958	1 .0031 .0040
6 4P6A	00000000000			2210.0	2210.0	2210.0	2210.0	2210.0 2210.0 2210.0
7 2210.0	2210.0	2210.0						
1 4P7A	1250.0	4.0	4.57	0.0	2.0		0.0	1 .0286 .0374
6 4P7A	00000000000							
7								
1 4P7C	1250.0	4.0	4.57	0.0	2.0		0.0	1 .0279 .0364
6 4P7C	00000000000							
7								
1 4P9A	325.0	4.0	5.8	0.0	2.0	0.82	0.928	1 .0453 .0398
6 4P9A	00000000000							
7								
2 0G4A	3.75	4.16	1.000		.077	.145	.693	30.00 0 .0111 .0369
6 0G4A	1	11111111111						
7								
4AD	96.0	82.0	30					
1 4P211C	450.0	4.0	4.74	0.0	2.0		0.0	1 .0444 .0390
6 4P211C	00000000000							
7								
1 4P9C	325.0	4.0	5.8	0.0	2.0	0.82	0.928	0.00 1 .0363 .0319
6 4P9C	00000000000							
7								
4B01	96.0	82.0	30					
1 4P201A	150.0	.460	5.800	0.0	2.0	0.90	.925	1 .0206 .0223
6 4P201A	00000000000							
7								
1 4P214A	250.0	.460	6.540	0.0	1.0	0.91	0.94	0.15 1 .0067 .0148
6 4P214A	112000000002							
7								
1 4S6A	150.0	.460	6.05	0.0	2.0		0.0	1 .0134 .0146
6 4S6A	00000000000							
7								
4 PH4812	150.0	.480	1.000	0.0	0.0		0.0	.0070 .0101
6 PH4812	11111111111							
7								
4B53	90.0	80.0	30					
1 HVACHP	18.0	.460	1.000	0.0	2.0		0.0	1
6 HVACHP	00000000000							
7								
4 HVACKW	27.0	.480	1.000	0.0	0.0		0.0	1
6 HVACKW	00000000000							
7								
4B03	96.0	82.0	30					
1 4K10	100.0	.460		0.0	2.0		0.0	1 .0217 .0148
6 4K10	1	11111111111						
7								

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
1 4P212	100.0	.460	0.0	2.0	0.0		1 .0449	.0306
6 4P212	000000000000							
7								
1 4P32	200.0	.460	0.0	2.0	0.0		1 .0111	.0225
6 4P32	1 11111111111							
7								
4 PH4X09	300.0	.480	1.000	0.0	0.0	0.0	.0048	.0069
6 PH4X09	000000000000							
7								
4805V	96.0	82.0	30					
1 4P31	40.0	.460	0.0	2.0	0.0		1 .0507	.0122
6 4P31	1 11111111111							
7								
1 4P36	25.0	.460	0.0	2.0	0.0		1 .0550	.0060
6 4P36	1 11111111111							
7								
1 4P37	8.0	.460	0.0	2.0	0.0		1 .2303	.0050
6 4P37	1 11111111111							
7								
1 4P40	20.0	.460	0.0	2.0	0.0		1 .3342	.0106
6 4P40	1 11111111111							
7								
1 4T08	50.0	.460	0.0	2.0	0.0		1 .0154	.0058
6 4T08	1 11111111111							
7								
1 4V1C	100.0	.460	7.75	0.0	2.0	0.0	1 .0347	.0236
6 4V1C	000000000001							
7								
1 4V30B	30.0	.460	5.39	0.0	2.0	0.0	1 .2817	.0343
6 4V30B	112000000000							
7								
1 4V3B	75.0	.460	6.06	0.0	2.0	0.0	1 .0328	.0223
6 4V3B	111112000000							
7								
1 4C1	75.0	.460	0.0	2.0	0.0		1 .0200	.0136
6 4C1	1 11111111111							
7								
4 STATICL	01.0	.480	1.000	0.0	0.0	0.0		
6 STATICL	000000000000							
7								
1 MOV1420	5.2	.460	5.66	2.0	0.85	.54 0.6	1 .7312	.0159
6 MOV1420	20000111111							
7								
1 MOV1400	.33	.460	7.33	2.0	0.85	.48 0.6	1 .6663	.0145
6 MOV1400	20000111111							
7								
1 MOV1427	.25	.460	4.91	2.0	0.85	.50 0.6	1 1.290	.0280
6 MOV1427	20000111111							
7								
4805H	90.0	80.0	30					



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1234567890123456789012345678901234567890123456789012345678901234567890								
1 4C19		0.5 .460	0.0	2.0	0.0		1 .2638	.0057
6 4C19	1	11111111111						
7								
1 4P15		3.0 .460	0.0	2.0	0.0		1 .4874	.0106
6 4P15	1	11111111111						
7								
1 4P19A		0.5 .460	0.0	2.0	0.0		1 .4338	.0094
6 4P19A	1	11111111111						
7								
1 4P19B		0.5 .460	0.0	2.0	0.0		1 .4561	.0099
6 4P19B	1	11111111111						
7								
1 4P232B		10.0 .460	0.0	2.0	0.0		1 1.163	.0253
6 4P232B	1	11111111111						
7								
1 4P28A		3.0 .460	0.0	2.0	0.0		1 .2974	.0065
6 4P28A	1	11111111111						
7								
1 4P34A		0.75 .460	0.0	2.0	0.0		1 .6865	.0149
6 4P34A	1	11111111111						
7								
1 4P4		10.0 .460	0.0	2.0	0.0		1 .4942	.0107
6 4P4	1	11111111111						
7								
1 4P43		5.0 .460	0.0	2.0	0.0		1 1.073	.0233
6 4P43	1	11111111111						
7								
1 4P49		0.75 .460	0.0	2.0	0.0		1 .3287	.0071
6 4P49	1	11111111111						
7								
1 4P5		40.0 .460	0.0	2.0	0.0		1 .1010	.0242
6 4P5	1	11111111111						
7								
1 4T9		25.0 .460	0.0	2.0	0.0		1 .1575	.0173
6 4T9	1	11111111111						
7								
1 4V14A		7.5 .460	0.0	2.0	0.0		1 .7558	.0164
6 4V14A		00000000000						
7								
1 4V5		0.5 .460	0.0	2.0	0.0		1 .1520	.0033
6 4V5		00000000000						
7								
1 4V16		2.0 .460	0.0	2.0	0.0		1 .3041	.0066
6 4V16		00000000000						
7								
1 4V18		7.5 .460	0.0	2.0	0.0		1 .4427	.0096
6 4V18		00000000000						
7								
1 4V19A		15.0 .460	0.0	2.0	0.0		1 .1165	.0037
6 4V19A		00000000000						

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1234567890123456789012345678901234567890123456789012345678901234567890								
7								
1 4V31B	3.0	.460	0.0	2.0	0.0		1 .7222	.0157
6 4V31B	000000000000							
7								
1 4V32B	0.75	.460	0.0	2.0	0.0		1 1.096	.0238
6 4V32B	000000000000							
7								
1 4V4	5.0	.460	0.0	2.0	0.0		1 .4986	.0108
6 4V4	000000000000							
7								
1 4V6A	7.5	.460	0.0	2.0	0.0		1 .3197	.0069
6 4V6A	000000000000							
7								
1 4F20A/B	1.5	.460	0.0	2.0	0.0		1 .3342	.0106
6 4F20A/B	000000000000							
7								
1 4P90A	2.0	.460	0.0	2.0	0.0		1 .6809	.0217
6 4P90A	000000000000							
7								
1 4P90B	2.0	.460	0.0	2.0	0.0		1 .6809	.0217
6 4P90B	000000000000							
7								
1 4P90C	2.0	.460	0.0	2.0	0.0		1 .6809	.0217
6 4P90C	000000000000							
7								
4 D10	3.0	.480 1.000	0.0	0.0	0.0		1 .9190	.1007
6 D10	000000000000							
7								
1 4XS75/76	20.0	.460	0.0	2.0 0.81	0.0		1 .1816	.0199
6 4XS75/76	000000000000							
7								
4 STAT1CL	260.0	.480 1.000	0.0	0.0	0.0			
6 STAT1CL	000000000000							
7								
4807	96.0	82.0 30						
1 E16F	36.0	.460	0.0	2.0	0.0		1 .0563	.0118
6 E16F	000000000000							
7								
1 4P203A	15.0	.460	0.0	2.0	0.0		1 .0776	.0141
6 4P203A	000000000000							
7								
1 4V1A	100.0	.460 7.75	0.0	2.0	0.0		1 .0135	.0092
6 4V1A	000000000001							
7								
1 P207B	6.0	.460	0.0	2.0	0.0		1 .3712	.0081
6 P207B	111111111111							
7								
1 4V2A	60.0	.460	0.0	2.0	0.0		1 .0476	.0207
6 4V2A	000000000000							
7								

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
4 4D25	1.0	.480	1.000	0.0	0.0	0.0	.0481	.0115
6 4D25	000000000000							
7								
4 STAT1CL	1.0	.480	1.000	0.0	0.0	0		
6 STAT1CL	000000000000							
7								
1 MOV1426	0.25	.460	4.91	2.0	0.85	.5	0.6	1 .4248 .0092
6 MOV1426	200001111111							
7								
1 MOV6386	0.13	.460	7.11	2.0	0.85	.32	0.6	1 .7582 .0241
6 MOV6386	200001111111							
7								
1 MOV1401	0.33	.460	7.33	2.0	0.85	.48	0.6	1 1.478 .0321
6 MOV1401	200001111111							
7								
1 MOV880A	2.0	.460	3.71	2.0	0.85	.63	0.6	1 .2996 .0065
6 MOV880A	200001111111							
7								
1 MOV716A	1.3	.460	3.75	2.0	0.85	.6	0.6	1 .3242 .0070
6 MOV716A	200001111111							
7								
1 MOV744A	10.3	.460	7.22	2.0	0.85	.8	0.6	1 .4764 .0213
6 MOV744A	200001111111							
7								
1 MOV843A	1.58	.460	7.43	2.0	0.85	.5	0.6	1 .5344 .0116
6 MOV843A	200001111111							
7								
4B08	96.0	82.0	30					
1 4V1B	100.0	.460	7.75	0.0	2.0	0.0		1 .0122 .0083
6 4V1B	000000000001							
7								
1 4V30A	30.0	.460	5.39	0.0	2.0	0.0		1 .0625 .0100
6 4V30A	111200000000							
7								
1 4V3A	75.0	.460	6.06	0.0	2.0	0.0		1 .0195 .0133
6 4V3A	111111200000							
7								
1 S77A	5.0	.460	0.0	2.0	0.0			1 .2780 .0089
6 S77A	000000000000	3.4	3.4	3.4	3.4	3.4	3.4	3.4 3.4
7 3.4	3.4	3.4						
1 S78A	5.0	.460	0.0	2.0	0.0			1 .2696 .0086
6 S78A	000000000000	3.4	3.4	3.4	3.4	3.4	3.4	3.4 3.4
7 3.4	3.4	3.4						
1 S75A	5.0	.460	0.0	2.0	0.0			1 .3370 .0107
6 S75A	000000000000							
7								
1 NS74A	60.0	.460	0.0	2.0	0.0			1 .0285 .0130
6 NS74A	000000000000	50.5	50.5	50.5	50.5	50.5	50.5	50.5 50.5
7 50.5	50.5	50.5						
1 E168/17	34.0	.460	0.0	2.0	0.0			1 .1985 .0204

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 E168/17	00000000000							
7								
1 V8A	40.0 .460		0.0	2.0	0.0		1 .0343 .0082	
6 V8A	00000000000							
7								
1 V10	10.0 .460		0.0	2.0	0.0		1 .5948 .0129	
6 V10	00000000000							
7								
1 V29A	1.0 .460		0.0	2.0	0.0		1 .3061 .0097	
6 V29A	20000000000							
7								
1 V76/232	36.0 .460		0.0	2.0	0.0		1 .0888 .0075	
6 V76/232	00000000000							
7								
4 3025A	18.7 .480 1.000						.0166 .0040	
6 3025A	00000000000							
4 3002A	25.0 .480 1.000						.0075 .0034	
6 3002A	00000000000							
4 STAT1CL	1.0 .480 1.000	0.0	0.0		0.0			
6 STAT1CL	00000000000							
7								
1 MOV1404	0.33 .460 3.60		2.0	0.85	.29 0.6		1 .3608 .0115	
6 MOV1404	20000111111							
7								
1 MOV1417	1.5 .460 5.71		2.0	0.85	.5 0.6		1 .3678 .0117	
6 MOV1417	20000111111							
7								
1 MOV6552A	0.13 .460 7.11		2.0	0.85	.32 0.6		1 .3819 .0122	
6 MOV6552A	20000111111							
7								
1 MOV6543A	0.13 .460 7.11		2.0	0.85	.32 0.6		1 .3356 .0107	
6 MOV6543A	20000111111							
7								
4B50	96.0 82.0 30							
1 4P201C	150.0 .460 5.800	0.0	2.0	0.90	0.0		1 .0136 .0147	
6 4P201C	00000000000							
7								
4B51	96.0 82.0 30							
1 4P244A	1.0 .460	0.0	2.0	0.0			1 .1081 .0034	
6 4P244A	20000000000							
7								
1 4V63A	2.0 .460	0.0	2.0	0.0			1 .0590 .0019	
6 4V63A	20000000000							
7								
1 4V70A	0.5 .460	0.0	2.0	0.0			1 .1123 .0036	
6 4V70A	00000000000							
7								
1 4V65A	2.0 .460	0.0	2.0	0.0			1 .0744 .0024	
6 4V65A	00000000000							
7								

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
1 4V67A	40.0	.460	0.0	2.0	0.0		1 .0092	.0042
6 4V67A	200000000000							
7								
1 4V64A	3.0	.460	0.0	2.0	0.0		1 .0323	.0010
6 4V64A	000000000000							
7								
1 4P241A	1.0	.460	0.0	2.0	0.0		1 .2190	.0070
6 4P241A	200000000000							
7								
1 4S226A	15.0	.460	0.0	2.0	0.0		1 .0748	.0082
6 4S226A	200000000000							
7								
1 4V68A	40.0	.460	0.0	2.0	0.0		1 .0103	.0047
6 4V68A	200000000000							
7								
1 4P245A	0.75	.460	0.0	2.0	0.0		1 .1081	.0034
6 4P245A	200000000000							
7								
1 4V69A	40.0	.460	0.0	2.0	0.0		1 .0116	.0053
6 4V69A	200000000000							
7								
1 4S231A	9.5	.460	0.0	2.0	0.0		1 .0777	.0040
6 4S231A	000000000000							
7								
1 4S230	7.0	.460	0.0	2.0	0.0		1 .1236	.0039
6 4S230	000000000000							
7								
4 STAT1CL	1.0	.480	1.000	0.0	0.0	0.0		
6 STAT1CL	000000000000							
7								
4A81	96.0	82.0	30					
1 4P200B	6000.0	4.0	6.32	0.0	2.0	0.0	1 .0032	.0097
6 4P200B	000000000020	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0
7 5061.0	6000.0	5061.0						
1 4P200C	6000.0	4.0	6.32	0.0	2.0	0.0	1 .0050	.0135
6 4P200C	1 000000000000	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0
7 5061.0	5061.0	5061.0						
4A82	96.0	82.0	30					
1 4P11B	400.0	4.0	5.09	0.0	2.0	0.85	0.938	0.00
6 4P11B	000000000000							
7								
1 4P210B	300.0	4.0	6.22	0.0	2.0	0.89	0.934	
6 4P210B	120000000000							
7								
1 4P211B	450.0	4.0	4.74	0.0	2.0		0.0	
6 4P211B	000000000000							
7								
1 4P215B	350.0	4.0	6.4	0.0	1.0	0.88	0.94	
6 4P215B	120000000000							
7								



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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
1 4P3B	800.0	4.0 5.94	0.0	2.0 0.89 0.944			1 .0226 .0199	
6 4P3B	00000000000	700.00 700.00 700.00 700.00 700.00 700.00 700.00 700.00						
7 700.00 700.00 700.00								
1 4P68	2250.0	4.0 7.06	0.0	2.0 0.90 0.958			1 .0029 .0037	
6 4P68	00000000000	2210.0 2210.0 2210.0 2210.0 2210.0 2210.0 2210.0 2210.0						
7 2210.0 2210.0 2210.0								
1 4P7D	1250.0	4.0 4.57	0.0	2.0	0.0		1 .0267 .0349	
6 4P7D	00000000000							
7								
1 4P7B	1250.0	4.0 4.57	0.0	2.0	0.0		1 .0275 .0359	
6 4P7B	00000000000							
7								
1 4P9B	325.0	4.0 5.8	0.0	2.0 0.82 0.928	0.00 0.00		1 .0452 .0398	
6 4P9B	00000000000							
7								
2 DG4B	3.75 4.16 1.000		.077 .145 .693	30.00		0	.0150 .0504	
6 DG4B	1 11111111111							
7								
4802	96.0 82.0 30							
1 4P201B	150.0 .460 5.800	0.0	2.0 0.90 0.925				1 .0271 .0294	
6 4P201B	00000000000							
7								
1 4V1D	100.0 .460 7.75	0.0	2.0	0.0			1 .0576 .0392	
6 4V1D	00000000001							
7								
4804	96.0 82.0 30							
1 4P214B	250.0 .460 6.540	0.0	1.0 0.91 0.94 0.15				1 .0057 .0124	
6 4P214B	11200000002							
7								
1 4S7B	150.0 .460	0.0 2.0	0.0				1 .0110 .0119	
6 4S7B	00000000000	75.0 75.0 75.0 75.0 75.0 75.0 75.0 75.0						
7 75.0 75.0 75.0								
4 PH4B13	150.0 .480 1.000	0.0 0.0	0.0				1 .0055 .0079	
6 PH4B13	11111111111							
7								
4854	90.0 80.0 30							
1 HVACHP	18.0 .460 1.000	0.0 2.0	0.0				1	
6 HVACHP	00000000000							
7								
4 HVACKW	27.0 .480 1.000	0.0 0.0	0.0				1	
6 HVACKW	00000000000							
7								
4806	96.0 82.0 30							
1 4P203B	15.0 .460	0.0 2.0	0.0				1 .1355 .0325	
6 4P203B	00000000000							
7								
1 E16A/17A	34.0 .460	0.0 2.0	0.0				1 .0747 .0075	
6 E16A/17A	00000000000							
7								
1 4V20	20.0 .460	0.0 2.0	0.0				1 .1943 .0101	

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 4V20	1	1111111111						
7								
1 4V19B		15.0 .460	0.0	2.0	0.0		1 .4535	.0144
6 4V19B		00000000000						
7								
1 4V2B		60.0 .460	0.0	2.0	0.0		1 .0668	.0251
6 4V2B		00000000000						
7								
1 4V30C		30.0 .460 5.39	0.0	2.0	0.0		1 .2307	.0302
6 4V30C		11200000000						
7								
1 4V3C		75.0 .460 6.06	0.0	2.0	0.0		1 .0429	.0292
6 4V3C		11111200000						
7								
1 4V9		20.0 .460	0.0	2.0	0.0		1 .2172	.0112
6 4V9	1	1111111111						
7								
1 4V36		2.0 .460	0.0	2.0	0.0		1 .8474	.0184
6 4V36		00000000000						
7								
4 4D02		25.0 .480 1.000					.0172	.0117
6 4D02		00000000000						
4 STAT1CL		10.0 .480 1.000	0.0	0.0	0.0			
6 STAT1CL		00000000000						
7								
1 MOV381		0.42 .460 5.26		2.0 0.85	.49 0.6		1 .6999	.0152
6 MOV381		20000111111						
7								
1 MOV626		1.0 .460 5.71		2.0 0.85	.39 0.6		1 .7781	.0169
6 MOV626		20000111111						
7								
1 MOV716B		1.3 .460 3.75		2.0 0.85	.60 0.6		1 .4914	.0156
6 MOV716B		20000111111						
7								
1 MOV730		1.3 .460 3.75		2.0 0.85	.60 0.6		1 .7110	.0155
6 MOV730		20000111111						
7								
1 MOV744B		10.5 .460 7.22		2.0 0.85	.80 0.6		1 .4934	.0169
6 MOV744B		20000111111						
7								
1 MOV843B		1.58 .460 7.43		2.0 0.85	.50 0.6		1 .6887	.0150
6 MOV843B		20000111111						
7								
1 MOV880B		2.0 .460 3.71		2.0 0.85	.63 0.6		1 .6775	.0147
6 MOV880B		20000111111						
7								
1 MOV1402		0.33 .460 7.33		2.0 0.85	.48 0.6		1 .6596	.0143
6 MOV1402		20000111111						
7								
1 MOV141B		1.5 .460 5.71		2.0 0.85	.50 0.6		1 .5855	.0186

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 MOV1418	20000111111							
7								
1 MOV1421	5.2 .460	5.66		2.0 0.85	.54 0.6		1 .7312	.0159
6 MOV1421	20000111111							
7								
1 MOV1425	0.25 .460	4.91		2.0 0.85	.50 0.6		1 .9704	.0211
6 MOV1425	20000111111							
7								
4852	96.0 82.0	30						
1 4P2448	1.0 .460		0.0 2.0		0.0		1 .1179	.0038
6 4P2448	20000000000							
7								
1 4V638	2.0 .460		0.0 2.0		0.0		1 .0562	.0018
6 4V638	00000000000							
7								
1 4V708	0.5 .460		0.0 2.0		0.0		1 .1432	.0046
6 4V708	00000000000							
7								
1 4V658	2.0 .460		0.0 2.0		0.0		1 .0646	.0021
6 4V658	00000000000							
7								
1 4V678	40.0 .460		0.0 2.0		0.0		1 .0084	.0038
6 4V678	20000000000							
7								
1 4V648	3.0 .460		0.0 2.0		0.0		1 .0323	.0010
6 4V648	00000000000							
7								
1 4P2418	1.0 .460		0.0 2.0		0.0		1 .2429	.0077
6 4P2418	20000000000							
7								
1 4S2268	15.0 .460		0.0 2.0		0.0		1 .0513	.0056
6 4S2268	20000000000							
7								
1 4V688	40.0 .460		0.0 2.0		0.0		1 .0103	.0047
6 4V688	20000000000							
7								
1 4P2458	0.75 .460		0.0 2.0		0.0		1 .1179	.0038
6 4P2458	20000000000							
7								
1 4V698	40.0 .460		0.0 2.0		0.0		1 .0111	.0051
6 4V698	20000000000							
7								
1 4S2318	9.5 .460		0.0 2.0		0.0		1 .0829	.0040
6 4S2318	00000000000							
7								
4 STATICL	1.0 .480 1.000		0.0 0.0		0.0			
6 STATICL	00000000000							
7								
2BUS114								
3 SWICHYD	15000 19.21.008	4435						

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 SWICHYD								
9								
C TRLIN H1		2BUS114						
C NONSG X1		4AA1		.0005	.0018			
C NONSG Y1		4AB1		.0005	.0021			
T 4X03 H1		X1	Y1	40.0	233.03	4.16	4.16	
				16.64	0.67	16.64	0.67	29.89 1.19
R 4AA2 4AA1		4AA2		0.0	0.0	0.04	80.00	0.00 0.00
C 4AD 4AA2		4AD		.0100	.0223			
C 4B01 X2		4B01		0.0	0.0			
C 4B03 X4		4B03		0.0	0.0			
C 4B05V 4B01		4B05V		.0020	.0041			
C 4B05N 4B01		4B05N		.0046	.0050			
C 4B07 4B03		4B07		.0037	.0075			
C 4B08 4B50		4B08		.0004	.0009			
C 4B50 4B04		4B50		.0026	.0052			
C 4B51 4B01		4B51		.0109	.0219			
C 4X04 4AA2		H2		.0035	.0031			
T 4X04 H2		X2		1.0	4.055	0.48		2.5
				5.63	0.544			
C 4X06 4AA2		H4		.0025	.0022			
T 4X06 H4		X4		1.0	4.055	0.48		2.5
				5.61	0.544			
R 4AB2 4AB1		4AB2		0.0	0.0	0.04	80.00	0.00 0.00
C 4B02 X3		4B02		0.0	0.0			
C 4B04 X5		4B04		0.0	0.0			
C 4B06 4B02		4B06		.0025	.0050			
C 4B52 4B04		4B52		.0119	.0240			
T 4X05 H3		X3		1.0	4.055	0.48		2.5
				5.61	0.544			
C 4X05 4AB2		H3		.0032	.0028			
C 4X07 4AB2		H5		.0039	.0034			
C 4B53 4B01		4B53		.0018	.0020			
C 4B54 4B04		4B54		.0027	.0029			
T 4X07 H5		X5		1.0	4.055	0.48		2.5
				5.65	0.544			

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FILE: \AUXSYS\U4APP6.DAT
STEADY STATE SET @ 96% AND STARTING @ 82% FOR SAFETY BUSES
STEADY STATE SET @ 90% AND STARTING @ 80% FOR NON-SAFETY BUSES
EBASCO SERVICES INC.
TURKEY POINT UNIT NO. 4: ELECTRICAL AUXILIARY SYSTEM DESIGN
AUX SYS FED THRU THE S/U TRF. PSB-1.
BUS 4AA2 ALIGNED TO 4AD, BUS 4B50 ALIGNED TO 4B04
SEQUENCED LOADING FOR CALCULATION EC-145, REV. 4
(3/08/91)

CALCULATION NO. EC-145
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GENERAL INSTRUCTION CARD DATA

NUMBER OF VOLTAGE DROP CASES	S/C CASE 1=YES 2=NO	TYPE OF OUTPUT	BASE MVA
1-11	1	SHORT	40.000

OPTIONAL USER SELECTED ASSUMED DATA

DATA							
LRA/FLA >1KV	LRA/FLA <=1KV	OP PF >1KV	OP PF <=1KV	OP EFF >1KV	OP EFF <=1KV	ST PF >1KV	ST PF <=1KV
6.00	6.00	.85	.85	.92	.92	.20	.20

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T
Y
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E

SHORT CIRCUIT & REACTANCE SIZING PARAMETERS

1	BUS NAME	MVA CLASS	RATED MAX KV	RATED C&L KA	RATED SC @ MAX KV	HPFV KV	"S" FACTOR	MIN CPT	FIXED K3	PERMISSIBLE INT CAP OF BREAKER KA@ HPFV	ASSYM MULT FOR C&L
2	BUS NAME	INT KA	HPFV KV	FIXED K4	K6 FACTOR	K6 BREAK OFF					
3	BUS NAME	INT KA	HPFV KV	FIXED K5	K7 FACTOR	K7 BREAK OFF					

1	4AA1	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	4AA2	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	4AD	250.00	4.760	80.0	30.30	4.160	1.100	3.000	(*****)	34.67	(1.60)
2	4801	30.00	.480(*****)	(1.00)	.00						
2	4803	30.00	.480(*****)	(1.00)	.00						
3	4805V	25.00	.480(*****)	(1.00)	.00						
3	4805N	25.00	.480(*****)	(1.00)	.00						
3	4807	25.00	.480(*****)	(1.00)	.00						
3	4808	25.00	.480(*****)	(1.00)	.00						
2	4850	30.00	.480(*****)	(1.00)	.00						
1	4AB1	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	4AB2	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
2	4802	30.00	.480(*****)	(1.00)	.00						
2	4804	30.00	.480(*****)	(1.00)	.00						
3	4806	25.00	.480(*****)	(1.00)	.00						
3	4852	25.00	.480(*****)	(1.00)	.00						
3	4851	25.00	.480(*****)	(1.00)	.00						
3	4853	25.00	.480(*****)	(1.00)	.00						
3	4854	25.00	.480(*****)	(1.00)	.00						

NOTE: TYPE 1 FAULT= MEDIUM VOLTAGE FAULT CALCULATION
 TYPE 2 FAULT= LOW VOLTAGE POWER CIRCUIT BREAKER FAULT CALCULATION
 TYPE 3 FAULT= LOW VOLTAGE MOLDED CASE BREAKER FAULT CALCULATION
 (*****) = COMPUTER WILL CALCULATE K FACTOR

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
4AA1	96.00 %	82.00 %	30.0

[illegible]

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

[illegible]

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
4AA2	96.00 %	82.00 %	30.0

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          96.00 %
*****
*  LOAD DATA  *
*****

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1 MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 OP PWR FACTOR <3.6K=2	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)	
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT	X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C			
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C	
4 STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10

1 4P11A	400.00	4.000	5.090 (	1.2)	2.000	.850	.938 (	.200)(****)	(1.)	.029	.026 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1 4P210A	300.00	4.000	6.220 (	1.2)	2.000	.890	.934 (	.200)(****)	(1.)	.026	.023 (0)	1 2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1 4P211A	450.00	4.000	4.740 (	1.2)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.029	.026 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1 4P215A	350.00	4.000	6.400 (	1.0)	1.000	.880	.940 (	.200)(****)	(1.)	.031	.027 (0)	1 2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1 4P3A	800.00	4.000	5.940 (	1.2)	2.000	.890	.944 (	.200)(****)	(1.)	.028	.025 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1 4P6A	2250.00	4.000	7.060 (	1.0)	2.000	.900	.958 (	.200)(****)	(1.)	.003	.004 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1 4P7A	1250.00	4.000	4.570 (	1.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.029	.037 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1 4P7C	1250.00	4.000	4.570 (	1.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.028	.036 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1 4P9A	325.00	4.000	5.800 (	1.2)	2.000	.820	.928 (	.200)(****)	(1.)	.045	.040 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
2 DG4A	3.75	4.160	1.000	*****	.077	.145	.693	30.000	**** (0.)	.011	.037	1 1 1 1 1 1 1 1 1 1	

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

[illegible]

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[illegible]

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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX	# WARNINGS FOR LOW VOLT																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
4801														96.00 %				82.00 %				30.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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1 MOTOR NAME														RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 OP 3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC		CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
2 GEN NAME														RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC		CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
3 SYSTEM NAME														S/C KVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF TOL	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC		CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
4 STATIC NAME														RATED KVA	RATED KV	RATED PF									CABLE RES REAC		CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																											



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BUS NAME

MIN ALLOWABLE
VOLTAGE FOR S S

MIN ALLOWABLE
VOLTAGE WHEN STARTING
OTHER MOTORS
80.00 %

MAX # WARNINGS FOR LOW VOLT

30.0

**T
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[illegible]

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
4803	96.00 %	82.00 %	30.0

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          96.00 %
*****
*  LOAD DATA  *
*****

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VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

[illegible]

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TYPE	BUS NAME				MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT	
	4805V				96.00 %				82.00 %					30.0
	***** * LOAD DATA * *****													
1 MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)	
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R	ANG DEG		CABLE RES REAC	CON FOR S/C		
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C		
4 STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10 11	
1 4P31	40.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.051	.012	1	1 1 1 1 1 1 1 1 1 1 1
1 4P36	25.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.055	.006	1	1 1 1 1 1 1 1 1 1 1 1
1 4P37	8.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.230	.005	1	1 1 1 1 1 1 1 1 1 1 1
1 4P40	20.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.334	.011	1	1 1 1 1 1 1 1 1 1 1 1
1 4T08	50.00	.460(6.000)	(	1.2)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.015	.006	1	1 1 1 1 1 1 1 1 1 1 1
1 4V1C	100.00	.460 7.750	(	1.2)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.035	.024	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0) 1
1 4V30B	30.00	.460 5.390	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.282	.034	(0)	1 1 2 (0)(0)(0)(0)(0)(0)(0)(0) 1
1 4V3B	75.00	.460 6.060	(	1.2)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.033	.022	(0)	1 1 1 1 1 2 (0)(0)(0)(0)(0) 1
1 4C1	75.00	.460(6.000)	(	1.2)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.020	.014	1	1 1 1 1 1 1 1 1 1 1 1
4 STAT1CL	1.00	.480 1.000	*****	*****	*****	*****	*****	*****	*****	***	(.000)	(.000)	(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0) 1
1 MOV1420	5.20	.460 5.600	(	8.0)	2.000	.850	.540	.600	(****)	(1.)	.731	.016	(0)	2 (0)(0)(0)(0) 1 1 1 1 1 1 1
1 MOV1400	.33	.460 7.300	(	8.0)	2.000	.850	.480	.600	(****)	(1.)	.666	.014	(0)	2 (0)(0)(0)(0) 1 1 1 1 1 1 1
1 MOV1427	.25	.460 4.900	(	8.0)	2.000	.850	.500	.600	(****)	(1.)	1.290	.028	(0)	2 (0)(0)(0)(0) 1 1 1 1 1 1 1



BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
4805N	90.00 %	80.00 %	30.0

MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)										
GEN NAME	RATED MVA	RATED KV	PU OP VOLT	X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C													
SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C											
STATIC NAME	RATED KVA	RATED KV	RATED PF									CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10

1 4C19	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.264	.006	1	1	1	1	1	1	1	1	1	1	1	1
1 4P15	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.487	.011	1	1	1	1	1	1	1	1	1	1	1	1
1 4P19A	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.434	.009	1	1	1	1	1	1	1	1	1	1	1	1
1 4P19B	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.456	.010	1	1	1	1	1	1	1	1	1	1	1	1
1 4P232B	10.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	1.163	.025	1	1	1	1	1	1	1	1	1	1	1	1
1 4P28A	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.297	.007	1	1	1	1	1	1	1	1	1	1	1	1
1 4P34A	.75	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.687	.015	1	1	1	1	1	1	1	1	1	1	1	1
1 4P4	10.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.494	.011	1	1	1	1	1	1	1	1	1	1	1	1
1 4P43	5.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	1.073	.023	1	1	1	1	1	1	1	1	1	1	1	1
1 4P49	.75	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.329	.007	1	1	1	1	1	1	1	1	1	1	1	1
1 4P5	40.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.101	.024	1	1	1	1	1	1	1	1	1	1	1	1
1 4T9	25.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.157	.017	1	1	1	1	1	1	1	1	1	1	1	1
1 4V14A	7.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.756	.016	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 4V15	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.152	.003	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 4V16	2.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.304	.007	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 4V18	7.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.443	.010	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 4V19A	15.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****(	1.)	.116	.004	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 4V31B	3.00	.460(6.000)(8.0)	2.000	(.850)(.920)(.200)*****(1.)	.722	.016	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
1 4V32B	.75	.460(6.000)(8.0)	2.000	(.850)(.920)(.200)*****(1.)	1.096	.024	(0)	(8)											

[illegible]

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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT														
4807														96.00 %		82.00 %		30.0														
***** * LOAD DATA * *****																																
T Y P E	1 MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)																		
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C																				
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C																				
4 STATIC NAME	RATED KVA	RATED KV	RATED PF										CABLE RES REAC	CON FOR S/C																		

1	E16F	36.00	.460	(6.000)	(	8.0)	2.000	(	.850)	(	.920)	(	.200)	(****)	(	1.)	.056	.012	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4P203A	15.00	.460	(6.000)	(	8.0)	2.000	(	.850)	(	.920)	(	.200)	(****)	(	1.)	.078	.014	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V1A	100.00	.460	7.750	(	1.2)	2.000	(	.850)	(	.920)	(	.200)	(****)	(	1.)	.014	.009	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	P207B	6.00	.460	(6.000)	(	8.0)	2.000	(	.850)	(	.920)	(	.200)	(****)	(	1.)	.371	.008	(0)	1	1	1	1	1	1	1	1	1	1	1	1
1	4V2A	60.00	.460	(6.000)	(	1.2)	2.000	(	.850)	(	.920)	(	.200)	(****)	(	1.)	.048	.021	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
4	4D25	1.00	.480	1.000	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	***		.048	.012	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
4	STATICL	1.00	.480	1.000	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	***	(.000)	.000	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	MOV1426	.25	.460	4.900	(	8.0)	2.000		.850		.500		.600	(****)	(	1.)	.425	.009	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV6386	.13	.460	7.100	(	8.0)	2.000		.850		.320		.600	(****)	(	1.)	.758	.024	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV1401	.33	.460	7.300	(	8.0)	2.000		.850		.480		.600	(****)	(	1.)	1.478	.032	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV880A	2.00	.460	3.700	(	8.0)	2.000		.850		.630		.600	(****)	(	1.)	.300	.007	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV716A	1.30	.460	3.700	(	8.0)	2.000		.850		.600		.600	(****)	(	1.)	.324	.007	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV744A	10.30	.460	7.200	(8.0)	2.000		.850		.800		.600	(****)	(1.)	.476	.021	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1	
1	MOV843A	1.58	.460	7.400	(8.0)	2.000		.850		.500		.600	(****)	(1.)	.534	.012	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1	

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	BUS NAME	MIM ALLOWABLE VOLTAGE FOR S S	MIM ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT																					
T Y P E	4B08	96.00 % ***** * LOAD DATA * *****	82.00 %	30.0																					
1 MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 OP 3.6K=2	PWR FACTOR	EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON COM FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)												
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT	X C&L	X INT	X GVD	X/R		ANG DEG		CABLE RES REAC	COM FOR S/C													
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% TRANSF	% R/X FOR REAC OR X% TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	COM FOR S/C													
4 STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	COM FOR S/C	1 2 3 4 5 6 7 8 9 10 11												
1 4V1B	100.00	.460	7.750 (1.2)	2.000 (.850)(.920)(.200)*****(1.)	.012	.008 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	1												
1 4V30A	30.00	.460	5.390 (8.0)	2.000 (.850)(.920)(.200)*****(1.)	.063	.010 (0)	1 1 1 2 (0) (0) (0) (0) (0) (0)	0												
1 4V3A	75.00	.460	6.060 (1.2)	2.000 (.850)(.920)(.200)*****(1.)	.020	.013 (0)	1 1 1 1 1 2 (0) (0) (0) (0)	0												
1 S77A	5.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****(	1.)	.278	.009 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
1 S78A	5.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****(	1.)	.270	.009 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
1 S7SA	5.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****(	1.)	.337	.011 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
1 NS74A	60.00	.460(6.000)(	1.2)	2.000 (	.850)(	.920)(	.200)*****(	1.)	.029	.013 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
1 E16B/17	34.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****(	1.)	.199	.020 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
1 V8A	40.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****(	1.)	.034	.008 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
1 V10	10.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****(	1.)	.595	.013 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
1 V29A	1.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****(	1.)	.306	.010 (0)	2 (0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
1 V76/232	36.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****(	1.)	.089	.007 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
4 30Z5A	18.70	.480	1.000 *****	*****	*****	*****	*****	*****	***	.017	.004 (1)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
4 30O2A	25.00	.480	1.000 *****	*****	*****	*****	*****	*****	***	.007	.003 (1)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
4 STATICL	1.00	.480	1.000 *****	*****	*****	*****	*****	*****	***	(.000)(.000)(1)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	0												
1 MOV1404	.33	.460	3.600 (	8.0)	2.000 .850	.290	.600 *****(	1.)	.361	.012 (0)	2 (0) (0) (0) (0) 1 1 1 1 1 1 1	1												
1 MOV1417	1.50	.460	5.700 (	8.0)	2.000 .850	.500	.600 *****(	1.)	.368	.012 (0)	2 (0) (0) (0) (0) 1 1 1 1 1 1 1	1												
1 MOV6552	.13	.460	7.100 (	8.0)	2.000 .850	.320	.600 *****(	1.)	.382	.012 (0)	2 (0) (0) (0) (0) 1 1 1 1 1 1 1	1												
1 MOV6543	.13	.460	7.100 (8.0)	2.000 .850	.320	.600 *****(1.)	.336	.011 (0)	2 (0) (0) (0) (0) 1 1 1 1 1 1 1	1													

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

[illegible]

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30.0

82.00 %

1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	X1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C	
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C	
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10
1	4P201C	150.00	.460	5.800	(	1.2)	2.000	.900	(.920)(	.200)(****)	(1.)	.014	.015	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
4AB1	96.00 %	82.00 %	30.0

★ LOAD DATA ★
★★★★★★★★★★★★★★★★

0=ON
1=OFF

VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

T Y P E	***** * LOAD DATA * *****															
1 MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN#2 IND=1	CABLE RES REAC	COM FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)			
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	COM FOR S/C				
3 SYSTEM NAME	S/C MVA	X/R	PU OP' VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	COM FOR S/C				
4 STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	COM FOR S/C	1 2 3 4 5 6 7 8 9 10 11			
1 4P200B	6000.00	4.000	6.320	(	1.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.003	.010	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0) 2 (0
1 4P200C	6000.00	4.000	6.320	(	1.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.005	.014	1 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE *****

DEVICE NAME			CASE: 1	2	3	4	5	6	7	8	9	10	11
1	4P200C	RATED HP	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00
1	4P200B	RATED HP	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	6000.00	5061.00

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[illegible]



30.0

1 1

DEVICE		CASE: 1	2	3	4	5	6	7	8	9	10	11
NAME												
1	4S7B RATED HP	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	150.00	150.00	150.00

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
4B54	90.00 %	80.00 %	30.0

```

          90.00 %
*****
*  LOAD DATA  *
*****

```

1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 OP PWR <3.6K=2	OP EFF	ST PF	R-OHMS T-T	HOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)										
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT	X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C											
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C										
4	STATIC NAME	RATED KVA	RATED KV	RATED PF							CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11
1	HVACHP	18.00	.460	1.000	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	(.000)(.000)(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)										
4	HVACKV	27.00	.480	1.000	*****	*****	*****	*****	*****	***	(.000)(.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)											



BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
4852	96.00 %	82.00 %	30.0

0=ON
1=OFF

VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	X1 FACTOR	SPEED 3.6K=1 3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	COM FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	COM FOR S/C	
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	COM FOR S/C	
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	COM FOR S/C	1 2 3 4 5 6 7 8 9 10 11
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	4P244B	1.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.118	.004	(0)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4V63B	2.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.056	.002	(0)	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4V70B	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.143	.005	(0)	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4V65B	2.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.065	.002	(0)	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4V67B	40.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.008	.004	(0)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4V64B	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.032	.001	(0)	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4P241B	1.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.243	.008	(0)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4S226B	15.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.051	.006	(0)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4V68B	40.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.010	.005	(0)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4P245B	.75	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.118	.004	(0)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4V69B	40.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.011	.005	(0)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	4S231B	9.50	.460(6.000)(8.0)	2.000	(.850)(.920)(.200)*****	(1.)	.083	.004	(0)	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
4	STATICL	1.00	.480 1.000 *****	*****	*****	*****	*****	*****	***	(.000)(.000)((1)	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)

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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT									
2BUS114														(90.00) %				(70.70) %				(5.0)									

														* LOAD DATA *																	

																						0=ON 1=OFF									
																						VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)									

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BUS TIE CONNECTION DATA

T (NOTE: "C"=CABLE "T"=TRANSFORMER "R"=REACTOR ***=IMP FOR 3-WIND **=IMP FOR 2-WIND)

Y
 P TIE BUS OR BUS OR TERM NAME
 E NAME TERM TERM AWAY FROM
 NAME NAME CENTRAL
 TOWARD AWAY TRANSF
 CENTRAL FROM (USE THIS
 TRANSF CENTRAL COL FOR
 TRANSF TRANSF 3 -WIND
 TRANSF)

C				CABLE RESIS	CABLE REAC						
T	(A)	(B)	(C)	TRANSF RATED HVA	TERM (A) RATED VOLT	TERM (B) RATED VOLT	TERM (C) RATED VOLT	TRANSF TOL %			
R				CABLE RESIS	CABLE REAC	OHMS X	REACTOR X/R	+TOL FOR S/C	-TOL FOR V/D		

```

*****
C TRLIN H1      2BUS114      ( .000) ( .000)
C NONSG X1      4AA1         .001   .002
C NONSG Y1      4AB1         .001   .002
T 4X03 H1       X1          Y1      40.000 233.000   4.160 4.160   .000
*** ZH-X=16.640 % RH-X= .670 % ZH-Y=16.640 % RH-Y= .670 % ZX-Y=29.890 % RX-Y= 1.190 %
R 4AA2 4AA1     4AA2         ( .000) ( .000)   .04  80.0 ( .00) ( .00)
C 4AD 4AA2      4AD         .010   .022
C 4B01 X2       4B01        ( .000) ( .000)
C 4B03 X4       4B03        ( .000) ( .000)
C 4B05V 4B01    4B05V       .002   .004
C 4B05N 4B01    4B05N       .005   .005
C 4B07 4B03     4B07        .004   .007
C 4B08 4B50     4B08        .000   .001
C 4B50 4B04     4B50        .003   .005
C 4B51 4B01     4B51        .011   .022
C 4X04 4AA2     H2          .004   .003
T 4X04 H2       X2          1.000  4.050   .480   .000  2.500
** ZH-X= 5.630 % RH-X= .544 %
C 4X06 4AA2     H4          .002   .002
T 4X06 H4       X4          1.000  4.050   .480   .000  2.500
** ZH-X= 5.610 % RH-X= .544 %
R 4AB2 4AB1     4AB2        ( .000) ( .000)   .04  80.0 ( .00) ( .00)
C 4B02 X3       4B02        ( .000) ( .000)
C 4B04 X5       4B04        ( .000) ( .000)
C 4B06 4B02     4B06        .002   .005
C 4B52 4B04     4B52        .012   .024
T 4X05 H3       X3          1.000  4.050   .480   .000  2.500
** ZH-X= 5.610 % RH-X= .544 %
C 4X05 4AB2     H3          .003   .003
C 4X07 4AB2     H5          .004   .003
  
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BUS TIE CONNECTION DATA
***** ** ***** ****

Y	P TIE	BUS OR	BUS OR	TERM NAME
E NAME	NAME	NAME	NAME	AWAY FROM
	TOWARD	AWAY		CENTRAL
	CENTRAL	FROM		TRANSF
	TRANSF	CENTRAL		(USE THIS
		TRANSF		COL FOR
				3 -WIND
				TRANSF)

C				CABLE RESIS	CABLE REAC				
T	(A)	(B)	(C)	TRANSF RATED MVA	TERM (A) RATED VOLT	TERM (B) RATED VOLT	TERM (C) RATED VOLT	TRANSF TOL %	
R				CABLE RESIS	CABLE REAC	OHMS X	REACTOR X/R	+TOL FOR S/C	-TOL FOR V/D

C 4853	4801	4853	.002	.002				
C 4854	4804	4854	.003	.003				
T 4X07	H5	X5	1.000	4.055	.480	.000	2.500	
**	ZH-X= 5.650 % RH-X=		.544 %					



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SHORT CIRCUIT ANALYSIS

NOTE:

TYPE 1 FAULT= MEDIUM VOLTAGE FAULT CALCULATION
 TYPE 2 FAULT= LOW VOLTAGE POWER CIRCUIT BREAKER FAULT CALCULATION
 TYPE 3 FAULT= LOW VOLTAGE MOLDED CASE BREAKER FAULT CALCULATION

BASE MVA = 40.000

TYPE OF FAULT	FAULT NAME	PER UNIT RESISTANCE	PER UNIT INT REACTANCE	PER UNIT C&L REACTANCE	X/R	INT KA	C&L KA	K3	K4	K5	BASE VOLTAGE (KV)
1	4AA1	.00523	.14041	.12650	24.0	42.8	70.2	1.08			4.160
1	4AA2	.00604	.21157	.18623	30.3	30.0	47.7	1.14			4.160
1	4AD	.02790	.26226	.23588	8.3	21.2	37.7	1.00			4.160
2	4801	.17156	1.67610		9.8	28.8			1.06		.493
2	4803	.19911	2.00010		10.0	24.2			1.07		.493
3	4805V	.45907	2.25270		4.9	19.8				1.00	.493
3	4805N	.89130	2.45605		2.8	17.5				1.00	.493
3	4807	.66278	2.97516		4.5	15.0				1.00	.493
3	4808	.47623	2.31929		4.9	19.3				1.00	.492
2	4850	.43866	2.21738		5.1	20.2			1.00		.492
1	4AB1	.00553	.14249	.12925	23.2	41.8	68.7	1.07			4.160
1	4AB2	.00634	.21422	.19020	29.6	29.4	46.7	1.14			4.160
2	4802	.19812	1.91364		9.7	25.2			1.06		.493
2	4804	.16791	1.64914		9.8	29.4			1.06		.492
3	4806	.54856	2.58170		4.7	17.3				1.00	.493
3	4852	1.51428	4.96169		3.3	8.8				1.00	.492
3	4851	1.42219	4.68658		3.3	9.3				1.00	.493
3	4853	.46714	2.00461		4.3	22.2				1.00	.493
3	4854	.61218	2.12663		3.5	20.7				1.00	.492

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VOLTAGE DROP ANALYSIS CASE #= 1

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS114	***PRIOR***	233.877KV=100.4% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.771KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.862KV=100.4% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA1	***PRIOR***	4.022KV= 96.7% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	4.001KV= 96.2% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.019KV= 96.6% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AB1	***PRIOR***	3.980KV= 95.7% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.958KV= 95.2% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.977KV= 95.6% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA2	***PRIOR***	3.982KV= 95.7% OF 4.160KV	5252.9	2987.7	.0	.0
4AA2	***DURING***	3.952KV= 95.0% OF 4.160KV	5252.9	2987.7	.0	.0
4AA2	***AFTER***	3.978KV= 95.6% OF 4.160KV	5252.9	2987.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AD	***PRIOR***	3.979KV= 95.6% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.949KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.975KV= 95.5% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B01	***PRIOR***	.462KV= 93.8% OF .493KV	245.7	137.3	.0	.0
4B01	***DURING***	.437KV= 88.7% OF .493KV	245.7	137.3	.0	.0
4B01	***AFTER***	.459KV= 93.1% OF .493KV	245.7	137.3	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4803	***PRIOR***	.466KV= 94.5% OF	.493KV	83.0	51.6	280.6	2.5
4803	***DURING***	.459KV= 93.2% OF	.493KV	83.0	51.6	272.9	2.4
4803	***AFTER***	.465KV= 94.3% OF	.493KV	83.0	51.6	279.6	2.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4805V	***PRIOR***	.462KV= 93.7% OF	.493KV	82.6	51.3	.9	.0
4805V	***DURING***	.436KV= 88.5% OF	.493KV	112.6	83.7	.8	.0
4805V	***AFTER***	.458KV= 93.0% OF	.493KV	90.9	56.3	.9	.0

STARTING MOTOR NAME

HP

MOV1420***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1420***DURING***	5.2	.393KV= 85.5% OF	.460 KV	
MOV1420***AFTER***	5.2	.447KV= 97.2% OF	.460 KV	

STARTING MOTOR NAME

HP

MOV1400***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1400***DURING***	.3	.432KV= 94.0% OF	.460 KV	
MOV1400***AFTER***	.3	.458KV= 99.5% OF	.460 KV	

STARTING MOTOR NAME

HP

MOV1427***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1427***DURING***	.3	.433KV= 94.0% OF	.460 KV	
MOV1427***AFTER***	.3	.457KV= 99.4% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4805N	***PRIOR***	.459KV= 93.1% OF	.493KV	62.8	40.1	240.6	.0
4805N	***DURING***	.434KV= 88.0% OF	.493KV	62.8	40.1	215.1	.0
4805N	***AFTER***	.456KV= 92.5% OF	.493KV	62.8	40.1	237.2	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4807	***PRIOR***	.463KV= 93.8% OF	.493KV	172.8	106.8	1.9
4807	***DURING***	.454KV= 92.1% OF	.493KV	249.6	192.7	1.8
4807	***AFTER***	.461KV= 93.6% OF	.493KV	190.3	117.5	1.8
STARTING MOTOR NAME HP						
MOV1426***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *		
MOV1426***DURING***	.3	.453KV= 98.4% OF	.460 KV			
MOV1426***AFTER***	.3	.461KV=100.2% OF	.460 KV			
STARTING MOTOR NAME HP						
MOV6386***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *		
MOV6386***DURING***	.1	.451KV= 98.1% OF	.460 KV			
MOV6386***AFTER***	.1	.461KV=100.2% OF	.460 KV			
STARTING MOTOR NAME HP						
MOV1401***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *		
MOV1401***DURING***	.3	.445KV= 96.8% OF	.460 KV			
MOV1401***AFTER***	.3	.460KV= 99.9% OF	.460 KV			
STARTING MOTOR NAME HP						
MOV880A***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *		
MOV880A***DURING***	2.0	.450KV= 97.8% OF	.460 KV			
MOV880A***AFTER***	2.0	.460KV=100.0% OF	.460 KV			

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STARTING MOTOR NAME	HP				
MOV716A***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV716A***DURING***	1.3	.451KV=	98.1% OF	.460 KV	
MOV716A***AFTER***	1.3	.460KV=	100.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV744A***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV744A***DURING***	10.3	.403KV=	87.7% OF	.460 KV	
MOV744A***AFTER***	10.3	.451KV=	98.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV843A***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV843A***DURING***	1.6	.440KV=	95.6% OF	.460 KV	
MOV843A***AFTER***	1.6	.459KV=	99.7% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4808	***PRIOR***	.453KV= 91.9% OF	.492KV	231.8	142.6	39.7
4808	***DURING***	.427KV= 86.8% OF	.492KV	245.2	163.4	35.4
4808	***AFTER***	.449KV= 91.2% OF	.492KV	236.3	145.4	39.1

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E168/17***PRIOR***	34.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *
E168/17***DURING***	34.0	.414KV=	90.0% OF	.460 KV	* WARNING WARNING WARNING *
E168/17***AFTER***	34.0	.437KV=	94.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V10 ***PRIOR***	10.0	.442KV=	96.1% OF	.460 KV	* WARNING WARNING WARNING *
V10 ***DURING***	10.0	.416KV=	90.5% OF	.460 KV	* WARNING WARNING WARNING *
V10 ***AFTER***	10.0	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *

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VOLTAGE DROP ANALYSIS CASE #= 1

STARTING MOTOR NAME	HP					
V29A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
V29A ***DURING***	1.0	.427KV=	92.7% OF	.460 KV		
V29A ***AFTER***	1.0	.449KV=	97.5% OF	.460 KV		
STARTING MOTOR NAME	HP					
MOV1404***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
MOV1404***DURING***	.3	.426KV=	92.6% OF	.460 KV		
MOV1404***AFTER***	.3	.448KV=	97.5% OF	.460 KV		
STARTING MOTOR NAME	HP					
MOV1417***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
MOV1417***DURING***	1.5	.421KV=	91.4% OF	.460 KV		
MOV1417***AFTER***	1.5	.447KV=	97.2% OF	.460 KV		
STARTING MOTOR NAME	HP					
MOV6552***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
MOV6552***DURING***	.1	.426KV=	92.7% OF	.460 KV		
MOV6552***AFTER***	.1	.449KV=	97.6% OF	.460 KV		
STARTING MOTOR NAME	HP					
MOV6543***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
MOV6543***DURING***	.1	.426KV=	92.7% OF	.460 KV		
MOV6543***AFTER***	.1	.449KV=	97.6% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B50	***PRIOR***	.453KV= 92.0% OF	.492KV	122.8	60.2	.0	.0
4B50	***DURING***	.428KV= 86.9% OF	.492KV	122.8	60.2	.0	.0
4B50	***AFTER***	.450KV= 91.3% OF	.492KV	122.8	60.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B51	***PRIOR***	.462KV= 93.6% OF	.493KV	17.9	11.1	.9	.0
4B51	***DURING***	.401KV= 81.3% OF	.493KV	145.3	599.9	.7	.0
4B51	***AFTER***	.452KV= 91.7% OF	.493KV	131.5	81.4	.9	.0

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STARTING MOTOR NAME	HP				
4P244A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P244A ***DURING***	1.0	.400KV=	87.0% OF	.460 KV	
4P244A ***AFTER***	1.0	.452KV=	98.3% OF	.460 KV	
STARTING MOTOR NAME	HP				
4V63A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V63A ***DURING***	2.0	.400KV=	87.0% OF	.460 KV	
4V63A ***AFTER***	2.0	.452KV=	98.3% OF	.460 KV	
STARTING MOTOR NAME	HP				
4V67A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V67A ***DURING***	40.0	.398KV=	86.5% OF	.460 KV	
4V67A ***AFTER***	40.0	.451KV=	98.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
4P241A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P241A ***DURING***	1.0	.400KV=	87.0% OF	.460 KV	
4P241A ***AFTER***	1.0	.452KV=	98.2% OF	.460 KV	
STARTING MOTOR NAME	HP				
4S226A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4S226A ***DURING***	15.0	.397KV=	86.3% OF	.460 KV	
4S226A ***AFTER***	15.0	.450KV=	97.8% OF	.460 KV	

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STARTING MOTOR NAME	HP					
4V68A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
4V68A ***DURING***	40.0	.398KV=	86.5% OF	.460 KV		
4V68A ***AFTER***	40.0	.451KV=	98.1% OF	.460 KV		
STARTING MOTOR NAME	HP					
4P245A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
4P245A ***DURING***	.8	.400KV=	87.1% OF	.460 KV		
4P245A ***AFTER***	.8	.452KV=	98.3% OF	.460 KV		
STARTING MOTOR NAME	HP					
4V69A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
4V69A ***DURING***	40.0	.397KV=	86.4% OF	.460 KV		
4V69A ***AFTER***	40.0	.451KV=	98.1% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.944KV= 94.8% OF	4.160KV	5252.4	2987.2	.0	.0
4AB2	***DURING***	3.913KV= 94.1% OF	4.160KV	5252.4	2987.2	.0	.0
4AB2	***AFTER***	3.940KV= 94.7% OF	4.160KV	5252.4	2987.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4802	***PRIOR***	.461KV= 93.6% OF	.493KV	206.9	113.0	.0	.0
4802	***DURING***	.453KV= 91.9% OF	.493KV	206.9	113.0	.0	.0
4802	***AFTER***	.460KV= 93.3% OF	.493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4804	***PRIOR***	.458KV= 92.9% OF	.492KV	61.1	38.0	.0	.0
4804	***DURING***	.433KV= 88.0% OF	.492KV	61.1	38.0	.0	.0
4804	***AFTER***	.454KV= 92.3% OF	.492KV	61.1	38.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4806	***PRIOR***	.460KV= 93.3% OF	.493KV	104.2	63.8	32.1	.0
4806	***DURING***	.449KV= 91.2% OF	.493KV	229.7	203.7	30.6	.0
4806	***AFTER***	.459KV= 93.0% OF	.493KV	135.4	82.8	31.9	.0

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STARTING MOTOR NAME	HP				
MOV381 ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV381 ***DURING***	.4	.446KV=	96.9% OF	.460 KV	
MOV381 ***AFTER***	.4	.458KV=	99.5% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV626 ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV626 ***DURING***	1.0	.436KV=	94.9% OF	.460 KV	
MOV626 ***AFTER***	1.0	.455KV=	99.0% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV7168***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV7168***DURING***	1.3	.445KV=	96.7% OF	.460 KV	
MOV7168***AFTER***	1.3	.457KV=	99.3% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV730 ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV730 ***DURING***	1.3	.443KV=	96.3% OF	.460 KV	
MOV730 ***AFTER***	1.3	.456KV=	99.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV744B***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV744B***DURING***	10.5	.397KV=	86.4% OF	.460 KV	
MOV744B***AFTER***	10.5	.448KV=	97.4% OF	.460 KV	

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STARTING MOTOR NAME	HP				
MOV843B***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV843B***DURING***	1.6	.431KV=	93.7% OF	.460 KV	
MOV843B***AFTER****	1.6	.455KV=	98.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV880B***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV880B***DURING***	2.0	.440KV=	95.7% OF	.460 KV	
MOV880B***AFTER****	2.0	.455KV=	98.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1402***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1402***DURING***	.3	.446KV=	96.9% OF	.460 KV	
MOV1402***AFTER****	.3	.458KV=	99.5% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1418***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1418***DURING***	1.5	.438KV=	95.2% OF	.460 KV	
MOV1418***AFTER****	1.5	.456KV=	99.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1421***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1421***DURING***	5.2	.405KV=	88.1% OF	.460 KV	
MOV1421***AFTER****	5.2	.447KV=	97.2% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1425***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1425***DURING***	.3	.447KV=	97.1% OF	.460 KV	
MOV1425***AFTER****	.3	.458KV=	99.5% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4852	***PRIOR****	.457KV= 92.8% OF	.492KV	13.8	8.5	.9	.0
4852	***DURING***	.394KV= 80.1% OF	.492KV	134.8	571.3	.7	.0
4852	***AFTER****	.447KV= 90.8% OF	.492KV	125.8	77.9	.9	.0

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STARTING MOTOR NAME	HP				
4P244B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P244B ***DURING***	1.0	.394KV=	85.7% OF	.460 KV	
4P244B ***AFTER***	1.0	.447KV=	97.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
4V67B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V67B ***DURING***	40.0	.392KV=	85.2% OF	.460 KV	
4V67B ***AFTER***	40.0	.446KV=	97.0% OF	.460 KV	
STARTING MOTOR NAME	HP				
4P241B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P241B ***DURING***	1.0	.394KV=	85.6% OF	.460 KV	
4P241B ***AFTER***	1.0	.446KV=	97.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
4S226B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4S226B ***DURING***	15.0	.392KV=	85.2% OF	.460 KV	
4S226B ***AFTER***	15.0	.445KV=	96.8% OF	.460 KV	
STARTING MOTOR NAME	HP				
4V68B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V68B ***DURING***	40.0	.392KV=	85.1% OF	.460 KV	
4V68B ***AFTER***	40.0	.446KV=	96.9% OF	.460 KV	



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STARTING MOTOR NAME	HP				
4P245B ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P245B ***DURING***	.8	.394KV=	85.7% OF	.460 KV	
4P245B ***AFTER****	.8	.447KV=	97.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
4V69B ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V69B ***DURING***	40.0	.391KV=	85.1% OF	.460 KV	
4V69B ***AFTER****	40.0	.446KV=	96.9% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B53	***PRIOR****	.462KV= 93.8% OF	.493KV	14.6	9.0	25.1 .0
4B53	***DURING***	.437KV= 88.7% OF	.493KV	14.6	9.0	22.4 .0
4B53	***AFTER****	.459KV= 93.1% OF	.493KV	14.6	9.0	24.7 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B54	***PRIOR****	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5 .0
4B54	***DURING***	.433KV= 87.9% OF	.492KV	14.6	9.0	22.0 .0
4B54	***AFTER****	.454KV= 92.2% OF	.492KV	14.6	9.0	24.2 .0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.862KV=100.4% OF233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.443KV=100.2% OF233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.817KV=100.4% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.019KV= 96.6% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.935KV= 94.6% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.011KV= 96.4% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.977KV= 95.6% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.892KV= 93.6% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.978KV= 95.6% OF 4.160KV	5252.9	2987.7	.0	.0
4AA2	***DURING***	3.858KV= 92.7% OF 4.160KV	5946.8	6341.2	.0	.0
4AA2	***AFTER***	3.967KV= 95.4% OF 4.160KV	5770.5	3260.7	.0	.0

STARTING MOTOR NAME

HP

4P210A	***PRIOR***	.0	.000KV= .0% OF 4.000 KV
4P210A	***DURING***	300.0	3.847KV= 96.2% OF 4.000 KV
4P210A	***AFTER***	300.0	3.965KV= 99.1% OF 4.000 KV

* MOTOR NOT STARTED YET *

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VOLTAGE DROP ANALYSIS CASE # 2

STARTING MOTOR NAME	HP					
4P215A ***PRIOR***	.0	.000KV=	.0% OF	4.000 KV	* MOTOR NOT STARTED YET *	
4P215A ***DURING***	350.0	3.842KV=	96.0% OF	4.000 KV		
4P215A ***AFTER***	350.0	3.964KV=	99.1% OF	4.000 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AD	***PRIOR***	3.975KV= 95.5% OF	4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.854KV= 92.6% OF	4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.963KV= 95.3% OF	4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B01	***PRIOR***	.459KV= 93.1% OF	.493KV	245.7	137.3	.0	.0
4B01	***DURING***	.445KV= 90.2% OF	.493KV	245.7	137.3	.0	.0
4B01	***AFTER***	.458KV= 92.9% OF	.493KV	245.7	137.3	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B03	***PRIOR***	.465KV= 94.3% OF	.493KV	83.0	51.6	279.6	2.5
4B03	***DURING***	.450KV= 91.4% OF	.493KV	83.0	51.6	262.5	2.3
4B03	***AFTER***	.463KV= 94.0% OF	.493KV	83.0	51.6	278.0	2.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05V	***PRIOR***	.458KV= 93.0% OF	.493KV	90.9	56.3	.9	.0
4B05V	***DURING***	.444KV= 90.0% OF	.493KV	90.9	56.3	.9	.0
4B05V	***AFTER***	.457KV= 92.7% OF	.493KV	90.9	56.3	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05N	***PRIOR***	.456KV= 92.5% OF	.493KV	62.8	40.1	237.2	.0
4B05N	***DURING***	.441KV= 89.5% OF	.493KV	62.8	40.1	222.2	.0
4B05N	***AFTER***	.455KV= 92.2% OF	.493KV	62.8	40.1	235.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B07	***PRIOR***	.461KV= 93.6% OF	.493KV	190.3	117.5	1.8	.0
4B07	***DURING***	.447KV= 90.6% OF	.493KV	190.3	117.5	1.7	.0
4B07	***AFTER***	.460KV= 93.3% OF	.493KV	190.3	117.5	1.8	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4808	***PRIOR***	.449KV= 91.2% OF	.492KV	236.3	145.4	39.1	.0
4808	***DURING***	.434KV= 88.2% OF	.492KV	236.3	145.4	36.6	.0
4808	***AFTER***	.448KV= 90.9% OF	.492KV	236.3	145.4	38.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E168/17	***PRIOR***	34.0	.437KV= 94.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17	***DURING***	34.0	.421KV= 91.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17	***AFTER***	34.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V10	***PRIOR***	10.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10	***DURING***	10.0	.423KV= 92.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10	***AFTER***	10.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4850	***PRIOR***	.450KV= 91.3% OF	.492KV	122.8	60.2	.0	.0
4850	***DURING***	.435KV= 88.3% OF	.492KV	122.8	60.2	.0	.0
4850	***AFTER***	.448KV= 91.1% OF	.492KV	122.8	60.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4851	***PRIOR***	.452KV= 91.7% OF	.493KV	131.5	81.4	.9	.0
4851	***DURING***	.437KV= 88.7% OF	.493KV	131.5	81.4	.8	.0
4851	***AFTER***	.451KV= 91.4% OF	.493KV	131.5	81.4	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.940KV= 94.7% OF	4.160KV	5252.4	2987.2	.0	.0
4AB2	***DURING***	3.819KV= 91.8% OF	4.160KV	5932.8	6273.7	.0	.0
4AB2	***AFTER***	3.929KV= 94.4% OF	4.160KV	5770.1	3260.2	.0	.0

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STARTING MOTOR NAME	HP					
4P210B ***PRIOR***	.0	.000KV=	.0% OF	4.000 KV	* MOTOR NOT STARTED YET *	
4P210B ***DURING***	300.0	3.808KV=	95.2% OF	4.000 KV		
4P210B ***AFTER***	300.0	3.926KV=	98.2% OF	4.000 KV		
STARTING MOTOR NAME	HP					
4P215B ***PRIOR***	.0	.000KV=	.0% OF	4.000 KV	* MOTOR NOT STARTED YET *	
4P215B ***DURING***	350.0	3.803KV=	95.1% OF	4.000 KV		
4P215B ***AFTER***	350.0	3.925KV=	98.1% OF	4.000 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4802	***PRIOR***	.460KV= 93.3% OF	.493KV	206.9	113.0	.0	.0
4802	***DURING***	.446KV= 90.4% OF	.493KV	206.9	113.0	.0	.0
4802	***AFTER***	.459KV= 93.1% OF	.493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4804	***PRIOR***	.454KV= 92.3% OF	.492KV	61.1	38.0	.0	.0
4804	***DURING***	.440KV= 89.3% OF	.492KV	61.1	38.0	.0	.0
4804	***AFTER***	.453KV= 92.0% OF	.492KV	61.1	38.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4806	***PRIOR***	.459KV= 93.0% OF	.493KV	135.4	82.8	31.9	.0
4806	***DURING***	.444KV= 90.0% OF	.493KV	135.4	82.8	29.9	.0
4806	***AFTER***	.457KV= 92.7% OF	.493KV	135.4	82.8	31.7	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4852	***PRIOR***	.447KV= 90.8% OF	.492KV	125.8	77.9	.9	.0
4852	***DURING***	.432KV= 87.7% OF	.492KV	125.8	77.9	.8	.0
4852	***AFTER***	.445KV= 90.5% OF	.492KV	125.8	77.9	.9	.0

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VOLTAGE DROP ANALYSIS CASE # 2

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4853	***PRIOR***	.459KV= 93.1% OF	.493KV	14.6	9.0	24.7	.0
4853	***DURING***	.445KV= 90.2% OF	.493KV	14.6	9.0	23.2	.0
4853	***AFTER***	.458KV= 92.9% OF	.493KV	14.6	9.0	24.6	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4854	***PRIOR***	.454KV= 92.2% OF	.492KV	14.6	9.0	24.2	.0
4854	***DURING***	.439KV= 89.3% OF	.492KV	14.6	9.0	22.6	.0
4854	***AFTER***	.453KV= 92.0% OF	.492KV	14.6	9.0	24.0	.0



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VOLTAGE DROP ANALYSIS CASE # 3

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.817KV=100.4% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.653KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.796KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.011KV= 96.4% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.979KV= 95.6% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.007KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.935KV= 94.6% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.964KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.967KV= 95.4% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.920KV= 94.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.961KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AD	***PRIOR***	3.963KV= 95.3% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.917KV= 94.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.958KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B01	***PRIOR***	.458KV= 92.9% OF .493KV	245.7	137.3	.0	.0
4B01	***DURING***	.414KV= 83.9% OF .493KV	429.8	1164.6	.0	.0
4B01	***AFTER***	.453KV= 91.9% OF .493KV	445.6	231.0	.0	.0

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STARTING MOTOR NAME	HP					
4P214A ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
4P214A ***DURING***	250.0	.374KV=	81.4% OF	.460 KV	* WARNING WARNING WARNING *	
4P214A ***AFTER****	250.0	.447KV=	97.2% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4803	***PRIOR****	.463KV= 94.0% OF	.493KV	83.0	51.6	278.0	2.5
4803	***DURING***	.458KV= 92.9% OF	.493KV	83.0	51.6	271.3	2.4
4803	***AFTER****	.463KV= 93.9% OF	.493KV	83.0	51.6	277.2	2.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4805V	***PRIOR****	.457KV= 92.7% OF	.493KV	90.9	56.3	.9	.0
4805V	***DURING***	.412KV= 83.5% OF	.493KV	133.6	162.0	.7	.0
4805V	***AFTER****	.452KV= 91.7% OF	.493KV	116.3	71.5	.9	.0

STARTING MOTOR NAME	HP					
4V30B ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
4V30B ***DURING***	30.0	.380KV=	82.6% OF	.460 KV	* WARNING WARNING WARNING *	
4V30B ***AFTER****	30.0	.436KV=	94.8% OF	.460 KV		

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP					
MOV1420***PRIOR****	5.2	.446KV=	96.9% OF	.460 KV	* WARNING WARNING WARNING *	
MOV1420***DURING***	5.2	.399KV=	86.7% OF	.460 KV	* WARNING WARNING WARNING *	
MOV1420***AFTER****	5.2	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4805N	***PRIOR****	.455KV= 92.2% OF	.493KV	62.8	40.1	235.8	.0
4805N	***DURING***	.411KV= 83.3% OF	.493KV	62.8	40.1	192.4	.0
4805N	***AFTER****	.450KV= 91.2% OF	.493KV	62.8	40.1	230.8	.0

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VOLTAGE DROP ANALYSIS CASE # 3

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4807	***PRIOR***	.460KV= 93.3% OF	.493KV	190.3	117.5	1.8	.0
4807	***DURING***	.454KV= 92.2% OF	.493KV	190.3	117.5	1.8	.0
4807	***AFTER***	.459KV= 93.2% OF	.493KV	190.3	117.5	1.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4808	***PRIOR***	.448KV= 90.9% OF	.492KV	236.3	145.4	38.9	.0
4808	***DURING***	.406KV= 82.5% OF	.492KV	236.3	145.4	32.0	.0
4808	***AFTER***	.443KV= 90.0% OF	.492KV	236.3	145.4	38.1	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V1B	***PRIOR***	100.0	.445KV= 96.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1B	***DURING***	100.0	.403KV= 87.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1B	***AFTER***	100.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
S75A	***PRIOR***	5.0	.445KV= 96.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75A	***DURING***	5.0	.403KV= 87.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75A	***AFTER***	5.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
NS74A	***PRIOR***	50.5	.444KV= 96.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74A	***DURING***	50.5	.403KV= 87.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74A	***AFTER***	50.5	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

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VOLTAGE DROP ANALYSIS CASE # 3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E168/17***PRIOR***	34.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***DURING***	34.0	.392KV=	85.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***AFTER***	34.0	.431KV=	93.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V8A ***PRIOR***	40.0	.445KV=	96.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V8A ***DURING***	40.0	.403KV=	87.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V8A ***AFTER***	40.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V10 ***PRIOR***	10.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10 ***DURING***	10.0	.394KV=	85.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10 ***AFTER***	10.0	.433KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V76/232***PRIOR***	36.0	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V76/232***DURING***	36.0	.400KV=	86.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V76/232***AFTER***	36.0	.437KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV1417***PRIOR***	1.5	.446KV=	96.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1417***DURING***	1.5	.404KV=	87.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1417***AFTER***	1.5	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4850	***PRIOR***	.448KV= 91.1% OF	.492KV	122.8	60.2	.0	.0
4850	***DURING***	.407KV= 82.6% OF	.492KV	122.8	60.2	.0	.0
4850	***AFTER***	.444KV= 90.2% OF	.492KV	122.8	60.2	.0	.0



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201C	150.0	***PRIOR***	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C	150.0	***DURING***	.401KV= 87.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C	150.0	***AFTER***	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4851	***PRIOR***	.451KV= 91.4% OF	.493KV	131.5	81.4	.9	.0
4851	***DURING***	.406KV= 82.3% OF	.493KV	131.5	81.4	.7	.0
4851	***AFTER***	.446KV= 90.4% OF	.493KV	131.5	81.4	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4A82	***PRIOR***	3.929KV= 94.4% OF	4.160KV	5770.1	3260.2	.0	.0
4A82	***DURING***	3.880KV= 93.3% OF	4.160KV	5770.1	3260.2	.0	.0
4A82	***AFTER***	3.923KV= 94.3% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4802	***PRIOR***	.459KV= 93.1% OF	.493KV	206.9	113.0	.0	.0
4802	***DURING***	.449KV= 91.1% OF	.493KV	206.9	113.0	.0	.0
4802	***AFTER***	.458KV= 92.8% OF	.493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4804	***PRIOR***	.453KV= 92.0% OF	.492KV	61.1	38.0	.0	.0
4804	***DURING***	.412KV= 83.7% OF	.492KV	242.9	1072.7	.0	.0
4804	***AFTER***	.449KV= 91.1% OF	.492KV	260.8	131.2	.0	.0

STARTING MOTOR NAME

	HP					
4P214B	.0	***PRIOR***	.000KV= .0% OF	.460 KV	*	MOTOR NOT STARTED YET *
4P214B	250.0	***DURING***	.378KV= 82.3% OF	.460 KV		
4P214B	250.0	***AFTER***	.444KV= 96.5% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4806	***PRIOR***	.457KV= 92.7% OF	.493KV	135.4	82.8	31.7	.0
4806	***DURING***	.446KV= 90.4% OF	.493KV	182.2	210.1	30.1	.0
4806	***AFTER***	.456KV= 92.4% OF	.493KV	160.7	98.0	31.5	.0



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STARTING MOTOR NAME

HP

4V30C	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V30C	***DURING***	30.0	.418KV=	90.8% OF	.460 KV	
4V30C	***AFTER***	30.0	.443KV=	96.2% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B52	***PRIOR***	.445KV= 90.5% OF	.492KV	125.8	77.9	.9 .0
4B52	***DURING***	.404KV= 82.0% OF	.492KV	125.8	77.9	.7 .0
4B52	***AFTER***	.441KV= 89.6% OF	.492KV	125.8	77.9	.8 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P244B	***PRIOR***	1.0	.445KV= 96.8% OF	.460 KV	* WARNING WARNING WARNING *
4P244B	***DURING***	1.0	.403KV= 87.7% OF	.460 KV	* WARNING WARNING WARNING *
4P244B	***AFTER***	1.0	.441KV= 95.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V63B	***PRIOR***	2.0	.445KV= 96.8% OF	.460 KV	* WARNING WARNING WARNING *
4V63B	***DURING***	2.0	.403KV= 87.7% OF	.460 KV	* WARNING WARNING WARNING *
4V63B	***AFTER***	2.0	.441KV= 95.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V70B	***PRIOR***	.5	.445KV= 96.8% OF	.460 KV	* WARNING WARNING WARNING *
4V70B	***DURING***	.5	.403KV= 87.7% OF	.460 KV	* WARNING WARNING WARNING *
4V70B	***AFTER***	.5	.441KV= 95.9% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V65B ***PRIOR****	2.0	.445KV=	96.8% OF	.460 KV	* WARNING WARNING WARNING *
4V65B ***DURING***	2.0	.403KV=	87.7% OF	.460 KV	* WARNING WARNING WARNING *
4V65B ***AFTER****	2.0	.441KV=	95.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V67B ***PRIOR****	40.0	.445KV=	96.7% OF	.460 KV	* WARNING WARNING WARNING *
4V67B ***DURING***	40.0	.403KV=	87.5% OF	.460 KV	* WARNING WARNING WARNING *
4V67B ***AFTER****	40.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V64B ***PRIOR****	3.0	.445KV=	96.8% OF	.460 KV	* WARNING WARNING WARNING *
4V64B ***DURING***	3.0	.403KV=	87.7% OF	.460 KV	* WARNING WARNING WARNING *
4V64B ***AFTER****	3.0	.441KV=	95.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P241B ***PRIOR****	1.0	.445KV=	96.7% OF	.460 KV	* WARNING WARNING WARNING *
4P241B ***DURING***	1.0	.403KV=	87.6% OF	.460 KV	* WARNING WARNING WARNING *
4P241B ***AFTER****	1.0	.441KV=	95.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4S226B ***PRIOR****	15.0	.444KV=	96.5% OF	.460 KV	* WARNING WARNING WARNING *
4S226B ***DURING***	15.0	.402KV=	87.4% OF	.460 KV	* WARNING WARNING WARNING *
4S226B ***AFTER****	15.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V68B ***PRIOR****	40.0	.445KV=	96.6% OF	.460 KV	* WARNING WARNING WARNING *
4V68B ***DURING***	40.0	.403KV=	87.5% OF	.460 KV	* WARNING WARNING WARNING *
4V68B ***AFTER****	40.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P245B ***PRIOR***	.8	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245B ***DURING***	.8	.403KV=	87.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245B ***AFTER***	.8	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V69B ***PRIOR***	40.0	.444KV=	96.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69B ***DURING***	40.0	.402KV=	87.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69B ***AFTER***	40.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S231B ***PRIOR***	9.5	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231B ***DURING***	9.5	.402KV=	87.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231B ***AFTER***	9.5	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B53	***PRIOR***	.458KV= 92.9% OF	.493KV	14.6	9.0	24.6	.0
4B53	***DURING***	.414KV= 83.9% OF	.493KV	14.6	9.0	20.1	.0
4B53	***AFTER***	.453KV= 91.9% OF	.493KV	14.6	9.0	24.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B54	***PRIOR***	.453KV= 92.0% OF	.492KV	14.6	9.0	24.0	.0
4B54	***DURING***	.412KV= 83.6% OF	.492KV	14.6	9.0	19.9	.0
4B54	***AFTER***	.449KV= 91.1% OF	.492KV	14.6	9.0	23.6	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.796KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.786KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.794KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.007KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	4.007KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.007KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.964KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.961KV= 95.2% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.964KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.961KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.961KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.961KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AD	***PRIOR***	3.958KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.957KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.958KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4801	***PRIOR***	.453KV= 91.9% OF .493KV	445.6	231.0	.0	.0
4801	***DURING***	.453KV= 91.8% OF .493KV	445.6	231.0	.0	.0
4801	***AFTER***	.453KV= 91.9% OF .493KV	445.6	231.0	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4803	***PRIOR***	.463KV= 93.9% OF .493KV	83.0	51.6	277.2	2.5
4803	***DURING***	.463KV= 93.9% OF .493KV	83.0	51.6	277.1	2.5
4803	***AFTER***	.463KV= 93.9% OF .493KV	83.0	51.6	277.2	2.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4805V	***PRIOR***	.452KV= 91.7% OF .493KV	116.3	71.5	.9	.0
4805V	***DURING***	.452KV= 91.6% OF .493KV	116.3	71.5	.9	.0
4805V	***AFTER***	.452KV= 91.7% OF .493KV	116.3	71.5	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
4V30B	***PRIOR***	30.0	.436KV= 94.8% OF .460 KV	* WARNING	WARNING	WARNING	*	
4V30B	***DURING***	30.0	.436KV= 94.8% OF .460 KV	* WARNING	WARNING	WARNING	*	
4V30B	***AFTER***	30.0	.436KV= 94.8% OF .460 KV	* WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
MOV1420	***PRIOR***	5.2	.440KV= 95.7% OF .460 KV	* WARNING	WARNING	WARNING	*	
MOV1420	***DURING***	5.2	.440KV= 95.7% OF .460 KV	* WARNING	WARNING	WARNING	*	
MOV1420	***AFTER***	5.2	.440KV= 95.7% OF .460 KV	* WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4805N	***PRIOR***	.450KV= 91.2% OF .493KV	62.8	40.1	230.8	.0
4805N	***DURING***	.450KV= 91.2% OF .493KV	62.8	40.1	230.7	.0
4805N	***AFTER***	.450KV= 91.2% OF .493KV	62.8	40.1	230.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4807	***PRIOR***	.459KV= 93.2% OF .493KV	190.3	117.5	1.8	.0
4807	***DURING***	.459KV= 93.2% OF .493KV	190.3	117.5	1.8	.0
4807	***AFTER***	.459KV= 93.2% OF .493KV	190.3	117.5	1.8	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4808	***PRIOR***	.443KV= 90.0% OF	.492KV	236.3	145.4	38.1	.0
4808	***DURING***	.436KV= 88.6% OF	.492KV	269.2	277.8	36.9	.0
4808	***AFTER***	.442KV= 89.8% OF	.492KV	260.9	160.5	37.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V1B	***PRIOR***	100.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING *
4V1B	***DURING***	100.0	.433KV= 94.2% OF	.460 KV	* WARNING WARNING WARNING *
4V1B	***AFTER***	100.0	.439KV= 95.5% OF	.460 KV	* WARNING WARNING WARNING *

STARTING MOTOR NAME

	HP				
4V30A	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V30A	***DURING***	30.0	.429KV= 93.2% OF	.460 KV	
4V30A	***AFTER***	30.0	.439KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77A	***PRIOR***	3.4	.442KV= 96.0% OF	.460 KV	* WARNING WARNING WARNING *
S77A	***DURING***	3.4	.435KV= 94.5% OF	.460 KV	* WARNING WARNING WARNING *
S77A	***AFTER***	3.4	.441KV= 95.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S78A	***PRIOR***	3.4	.442KV= 96.0% OF	.460 KV	* WARNING WARNING WARNING *
S78A	***DURING***	3.4	.435KV= 94.5% OF	.460 KV	* WARNING WARNING WARNING *
S78A	***AFTER***	3.4	.441KV= 95.8% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75A	***PRIOR***	5.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75A	***DURING***	5.0	.433KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75A	***AFTER***	5.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
HS74A	***PRIOR***	50.5	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
HS74A	***DURING***	50.5	.433KV=	94.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
HS74A	***AFTER***	50.5	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E168/17	***PRIOR***	34.0	.431KV=	93.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
E168/17	***DURING***	34.0	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
E168/17	***AFTER***	34.0	.429KV=	93.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V8A	***PRIOR***	40.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
V8A	***DURING***	40.0	.433KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
V8A	***AFTER***	40.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V10	***PRIOR***	10.0	.433KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10	***DURING***	10.0	.425KV=	92.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10	***AFTER***	10.0	.431KV=	93.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V76/232	***PRIOR***	36.0	.437KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232	***DURING***	36.0	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232	***AFTER***	36.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV1417***PRIOR***	1.5	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
MOV1417***DURING***	1.5	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
MOV1417***AFTER***	1.5	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B50	***PRIOR***	.444KV= 90.2% OF	.492KV	122.8	60.2	.0 .0
4B50	***DURING***	.437KV= 88.8% OF	.492KV	122.8	60.2	.0 .0
4B50	***AFTER***	.443KV= 90.0% OF	.492KV	122.8	60.2	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201C ***PRIOR***	150.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4P201C ***DURING***	150.0	.432KV= 93.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4P201C ***AFTER***	150.0	.437KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B51	***PRIOR***	.446KV= 90.4% OF	.493KV	131.5	81.4	.9 .0
4B51	***DURING***	.446KV= 90.4% OF	.493KV	131.5	81.4	.9 .0
4B51	***AFTER***	.446KV= 90.4% OF	.493KV	131.5	81.4	.9 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4A82	***PRIOR***	3.923KV= 94.3% OF	4.160KV	5770.1	3260.2	.0 .0
4A82	***DURING***	3.918KV= 94.2% OF	4.160KV	5770.1	3260.2	.0 .0
4A82	***AFTER***	3.922KV= 94.3% OF	4.160KV	5770.1	3260.2	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B02	***PRIOR***	.458KV= 92.8% OF	.493KV	206.9	113.0	.0 .0
4B02	***DURING***	.457KV= 92.7% OF	.493KV	206.9	113.0	.0 .0
4B02	***AFTER***	.458KV= 92.8% OF	.493KV	206.9	113.0	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B04	***PRIOR***	.449KV= 91.1% OF	.492KV	260.8	131.2	.0 .0
4B04	***DURING***	.444KV= 90.1% OF	.492KV	260.8	131.2	.0 .0
4B04	***AFTER***	.448KV= 91.0% OF	.492KV	260.8	131.2	.0 .0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4806	***PRIOR***	.456KV= 92.4% OF	.493KV	160.7	98.0	31.5	.0
4806	***DURING***	.455KV= 92.3% OF	.493KV	160.7	98.0	31.4	.0
4806	***AFTER***	.456KV= 92.4% OF	.493KV	160.7	98.0	31.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4852	***PRIOR***	.441KV= 89.6% OF	.492KV	125.8	77.9	.8	.0
4852	***DURING***	.436KV= 88.6% OF	.492KV	125.8	77.9	.8	.0
4852	***AFTER***	.440KV= 89.4% OF	.492KV	125.8	77.9	.8	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4P244B	***PRIOR***	1.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P244B	***DURING***	1.0	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P244B	***AFTER***	1.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V63B	***PRIOR***	2.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V63B	***DURING***	2.0	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V63B	***AFTER***	2.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V70B	***PRIOR***	.5	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V70B	***DURING***	.5	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V70B	***AFTER***	.5	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V65B ***PRIOR***	2.0	.441KV= 95.8% OF	.460 KV	* WARNING WARNING WARNING	*
4V65B ***DURING***	2.0	.436KV= 94.7% OF	.460 KV	* WARNING WARNING WARNING	*
4V65B ***AFTER***	2.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V67B ***PRIOR***	40.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*
4V67B ***DURING***	40.0	.435KV= 94.6% OF	.460 KV	* WARNING WARNING WARNING	*
4V67B ***AFTER***	40.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V64B ***PRIOR***	3.0	.441KV= 95.9% OF	.460 KV	* WARNING WARNING WARNING	*
4V64B ***DURING***	3.0	.436KV= 94.8% OF	.460 KV	* WARNING WARNING WARNING	*
4V64B ***AFTER***	3.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P241B ***PRIOR***	1.0	.441KV= 95.8% OF	.460 KV	* WARNING WARNING WARNING	*
4P241B ***DURING***	1.0	.436KV= 94.7% OF	.460 KV	* WARNING WARNING WARNING	*
4P241B ***AFTER***	1.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4S226B ***PRIOR***	15.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING	*
4S226B ***DURING***	15.0	.435KV= 94.5% OF	.460 KV	* WARNING WARNING WARNING	*
4S226B ***AFTER***	15.0	.439KV= 95.4% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V68B ***PRIOR***	40.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*
4V68B ***DURING***	40.0	.435KV= 94.6% OF	.460 KV	* WARNING WARNING WARNING	*
4V68B ***AFTER***	40.0	.439KV= 95.5% OF	.460 KV	* WARNING WARNING WARNING	*



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4P245B ***PRIOR***	.8	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P245B ***DURING***	.8	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P245B ***AFTER***	.8	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V69B ***PRIOR***	40.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V69B ***DURING***	40.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V69B ***AFTER***	40.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4S231B ***PRIOR***	9.5	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4S231B ***DURING***	9.5	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4S231B ***AFTER***	9.5	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B53	***PRIOR***	.453KV= 91.9% OF	.493KV	14.6	9.0	24.0	.0
4B53	***DURING***	.453KV= 91.9% OF	.493KV	14.6	9.0	24.0	.0
4B53	***AFTER***	.453KV= 91.9% OF	.493KV	14.6	9.0	24.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B54	***PRIOR***	.449KV= 91.1% OF	.492KV	14.6	9.0	23.6	.0
4B54	***DURING***	.444KV= 90.1% OF	.492KV	14.6	9.0	23.1	.0
4B54	***AFTER***	.448KV= 90.9% OF	.492KV	14.6	9.0	23.5	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS114	***PRIOR***	233.794KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.794KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.794KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA1	***PRIOR***	4.007KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	4.007KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.007KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AB1	***PRIOR***	3.964KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.964KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.964KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA2	***PRIOR***	3.961KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.961KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.961KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AD	***PRIOR***	3.958KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.958KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.958KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B01	***PRIOR***	.453KV= 91.9% OF .493KV	445.6	231.0	.0	.0
4B01	***DURING***	.453KV= 91.9% OF .493KV	445.6	231.0	.0	.0
4B01	***AFTER***	.453KV= 91.9% OF .493KV	445.6	231.0	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B03	***PRIOR***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.2	2.5
4B03	***DURING***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.2	2.5
4B03	***AFTER***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.2	2.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05V	***PRIOR***	.452KV= 91.7% OF	.493KV	116.3	71.5	.9	.0
4B05V	***DURING***	.452KV= 91.7% OF	.493KV	116.3	71.5	.9	.0
4B05V	***AFTER***	.452KV= 91.7% OF	.493KV	116.3	71.5	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

4V30B	***PRIOR***	30.0	.436KV= 94.8% OF	.460 KV	* WARNING	WARNING	WARNING	*
4V30B	***DURING***	30.0	.436KV= 94.8% OF	.460 KV	* WARNING	WARNING	WARNING	*
4V30B	***AFTER***	30.0	.436KV= 94.8% OF	.460 KV	* WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

MOV1420	***PRIOR***	5.2	.440KV= 95.7% OF	.460 KV	* WARNING	WARNING	WARNING	*
MOV1420	***DURING***	5.2	.440KV= 95.7% OF	.460 KV	* WARNING	WARNING	WARNING	*
MOV1420	***AFTER***	5.2	.440KV= 95.7% OF	.460 KV	* WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05N	***PRIOR***	.450KV= 91.2% OF	.493KV	62.8	40.1	230.8	.0
4B05N	***DURING***	.450KV= 91.2% OF	.493KV	62.8	40.1	230.8	.0
4B05N	***AFTER***	.450KV= 91.2% OF	.493KV	62.8	40.1	230.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B07	***PRIOR***	.459KV= 93.2% OF	.493KV	190.3	117.5	1.8	.0
4B07	***DURING***	.459KV= 93.2% OF	.493KV	190.3	117.5	1.8	.0
4B07	***AFTER***	.459KV= 93.2% OF	.493KV	190.3	117.5	1.8	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B08	***PRIOR***	.442KV= 89.8% OF	.492KV	260.9	160.5	37.9
4B08	***DURING***	.442KV= 89.8% OF	.492KV	260.9	160.5	37.9
4B08	***AFTER***	.442KV= 89.8% OF	.492KV	260.9	160.5	37.9
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
		HP				
4V1B	***PRIOR***	100.0	.439KV= 95.5% OF	.460 KV	* WARNING	WARNING
4V1B	***DURING***	100.0	.439KV= 95.5% OF	.460 KV	* WARNING	WARNING
4V1B	***AFTER***	100.0	.439KV= 95.5% OF	.460 KV	* WARNING	WARNING
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
		HP				
4V30A	***PRIOR***	30.0	.439KV= 95.3% OF	.460 KV	* WARNING	WARNING
4V30A	***DURING***	30.0	.439KV= 95.3% OF	.460 KV	* WARNING	WARNING
4V30A	***AFTER***	30.0	.439KV= 95.3% OF	.460 KV	* WARNING	WARNING
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
		HP				
S77A	***PRIOR***	3.4	.441KV= 95.8% OF	.460 KV	* WARNING	WARNING
S77A	***DURING***	3.4	.441KV= 95.8% OF	.460 KV	* WARNING	WARNING
S77A	***AFTER***	3.4	.441KV= 95.8% OF	.460 KV	* WARNING	WARNING
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
		HP				
S78A	***PRIOR***	3.4	.441KV= 95.8% OF	.460 KV	* WARNING	WARNING
S78A	***DURING***	3.4	.441KV= 95.8% OF	.460 KV	* WARNING	WARNING
S78A	***AFTER***	3.4	.441KV= 95.8% OF	.460 KV	* WARNING	WARNING



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S75A ***PRIOR***	5.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
S75A ***DURING***	5.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
S75A ***AFTER***	5.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
NS74A ***PRIOR***	50.5	.439KV=	95.4% OF	.460 KV	* WARNING WARNING WARNING *
NS74A ***DURING***	50.5	.439KV=	95.4% OF	.460 KV	* WARNING WARNING WARNING *
NS74A ***AFTER***	50.5	.439KV=	95.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E168/17***PRIOR***	34.0	.429KV=	93.4% OF	.460 KV	* WARNING WARNING WARNING *
E168/17***DURING***	34.0	.429KV=	93.4% OF	.460 KV	* WARNING WARNING WARNING *
E168/17***AFTER***	34.0	.429KV=	93.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V8A ***PRIOR***	40.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
V8A ***DURING***	40.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
V8A ***AFTER***	40.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V10 ***PRIOR***	10.0	.431KV=	93.8% OF	.460 KV	* WARNING WARNING WARNING *
V10 ***DURING***	10.0	.431KV=	93.8% OF	.460 KV	* WARNING WARNING WARNING *
V10 ***AFTER***	10.0	.431KV=	93.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V76/232***PRIOR***	36.0	.436KV=	94.8% OF	.460 KV	* WARNING WARNING WARNING *
V76/232***DURING***	36.0	.436KV=	94.8% OF	.460 KV	* WARNING WARNING WARNING *
V76/232***AFTER***	36.0	.436KV=	94.8% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
MOV1417***PRIOR***	1.5	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1417***DURING***	1.5	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1417***AFTER***	1.5	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B50	***PRIOR***	.443KV= 90.0% OF	.492KV	122.8	60.2	.0	.0
4B50	***DURING***	.443KV= 90.0% OF	.492KV	122.8	60.2	.0	.0
4B50	***AFTER***	.443KV= 90.0% OF	.492KV	122.8	60.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4P201C ***PRIOR***	150.0	.437KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C ***DURING***	150.0	.437KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C ***AFTER***	150.0	.437KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B51	***PRIOR***	.446KV= 90.4% OF	.493KV	131.5	81.4	.9	.0
4B51	***DURING***	.446KV= 90.4% OF	.493KV	131.5	81.4	.9	.0
4B51	***AFTER***	.446KV= 90.4% OF	.493KV	131.5	81.4	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.922KV= 94.3% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.922KV= 94.3% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.922KV= 94.3% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.458KV= 92.8% OF	.493KV	206.9	113.0	.0	.0
4B02	***DURING***	.458KV= 92.8% OF	.493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.458KV= 92.8% OF	.493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR***	.448KV= 91.0% OF	.492KV	260.8	131.2	.0	.0
4B04	***DURING***	.448KV= 91.0% OF	.492KV	260.8	131.2	.0	.0
4B04	***AFTER***	.448KV= 91.0% OF	.492KV	260.8	131.2	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4806	***PRIOR***	.456KV= 92.4% OF	.493KV	160.7	98.0	31.5	.0
4806	***DURING***	.456KV= 92.4% OF	.493KV	160.7	98.0	31.5	.0
4806	***AFTER***	.456KV= 92.4% OF	.493KV	160.7	98.0	31.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4852	***PRIOR***	.440KV= 89.4% OF	.492KV	125.8	77.9	.8	.0
4852	***DURING***	.440KV= 89.4% OF	.492KV	125.8	77.9	.8	.0
4852	***AFTER***	.440KV= 89.4% OF	.492KV	125.8	77.9	.8	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4P244B	***PRIOR***	1.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P244B	***DURING***	1.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P244B	***AFTER***	1.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V63B	***PRIOR***	2.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V63B	***DURING***	2.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V63B	***AFTER***	2.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V70B	***PRIOR***	.5	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V70B	***DURING***	.5	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V70B	***AFTER***	.5	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V65B ***PRIOR***	2.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING *	
4V65B ***DURING***	2.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING *	
4V65B ***AFTER***	2.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V67B ***PRIOR***	40.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING *	
4V67B ***DURING***	40.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING *	
4V67B ***AFTER***	40.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V64B ***PRIOR***	3.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING *	
4V64B ***DURING***	3.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING *	
4V64B ***AFTER***	3.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P241B ***PRIOR***	1.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING *	
4P241B ***DURING***	1.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING *	
4P241B ***AFTER***	1.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4S226B ***PRIOR***	15.0	.439KV= 95.4% OF	.460 KV	* WARNING WARNING WARNING *	
4S226B ***DURING***	15.0	.439KV= 95.4% OF	.460 KV	* WARNING WARNING WARNING *	
4S226B ***AFTER***	15.0	.439KV= 95.4% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V68B ***PRIOR***	40.0	.439KV= 95.5% OF	.460 KV	* WARNING WARNING WARNING *	
4V68B ***DURING***	40.0	.439KV= 95.5% OF	.460 KV	* WARNING WARNING WARNING *	
4V68B ***AFTER***	40.0	.439KV= 95.5% OF	.460 KV	* WARNING WARNING WARNING *	

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

4P245B ***PRIOR****	.8	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING *
4P245B ***DURING***	.8	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING *
4P245B ***AFTER****	.8	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

4V69B ***PRIOR****	40.0	.439KV= 95.5% OF	.460 KV	* WARNING WARNING WARNING *
4V69B ***DURING***	40.0	.439KV= 95.5% OF	.460 KV	* WARNING WARNING WARNING *
4V69B ***AFTER****	40.0	.439KV= 95.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

4S231B ***PRIOR****	9.5	.439KV= 95.4% OF	.460 KV	* WARNING WARNING WARNING *
4S231B ***DURING***	9.5	.439KV= 95.4% OF	.460 KV	* WARNING WARNING WARNING *
4S231B ***AFTER****	9.5	.439KV= 95.4% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4B53	***PRIOR****	.453KV= 91.9% OF	.493KV	14.6	9.0	24.0	.0
4B53	***DURING***	.453KV= 91.9% OF	.493KV	14.6	9.0	24.0	.0
4B53	***AFTER****	.453KV= 91.9% OF	.493KV	14.6	9.0	24.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4B54	***PRIOR****	.448KV= 90.9% OF	.492KV	14.6	9.0	23.5	.0
4B54	***DURING***	.448KV= 90.9% OF	.492KV	14.6	9.0	23.5	.0
4B54	***AFTER****	.448KV= 90.9% OF	.492KV	14.6	9.0	23.5	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS114	***PRIOR***	233.798KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.748KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.791KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA1	***PRIOR***	4.008KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.998KV= 96.1% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.006KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AB1	***PRIOR***	3.965KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.955KV= 95.1% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.963KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA2	***PRIOR***	3.962KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.948KV= 94.9% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.960KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AD	***PRIOR***	3.959KV= 95.2% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.944KV= 94.8% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.957KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B01	***PRIOR***	.453KV= 91.9% OF .493KV	445.6	231.0	.0	.0
4B01	***DURING***	.440KV= 89.2% OF .493KV	445.6	231.0	.0	.0
4B01	***AFTER***	.451KV= 91.6% OF .493KV	445.6	231.0	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B03	***PRIOR***	.463KV= 94.0% OF	.493KV	83.0	51.6	277.7	2.5
4B03	***DURING***	.462KV= 93.6% OF	.493KV	83.0	51.6	275.7	2.5
4B03	***AFTER***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.4	2.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05V	***PRIOR***	.452KV= 91.7% OF	.493KV	108.0	66.5	.9	.0
4B05V	***DURING***	.435KV= 88.2% OF	.493KV	200.3	420.7	.8	.0
4B05V	***AFTER***	.450KV= 91.3% OF	.493KV	169.6	104.7	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V1C	***PRIOR***	100.0	.444KV= 96.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1C	***DURING***	100.0	.426KV= 92.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1C	***AFTER***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V30B	***PRIOR***	30.0	.436KV= 94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***DURING***	30.0	.419KV= 91.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***AFTER***	30.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

STARTING MOTOR NAME

	HP						
4V3B	***PRIOR***	.0	.000KV= .0% OF	.460 KV	*	MOTOR NOT STARTED YET *	
4V3B	***DURING***	75.0	.411KV= 89.3% OF	.460 KV			
4V3B	***AFTER***	75.0	.444KV= 96.5% OF	.460 KV			

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05N	***PRIOR***	.450KV= 91.3% OF	.493KV	62.8	40.1	231.1	.0
4B05N	***DURING***	.437KV= 88.6% OF	.493KV	62.8	40.1	217.6	.0
4B05N	***AFTER***	.448KV= 90.9% OF	.493KV	62.8	40.1	229.4	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B07	***PRIOR***	.460KV= 93.3% OF	.493KV	172.8	106.8	1.8 .0
4B07	***DURING***	.458KV= 93.0% OF	.493KV	172.8	106.8	1.8 .0
4B07	***AFTER***	.460KV= 93.3% OF	.493KV	172.8	106.8	1.8 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B08	***PRIOR***	.443KV= 89.9% OF	.492KV	257.2	158.2	38.0 .0
4B08	***DURING***	.441KV= 89.5% OF	.492KV	257.2	158.2	37.7 .0
4B08	***AFTER***	.442KV= 89.8% OF	.492KV	257.2	158.2	37.9 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	CONDITION	VOLTAGE	KV	WARNING	WARNING	WARNING	*
4V1B	100.0	***PRIOR***	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	*
4V1B	100.0	***DURING***	.438KV= 95.2% OF	.460 KV	*	WARNING	WARNING	*
4V1B	100.0	***AFTER***	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	CONDITION	VOLTAGE	KV	WARNING	WARNING	WARNING	*
4V30A	30.0	***PRIOR***	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING	*
4V30A	30.0	***DURING***	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	*
4V30A	30.0	***AFTER***	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	CONDITION	VOLTAGE	KV	WARNING	WARNING	WARNING	*
S77A	3.4	***PRIOR***	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	*
S77A	3.4	***DURING***	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	*
S77A	3.4	***AFTER***	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	*

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VOLTAGE DROP ANALYSIS CASE #= 6

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
S78A	***PRIOR***	3.4	.441KV=	95.8% OF	.460 KV	* WARNING WARNING WARNING *
S78A	***DURING***	3.4	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
S78A	***AFTER***	3.4	.441KV=	95.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
S75A	***PRIOR***	5.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
S75A	***DURING***	5.0	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *
S75A	***AFTER***	5.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
NS74A	***PRIOR***	50.5	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
NS74A	***DURING***	50.5	.438KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *
NS74A	***AFTER***	50.5	.439KV=	95.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
E16B/17	***PRIOR***	34.0	.430KV=	93.4% OF	.460 KV	* WARNING WARNING WARNING *
E16B/17	***DURING***	34.0	.428KV=	93.0% OF	.460 KV	* WARNING WARNING WARNING *
E16B/17	***AFTER***	34.0	.430KV=	93.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V8A	***PRIOR***	40.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *
V8A	***DURING***	40.0	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *
V8A	***AFTER***	40.0	.440KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V10	***PRIOR***	10.0	.432KV=	93.9% OF	.460 KV	* WARNING WARNING WARNING *
V10	***DURING***	10.0	.430KV=	93.5% OF	.460 KV	* WARNING WARNING WARNING *
V10	***AFTER***	10.0	.432KV=	93.8% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
V76/232***PRIOR***	36.0	.437KV= 94.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V76/232***DURING***	36.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V76/232***AFTER***	36.0	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B50	***PRIOR***	.443KV= 90.0% OF	.492KV	122.8	60.2	.0	.0
4B50	***DURING***	.442KV= 89.7% OF	.492KV	122.8	60.2	.0	.0
4B50	***AFTER***	.443KV= 90.0% OF	.492KV	122.8	60.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4P201C ***PRIOR***	150.0	.438KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C ***DURING***	150.0	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C ***AFTER***	150.0	.437KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B51	***PRIOR***	.446KV= 90.5% OF	.493KV	131.5	81.4	.9	.0
4B51	***DURING***	.433KV= 87.7% OF	.493KV	131.5	81.4	.8	.0
4B51	***AFTER***	.444KV= 90.1% OF	.493KV	131.5	81.4	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.923KV= 94.3% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.909KV= 94.0% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.922KV= 94.3% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.458KV= 93.0% OF	.493KV	206.9	113.0	.0	.0
4B02	***DURING***	.446KV= 90.4% OF	.493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.457KV= 92.7% OF	.493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR***	.448KV= 91.0% OF	.492KV	260.8	131.2	.0	.0
4B04	***DURING***	.447KV= 90.7% OF	.492KV	260.8	131.2	.0	.0
4B04	***AFTER***	.448KV= 91.0% OF	.492KV	260.8	131.2	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4806	***PRIOR***	.457KV= 92.6% OF	.493KV	129.4	79.0	31.6 .0
4806	***DURING***	.439KV= 89.1% OF	.493KV	227.2	432.2	29.3 .0
4806	***AFTER***	.454KV= 92.2% OF	.493KV	191.2	117.4	31.3 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V30C	***PRIOR***	30.0	.444KV= 96.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30C	***DURING***	30.0	.426KV= 92.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30C	***AFTER***	30.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

STARTING MOTOR NAME

HP

4V3C	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *			
4V3C	***DURING***	75.0	.407KV= 88.5% OF	.460 KV				
4V3C	***AFTER***	75.0	.446KV= 97.0% OF	.460 KV				

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4852	***PRIOR***	.441KV= 89.5% OF	.492KV	125.8	77.9	.8 .0
4852	***DURING***	.439KV= 89.1% OF	.492KV	125.8	77.9	.8 .0
4852	***AFTER***	.440KV= 89.4% OF	.492KV	125.8	77.9	.8 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P244B	***PRIOR***	1.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P244B	***DURING***	1.0	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P244B	***AFTER***	1.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V63B	***PRIOR***	2.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V63B	***DURING***	2.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V63B	***AFTER***	2.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V70B	***PRIOR***	.5	.440KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V70B	***DURING***	.5	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V70B	***AFTER***	.5	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V65B	***PRIOR***	2.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V65B	***DURING***	2.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V65B	***AFTER***	2.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V67B	***PRIOR***	40.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V67B	***DURING***	40.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V67B	***AFTER***	40.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V64B	***PRIOR***	3.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V64B	***DURING***	3.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V64B	***AFTER***	3.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P241B	***PRIOR***	1.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P241B	***DURING***	1.0	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P241B	***AFTER***	1.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S226B ***PRIOR***	15.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S226B ***DURING***	15.0	.437KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S226B ***AFTER***	15.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V68B ***PRIOR***	40.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V68B ***DURING***	40.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V68B ***AFTER***	40.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P245B ***PRIOR***	.8	.440KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245B ***DURING***	.8	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245B ***AFTER***	.8	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V69B ***PRIOR***	40.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69B ***DURING***	40.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69B ***AFTER***	40.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S231B ***PRIOR***	9.5	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231B ***DURING***	9.5	.437KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231B ***AFTER***	9.5	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B53	***PRIOR***	.453KV=	91.9% OF	.493KV	14.6	9.0	24.1 .0
4B53	***DURING***	.440KV=	89.2% OF	.493KV	14.6	9.0	22.7 .0
4B53	***AFTER***	.452KV=	91.6% OF	.493KV	14.6	9.0	23.9 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B54	***PRIOR***	.448KV=	91.0% OF	.492KV	14.6	9.0	23.5 .0
4B54	***DURING***	.446KV=	90.6% OF	.492KV	14.6	9.0	23.3 .0
4B54	***AFTER***	.448KV=	90.9% OF	.492KV	14.6	9.0	23.5 .0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.791KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.765KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.787KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.006KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	4.005KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.006KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.963KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.955KV= 95.1% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.962KV= 95.2% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.960KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.959KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.960KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AD	***PRIOR***	3.957KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.955KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.956KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B01	***PRIOR***	.451KV= 91.6% OF .493KV	445.6	231.0	.0	.0
4B01	***DURING***	.451KV= 91.5% OF .493KV	445.6	231.0	.0	.0
4B01	***AFTER***	.451KV= 91.6% OF .493KV	445.6	231.0	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B03	***PRIOR***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.4	2.5
4B03	***DURING***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.2	2.5
4B03	***AFTER***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.4	2.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B05V	***PRIOR***	.450KV= 91.3% OF	.493KV	169.6	104.7	.9	.0
4B05V	***DURING***	.450KV= 91.2% OF	.493KV	169.6	104.7	.9	.0
4B05V	***AFTER***	.450KV= 91.2% OF	.493KV	169.6	104.7	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V1C	***PRIOR***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V1C	***DURING***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V1C	***AFTER***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V30B	***PRIOR***	30.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30B	***DURING***	30.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30B	***AFTER***	30.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B05N	***PRIOR***	.448KV= 90.9% OF	.493KV	62.8	40.1	229.4	.0
4B05N	***DURING***	.448KV= 90.9% OF	.493KV	62.8	40.1	229.2	.0
4B05N	***AFTER***	.448KV= 90.9% OF	.493KV	62.8	40.1	229.3	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B07	***PRIOR***	.460KV= 93.3% OF	.493KV	172.8	106.8	1.8	.0
4B07	***DURING***	.460KV= 93.3% OF	.493KV	172.8	106.8	1.8	.0
4B07	***AFTER***	.460KV= 93.3% OF	.493KV	172.8	106.8	1.8	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR	
4B08	***PRIOR***	.442KV= 89.8% OF	.492KV	257.2	158.2	37.9	.0
4B08	***DURING***	.423KV= 86.0% OF	.492KV	339.4	503.1	34.7	.0
4B08	***AFTER***	.440KV= 89.3% OF	.492KV	318.5	196.2	37.5	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4V1B	***PRIOR***	100.0	.439KV= 95.5% OF	.460 KV	* WARNING	WARNING	WARNING *
4V1B	***DURING***	100.0	.420KV= 91.3% OF	.460 KV	* WARNING	WARNING	WARNING *
4V1B	***AFTER***	100.0	.436KV= 94.9% OF	.460 KV	* WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4V30A	***PRIOR***	30.0	.439KV= 95.4% OF	.460 KV	* WARNING	WARNING	WARNING *
4V30A	***DURING***	30.0	.419KV= 91.2% OF	.460 KV	* WARNING	WARNING	WARNING *
4V30A	***AFTER***	30.0	.436KV= 94.8% OF	.460 KV	* WARNING	WARNING	WARNING *

STARTING MOTOR NAME

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4V3A	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *		
4V3A	***DURING***	75.0	.409KV= 88.9% OF	.460 KV	* WARNING	WARNING	WARNING *
4V3A	***AFTER***	75.0	.436KV= 94.7% OF	.460 KV	* WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
S77A	***PRIOR***	3.4	.441KV= 95.8% OF	.460 KV	* WARNING	WARNING	WARNING *
S77A	***DURING***	3.4	.421KV= 91.6% OF	.460 KV	* WARNING	WARNING	WARNING *
S77A	***AFTER***	3.4	.438KV= 95.2% OF	.460 KV	* WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78A	***PRIOR***	3.4	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78A	***DURING***	3.4	.421KV=	91.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78A	***AFTER***	3.4	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75A	***PRIOR***	5.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75A	***DURING***	5.0	.420KV=	91.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75A	***AFTER***	5.0	.436KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
NS74A	***PRIOR***	50.5	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74A	***DURING***	50.5	.420KV=	91.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74A	***AFTER***	50.5	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E16B/17	***PRIOR***	34.0	.430KV=	93.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16B/17	***DURING***	34.0	.410KV=	89.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16B/17	***AFTER***	34.0	.427KV=	92.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V8A	***PRIOR***	40.0	.440KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V8A	***DURING***	40.0	.420KV=	91.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
V8A	***AFTER***	40.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V10	***PRIOR***	10.0	.432KV=	93.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10	***DURING***	10.0	.412KV=	89.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10	***AFTER***	10.0	.429KV=	93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V29A	***PRIOR***	1.0	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29A	***DURING***	1.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29A	***AFTER***	1.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V76/232	***PRIOR***	36.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232	***DURING***	36.0	.417KV=	90.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232	***AFTER***	36.0	.434KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4850	***PRIOR***	.443KV= 90.0% OF	.492KV	122.8	60.2	.0	.0
4850	***DURING***	.425KV= 86.3% OF	.492KV	122.8	60.2	.0	.0
4850	***AFTER***	.441KV= 89.5% OF	.492KV	122.8	60.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P201C	***PRIOR***	150.0	.437KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P201C	***DURING***	150.0	.419KV=	91.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P201C	***AFTER***	150.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4851	***PRIOR***	.444KV= 90.1% OF	.493KV	131.5	81.4	.9	.0
4851	***DURING***	.444KV= 90.1% OF	.493KV	131.5	81.4	.9	.0
4851	***AFTER***	.444KV= 90.1% OF	.493KV	131.5	81.4	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4A82	***PRIOR***	3.922KV= 94.3% OF	4.160KV	5770.1	3260.2	.0	.0
4A82	***DURING***	3.908KV= 94.0% OF	4.160KV	5770.1	3260.2	.0	.0
4A82	***AFTER***	3.920KV= 94.2% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4802	***PRIOR***	.457KV= 92.7% OF	.493KV	206.9	113.0	.0	.0
4802	***DURING***	.455KV= 92.3% OF	.493KV	206.9	113.0	.0	.0
4802	***AFTER***	.457KV= 92.6% OF	.493KV	206.9	113.0	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR	
4804	***PRIOR***	.448KV= 91.0% OF	.492KV	260.8	131.2	.0	.0
4804	***DURING***	.435KV= 88.3% OF	.492KV	260.8	131.2	.0	.0
4804	***AFTER***	.446KV= 90.6% OF	.492KV	260.8	131.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE	MOTOR	WARNING	WARNING	WARNING
4P214B	250.0	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING *
4P214B	250.0	.430KV= 93.4% OF	.460 KV	*	WARNING	WARNING *
4P214B	250.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR	
4806	***PRIOR***	.454KV= 92.2% OF	.493KV	191.2	117.4	31.3	.0
4806	***DURING***	.453KV= 91.8% OF	.493KV	191.2	117.4	31.1	.0
4806	***AFTER***	.454KV= 92.1% OF	.493KV	191.2	117.4	31.3	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE	MOTOR	WARNING	WARNING	WARNING
4V30C	30.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING *
4V30C	30.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING *
4V30C	30.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR	
4852	***PRIOR***	.440KV= 89.4% OF	.492KV	125.8	77.9	.8	.0
4852	***DURING***	.427KV= 86.7% OF	.492KV	125.8	77.9	.8	.0
4852	***AFTER***	.439KV= 89.1% OF	.492KV	125.8	77.9	.8	.0



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P244B ***PRIOR***	1.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*
4P244B ***DURING***	1.0	.427KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING	*
4P244B ***AFTER***	1.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V63B ***PRIOR***	2.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*
4V63B ***DURING***	2.0	.427KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING	*
4V63B ***AFTER***	2.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V70B ***PRIOR***	.5	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*
4V70B ***DURING***	.5	.427KV= 92.8% OF	.460 KV	* WARNING WARNING WARNING	*
4V70B ***AFTER***	.5	.439KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V65B ***PRIOR***	2.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*
4V65B ***DURING***	2.0	.427KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING	*
4V65B ***AFTER***	2.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V67B ***PRIOR***	40.0	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING	*
4V67B ***DURING***	40.0	.426KV= 92.6% OF	.460 KV	* WARNING WARNING WARNING	*
4V67B ***AFTER***	40.0	.438KV= 95.2% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V64B ***PRIOR***	3.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*
4V64B ***DURING***	3.0	.427KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING	*
4V64B ***AFTER***	3.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P241B ***PRIOR***	1.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *
4P241B ***DURING***	1.0	.426KV=	92.7% OF	.460 KV	* WARNING WARNING WARNING *
4P241B ***AFTER***	1.0	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4S226B ***PRIOR***	15.0	.439KV=	95.4% OF	.460 KV	* WARNING WARNING WARNING *
4S226B ***DURING***	15.0	.425KV=	92.4% OF	.460 KV	* WARNING WARNING WARNING *
4S226B ***AFTER***	15.0	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V68B ***PRIOR***	40.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
4V68B ***DURING***	40.0	.426KV=	92.6% OF	.460 KV	* WARNING WARNING WARNING *
4V68B ***AFTER***	40.0	.438KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P245B ***PRIOR***	.8	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *
4P245B ***DURING***	.8	.427KV=	92.7% OF	.460 KV	* WARNING WARNING WARNING *
4P245B ***AFTER***	.8	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V69B ***PRIOR***	40.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
4V69B ***DURING***	40.0	.426KV=	92.5% OF	.460 KV	* WARNING WARNING WARNING *
4V69B ***AFTER***	40.0	.438KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4S231B ***PRIOR***	9.5	.439KV=	95.4% OF	.460 KV	* WARNING WARNING WARNING *
4S231B ***DURING***	9.5	.425KV=	92.4% OF	.460 KV	* WARNING WARNING WARNING *
4S231B ***AFTER***	9.5	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B53	***PRIOR***	.452KV= 91.6% OF .493KV	14.6	9.0	23.9	.0
4B53	***DURING***	.451KV= 91.6% OF .493KV	14.6	9.0	23.9	.0
4B53	***AFTER***	.452KV= 91.6% OF .493KV	14.6	9.0	23.9	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4854	***PRIOR***	.448KV= 90.9% OF	.492KV	14.6	9.0	23.5	.0
4854	***DURING***	.434KV= 88.2% OF	.492KV	14.6	9.0	22.1	.0
4854	***AFTER***	.446KV= 90.6% OF	.492KV	14.6	9.0	23.3	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.787KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.787KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.787KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.006KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	4.006KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.006KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.962KV= 95.2% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.962KV= 95.2% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.962KV= 95.2% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.960KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.960KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.960KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AD	***PRIOR***	3.956KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.956KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.956KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B01	***PRIOR***	.451KV= 91.6% OF .493KV	445.6	231.0	.0	.0
4B01	***DURING***	.451KV= 91.6% OF .493KV	445.6	231.0	.0	.0
4B01	***AFTER***	.451KV= 91.6% OF .493KV	445.6	231.0	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B03	***PRIOR***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.4	2.5
4B03	***DURING***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.4	2.5
4B03	***AFTER***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.4	2.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05V	***PRIOR***	.450KV= 91.2% OF	.493KV	169.6	104.7	.9	.0
4B05V	***DURING***	.450KV= 91.2% OF	.493KV	169.6	104.7	.9	.0
4B05V	***AFTER***	.450KV= 91.2% OF	.493KV	169.6	104.7	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V1C	***PRIOR***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1C	***DURING***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1C	***AFTER***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V30B	***PRIOR***	30.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***DURING***	30.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***AFTER***	30.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05N	***PRIOR***	.448KV= 90.9% OF	.493KV	62.8	40.1	229.3	.0
4B05N	***DURING***	.448KV= 90.9% OF	.493KV	62.8	40.1	229.3	.0
4B05N	***AFTER***	.448KV= 90.9% OF	.493KV	62.8	40.1	229.3	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B07	***PRIOR***	.460KV= 93.3% OF	.493KV	172.8	106.8	1.8	.0
4B07	***DURING***	.460KV= 93.3% OF	.493KV	172.8	106.8	1.8	.0
4B07	***AFTER***	.460KV= 93.3% OF	.493KV	172.8	106.8	1.8	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4808	***PRIOR***	.440KV= 89.3% OF	.492KV	318.5	196.2	37.5 .0
4808	***DURING***	.440KV= 89.3% OF	.492KV	318.5	196.2	37.5 .0
4808	***AFTER***	.440KV= 89.3% OF	.492KV	318.5	196.2	37.5 .0
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
4V1B	***PRIOR***	100.0 .436KV= 94.9% OF	.460 KV	*	WARNING	WARNING WARNING *
4V1B	***DURING***	100.0 .436KV= 94.9% OF	.460 KV	*	WARNING	WARNING WARNING *
4V1B	***AFTER***	100.0 .436KV= 94.9% OF	.460 KV	*	WARNING	WARNING WARNING *
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
4V30A	***PRIOR***	30.0 .436KV= 94.8% OF	.460 KV	*	WARNING	WARNING WARNING *
4V30A	***DURING***	30.0 .436KV= 94.8% OF	.460 KV	*	WARNING	WARNING WARNING *
4V30A	***AFTER***	30.0 .436KV= 94.8% OF	.460 KV	*	WARNING	WARNING WARNING *
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
4V3A	***PRIOR***	75.0 .436KV= 94.7% OF	.460 KV	*	WARNING	WARNING WARNING *
4V3A	***DURING***	75.0 .436KV= 94.7% OF	.460 KV	*	WARNING	WARNING WARNING *
4V3A	***AFTER***	75.0 .436KV= 94.7% OF	.460 KV	*	WARNING	WARNING WARNING *
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
S77A	***PRIOR***	3.4 .438KV= 95.2% OF	.460 KV	*	WARNING	WARNING WARNING *
S77A	***DURING***	3.4 .438KV= 95.2% OF	.460 KV	*	WARNING	WARNING WARNING *
S77A	***AFTER***	3.4 .438KV= 95.2% OF	.460 KV	*	WARNING	WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78A	***PRIOR***	3.4	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78A	***DURING***	3.4	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78A	***AFTER***	3.4	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75A	***PRIOR***	5.0	.436KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75A	***DURING***	5.0	.436KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75A	***AFTER***	5.0	.436KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
HS74A	***PRIOR***	50.5	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
HS74A	***DURING***	50.5	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
HS74A	***AFTER***	50.5	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E168/17	***PRIOR***	34.0	.427KV=	92.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
E168/17	***DURING***	34.0	.427KV=	92.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
E168/17	***AFTER***	34.0	.427KV=	92.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V8A	***PRIOR***	40.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
V8A	***DURING***	40.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
V8A	***AFTER***	40.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V10	***PRIOR***	10.0	.429KV=	93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10	***DURING***	10.0	.429KV=	93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10	***AFTER***	10.0	.429KV=	93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V29A	***PRIOR***	1.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29A	***DURING***	1.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29A	***AFTER***	1.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V76/232	***PRIOR***	36.0	.434KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232	***DURING***	36.0	.434KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232	***AFTER***	36.0	.434KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B50	***PRIOR***	.441KV= 89.5% OF	.492KV	122.8	60.2	.0	.0
4B50	***DURING***	.441KV= 89.5% OF	.492KV	122.8	60.2	.0	.0
4B50	***AFTER***	.441KV= 89.5% OF	.492KV	122.8	60.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P201C	***PRIOR***	150.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P201C	***DURING***	150.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P201C	***AFTER***	150.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B51	***PRIOR***	.444KV= 90.1% OF	.493KV	131.5	81.4	.9	.0
4B51	***DURING***	.444KV= 90.1% OF	.493KV	131.5	81.4	.9	.0
4B51	***AFTER***	.444KV= 90.1% OF	.493KV	131.5	81.4	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.920KV= 94.2% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.920KV= 94.2% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.920KV= 94.2% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.457KV= 92.6% OF	.493KV	206.9	113.0	.0	.0
4B02	***DURING***	.457KV= 92.6% OF	.493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.457KV= 92.6% OF	.493KV	206.9	113.0	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR***	.446KV= 90.6% OF	.492KV	260.8	131.2	.0	.0
4B04	***DURING***	.446KV= 90.6% OF	.492KV	260.8	131.2	.0	.0
4B04	***AFTER***	.446KV= 90.6% OF	.492KV	260.8	131.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P214B	***PRIOR***	250.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P214B	***DURING***	250.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P214B	***AFTER***	250.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B06	***PRIOR***	.454KV= 92.1% OF	.493KV	191.2	117.4	31.3	.0
4B06	***DURING***	.454KV= 92.1% OF	.493KV	191.2	117.4	31.3	.0
4B06	***AFTER***	.454KV= 92.1% OF	.493KV	191.2	117.4	31.3	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V30C	***PRIOR***	30.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30C	***DURING***	30.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30C	***AFTER***	30.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B52	***PRIOR***	.439KV= 89.1% OF	.492KV	125.8	77.9	.8	.0
4B52	***DURING***	.439KV= 89.1% OF	.492KV	125.8	77.9	.8	.0
4B52	***AFTER***	.439KV= 89.1% OF	.492KV	125.8	77.9	.8	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P244B ***PRIOR***	1.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*
4P244B ***DURING***	1.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*
4P244B ***AFTER***	1.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V63B ***PRIOR***	2.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*
4V63B ***DURING***	2.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*
4V63B ***AFTER***	2.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V70B ***PRIOR***	.5	.439KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*
4V70B ***DURING***	.5	.439KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*
4V70B ***AFTER***	.5	.439KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V65B ***PRIOR***	2.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*
4V65B ***DURING***	2.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*
4V65B ***AFTER***	2.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V67B ***PRIOR***	40.0	.438KV= 95.2% OF	.460 KV	* WARNING WARNING WARNING	*
4V67B ***DURING***	40.0	.438KV= 95.2% OF	.460 KV	* WARNING WARNING WARNING	*
4V67B ***AFTER***	40.0	.438KV= 95.2% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V64B ***PRIOR***	3.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*
4V64B ***DURING***	3.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*
4V64B ***AFTER***	3.0	.438KV= 95.3% OF	.460 KV	* WARNING WARNING WARNING	*

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P241B ***PRIOR***	1.0	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P241B ***DURING***	1.0	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P241B ***AFTER***	1.0	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S226B ***PRIOR***	15.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S226B ***DURING***	15.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S226B ***AFTER***	15.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V68B ***PRIOR***	40.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V68B ***DURING***	40.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V68B ***AFTER***	40.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P245B ***PRIOR***	.8	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245B ***DURING***	.8	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245B ***AFTER***	.8	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V69B ***PRIOR***	40.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69B ***DURING***	40.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69B ***AFTER***	40.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S231B ***PRIOR***	9.5	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231B ***DURING***	9.5	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231B ***AFTER***	9.5	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B53	***PRIOR***	.452KV= 91.6% OF	.493KV	14.6	9.0	23.9	.0
4B53	***DURING***	.452KV= 91.6% OF	.493KV	14.6	9.0	23.9	.0
4B53	***AFTER***	.452KV= 91.6% OF	.493KV	14.6	9.0	23.9	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B54	***PRIOR***	.446KV= 90.6% OF	.492KV	14.6	9.0	23.3	.0
4B54	***DURING***	.446KV= 90.6% OF	.492KV	14.6	9.0	23.3	.0
4B54	***AFTER***	.446KV= 90.6% OF	.492KV	14.6	9.0	23.3	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.787KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	231.882KV= 99.5% OF233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.572KV=100.2% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.006KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.343KV= 80.4% OF 4.160KV	9603.6	28985.7	.0	.0
4AA1	***AFTER***	3.939KV= 94.7% OF 4.160KV	9561.0	5210.9	.0	.0

STARTING MOTOR NAME

HP

4P1A	***PRIOR***	.0	.000KV= .0% OF 4.000 KV	* MOTOR NOT STARTED YET *		
4P1A	***DURING***	7000.0	3.290KV= 82.2% OF 4.000 KV			
4P1A	***AFTER***	7000.0	3.931KV= 98.3% OF 4.000 KV			

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.962KV= 95.2% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.859KV= 92.8% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.951KV= 95.0% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.960KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.287KV= 79.0% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.892KV= 93.6% OF 4.160KV	5770.5	3260.7	.0	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

4P7A	***PRIOR***	1250.0	3.947KV= 98.7% OF	4.000 KV	* WARNING WARNING WARNING *
4P7A	***DURING***	1250.0	3.271KV= 81.8% OF	4.000 KV	* WARNING WARNING WARNING *
4P7A	***AFTER***	1250.0	3.878KV= 97.0% OF	4.000 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

4P7C	***PRIOR***	1250.0	3.947KV= 98.7% OF	4.000 KV	* WARNING WARNING WARNING *
4P7C	***DURING***	1250.0	3.271KV= 81.8% OF	4.000 KV	* WARNING WARNING WARNING *
4P7C	***AFTER***	1250.0	3.879KV= 97.0% OF	4.000 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AD	***PRIOR***	3.956KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.283KV= 78.9% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.888KV= 93.5% OF 4.160KV	626.9	409.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

4P211C	***PRIOR***	450.0	3.950KV= 98.8% OF	4.000 KV	* WARNING WARNING WARNING *
4P211C	***DURING***	450.0	3.275KV= 81.9% OF	4.000 KV	* WARNING WARNING WARNING *
4P211C	***AFTER***	450.0	3.882KV= 97.0% OF	4.000 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

4P9C	***PRIOR***	325.0	3.953KV= 98.8% OF	4.000 KV	* WARNING WARNING WARNING *
4P9C	***DURING***	325.0	3.278KV= 81.9% OF	4.000 KV	* WARNING WARNING WARNING *
4P9C	***AFTER***	325.0	3.884KV= 97.1% OF	4.000 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4801	***PRIOR***	.451KV= 91.6% OF .493KV	445.6	231.0	.0	.0
4801	***DURING***	.368KV= 74.6% OF .493KV	445.6	231.0	.0	.0
4801	***AFTER***	.443KV= 89.9% OF .493KV	445.6	231.0	.0	.0



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201A	***PRIOR***	150.0	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P201A	***DURING***	150.0	.357KV=	77.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P201A	***AFTER***	150.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P214A	***PRIOR***	250.0	.446KV=	96.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P214A	***DURING***	250.0	.360KV=	78.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P214A	***AFTER***	250.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S6A	***PRIOR***	150.0	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
4S6A	***DURING***	150.0	.360KV=	78.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4S6A	***AFTER***	150.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4803	***PRIOR***	.463KV=	93.9% OF	.493KV	83.0	51.6	277.4 2.5
4803	***DURING***	.382KV=	77.5% OF	.493KV	83.0	51.6	189.0 1.7
4803	***AFTER***	.455KV=	92.3% OF	.493KV	83.0	51.6	267.7 2.4

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P212	***PRIOR***	100.0	.452KV=	98.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P212	***DURING***	100.0	.369KV=	80.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P212	***AFTER***	100.0	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4805V	***PRIOR***	.450KV=	91.2% OF	.493KV	169.6	104.7	.9 .0
4805V	***DURING***	.366KV=	74.2% OF	.493KV	169.6	104.7	.6 .0
4805V	***AFTER***	.441KV=	89.5% OF	.493KV	169.6	104.7	.8 .0



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V1C ***PRIOR****	100.0	.441KV= 95.9% OF	.460 KV	* WARNING WARNING WARNING *	
4V1C ***DURING***	100.0	.355KV= 77.1% OF	.460 KV	* WARNING WARNING WARNING *	
4V1C ***AFTER****	100.0	.433KV= 94.0% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V30B ***PRIOR****	30.0	.434KV= 94.3% OF	.460 KV	* WARNING WARNING WARNING *	
4V30B ***DURING***	30.0	.346KV= 75.2% OF	.460 KV	* WARNING WARNING WARNING *	
4V30B ***AFTER****	30.0	.425KV= 92.4% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V3B ***PRIOR****	75.0	.444KV= 96.4% OF	.460 KV	* WARNING WARNING WARNING *	
4V3B ***DURING***	75.0	.358KV= 77.8% OF	.460 KV	* WARNING WARNING WARNING *	
4V3B ***AFTER****	75.0	.435KV= 94.6% OF	.460 KV	* WARNING WARNING WARNING *	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B05N	***PRIOR****	.448KV= 90.9% OF	.493KV	62.8	40.1	229.3
4B05N	***DURING***	.365KV= 74.0% OF	.493KV	62.8	40.1	151.7
4B05N	***AFTER****	.440KV= 89.2% OF	.493KV	62.8	40.1	220.8

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V14A ***PRIOR****	7.5	.438KV= 95.2% OF	.460 KV	* WARNING WARNING WARNING *	
4V14A ***DURING***	7.5	.352KV= 76.5% OF	.460 KV	* WARNING WARNING WARNING *	
4V14A ***AFTER****	7.5	.429KV= 93.4% OF	.460 KV	* WARNING WARNING WARNING *	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V5 ***PRIOR****	.5	.448KV= 97.4% OF	.460 KV	* WARNING WARNING WARNING *	
4V5 ***DURING***	.5	.364KV= 79.2% OF	.460 KV	* WARNING WARNING WARNING *	
4V5 ***AFTER****	.5	.440KV= 95.6% OF	.460 KV	* WARNING WARNING WARNING *	



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V16	***PRIOR***	2.0	.447KV=	97.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V16	***DURING***	2.0	.363KV=	79.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V16	***AFTER***	2.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V18	***PRIOR***	7.5	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V18	***DURING***	7.5	.357KV=	77.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V18	***AFTER***	7.5	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V19A	***PRIOR***	15.0	.445KV=	96.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V19A	***DURING***	15.0	.361KV=	78.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V19A	***AFTER***	15.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V31B	***PRIOR***	3.0	.444KV=	96.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V31B	***DURING***	3.0	.360KV=	78.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V31B	***AFTER***	3.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V32B	***PRIOR***	.8	.447KV=	97.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V32B	***DURING***	.8	.363KV=	78.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V32B	***AFTER***	.8	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V4	***PRIOR***	5.0	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V4	***DURING***	5.0	.359KV=	78.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V4	***AFTER***	5.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V6A	***PRIOR***	7.5	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V6A	***DURING***	7.5	.359KV=	78.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V6A	***AFTER***	7.5	.435KV=	94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4F20A/B	***PRIOR***	1.5	.447KV=	97.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4F20A/B	***DURING***	1.5	.363KV=	79.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
4F20A/B	***AFTER***	1.5	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P90A	***PRIOR***	2.0	.446KV=	96.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90A	***DURING***	2.0	.362KV=	78.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90A	***AFTER***	2.0	.437KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P90B	***PRIOR***	2.0	.446KV=	96.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90B	***DURING***	2.0	.362KV=	78.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90B	***AFTER***	2.0	.437KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P90C	***PRIOR***	2.0	.446KV=	96.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90C	***DURING***	2.0	.362KV=	78.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90C	***AFTER***	2.0	.437KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4XS75/7	***PRIOR***	20.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4XS75/7	***DURING***	20.0	.356KV=	77.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
4XS75/7	***AFTER***	20.0	.433KV=	94.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4807	***PRIOR***	.460KV= 93.3% OF	.493KV	172.8	106.8	1.8 .0
4807	***DURING***	.378KV= 76.8% OF	.493KV	172.8	106.8	1.2 .0
4807	***AFTER***	.452KV= 91.6% OF	.493KV	172.8	106.8	1.8 .0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
E16F	***PRIOR***	36.0	.456KV=	99.1% OF	.460 KV	*	WARNING	WARNING
E16F	***DURING***	36.0	.374KV=	81.2% OF	.460 KV	*	WARNING	WARNING
E16F	***AFTER***	36.0	.448KV=	97.3% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
4P203A	***PRIOR***	15.0	.458KV=	99.5% OF	.460 KV	*	WARNING	WARNING
4P203A	***DURING***	15.0	.376KV=	81.7% OF	.460 KV	*	WARNING	WARNING
4P203A	***AFTER***	15.0	.449KV=	97.7% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
4V1A	***PRIOR***	100.0	.457KV=	99.2% OF	.460 KV	*	WARNING	WARNING
4V1A	***DURING***	100.0	.374KV=	81.4% OF	.460 KV	*	WARNING	WARNING
4V1A	***AFTER***	100.0	.448KV=	97.4% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
4V2A	***PRIOR***	60.0	.454KV=	98.6% OF	.460 KV	*	WARNING	WARNING
4V2A	***DURING***	60.0	.371KV=	80.6% OF	.460 KV	*	WARNING	WARNING
4V2A	***AFTER***	60.0	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B08	***PRIOR***	.440KV= 89.3% OF	.492KV	318.5	196.2	37.5 .0
4B08	***DURING***	.427KV= 86.6% OF	.492KV	318.5	196.2	35.3 .0
4B08	***AFTER***	.438KV= 89.0% OF	.492KV	318.5	196.2	37.2 .0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V1B	***PRIOR***	100.0	.436KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1B	***DURING***	100.0	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1B	***AFTER***	100.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V30A	***PRIOR***	30.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30A	***DURING***	30.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30A	***AFTER***	30.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V3A	***PRIOR***	75.0	.436KV=	94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3A	***DURING***	75.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3A	***AFTER***	75.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S77A	***PRIOR***	3.4	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77A	***DURING***	3.4	.425KV=	92.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77A	***AFTER***	3.4	.436KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78A	***PRIOR***	3.4	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78A	***DURING***	3.4	.425KV=	92.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78A	***AFTER***	3.4	.436KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75A	***PRIOR***	5.0	.436KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75A	***DURING***	5.0	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75A	***AFTER***	5.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
NS74A	***PRIOR***	50.5	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74A	***DURING***	50.5	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74A	***AFTER***	50.5	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E168/17	***PRIOR***	34.0	.427KV=	92.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
E168/17	***DURING***	34.0	.413KV=	89.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
E168/17	***AFTER***	34.0	.425KV=	92.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V8A	***PRIOR***	40.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
V8A	***DURING***	40.0	.424KV=	92.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
V8A	***AFTER***	40.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V10	***PRIOR***	10.0	.429KV=	93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10	***DURING***	10.0	.415KV=	90.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10	***AFTER***	10.0	.427KV=	92.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V29A	***PRIOR***	1.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29A	***DURING***	1.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29A	***AFTER***	1.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V76/232	***PRIOR***	36.0	.434KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232	***DURING***	36.0	.420KV=	91.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232	***AFTER***	36.0	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4850	***PRIOR***	.441KV=	89.5% OF	.492KV	122.8	60.2	.0 .0
4850	***DURING***	.427KV=	86.8% OF	.492KV	122.8	60.2	.0 .0
4850	***AFTER***	.439KV=	89.2% OF	.492KV	122.8	60.2	.0 .0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201C	150.0	***PRIOR***	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C	150.0	***DURING***	.422KV= 91.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C	150.0	***AFTER***	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B51	***PRIOR***	.444KV= 90.1% OF	.493KV	131.5	81.4	.9 .0
4B51	***DURING***	.359KV= 72.8% OF	.493KV	131.5	81.4	.6 .0
4B51	***AFTER***	.436KV= 88.4% OF	.493KV	131.5	81.4	.8 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P244A	1.0	***PRIOR***	.444KV= 96.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P244A	1.0	***DURING***	.359KV= 78.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P244A	1.0	***AFTER***	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V63A	2.0	***PRIOR***	.444KV= 96.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V63A	2.0	***DURING***	.359KV= 78.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V63A	2.0	***AFTER***	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V70A	.5	***PRIOR***	.444KV= 96.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V70A	.5	***DURING***	.359KV= 78.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V70A	.5	***AFTER***	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V65A ***PRIOR***	2.0	.444KV=	96.6% OF	.460 KV	* WARNING WARNING WARNING *
4V65A ***DURING***	2.0	.359KV=	77.9% OF	.460 KV	* WARNING WARNING WARNING *
4V65A ***AFTER***	2.0	.436KV=	94.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V67A ***PRIOR***	40.0	.444KV=	96.4% OF	.460 KV	* WARNING WARNING WARNING *
4V67A ***DURING***	40.0	.358KV=	77.8% OF	.460 KV	* WARNING WARNING WARNING *
4V67A ***AFTER***	40.0	.435KV=	94.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V64A ***PRIOR***	3.0	.444KV=	96.6% OF	.460 KV	* WARNING WARNING WARNING *
4V64A ***DURING***	3.0	.359KV=	78.0% OF	.460 KV	* WARNING WARNING WARNING *
4V64A ***AFTER***	3.0	.436KV=	94.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P241A ***PRIOR***	1.0	.444KV=	96.5% OF	.460 KV	* WARNING WARNING WARNING *
4P241A ***DURING***	1.0	.358KV=	77.9% OF	.460 KV	* WARNING WARNING WARNING *
4P241A ***AFTER***	1.0	.435KV=	94.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4S226A ***PRIOR***	15.0	.442KV=	96.1% OF	.460 KV	* WARNING WARNING WARNING *
4S226A ***DURING***	15.0	.356KV=	77.4% OF	.460 KV	* WARNING WARNING WARNING *
4S226A ***AFTER***	15.0	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V68A ***PRIOR***	40.0	.443KV=	96.4% OF	.460 KV	* WARNING WARNING WARNING *
4V68A ***DURING***	40.0	.358KV=	77.8% OF	.460 KV	* WARNING WARNING WARNING *
4V68A ***AFTER***	40.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P245A ***PRIOR***	.8	.444KV=	96.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245A ***DURING***	.8	.359KV=	78.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245A ***AFTER***	.8	.436KV=	94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V69A ***PRIOR***	40.0	.443KV=	96.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69A ***DURING***	40.0	.358KV=	77.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69A ***AFTER***	40.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S231A ***PRIOR***	9.5	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231A ***DURING***	9.5	.357KV=	77.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231A ***AFTER***	9.5	.434KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S230 ***PRIOR***	7.0	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S230 ***DURING***	7.0	.357KV=	77.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S230 ***AFTER***	7.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.920KV= 94.2% OF 4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.815KV= 91.7% OF 4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.908KV= 93.9% OF 4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.457KV= 92.6% OF .493KV	206.9	113.0	.0	.0
4B02	***DURING***	.444KV= 90.1% OF .493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.455KV= 92.3% OF .493KV	206.9	113.0	.0	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V1D	***PRIOR***	100.0	.442KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1D	***DURING***	100.0	.429KV=	93.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1D	***AFTER***	100.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR***	.446KV= 90.6% OF	.492KV	260.8	131.2	.0	.0
4B04	***DURING***	.433KV= 88.0% OF	.492KV	260.8	131.2	.0	.0
4B04	***AFTER***	.445KV= 90.3% OF	.492KV	260.8	131.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P214B	***PRIOR***	250.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P214B	***DURING***	250.0	.428KV=	93.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P214B	***AFTER***	250.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B06	***PRIOR***	.454KV= 92.1% OF	.493KV	191.2	117.4	31.3	.0
4B06	***DURING***	.441KV= 89.5% OF	.493KV	191.2	117.4	29.6	.0
4B06	***AFTER***	.453KV= 91.8% OF	.493KV	191.2	117.4	31.1	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V19B	***PRIOR***	15.0	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V19B	***DURING***	15.0	.429KV=	93.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V19B	***AFTER***	15.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V30C	***PRIOR***	30.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30C	***DURING***	30.0	.428KV=	93.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30C	***AFTER***	30.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B52	***PRIOR***	.439KV= 89.1% OF	.492KV	125.8	77.9	.8	.0
4B52	***DURING***	.425KV= 86.4% OF	.492KV	125.8	77.9	.8	.0
4B52	***AFTER***	.437KV= 88.8% OF	.492KV	125.8	77.9	.8	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P244B ***PRIOR***	1.0	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
4P244B ***DURING***	1.0	.425KV=	92.4% OF	.460 KV	* WARNING WARNING WARNING *
4P244B ***AFTER***	1.0	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V63B ***PRIOR***	2.0	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
4V63B ***DURING***	2.0	.425KV=	92.4% OF	.460 KV	* WARNING WARNING WARNING *
4V63B ***AFTER***	2.0	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V70B ***PRIOR***	.5	.439KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
4V70B ***DURING***	.5	.425KV=	92.5% OF	.460 KV	* WARNING WARNING WARNING *
4V70B ***AFTER***	.5	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V65B ***PRIOR***	2.0	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
4V65B ***DURING***	2.0	.425KV=	92.4% OF	.460 KV	* WARNING WARNING WARNING *
4V65B ***AFTER***	2.0	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V67B ***PRIOR***	40.0	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *
4V67B ***DURING***	40.0	.425KV=	92.3% OF	.460 KV	* WARNING WARNING WARNING *
4V67B ***AFTER***	40.0	.436KV=	94.9% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V64B ***PRIOR***	3.0	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
4V64B ***DURING***	3.0	.425KV=	92.5% OF	.460 KV	* WARNING WARNING WARNING *
4V64B ***AFTER***	3.0	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P241B ***PRIOR***	1.0	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
4P241B ***DURING***	1.0	.425KV=	92.4% OF	.460 KV	* WARNING WARNING WARNING *
4P241B ***AFTER***	1.0	.437KV=	94.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4S226B ***PRIOR***	15.0	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *
4S226B ***DURING***	15.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *
4S226B ***AFTER***	15.0	.436KV=	94.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V68B ***PRIOR***	40.0	.438KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *
4V68B ***DURING***	40.0	.424KV=	92.3% OF	.460 KV	* WARNING WARNING WARNING *
4V68B ***AFTER***	40.0	.436KV=	94.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P245B ***PRIOR***	.8	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
4P245B ***DURING***	.8	.425KV=	92.5% OF	.460 KV	* WARNING WARNING WARNING *
4P245B ***AFTER***	.8	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V69B ***PRIOR***	40.0	.438KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *
4V69B ***DURING***	40.0	.424KV=	92.3% OF	.460 KV	* WARNING WARNING WARNING *
4V69B ***AFTER***	40.0	.436KV=	94.8% OF	.460 KV	* WARNING WARNING WARNING *

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VOLTAGE DROP ANALYSIS CASE # 9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S231B	***PRIOR***	9.5	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231B	***DURING***	9.5	.424KV= 92.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231B	***AFTER***	9.5	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B53	***PRIOR***	.452KV= 91.6% OF	.493KV	14.6	9.0	23.9	.0
4B53	***DURING***	.368KV= 74.6% OF	.493KV	14.6	9.0	15.8	.0
4B53	***AFTER***	.443KV= 89.9% OF	.493KV	14.6	9.0	23.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
HVACHP	***PRIOR***	18.0	.452KV= 98.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
HVACHP	***DURING***	18.0	.368KV= 79.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
HVACHP	***AFTER***	18.0	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B54	***PRIOR***	.446KV= 90.6% OF	.492KV	14.6	9.0	23.3	.0
4B54	***DURING***	.433KV= 88.0% OF	.492KV	14.6	9.0	22.0	.0
4B54	***AFTER***	.445KV= 90.3% OF	.492KV	14.6	9.0	23.2	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.975KV=100.4% OF233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	232.214KV= 99.7% OF233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.750KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.016KV= 96.5% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.922KV= 94.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.004KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	4.024KV= 96.7% OF 4.160KV	4111.1	2563.0	.0	.0
4AB1	***DURING***	3.406KV= 81.9% OF 4.160KV	9306.3	27675.3	.0	.0
4AB1	***AFTER***	3.950KV= 95.0% OF 4.160KV	8982.9	5598.0	.0	.0

STARTING MOTOR NAME

HP

4P200B	***PRIOR***	.0	.000KV= .0% OF 4.000 KV	* MOTOR NOT STARTED YET *
4P200B	***DURING***	6000.0	3.330KV= 83.2% OF 4.000 KV	
4P200B	***AFTER***	6000.0	3.939KV= 98.5% OF 4.000 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.970KV= 95.4% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.875KV= 93.1% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.958KV= 95.1% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AD	***PRIOR***	3.966KV= 95.3% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.871KV= 93.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.955KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4801	***PRIOR***	.453KV= 91.8% OF	.493KV	445.6	231.0	.0	.0
4801	***DURING***	.441KV= 89.4% OF	.493KV	445.6	231.0	.0	.0
4801	***AFTER***	.451KV= 91.5% OF	.493KV	445.6	231.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4803	***PRIOR***	.464KV= 94.2% OF	.493KV	83.0	51.6	278.9	2.5
4803	***DURING***	.453KV= 91.8% OF	.493KV	83.0	51.6	265.3	2.4
4803	***AFTER***	.463KV= 93.9% OF	.493KV	83.0	51.6	277.1	2.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4805V	***PRIOR***	.451KV= 91.5% OF	.493KV	169.6	104.7	.9	.0
4805V	***DURING***	.439KV= 89.1% OF	.493KV	169.6	104.7	.8	.0
4805V	***AFTER***	.450KV= 91.2% OF	.493KV	169.6	104.7	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V1C	***PRIOR***	100.0	.442KV= 96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1C	***DURING***	100.0	.430KV= 93.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1C	***AFTER***	100.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V30B	***PRIOR***	30.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***DURING***	30.0	.423KV= 92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***AFTER***	30.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4805N	***PRIOR***	.449KV= 91.2% OF	.493KV	62.8	40.1	230.6	.0
4805N	***DURING***	.438KV= 88.8% OF	.493KV	62.8	40.1	218.7	.0
4805N	***AFTER***	.448KV= 90.9% OF	.493KV	62.8	40.1	229.1	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B07	***PRIOR***	.461KV= 93.5% OF	.493KV	172.8	106.8	1.8	.0
4B07	***DURING***	.450KV= 91.2% OF	.493KV	172.8	106.8	1.8	.0
4B07	***AFTER***	.460KV= 93.2% OF	.493KV	172.8	106.8	1.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B08	***PRIOR***	.447KV= 90.9% OF	.492KV	318.5	196.2	38.8	.0
4B08	***DURING***	.368KV= 74.7% OF	.492KV	318.5	196.2	26.2	.0
4B08	***AFTER***	.438KV= 89.0% OF	.492KV	318.5	196.2	37.2	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V1B	***PRIOR***	100.0	.444KV= 96.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1B	***DURING***	100.0	.364KV= 79.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1B	***AFTER***	100.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V30A	***PRIOR***	30.0	.444KV= 96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30A	***DURING***	30.0	.363KV= 79.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30A	***AFTER***	30.0	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V3A	***PRIOR***	75.0	.444KV= 96.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3A	***DURING***	75.0	.363KV= 79.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3A	***AFTER***	75.0	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77A	***PRIOR***	3.4	.446KV= 96.9% OF	.460 KV	* WARNING WARNING WARNING *
S77A	***DURING***	3.4	.366KV= 79.5% OF	.460 KV	* WARNING WARNING WARNING *
S77A	***AFTER***	3.4	.436KV= 94.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S78A	***PRIOR***	3.4	.446KV= 96.9% OF	.460 KV	* WARNING WARNING WARNING *
S78A	***DURING***	3.4	.366KV= 79.5% OF	.460 KV	* WARNING WARNING WARNING *
S78A	***AFTER***	3.4	.436KV= 94.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S75A	***PRIOR***	5.0	.444KV= 96.6% OF	.460 KV	* WARNING WARNING WARNING *
S75A	***DURING***	5.0	.364KV= 79.2% OF	.460 KV	* WARNING WARNING WARNING *
S75A	***AFTER***	5.0	.435KV= 94.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
NS74A	***PRIOR***	50.5	.444KV= 96.5% OF	.460 KV	* WARNING WARNING WARNING *
NS74A	***DURING***	50.5	.364KV= 79.1% OF	.460 KV	* WARNING WARNING WARNING *
NS74A	***AFTER***	50.5	.435KV= 94.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16B/17	***PRIOR***	34.0	.435KV= 94.5% OF	.460 KV	* WARNING WARNING WARNING *
E16B/17	***DURING***	34.0	.353KV= 76.6% OF	.460 KV	* WARNING WARNING WARNING *
E16B/17	***AFTER***	34.0	.425KV= 92.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V8A	***PRIOR***	40.0	.445KV= 96.6% OF	.460 KV	* WARNING WARNING WARNING *
V8A	***DURING***	40.0	.365KV= 79.2% OF	.460 KV	* WARNING WARNING WARNING *
V8A	***AFTER***	40.0	.435KV= 94.6% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V10	***PRIOR***	10.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10	***DURING***	10.0	.355KV=	77.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10	***AFTER***	10.0	.427KV=	92.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V29A	***PRIOR***	1.0	.447KV=	97.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29A	***DURING***	1.0	.367KV=	79.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29A	***AFTER***	1.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V76/232	***PRIOR***	36.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232	***DURING***	36.0	.361KV=	78.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232	***AFTER***	36.0	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B50	***PRIOR***	.448KV= 91.0% OF	.492KV	122.8	60.2	.0	.0
4B50	***DURING***	.369KV= 74.9% OF	.492KV	122.8	60.2	.0	.0
4B50	***AFTER***	.439KV= 89.2% OF	.492KV	122.8	60.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P201C	***PRIOR***	150.0	.443KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P201C	***DURING***	150.0	.362KV=	78.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P201C	***AFTER***	150.0	.433KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B51	***PRIOR***	.446KV= 90.4% OF	.493KV	131.5	81.4	.9	.0
4B51	***DURING***	.434KV= 88.0% OF	.493KV	131.5	81.4	.8	.0
4B51	***AFTER***	.444KV= 90.1% OF	.493KV	131.5	81.4	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.982KV= 95.7% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.356KV= 80.7% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.908KV= 93.9% OF	4.160KV	5770.1	3260.2	.0	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4802	***PRIOR***	.464KV= 94.1% OF	.493KV	206.9	113.0	.0	.0
4802	***DURING***	.388KV= 78.8% OF	.493KV	206.9	113.0	.0	.0
4802	***AFTER***	.455KV= 92.3% OF	.493KV	206.9	113.0	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201B	***PRIOR***	150.0	.453KV= 98.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201B	***DURING***	150.0	.376KV= 81.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201B	***AFTER***	150.0	.444KV= 96.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V1D	***PRIOR***	100.0	.450KV= 97.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V1D	***DURING***	100.0	.372KV= 80.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V1D	***AFTER***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4804	***PRIOR***	.454KV= 92.2% OF	.492KV	260.8	131.2	.0	.0
4804	***DURING***	.376KV= 76.3% OF	.492KV	260.8	131.2	.0	.0
4804	***AFTER***	.445KV= 90.3% OF	.492KV	260.8	131.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P214B	***PRIOR***	250.0	.449KV= 97.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P214B	***DURING***	250.0	.370KV= 80.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P214B	***AFTER***	250.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4S7B	***PRIOR***	75.0	.451KV=	98.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4S7B	***DURING***	75.0	.373KV=	81.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4S7B	***AFTER***	75.0	.442KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B06	***PRIOR***	.462KV= 93.6% OF	.493KV	191.2	117.4	32.3	.0
4B06	***DURING***	.385KV= 78.2% OF	.493KV	191.2	117.4	22.5	.0
4B06	***AFTER***	.453KV= 91.8% OF	.493KV	191.2	117.4	31.1	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V19B	***PRIOR***	15.0	.450KV=	97.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V19B	***DURING***	15.0	.371KV=	80.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V19B	***AFTER***	15.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V2B	***PRIOR***	60.0	.453KV=	98.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V2B	***DURING***	60.0	.375KV=	81.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V2B	***AFTER***	60.0	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V30C	***PRIOR***	30.0	.449KV=	97.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30C	***DURING***	30.0	.370KV=	80.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30C	***AFTER***	30.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V3C	***PRIOR***	75.0	.454KV=	98.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3C	***DURING***	75.0	.376KV=	81.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3C	***AFTER***	75.0	.445KV=	96.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B52	***PRIOR***	.446KV= 90.7% OF	.492KV	125.8	77.9	.9	.0
4B52	***DURING***	.367KV= 74.5% OF	.492KV	125.8	77.9	.6	.0
4B52	***AFTER***	.437KV= 88.8% OF	.492KV	125.8	77.9	.8	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P244B ***PRIOR****	1.0	.446KV=	97.0% OF	.460 KV	* WARNING WARNING WARNING *
4P244B ***DURING***	1.0	.366KV=	79.7% OF	.460 KV	* WARNING WARNING WARNING *
4P244B ***AFTER****	1.0	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V63B ***PRIOR****	2.0	.446KV=	97.0% OF	.460 KV	* WARNING WARNING WARNING *
4V63B ***DURING***	2.0	.366KV=	79.7% OF	.460 KV	* WARNING WARNING WARNING *
4V63B ***AFTER****	2.0	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V70B ***PRIOR****	.5	.446KV=	97.0% OF	.460 KV	* WARNING WARNING WARNING *
4V70B ***DURING***	.5	.366KV=	79.7% OF	.460 KV	* WARNING WARNING WARNING *
4V70B ***AFTER****	.5	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V65B ***PRIOR****	2.0	.446KV=	97.0% OF	.460 KV	* WARNING WARNING WARNING *
4V65B ***DURING***	2.0	.366KV=	79.6% OF	.460 KV	* WARNING WARNING WARNING *
4V65B ***AFTER****	2.0	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V67B ***PRIOR****	40.0	.446KV=	96.9% OF	.460 KV	* WARNING WARNING WARNING *
4V67B ***DURING***	40.0	.366KV=	79.5% OF	.460 KV	* WARNING WARNING WARNING *
4V67B ***AFTER****	40.0	.436KV=	94.9% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V64B ***PRIOR***	3.0	.446KV=	97.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V64B ***DURING***	3.0	.366KV=	79.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V64B ***AFTER***	3.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P241B ***PRIOR***	1.0	.446KV=	96.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P241B ***DURING***	1.0	.366KV=	79.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P241B ***AFTER***	1.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S226B ***PRIOR***	15.0	.445KV=	96.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S226B ***DURING***	15.0	.365KV=	79.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S226B ***AFTER***	15.0	.436KV=	94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V68B ***PRIOR***	40.0	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V68B ***DURING***	40.0	.365KV=	79.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V68B ***AFTER***	40.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P245B ***PRIOR***	.8	.446KV=	97.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245B ***DURING***	.8	.366KV=	79.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245B ***AFTER***	.8	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V69B ***PRIOR***	40.0	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69B ***DURING***	40.0	.365KV=	79.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69B ***AFTER***	40.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4S231B ***PRIOR***	9.5	.445KV= 96.7% OF	.460 KV	* WARNING	WARNING
4S231B ***DURING***	9.5	.365KV= 79.3% OF	.460 KV	* WARNING	WARNING
4S231B ***AFTER***	9.5	.436KV= 94.7% OF	.460 KV	* WARNING	WARNING

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B53	***PRIOR***	.453KV= 91.8% OF	.493KV	14.6	9.0	24.0
4B53	***DURING***	.441KV= 89.5% OF	.493KV	14.6	9.0	22.8
4B53	***AFTER***	.451KV= 91.5% OF	.493KV	14.6	9.0	23.9

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B54	***PRIOR***	.454KV= 92.1% OF	.492KV	14.6	9.0	24.1
4B54	***DURING***	.376KV= 76.3% OF	.492KV	14.6	9.0	16.5
4B54	***AFTER***	.445KV= 90.3% OF	.492KV	14.6	9.0	23.2

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.824KV=100.4% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.675KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.805KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.013KV= 96.5% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.983KV= 95.8% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.010KV= 96.4% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.939KV= 94.7% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.966KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.970KV= 95.4% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.927KV= 94.4% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.965KV= 95.3% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AD	***PRIOR***	3.966KV= 95.3% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.923KV= 94.3% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.961KV= 95.2% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B01	***PRIOR***	.458KV= 92.9% OF .493KV	245.7	137.3	.0	.0
4B01	***DURING***	.418KV= 84.8% OF .493KV	433.7	1186.1	.0	.0
4B01	***AFTER***	.454KV= 92.1% OF .493KV	445.6	231.0	.0	.0



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STARTING MOTOR NAME	HP				
4P214A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P214A ***DURING***	250.0	.378KV=	82.2% OF	.460 KV	
4P214A ***AFTER***	250.0	.448KV=	97.4% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B03	***PRIOR***	.466KV= 94.5% OF	.493KV	83.0	51.6	280.9	2.5
4B03	***DURING***	.461KV= 93.5% OF	.493KV	83.0	51.6	274.8	2.5
4B03	***AFTER***	.465KV= 94.4% OF	.493KV	83.0	51.6	280.2	2.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05V	***PRIOR***	.457KV= 92.8% OF	.493KV	87.0	53.4	.9	.0
4B05V	***DURING***	.417KV= 84.6% OF	.493KV	87.0	53.4	.8	.0
4B05V	***AFTER***	.453KV= 91.9% OF	.493KV	87.0	53.4	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V30B ***PRIOR***	30.0	.442KV=	96.0% OF	.460 KV	* WARNING WARNING WARNING *
4V30B ***DURING***	30.0	.400KV=	87.0% OF	.460 KV	* WARNING WARNING WARNING *
4V30B ***AFTER***	30.0	.437KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05N	***PRIOR***	.455KV= 92.3% OF	.493KV	62.8	40.1	236.2	.0
4B05N	***DURING***	.415KV= 84.2% OF	.493KV	62.8	40.1	196.5	.0
4B05N	***AFTER***	.451KV= 91.4% OF	.493KV	62.8	40.1	231.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B07	***PRIOR***	.464KV= 94.2% OF	.493KV	91.1	56.2	1.9	.0
4B07	***DURING***	.459KV= 93.1% OF	.493KV	91.1	56.2	1.8	.0
4B07	***AFTER***	.464KV= 94.1% OF	.493KV	91.1	56.2	1.9	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B08	***PRIOR***	.448KV= 91.0% OF	.492KV	236.8	145.6	38.9
4B08	***DURING***	.407KV= 82.6% OF	.492KV	236.8	145.6	32.1
4B08	***AFTER***	.444KV= 90.1% OF	.492KV	236.8	145.6	38.1
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
4V30A	***PRIOR***	30.0 .444KV= 96.6% OF	.460 KV	*	WARNING	WARNING
4V30A	***DURING***	30.0 .403KV= 87.6% OF	.460 KV	*	WARNING	WARNING
4V30A	***AFTER***	30.0 .440KV= 95.6% OF	.460 KV	*	WARNING	WARNING
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
4V3A	***PRIOR***	75.0 .444KV= 96.5% OF	.460 KV	*	WARNING	WARNING
4V3A	***DURING***	75.0 .403KV= 87.5% OF	.460 KV	*	WARNING	WARNING
4V3A	***AFTER***	75.0 .440KV= 95.6% OF	.460 KV	*	WARNING	WARNING
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
S75A	***PRIOR***	5.0 .445KV= 96.7% OF	.460 KV	*	WARNING	WARNING
S75A	***DURING***	5.0 .403KV= 87.7% OF	.460 KV	*	WARNING	WARNING
S75A	***AFTER***	5.0 .440KV= 95.8% OF	.460 KV	*	WARNING	WARNING
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR						
	HP					
NS74A	***PRIOR***	50.5 .445KV= 96.6% OF	.460 KV	*	WARNING	WARNING
NS74A	***DURING***	50.5 .403KV= 87.6% OF	.460 KV	*	WARNING	WARNING
NS74A	***AFTER***	50.5 .440KV= 95.7% OF	.460 KV	*	WARNING	WARNING

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E168/17***PRIOR***	34.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***DURING***	34.0	.393KV=	85.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***AFTER***	34.0	.431KV=	93.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V8A ***PRIOR***	40.0	.445KV=	96.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V8A ***DURING***	40.0	.404KV=	87.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V8A ***AFTER***	40.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V10 ***PRIOR***	10.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10 ***DURING***	10.0	.395KV=	85.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10 ***AFTER***	10.0	.433KV=	94.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V76/232***PRIOR***	36.0	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V76/232***DURING***	36.0	.400KV=	87.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V76/232***AFTER***	36.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B50	***PRIOR***	.448KV= 91.1% OF	.492KV	122.8	60.2	.0 .0
4B50	***DURING***	.407KV= 82.8% OF	.492KV	122.8	60.2	.0 .0
4B50	***AFTER***	.444KV= 90.2% OF	.492KV	122.8	60.2	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201C ***PRIOR***	150.0	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C ***DURING***	150.0	.401KV=	87.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C ***AFTER***	150.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B51	***PRIOR***	.451KV= 91.5% OF	.493KV	131.5	81.4	.9 .0
4B51	***DURING***	.410KV= 83.2% OF	.493KV	131.5	81.4	.7 .0
4B51	***AFTER***	.447KV= 90.7% OF	.493KV	131.5	81.4	.9 .0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB2	***PRIOR***	3.929KV= 94.5% OF 4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.886KV= 93.4% OF 4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.925KV= 94.3% OF 4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B02	***PRIOR***	.460KV= 93.2% OF .493KV	123.3	61.1	.0	.0
4B02	***DURING***	.454KV= 92.2% OF .493KV	123.3	61.1	.0	.0
4B02	***AFTER***	.459KV= 93.1% OF .493KV	123.3	61.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B04	***PRIOR***	.453KV= 92.0% OF .492KV	61.1	38.0	.0	.0
4B04	***DURING***	.413KV= 83.8% OF .492KV	243.5	1075.9	.0	.0
4B04	***AFTER***	.449KV= 91.2% OF .492KV	260.8	131.2	.0	.0

STARTING MOTOR NAME HP

4P214B	***PRIOR***	.0	.000KV= .0% OF .460 KV	* MOTOR NOT STARTED YET *
4P214B	***DURING***	250.0	.379KV= 82.4% OF .460 KV	
4P214B	***AFTER***	250.0	.444KV= 96.5% OF .460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B06	***PRIOR***	.457KV= 92.7% OF .493KV	191.2	117.4	31.7	.0
4B06	***DURING***	.452KV= 91.6% OF .493KV	191.2	117.4	31.0	.0
4B06	***AFTER***	.456KV= 92.6% OF .493KV	191.2	117.4	31.6	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B52	***PRIOR***	.446KV= 90.5% OF .492KV	125.8	77.9	.9	.0
4B52	***DURING***	.404KV= 82.1% OF .492KV	125.8	77.9	.7	.0
4B52	***AFTER***	.441KV= 89.6% OF .492KV	125.8	77.9	.8	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P244B ***PRIOR***	1.0	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P244B ***DURING***	1.0	.404KV=	87.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P244B ***AFTER***	1.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V63B ***PRIOR***	2.0	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V63B ***DURING***	2.0	.404KV=	87.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V63B ***AFTER***	2.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V70B ***PRIOR***	.5	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V70B ***DURING***	.5	.404KV=	87.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V70B ***AFTER***	.5	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V65B ***PRIOR***	2.0	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V65B ***DURING***	2.0	.404KV=	87.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V65B ***AFTER***	2.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V67B ***PRIOR***	40.0	.445KV=	96.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V67B ***DURING***	40.0	.403KV=	87.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V67B ***AFTER***	40.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*



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VOLTAGE DROP ANALYSIS CASE #=11

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V64B ***PRIOR***	3.0	.445KV=	96.8% OF	.460 KV	* WARNING WARNING WARNING *
4V64B ***DURING***	3.0	.404KV=	87.8% OF	.460 KV	* WARNING WARNING WARNING *
4V64B ***AFTER***	3.0	.441KV=	95.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P241B ***PRIOR***	1.0	.445KV=	96.8% OF	.460 KV	* WARNING WARNING WARNING *
4P241B ***DURING***	1.0	.404KV=	87.8% OF	.460 KV	* WARNING WARNING WARNING *
4P241B ***AFTER***	1.0	.441KV=	95.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4S226B ***PRIOR***	15.0	.444KV=	96.5% OF	.460 KV	* WARNING WARNING WARNING *
4S226B ***DURING***	15.0	.403KV=	87.5% OF	.460 KV	* WARNING WARNING WARNING *
4S226B ***AFTER***	15.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V68B ***PRIOR***	40.0	.445KV=	96.7% OF	.460 KV	* WARNING WARNING WARNING *
4V68B ***DURING***	40.0	.403KV=	87.6% OF	.460 KV	* WARNING WARNING WARNING *
4V68B ***AFTER***	40.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P245B ***PRIOR***	.8	.445KV=	96.8% OF	.460 KV	* WARNING WARNING WARNING *
4P245B ***DURING***	.8	.404KV=	87.8% OF	.460 KV	* WARNING WARNING WARNING *
4P245B ***AFTER***	.8	.441KV=	95.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V69B ***PRIOR***	40.0	.445KV=	96.6% OF	.460 KV	* WARNING WARNING WARNING *
4V69B ***DURING***	40.0	.403KV=	87.6% OF	.460 KV	* WARNING WARNING WARNING *
4V69B ***AFTER***	40.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *



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VOLTAGE DROP ANALYSIS CASE #=11

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4S231B	***PRIOR***	9.5	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4S231B	***DURING***	9.5	.403KV=	87.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4S231B	***AFTER***	9.5	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4853	***PRIOR***	.458KV= 92.9% OF	.493KV	14.6	9.0	24.6	.0
4853	***DURING***	.418KV= 84.8% OF	.493KV	14.6	9.0	20.5	.0
4853	***AFTER***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4854	***PRIOR***	.453KV= 92.0% OF	.492KV	14.6	9.0	24.0	.0
4854	***DURING***	.412KV= 83.7% OF	.492KV	14.6	9.0	19.9	.0
4854	***AFTER***	.449KV= 91.1% OF	.492KV	14.6	9.0	23.6	.0

*****END OF JOB*****

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1 2 3 4 5 6 7 8
 123456789012345678901234567890123456789012345678901234567890

FILE: \AUXSYS\U3APP7.DAT
 STEADY STATE SET @ 96% AND STARTING @ 82% FOR SAFETY BUSES
 STEADY STATE SET @ 90% AND STARTING @ 80% FOR NON-SAFETY BUSES
 EBASCO SERVICES INC.
 TURKEY POINT UNIT No 3. ELECTRICAL AUXILIARY SYSTEM DESIGN
 AUX SYS FED THRU THE S/U TRF.PSB-1.
 BUS 3A82 ALIGNED TO 3AD, BUS 3B50 ALIGNED TO 3B03
 SEQUENCED LOADING FOR CALCULATION EC-145, REV. 4
 (3/06/91)

*A 1-11	1	1	40.00	6.0	6.0	0.85	0.85	0.92	0.92	0.20	0.20
1 3AA1	350.0	4.76	80.00	42.45	4.16	1.10	3.00				
1 3AA2	350.0	4.76	80.00	42.45	4.16	1.10	3.00				
1 3AD	250.0	4.76	80.00	30.3	4.16	1.10	3.00				
2 3B01	30.0	0.48	0.00								
2 3B03	30.0	0.48	0.00								
3 3B05V	25.0	0.48	0.00								
3 3B05H	25.0	0.48	0.00								
3 3B07	25.0	0.48	0.00								
3 3B08V	25.0	0.48	0.00								
1 3A81	350.0	4.76	80.00	42.45	4.16	1.10	3.00				
1 3A82	350.0	4.76	80.00	42.45	4.16	1.10	3.00				
2 3B02	30.0	0.48	0.00								
2 3B04	30.0	0.48	0.00								
3 3B06	25.0	0.48	0.00								
3 B08H	25.0	0.48	0.00								
2 3B50	30.0	0.48	0.00								
3 3B52	25.0	0.48	0.00								
3 3B53	25.0	0.48	0.00								
3 3B54	25.0	0.48	0.00								
9											
3AA1	96.0	82.0	30								
1 3P1A	7000.0	4.0	6.49	0.0	1.0	0.90	0.959			1	.0036 .0080
6 3P1A	1	11111111211									
7 7000.0											
1 3P200A	6000.0	4.0	6.32	0.0	2.0		0.0			1	.0046 .0133
6 3P200A	00000000000			5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0
7 5061.0	5061.0	5061.0									
3AA2	96.0	82.0	30								
1 3P11A	400.0	4.0	5.09	0.0	2.0	0.85	0.938			1	.0360 .0317
6 3P11A	00000000000										
7											
1 3P210A	300.0	4.0	6.22	0.0	2.0	0.89	0.934			1	.0363 .0319
6 3P210A	120000000000										
7											
1 3P211A	450.0	4.0	4.74	0.0	2.0		0.0			1	.0374 .0329
6 3P211A	00000000000										
7											
1 3P215A	350.0	4.0	6.4	0.0	1.0	0.88	0.94			1	.0393 .0346

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
4 PH3X09	225.0	.480	1.000	0.0	0.0	0.0	.0052	.0075
6 PH3X09	000000000000							
7								
3B05V	96.0	82.0	30					
1 3C2A	5.0	.460		0.0	2.0	0.0	1	.5366 .0117
6 3C2A	200000000000							
7								
1 3P10	0.75	.460		0.0	2.0	0.0	1	.5612 .0122
6 3P10	200000000000							
7								
1 3P31	40.0	.460		0.0	2.0	.902	1	.0577 .0138
6 3P31	1 111111111111							
7								
1 3P36	25.0	.460		0.0	2.0	0.0	1	.0646 .0071
6 3P36	1 111111111111							
7								
1 3P37	8.0	.460		0.0	2.0	0.0	1	.2437 .0053
6 3P37	1 111111111111							
7								
1 3P40	15.0	.460		0.0	2.0	0.0	1	.3847 .0122
6 3P40	1 111111111111							
7								
1 3T08	50.0	.460		0.0	2.0	0.0	1	.0162 .0061
6 3T08	1 111111111111							
7								
1 3V1A	100.0	.460	7.75	0.0	2.0	0.0	1	.0453 .0309
6 3V1A	000000000001							
7								
1 3V34	5.0	.460		0.0	2.0	0.0	1	.4807 .0104
6 3V34	200000000000							
7								
1 3C1	75.0	.460		0.0	2.0	0.0	1	.0237 .0161
6 3C1	1 111111111111							
7								
4 3C13A	17.0	.480	1.000	0.0	0.0	0.0		.2517 .0130
6 3C13A	200000000000							
4 STAT1CL	15.0	.480	1.000	0.0	0.0	0.0		
6 STAT1CL	000000000000							
7								
1 MOV1420	5.2	.460	5.66		2.0	0.85	.54	0.6 1 .8027 .0174
6 MOV1420	200001111111							
7								
1 MOV1400	.33	.460	7.33		2.0	0.85	.48	0.6 .6037 .0131
6 MOV1400	200001111111							
7								
1 MOV1427	.25	.460	4.91		2.0	0.85	.5	0.6 2.148 .0467
6 MOV1427	200001111111							
7								
3B05N	90.0	80.0	30					
1 3P15	3.0	.460		0.0	2.0	0.0	1	.5903 .0128

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 3P15	1	11111111111						
7								
1 3P19D		0.5 .460	0.0	2.0	0.0		1 .7491 .0163	
6 3P19D	1	11111111111						
7								
1 3P19A		0.5 .460	0.0	2.0	0.0		1 .7267 .0158	
6 3P19A	1	11111111111						
7								
1 3P19B		0.5 .460	0.0	2.0	0.0		1 .7379 .0160	
6 3P19B	1	11111111111						
7								
1 3P19C		0.5 .460	0.0	2.0	0.0		1 .7491 .0163	
6 3P19C		00000000000						
7								
1 3P232A		10.0 .460	0.0	2.0	0.0		1 1.547 .0336	
6 3P232A	1	11111111111						
7								
1 3P28A		3.0 .460	0.0	2.0	0.0		1 .1968 .0043	
6 3P28A	1	11111111111						
7								
1 3P34A		0.75 .460	0.0	2.0	0.0		1 .8184 .0178	
6 3P34A	1	11111111111						
7								
1 3P4		10.0 .460	0.0	2.0	0.0		1 .5970 .0130	
6 3P4	1	11111111111						
7								
1 3P43		5.0 .460	0.0	2.0	0.0		1 .5411 .0118	
6 3P43	1	11111111111						
7								
1 3P49		0.75 .460	0.0	2.0	0.0		1 .2728 .0059	
6 3P49	1	11111111111						
7								
1 3P5		40.0 .460	0.0	2.0	0.0		1 .0358 .0086	
6 3P5	1	11111111111						
7								
1 3V14A		7.5 .460	0.0	2.0	0.0		1 .8832 .0192	
6 3V14A		00000000000						
7								
1 3V16		2.0 .460	0.0	2.0	0.0		1 .2102 .0046	
6 3V16		00000000000						
7								
1 3V18		7.5 .460	0.0	2.0	0.0		1 .4740 .0103	
6 3V18		00000000000						
7								
1 3V19A		15.0 .460	0.0	2.0	0.0		1 .1348 .0043	
6 3V19A		00000000000						
7								
1 3V31B		3.0 .460	0.0	2.0	0.0		1 .6596 .0143	
6 3V31B		00000000000						
7								

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1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890							
1 3V32B	0.75 .460	0.0	2.0	0.0		1 .4897 .0106	
6 3V32B	000000000000						
7							
1 3V4	5.0 .460	0.0	2.0	0.0		1 .5791 .0126	
6 3V4	000000000000						
7							
1 3V6A	7.5 .460	0.0	2.0	0.0		1 .2683 .0058	
6 3V6A	000000000000						
7							
1 P51A	1.0 .460	0.0	2.0	0.0		1 .7491 .0163	
6 P51A	000000000000						
7							
1 3X03	7.0 .460	0.0	2.0	0.0		1 .1025 .0112	
6 3X03	000000000000						
7							
1 3NF20A/B	1.5 .460	0.0	2.0	0.0		1 .1685 .0054	
6 3NF20A/B	000000000000						
7							
1 3X02	9.0 .460	0.0	2.0	0.0		1 .0726 .0080	
6 3X02	000000000000						
7							
1 3V5	0.5 .460	0.0	2.0	0.0		1 .2035 .0044	
6 3V5	000000000000						
7							
1 3X01	170.0 .460	0.0	2.0	0.0		1 .0055 .0060	
6 3X01	000000000000						
7							
1 3P90C	2.0 .460	0.0	2.0	0.0		1 .4774 .0152	
6 3P90C	000000000000						
7							
1 3P90B	2.0 .460	0.0	2.0	0.0		1 .4858 .0155	
6 3P90B	000000000000						
7							
1 3P90A	2.0 .460	0.0	2.0	0.0		1 .4858 .0155	
6 3P90A	000000000000						
7							
1 3XS75/76	20.0 .460	0.0	2.0 0.81	0.0		1 .1388 .0152	
6 3XS75/76	000000000000						
7							
4 STAT1CL	15.0 .480 1.000	0.0	0.0	0.0			
6 STAT1CL	000000000000						
7							
3B07	96.0 82.0 30						
1 3P203A	15.0 .460	0.0	2.0	0.0		1 .0358 .0086	
6 3P203A	000000000000						
7							
1 3V1C	100.0 .460 7.75	0.0	2.0	0.0		1 .0177 .0121	
6 3V1C	000000000001						
7							
1 3V30C	30.0 .460 5.39	0.0	2.0	0.0 0.42		1 .2617 .0312	



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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 3V30C	112000000000							
7								
1 3V3C	75.0 .460 6.06	0.0	2.0		0.0 0.35		1 .0358 .0243	
6 3V3C	111112000000							
7								
1 P207A	6.0 .460	0.0	2.0		0.0		1 .2616 .0057	
6 P207A	000000000000							
7								
1 T206	1.5 .460	0.0	2.0		0.0		1 .5881 .0128	
6 T206	000000000000							
7								
1 3V2B	60.0 .460	0.0	2.0		0.0		1 .0657 .0247	
6 3V2B	000000000000							
7								
1 3V65A	2.0 .460	0.0	2.0		0.0		1 .8550 .0272	
6 3V65A	000000000000							
7								
1 P42A	7.5 .460	0.0	2.0		0.0		1 .1334 .0042	
6 P42A	000000000000							
7								
4 3D02	71.0 .480 1.000						.0248 .0169	
6 3D02	000000000000							
4 STAT1CL	1.0 .480 1.000	0.0	0.0		0.0			
6 STAT1CL	111111111111							
7								
1 MOV716A	1.3 .460 3.75		2.0 0.85	.60 0.6			1 .3130 .0068	
6 MOV716A	200001111111							
7								
1 MOV744A	10.5 .460 7.22		2.0 0.85	.80 0.6			1 .3838 .0267	
6 MOV744A	200001111111							
7								
1 MOV843A	1.58 .460 7.43		2.0 0.85	.50 0.6			1 .2594 .0056	
6 MOV843A	200001111111							
7								
1 MOV880A	2.0 .460 3.71		2.0 0.85	.63 0.6			1 .2795 .0061	
6 MOV880A	200001111111							
7								
1 MOV1401	0.33 .460 7.33		2.0 0.85	.48 0.6			1 1.019 .0222	
6 MOV1401	200001111111							
7								
1 MOV1426	0.25 .460 4.91		2.0 0.85	.50 0.6			1 .3354 .0073	
6 MOV1426	200001111111							
7								
1 MOV6386	0.13 .460 7.11		2.0 0.85	.32 0.6			1 .7048 .0224	
6 MOV6386	200001111111							
7								
3B53	90.0 80.0 30							
1 HVACHP	18 .460	0.0	2.0		0.0		1	
6 HVACHP	000000000000							
7								



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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
4 HVACKW	27	.460	1.000	0.0	0.0	0.0	1	
6 HVACKW	000000000000							
7								
3808V	96.0	82.0	30					
1 3V1D	100.0	.460	7.75	0.0	2.0	0.0	1	.0161 .0109
6 3V1D	000000000001							
7								
1 3V30B	30.0	.460	5.39	0.0	2.0	0.0 0.42	1	.2490 .0294
6 3V30B	111200000000							
7								
1 3V3B	75.0	.460	6.06	0.0	2.0	0.0 0.35	1	.0379 .0258
6 3V3B	111111200000							
7								
1 V11	10.0	.460		0.0	2.0	0.0	1	.2035 .0044
6 V11	000000000000							
7								
1 V29B	1.0	.460		0.0	2.0	0.0	1	.5335 .0170
6 V29B	200000000000							
7								
1 E16C/17C	34.0	.460		0.0	2.0	0.0	1	.1880 .0206
6 E16C/17C	000000000000							
7								
1 C1	75.0	.460		0.0	2.0	0.0	1	.0249 .0170
6 C1	1 111111111111							
7								
1 E16D	36.0	.460		0.0	2.0	0.0	1	.0480 .0087
6 E16D	000000000000							
7								
1 P42B	3.0	.460		0.0	2.0	0.0	1	.6708 .0146
6 P42B	000000000000							
7								
1 V77/E231	36.0	.460		0.0	2.0	0.0	1	.0773 .0142
6 V77/E231	000000000000							
7								
1 HS74B	60.0	.460		0.0	2.0	0.0	1	.0691 .0315
6 HS74B	000000000000		50.5	50.5	50.5	50.5	50.5	50.5
7 50.5	50.5	50.5						
1 S77B	5.0	.460		0.0	2.0	0.0	1	.8073 .0257
6 S77B	000000000000		3.4	3.4	3.4	3.4	3.4	3.4
7 3.4	3.4	3.4						
1 S78B	5.0	.460		0.0	2.0	0.0	1	.7160 .0228
6 S78B	000000000000		3.4	3.4	3.4	3.4	3.4	3.4
7 3.4	3.4	3.4						
1 S75B	5.0	.460		0.0	2.0	0.0	1	.6388 .0203
6 S75B	000000000000							
7								
4 4D25A	1.0	.480	1.000					.0473 .0113
6 4D25A	000000000000							
4 4D02A	70.6	.480	1.000					.0229 .0104
6 4D02A	111111111111							

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
4 STAT1CL	1.0	.480	1.000	0.0	0.0	0.0		
6 STAT1CL	000000000000							
7								
1 MOV1404	0.33	.460	3.60	2.0	0.85	.29	0.6	1 .5911 .0188
6 MOV1404	20000111111							
7								
1 MOV1417	1.5	.460	5.71	2.0	0.85	.50	0.6	1 .4629 .0101
6 MOV1417	20000111111							
7								
1 MOV6552B	0.13	.460	7.11	2.0	0.85	.32	0.6	1 .5082 .0162
6 MOV6552B	20000111111							
7								
1 MOV6543B	0.13	.460	7.11	2.0	0.85	.32	0.6	1 .4605 .0147
6 MOV6543B	20000111111							
7								
3B50	96.0	82.0	30					
1 3P201C	150.0	.460	5.800	0.0	2.0	0.90	0.0	1 .0206 .0223
6 3P201C	000000000000							
7								
3AB1	96.0	82.0	30					
1 3P200B	6000.0	4.0	6.32	0.0	2.0	0.0		1 .0050 .0148
6 3P200B	000000000020		5061.0	5061.0	5061.0	5061.0	5061.0	5061.0 5061.0
7 5061.0	6000.0	5061.0						
1 3P200C	6000.0	4.0	6.32	0.0	2.0	0.0		1 .0051 .0148
6 3P200C	1 000000000000		5061.0	5061.0	5061.0	5061.0	5061.0	5061.0 5061.0
7 5061.0	5061.0	5061.0						
3AB2	96.0	82.0	30					
1 3P11B	400.0	4.0	5.09	0.0	2.0	0.85	0.938	0.00 0.00 1 .0295 .0259
6 3P11B	000000000000							
7								
1 3P210B	300.0	4.0	6.22	0.0	2.0	0.89	0.934	1 .0343 .0302
6 3P210B	120000000000							
7								
1 3P211B	450.0	4.0	4.74	0.0	2.0	0.0		1 .0371 .0326
6 3P211B	000000000000							
7								
1 3P215B	350.0	4.0	6.4	0.0	1.0	0.88	0.94	1 .0371 .0326
6 3P215B	120000000000							
7								
1 3P3B	800.0	4.0	5.94	0.0	2.0	0.89	0.944	1 .0274 .0241
6 3P3B	000000000000		700.00	700.00	700.00	700.00	700.00	700.00
700.0 700.00								
7 700.00	700.00	700.00						
1 3P6B	2250.0	4.0	7.06	0.0	2.0	0.90	0.958	1 .0035 .0046
6 3P6B	000000000000		2210.0	2210.0	2210.0	2210.0	2210.0	2210.0 2210.0
7 2210.0	2210.0	2210.0						
1 3P7D	1250.0	4.0	4.57	0.0	2.0	0.0		1 .0292 .0381
6 3P7D	000000000000							
7								
1 3P7B	1250.0	4.0	4.57	0.0	2.0	0.0		1 .0288 .0376

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 3P7B	000000000000							
7								
1 3P9B	325.0	4.0	5.8	0.0	2.0	0.82	0.928	0.00 0.00 1 .0449 .0395
6 3P9B	000000000000							
7								
2 DG3B	3.0	4.16	1.000	.270	.405	1.534	30.00	0 .0033 .0110
6 DG3B	1 111111111111							
7								
3802	96.0	82.0	30					
1 3P201B	150.0	.460	5.800	0.0	2.0	0.90	0.925	1 .0325 .0352
6 3P201B	000000000000							
7								
1 3V1B	100.0	.460	7.75	0.0	2.0	0.0		1 .0514 .0350
6 3V1B	000000000001							
7								
3804	96.0	82.0	30					
1 3P214B	250.0	.460	6.540	0.0	1.0	0.91	0.94 .15	1 .0077 .0178
6 3P214B	112000000002							
7								
1 3S7B	150.0	.460		0.0	2.0	0.0		1 .0197 .0214
6 3S7B	000000000000							
7								
1 3H1	240.0	.460		0.0	2.0	0.0		1 .0070 .0047
6 3H1	1 111111111111							
7								
4 PH3B13	150.0	.480	1.000	0.0	0.0	0.0		.0062 .0090
6 PH3B13	111111111111							
7								
3806	96.0	82.0	30					
1 3P203B	15.0	.460		0.0	2.0	0.0		1 .1235 .0296
6 3P203B	000000000000							
7								
1 3V20	20.0	.460		0.0	2.0	0.0		1 .1828 .0095
6 3V20	1 111111111111							
7								
1 3V2A	60.0	.460		0.0	2.0	0.0		1 .0541 .0204
6 3V2A	111111111111							
7								
1 3V30A	30.0	.460	5.39	0.0	2.0	0.0	0.42	1 .1939 .0256
6 3V30A	112000000000							
7								
1 3V3A	75.0	.460	6.06	0.0	2.0	0.0	0.35	1 .0320 .0218
6 3V3A	111112000000							
7								
1 3V9	20.0	.460		0.0	2.0	0.0		1 .1960 .0101
6 3V9	1 111111111111							
7								
1 E16A/17A	34.0	.460		0.0	2.0	0.0		1 .1308 .0143
6 E16A/17A	000000000000							
7								

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
1 E16E	36.0	.460	0.0	2.0	0.0		1	.0386 .0079
6 E16E	000000000000							
7								
1 3V68	2.0	.460	0.0	2.0	0.0		1	.6395 .0139
6 3V68	000000000000							
7								
1 V88	40.0	.460	0.0	2.0	0.0		1	.0716 .0172
6 V88	000000000000							
7								
4 3D25	52.4	.480	1.000					.0362 .0087
6 3D25	000000000000							
4 STATICL	1.0	.480	1.000	0.0	0.0	0.0		
6 STATICL	000000000000							
7								
1 MOV381	0.42	.460	5.26	2.0	0.85	.49 0.6	1	.7200 .0156
6 MOV381	200001111111							
7								
1 MOV626	1.0	.460	5.71	2.0	0.85	.39 0.6	1	.7915 .0172
6 MOV626	200001111111							
7								
1 MOV7168	1.3	.460	3.75	2.0	0.85	.60 0.6	1	.6663 .0145
6 MOV7168	200001111111							
7								
1 MOV730	1.3	.460	3.75	2.0	0.85	.60 0.6	1	.7960 .0173
6 MOV730	200001111111							
7								
1 MOV7448	10.3	.460	7.22	2.0	0.85	.80 0.6	1	.5685 .0197
6 MOV7448	200001111111							
7								
1 MOV8438	1.58	.460	7.43	2.0	0.85	.50 0.6	1	.8184 .0178
6 MOV8438	200001111111							
7								
1 MOV8808	2.0	.460	3.71	2.0	0.85	.63 0.6	1	.7312 .0159
6 MOV8808	200001111111							
7								
1 MOV1402	0.33	.460	7.33	2.0	0.85	.48 0.6	1	.6395 .0139
6 MOV1402	200001111111							
7								
1 MOV1418	1.5	.460	5.71	2.0	0.85	.50 0.6	1	.7088 .0154
6 MOV1418	200001111111							
7								
1 MOV1425	0.33	.460	5.26	2.0	0.85	.38 0.6	1	.9861 .0214
6 MOV1425	200001111111							
7								
1 MOV1421	5.3	.460	8.57	2.0	0.85	.76 0.6	1	.5277 .0115
6 MOV1421	200001111111							
7								
B08W	90.0	80.0	30					
1 3P2048	6.0	.460	0.0	2.0	0.0		1	.2974 .0065
6 3P2048	000000000000							



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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
7								
1 3P26B		3.0 .460		0.0 2.0		0.0		1 .3712 .0081
6 3P26B	1	11111111111						
7								
1 P208		20.0 .460		0.0 2.0		0.0		1 .1192 .0062
6 P208		00000000000						
7								
1 4P26B		3.0 .460		0.0 2.0		0.0		1 .4942 .0107
6 4P26B	1	11111111111						
7								
1 P84A		20.0 .460		0.0 2.0		0.0		1 .1157 .0060
6 P84A	1	11111111111						
7								
1 3P24B		3.0 .460		0.0 2.0		0.0		1 .5322 .0116
6 3P24B		00000000000						
7								
1 P20		0.5 .460		0.0 2.0		0.0		1 .8542 .0186
6 P20		00000000000						
7								
1 P21		0.5 .460		0.0 2.0		0.0		1 .8787 .0191
6 P21		00000000000						
7								
1 3P25B		3.0 .460		0.0 2.0		0.0		1 .3376 .0073
6 3P25B		00000000000						
7								
1 P22		0.5 .460		0.0 2.0		0.0		1 .8765 .0191
6 P22		00000000000						
7								
1 P220		3.0 .460		0.0 2.0		0.0		1 .2706 .0059
6 P220		00000000000						
7								
1 4P24B		3.0 .460		0.0 2.0		0.0		1 .4718 .0103
6 4P24B	1	11111111111						
7								
1 4P25B		3.0 .460		0.0 2.0		0.0		1 .4942 .0107
6 4P25B	1	11111111111						
7								
1 P84B		20.0 .460		0.0 2.0		0.0		1 .1166 .0060
6 P84B	1	11111111111						
7								
1 4P16A		50.0 .460		0.0 2.0		0.0		1 .0541 .0130
6 4P16A		00000000000						
7								
1 3P16A		50.0 .460		0.0 2.0		0.0		1 .0541 .0130
6 3P16A		00000000000						
7								
1 3V36A		2.0 .460		0.0 2.0		0.0		1 .3399 .0074
6 3V36A		00000000000						
7								
1 V78		5.0 .460		0.0 2.0		0.0		1 .2934 .0093



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	1	2	3	4	5	6	7	8
123456789012345678901234567890123456789012345678901234567890								
6 V78	000000000000							
7								
4 NS233M	27.4 .480 0.85	0.0	0.0	0.0		1	.1162 .0129	
6 NS233M	000000000000							
7								
4 STATICL	1.0 .480 1.000	0.0	0.0	0.0				
6 STATICL	000000000000							
7								
3B52	96.0 82.0 30							
1 3C2B	5.0 .460	0.0	2.0	0.0		1	.1250 .0040	
6 3C2B	200000000000							
7								
1 3V34B	5.0 .460	0.0	2.0	0.0		1	.0208 .0023	
6 3V34B	200000000000							
7								
1 3P10B	0.75 .460	0.0	2.0	0.0		1	.1615 .0051	
6 3P10B	200000000000							
7								
1 3V65B	2.0 .460	0.0	2.0	0.0		1	1.003 .0319	
6 3V65B	000000000000							
7								
1 3S230	7.0 .460	0.0	2.0	0.0		1	.3964 .0423	
6 3S230	000000000000							
7								
4 3C13B	17.0 .480 1.000						.0182 .0020	
6 3C13B	200000000000							
7								
4 STATICL	1.0 .480 1.000	0.0	0.0	0.0				
6 STATICL	000000000000							
7								
3B54	90.0 80.0 30							
1 HVACHP	18.0 .460 1.000	0.0	2.0	0.0		1		
6 HVACHP	000000000000							
7								
4 HVACKW	27.0 .480 1.000	0.0	0.0	0.0		1		
6 HVACKW	000000000000							
7								
2BUS113								
3 SWICHYD	15000 19.21.008 4435							
6 SWICHYD								
9								
C TRLIN H1	2BUS113							
C NONSG X1	3AA1	.0002	.0010					
C NONSG Y1	3AB1	.0003	.0016					
T 3X03 H1	X1 Y1	40.0	233.03	4.16	4.16			
		16.64	0.67	16.90	0.68	30.42	1.22	
R 3AA2 3AA1	3AA2	0.0	0.0	0.04	80.00	0.00	0.00	
C 3AD 3AB2	3AD	.0077	.0172					
C 3B01 X2	3B01	0.0	0.0					
C 3B03 X4	3B03	0.0	0.0					

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1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890							
C 3805V 3801	3805V		.0013	.0027			
C 3805N 3801	3805N		.0030	.0033			
C 3807 3803	3807		.0064	.0129			
C 3808V 3850	3808V		0.002	.0040			
C 3850 3803	3850		.0049	.0098			
C 3X04 3AA2	H2		.0035	.0031			
T 3X04	H2	X2	1.0	4.055	0.48	2.5	
			5.54	0.544			
C 3X06 3AA2	H4		.0025	.0022			
T 3X06	H4	X4	1.0	4.055	0.48	2.5	
			5.62	0.544			
R 3A82 3A81	3A82		0.0	0.0	0.04	80.00	0.00 0.00
C 3802 X3	3802		0.0	0.0			
C 3804 X5	3804		0.0	0.0			
C 3806 3802	3806		.0045	.0090			
C 808N 3804	808N		.0132	.0143			
C 3852 3804	3852		.0048	.0098			
T 3X05	H3	X3	1.0	4.055	0.48	2.5	
			5.71	0.544			
C 3X05 3A82	H3		.0032	.0028			
C 3X07 3A82	H5		.0039	.0034			
C 3853 3801	3853		.0016	.0017			
C 3854 3804	3854		.0019	.0021			
T 3X07	H5	X5	1.0	4.055	0.48	2.5	
			5.71	0.544			

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FILE: \AUXSYS\U3APP7.DAT
STEADY STATE SET @ 96% AND STARTING @ 82% FOR SAFETY BUSES
STEADY STATE SET @ 90% AND STARTING @ 80% FOR NON-SAFETY BUSES
EBASCO SERVICES INC.
TURKEY POINT UNIT No 3. ELECTRICAL AUXILIARY SYSTEM DESIGN
AUX SYS FED THRU THE S/U TRF.PSB-1.
BUS 3AB2 ALIGNED TO 3AD, BUS 3B50 ALIGNED TO 3B03
SEQUENCED LOADING FOR CALCULATION EC-145, REV. 4
(3/06/91)

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GENERAL INSTRUCTION CARD DATA

 NUMBER S/C TYPE
 OF CASE OF
 VOLTAGE 1=YES OUTPUT
 DROP 2=NO BASE
 CASES MVA
 1-11 1 SHORT 40.000

OPTIONAL USER SELECTED ASSUMED DATA

 DATA

LRA/FLA	LRA/FLA	OP PF	OP PF	OP EFF	OP EFF	ST PF	ST PF
>1KV	<=1KV	>1KV	<=1KV	>1KV	<=1KV	>1KV	<=1KV
6.00	6.00	.85	.85	.92	.92	.20	.20

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T
Y
P
E

SHORT CIRCUIT & REACTANCE SIZING PARAMETERS

1	BUS NAME	MVA CLASS	RATED MAX KV	RATED C&L KA	RATED SC @ MAX KV	HPFV KV	"S" FACTOR	MIN CPT	FIXED K3	PERMISSIBLE INT CAP OF BREAKER KA@ HPFV	ASSYM MULT FOR C&L
2	BUS NAME	INT KA	HPFV KV	FIXED K4	K6 FACTOR	K6 BREAK OFF					
3	BUS NAME	INT KA	HPFV KV	FIXED K5	K7 FACTOR	K7 BREAK OFF					

1	3AA1	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	3AA2	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	3AD	250.00	4.760	80.0	30.30	4.160	1.100	3.000	(*****)	34.67	(1.60)
2	3B01	30.00	.480(*****)	(1.00)	.00						
2	3B03	30.00	.480(*****)	(1.00)	.00						
3	3B05V	25.00	.480(*****)	(1.00)	.00						
3	3B05N	25.00	.480(*****)	(1.00)	.00						
3	3B07	25.00	.480(*****)	(1.00)	.00						
3	3B08V	25.00	.480(*****)	(1.00)	.00						
1	3AB1	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	3AB2	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
2	3B02	30.00	.480(*****)	(1.00)	.00						
2	3B04	30.00	.480(*****)	(1.00)	.00						
3	3B06	25.00	.480(*****)	(1.00)	.00						
3	3B08N	25.00	.480(*****)	(1.00)	.00						
2	3B50	30.00	.480(*****)	(1.00)	.00						
3	3B52	25.00	.480(*****)	(1.00)	.00						
3	3B53	25.00	.480(*****)	(1.00)	.00						
3	3B54	25.00	.480(*****)	(1.00)	.00						

NOTE: TYPE 1 FAULT= MEDIUM VOLTAGE FAULT CALCULATION
 TYPE 2 FAULT= LOW VOLTAGE POWER CIRCUIT BREAKER FAULT CALCULATION
 TYPE 3 FAULT= LOW VOLTAGE MOLDED CASE BREAKER FAULT CALCULATION
 (*****) = COMPUTER WILL CALCULATE K FACTOR

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	BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT									
T Y P E	3AA1	96.00 % ***** * LOAD DATA * *****	82.00 %	30.0									
1 MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 OP PWR FACTOR <3.6K=2	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)	
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT	X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C			
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C	
4 STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10
1 3P1A	7000.00	4.000	6.490 (	1.0)	1.000	.900	.959 (	.200)(****)	(1.)	.004	.008	1	1 1 1 1 1 1 1 1 2 1
1 3P200A	6000.00	4.000	6.320 (1.0)	2.000 (.850)(.920)(.200)(****)	(1.)	.005	.013	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)

[illegible]

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[illegible]

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

[illegible]

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3AD	96.00 %	82.00 %	30.0

1	MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)										
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES	CON FOR S/C											
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR %R FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES	CON FOR S/C											
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	
1	3P211C	450.00	4.000	4.740	(1.2)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.038	.034	(0)	(0)	(0)	(0)	(0)	(0)
1	3P9C	325.00	4.000	5.800	(1.2)	2.000		.820		.928	(.200)	(****)	(1.)	.030	.026	(0)	(0)	(0)	(0)	(0)	(0)

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3B01	96.00 %	82.00 %	30.0

96.00 %
 ☆☆☆☆☆☆☆☆☆☆☆☆☆☆
 ☆ LOAD DATA ☆
 ☆☆☆☆☆☆☆☆☆☆☆☆☆☆

0=ON
1=OFF
CON
FOR
S/C

VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

[illegible]

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BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S						MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT
3B03	96.00 %						82.00 %		30.0

* LOAD DATA *									

A/A	K1 FACTOR	SPEED OP PWR 3.6K=1 3.6K=2	OP FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
LT	X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC CON FOR S/C			
LT	V/D MVA	OHMS FOR REACT OR Z% TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC CON FOR S/C	
TED F								CABLE RES REAC CON FOR S/C	1 2 3 4 5 6 7 8 9 10
000)(1.2)	2.000 (.850)(.920)(.200)(****)	(1.)	.035	.023 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
000)(1.2)	2.000 (.850)(.920)(.200)(****)	(1.)	.011	.022 1	1 1 1 1 1 1 1 1 1 1
490 (1.2)	2.000	.890	.928 (.200)(****)	(1.)	.018	.041 1	1 1 1 1 1 1 1 1 1 1
000 *****	*****	*****	*****	*****	*****	***	.005	.007 (1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)



BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3B05V	96.00 %	82.00 %	30.0

96.00 %

★ LOAD DATA ★

◆ ◆ ◆ ◆ ◆

0=ON
1=OFF
CON
FOR
S/C

VOLTAGE DROP
CONDITION CODES
(0=ON:1=OFF:2=STARTING)

1	MOTOR NAME	RATED HP	RATED KV.	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 OP PWR FACTOR <3.6K=2	OP EFF	ST PF	R-OHMS T-T	HOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)		
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C			
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C		
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10 11	
	*****													*****	
	3C2A	5.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.537	.012	(0)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	3P10	.75	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.561	.012	(0)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	3P31	40.00	.460(6.000)(	8.0)	2.000	(.850)	.900	(.200)*****	(1.)	.058	.014	1	1	1 1 1 1 1 1 1 1 1 1 1
1	3P36	25.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.065	.007	1	1	1 1 1 1 1 1 1 1 1 1 1
1	3P37	8.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.244	.005	1	1	1 1 1 1 1 1 1 1 1 1 1
1	3P40	15.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.385	.012	1	1	1 1 1 1 1 1 1 1 1 1 1
1	3T08	50.00	.460(6.000)(	1.2)	2.000	(.850)(	.920)(	.200)*****	(1.)	.016	.006	1	1	1 1 1 1 1 1 1 1 1 1 1
1	3V1A	100.00	.460 7.750 (	1.2)	2.000	(.850)(	.920)(	.200)*****	(1.)	.045	.031	(0)	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	3V34	5.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)*****	(1.)	.481	.010	(0)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	3C1	75.00	.460(6.000)(	1.2)	2.000	(.850)(	.920)(	.200)*****	(1.)	.024	.016	1	1	1 1 1 1 1 1 1 1 1 1 1
4	3C13A	17.00	.480 1.000 *****	*****	*****	*****	*****	*****	***	.252	.013	(1)	2	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	
4	STAT1CL	15.00	.480 1.000 *****	*****	*****	*****	*****	*****	***	(.000)(	.000)(	(1)	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	MOV1420	5.20	.460 5.660 (8.0)	2.000	.850	.540	.600	*****	(1.)	.803	.017	(0)	2	(0)(0)(0)(0)(0) 1 1 1 1 1 1
1	MOV1400	.33	.460 7.330 (8.0)	2.000	.850	.480	.600	*****	(1.)	.604	.013	(0)	2	(0)(0)(0)(0)(0) 1 1 1 1 1 1
1	MOV1427	.25	.460 4.910 (8.0)	2.000	.850	.500	.600	*****	(1.)	2.148	.047	(0)	2	(0)(0)(0)(0) 1 1 1 1 1 1



BUS NAME		MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT				
3B05N		90.00 %		80.00 %		30.0				

		* LOAD DATA *								

						0=ON 1=OFF				
A/ A	K1 FACTOR	SPEED 3.6K=1 OP 3.6K=2	OP FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C	
LT										
	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C	
LT										
ED F								CABLE RES REAC	CON FOR S/C	
										1 2 3 4 5 6 7 8 9 10
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.590	.013	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.749	.016	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.727	.016	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.738	.016	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.749	.016	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	1.547	.034	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.197	.004	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.818	.018	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.597	.013	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.541	.012	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.273	.006	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.036	.009	1 1 1 1 1 1 1 1 1 1
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.883	.019	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.210	.005	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.474	.010	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.135	.004	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.660	.014	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.490	.011	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.579	.013	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.268	.006	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.749	.016	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.102	.011	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.169	.005	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.073	.008	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.204	.004	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
000)(1.2)	2.000								



TYPE	***** * LOAD DATA * *****												0=ON 1=OFF		VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)										
	1 MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C												
	2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C												
	3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C												
4 STATIC NAME	RATED KVA	RATED KV	RATED PF									CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11	

1 3P90C	2.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.477	.015 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)													
1 3P90B	2.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.486	.015 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)													
1 3P90A	2.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.486	.015 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)													
1 3XS75/7	20.00	.460(6.000)(	8.0)	2.000	.810 (	.920)(	.200)(****)	(1.)	.139	.015 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)													
4 STAT1CL	15.00	.480 1.000	*****	*****	*****	*****	*****	*****	*** (	.000)(	.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)												

EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

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BUS NAME															MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT										
3807															96.00 %		82.00 %		30.0										

															* LOAD DATA *														

																			0=ON 1=OFF										
																			VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)										

[illegible]

BUS NAME		MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT				
3B08V		96.00 %		82.00 %		30.0				

* LOAD DATA *										

						0=ON 1=OFF				
A/	K1	SPEED OP	PWR	OP	ST	R-OHMS	MOT	CABLE	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)	
A	FACTOR	3.6K=1	FACTOR	EFF	PF	T-T	SYN=2	RES		REAC
		<3.6K=2					IND=1			

2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES	CABLE REAC	CON FOR S/C												
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR %R FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES	CABLE REAC	CON FOR S/C											
6 STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES	CABLE REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11

1 3V1D	100.00	.460	7.750 (1.2)	2.000 (.850)(.920)(.200)*****	(1.)	.016	.011 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	1											
1 3V30B	30.00	.460	5.390 (8.0)	2.000 (.850)(.920)	.420 *****	(1.)	.249	.029 (0)	1 1 1 2 (0)(0)(0)(0)(0)(0)(0)												
1 3V3B	75.00	.460	6.060 (1.2)	2.000 (.850)(.920)	.350 *****	(1.)	.038	.026 (0)	1 1 1 1 1 1 2 (0)(0)(0)(0)(0)												
1 V11	10.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.204	.004 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1 V29B	1.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.534	.017 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1 E16C/17	34.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.188	.021 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1 C1	75.00	.460(6.000)(	1.2)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.025	.017 1	1 1 1 1 1 1 1 1 1 1 1 1									
1 E16D	36.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.048	.009 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1 P42B	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.671	.015 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1 V77/E23	36.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.077	.014 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1 NS74B	60.00	.460(6.000)(	1.2)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.069	.032 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1 S77B	5.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.807	.026 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1 S78B	5.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.716	.023 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
1 S75B	5.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)*****	(1.)	.639	.020 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)									
4 4D25A	1.00	.480	1.000	*****	*****	*****	*****	*****	***	.047	.011 (1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)												
4 4D02A	70.60	.480	1.000	*****	*****	*****	*****	*****	***	.023	.010 (1)	1 1 1 1 1 1 1 1 1 1 1 1												
4 STATICL	1.00	.480	1.000	*****	*****	*****	*****	*****	***	(.000)(.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)												
1 MOV1404	.33	.460	3.600 (8.0)	2.000	.850	.290	.600 *****	(1.)	.591	.019 (0)	2 (0)(0)(0)(0)(0) 1 1 1 1 1 1												
1 MOV1417	1.50	.460	5.700 (8.0)	2.000	.850	.500	.600 *****	(1.)	.463	.010 (0)	2 (0)(0)(0)(0)(0) 1 1 1 1 1 1												
1 MOV6552	.13	.460	7.100 (8.0)	2.000	.850	.320	.600 *****	(1.)	.508	.016 (0)	2 (0)(0)(0)(0)(0) 1 1 1 1 1 1												
1 MOV6543	.13	.460	7.100 (8.0)	2.000	.850	.320	.600 *****	(1.)	.461	.015 (0)	2 (0)(0)(0)(0)(0) 1 1 1 1 1 1												

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

[illegible]

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S						MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS			MAX # WARNINGS FOR LOW VOLT
3B50	96.00 % ***** * LOAD DATA * *****						82.00 %			30.0
A/A	K1 FACTOR	SPEED OP PWR 3.6K=1 3.6K=2	OP FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
LT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C	
LT	V/D MVA	OHMS FOR REACT OR 2% FOR TRANSF	% R/X FOR REAC OR %R FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C	
TED F								CABLE RES REAC	CON FOR S/C	
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
300 (1.2)	2.000	.900 (.920)(.200)(****)	(1.)	.021	.022 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	1 2 3 4 5 6 7 8 9 10

EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

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T Y P E	BUS NAME				MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT			
	3AB1				96.00 % ***** * LOAD DATA * *****				82.00 %				30.0			
1 MOTOR	RATED	RATED	LRA/	K1	SPEED	OP	PWR	OP	ST	R-OHMS	MOT	CABLE	0=ON 1=OFF			
NAME	HP	KV	FLA	FACTOR	3.6K=1 <3.6K=2	FACTOR	FACTOR	EFF	PF	T-T	SYN=2 IND=1	RES	REAC	FOR	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)	
2 GEN	RATED	RATED	PU		X	X	X		X/R			CABLE	CON			
NAME	MVA	KV	OP		C&L	INT	GVD			ANG		RES	REAC	FOR		
			VOLT							DEG				S/C		
3 SYSTEM	S/C	X/R	PU	V/D	OHMS	% R/X	TRANSF	REACT	REAC	ANG		CABLE	CON			
NAME	MVA		OP	MVA	FOR	FOR	MVA	-TOL	+TOL	DEG		RES	REAC	FOR		
			VOLT		REACT	REAC		OR	OR					S/C		
					OR 2% FOR	OR %R FOR		TRANSF KV	TRANSF TOL							
4 STATIC	RATED	RATED	RATED									CABLE	CON			
NAME	KVA	KV	PF									RES	REAC	FOR		
														S/C	1	2
															3	4
															5	6
															7	8
															9	10
															11	
3P200B	6000.00	4.000	6.320 (	1.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.005	.015 (0)	(0)(0)	(0)(0)	(0)(0)	(0)(0)	(0)(0)
1 3P200C	6000.00	4.000	6.320 (	1.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.005	.015 1	(0)(0)	(0)(0)	(0)(0)	(0)(0)	(0)(0)
*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE *****																
DEVICE	CASE: 1	2	3	4	5	6	7	8	9	10	11					
NAME																
1 3P200C	RATED HP	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00					
1 3P200B	RATED HP	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	6000.00				

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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT											
3AB2														96.00 %				82.00 %				30.0											
														***** * LOAD DATA * *****																			
T Y P E	1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	0=ON 1=OFF VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)																		
															2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT	X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR %R FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C																				
	STATIC NAME	RATED KVA	RATED KV	RATED PF											CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11						
*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****																																	
	3P11B	400.00	4.000	5.090	(	1.2)	2.000	.850	.938	(	.200)	(****)	(	1.)	.030	.026	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3P210B	300.00	4.000	6.220	(	1.2)	2.000	.890	.934	(	.200)	(****)	(	1.)	.034	.030	(0)	1	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3P211B	450.00	4.000	4.740	(	1.2)	2.000	(.850)	(.920)	(	.200)	(****)	(	1.)	.037	.033	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3P215B	350.00	4.000	6.400	(	1.0)	1.000	.880	.940	(	.200)	(****)	(	1.)	.037	.033	(0)	1	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3P3B	800.00	4.000	5.940	(	1.2)	2.000	.890	.944	(	.200)	(****)	(	1.)	.027	.024	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3P6B	2250.00	4.000	7.060	(	1.0)	2.000	.900	.958	(	.200)	(****)	(	1.)	.004	.005	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3P7D	1250.00	4.000	4.570	(	1.0)	2.000	(.850)	(.920)	(	.200)	(****)	(	1.)	.029	.038	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3P7B	1250.00	4.000	4.570	(	1.0)	2.000	(.850)	(.920)	(	.200)	(****)	(	1.)	.029	.038	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
1	3P9B	325.00	4.000	5.800	(	1.2)	2.000	.820	.928	(	.200)	(****)	(	1.)	.045	.040	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
2	0G3B	3.00	4.160	1.000	*****	.270	.405	1.534	30.000	****	(	0.)	.003	.011	1	1	1	1	1	1	1	1	1	1	1	1						

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****												
DEVICE NAME	CASE: 1	2	3	4	5	6	7	8	9	10	11	
1 3P6B RATED HP	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	
1 3P3B RATED HP	700.00	700.00	700.00	700.00	700.00	700.00	800.00	800.00	700.00	700.00	700.00	

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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX	# WARNINGS FOR LOW VOLT											
3802														96.00 %				82.00 %					30.0											

														* LOAD DATA *																				

																						0=ON 1=OFF												
																						CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)											

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	BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIM ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	# WARNINGS FOR LOW VOLT
TYP E	3B04	96.00 % ***** * LOAD DATA * *****	82.00 %	30.0
1 MOTOR	RATED HP	RATED KV LRA/ FLA K1 SPEED OP PWR FACTOR 3.6K=1 FACTOR EFF ST PF R-OHMS T-T HOT SYN#2 RES REAC COW CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)	
2 GEN NAHE	RATED MVA	P.U. OP VOLT X C&L INT GVD X/R ANG DEG RES REAC COW CON FOR S/C		
3 SYSTEM NAME	S/C MVA	X/R PU OP VOLT V/D OHMS FOR REACT OR ZX FOR TRANSF TRANSF % R/X FOR REAC OR XR FOR TRANSF TRANSF REACT -TOL OR TRANSF KV REAC +TOL OR TRANSF TOL ANG DEG RES REAC COW CON FOR S/C		
4 STATIC NAHE	RATED KVA	RATED KV RATED PF	CABLE RES REAC COW CON FOR S/C	
1 3P214B	250.00	.460 6.540 (1.2) 1.000 .910 .940 .150 (****)(1.) .008 .018 (0)	1 1 2 (0)(0)(0)(0)(0)(0)(0) 2	
1 3S7B	150.00	.460(6.000)(1.2) 2.000 (.850)(.920)(.200)(****)(1.) .020 .021 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	
1 3H1	240.00	.460(6.000)(1.2) 2.000 (.850)(.920)(.200)(****)(1.) .007 .005 1	1 1 1 1 1 1 1 1 1 1 1	
4 PH3B13	150.00	.480 1.000 ***** ***** ***** ***** ***** *** .006 .009 (1)	1 1 1 1 1 1 1 1 1 1 1	

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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT										
3806														96.00 %		82.00 %		30.0										

														* LOAD DATA *														

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BUS NAME															MIN ALLOWABLE VOLTAGE FOR S S										MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS										MAX # WARNINGS FOR LOW VOLT									
B08N															90.00 %										80.00 %										30.0									

															* LOAD DATA *																													

T Y P E	1 MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 OP 3.6K=2	PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES	REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)																													
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES	REAC	CON FOR S/C																														
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z%	R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES	REAC	CON FOR S/C																														
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES	REAC	CON FOR S/C																														

1	3P204B	6.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.297	.007	(0)	(0)	(0)	(0)	(0)																									
1	3P26B	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.371	.008	1	1	1	1	1																									
1	P20B	20.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.119	.006	(0)	(0)	(0)	(0)	(0)																									
1	4P26B	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.494	.011	1	1	1	1	1																									
1	P84A	20.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.116	.006	1	1	1	1	1																									
1	3P24B	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.532	.012	(0)	(0)	(0)	(0)	(0)																									
1	P20	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.854	.019	(0)	(0)	(0)	(0)	(0)																									
1	P21	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.879	.019	(0)	(0)	(0)	(0)	(0)																									
1	3P25B	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.338	.007	(0)	(0)	(0)	(0)	(0)																									
1	P22	.50	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.877	.019	(0)	(0)	(0)	(0)	(0)																									
1	P220	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.271	.006	(0)	(0)	(0)	(0)	(0)																									
1	4P24B	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.472	.010	1	1	1	1	1																									
1	4P25B	3.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.494	.011	1	1	1	1	1																									
1	P84B	20.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.117	.006	1	1	1	1	1																									
1	4P16A	50.00	.460(6.000)(	1.2)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.054	.013	(0)	(0)	(0)	(0)	(0)																									
1	3P16A	50.00	.460(6.000)(	1.2)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.054	.013	(0)	(0)	(0)	(0)	(0)																									
1	3V36A	2.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.340	.007	(0)	(0)	(0)	(0)	(0)																									
1	V7B	5.00	.460(6.000)(8.0)	2.000	(.850)(.920)(.200)(****)	(1.)	.293	.009	(0)	(0)	(0)	(0)	(0)																												
4	NS233M	27.40	.480 .850	*****	*****	*****	*****	*****	*****	***	.116	.013	(1)	(0)	(0)	(0)																												
4	STATICL	1.00	.480 1.000	*****	*****	*****	*****	*****	*****	***	(.000)(.000)(1)	(0)	(0)	(0)	(0)																												



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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT																		
3B52														96.00 %				82.00 %				30.0																		
*****														* LOAD DATA *				*****				O=ON 1=OFF																		
1 MOTOR NAME														RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 OP PWR 3.6K=2	OP FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC		CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)													
2 GEN NAME														RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC		CON FOR S/C														
3 SYSTEM NAME														S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC		CON FOR S/C														
4 STATIC NAME														RATED KVA	RATED KV	RATED PF									CABLE RES REAC		CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11		

1 3C2B														5.00	.460(6.000)(8.0)	2.000	(.850)(.920)(.200)(****)	(1.)	.125	.004	(0)	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 3V34B														5.00	.460(6.000)(	8.0)	2.000	(	.850)(	.920)(	.200)(****)	(	1.)	.021	.002	(0)	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 3P10B														.75	.460(6.000)(	8.0)	2.000	(	.850)(	.920)(	.200)(****)	(	1.)	.162	.005	(0)	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 3V65B														2.00	.460(6.000)(	8.0)	2.000	(	.850)(	.920)(	.200)(****)	(	1.)	1.003	.032	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
1 3S230														7.00	.460(6.000)(	8.0)	2.000	(	.850)(	.920)(	.200)(****)	(	1.)	.396	.042	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
4 3C13B														17.00	.480 1.000	*****	*****	*****	*****	*****	*****	*****	*****	.018	.002	(1)	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
4 STATICL														1.00	.480 1.000	*****	*****	*****	*****	*****	*****	*****	*** (.000)(.000)(1)	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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VOLTAGE DROP ANALYSIS CASE #= 1

STARTING MOTOR NAME	HP				
MOV744A***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV744A***DURING***	10.5	.403KV=	87.6% OF	.460 KV	
MOV744A***AFTER****	10.5	.444KV=	96.5% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV843A***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV843A***DURING***	1.6	.438KV=	95.2% OF	.460 KV	
MOV843A***AFTER****	1.6	.451KV=	98.0% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV880A***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV880A***DURING***	2.0	.441KV=	95.9% OF	.460 KV	
MOV880A***AFTER****	2.0	.451KV=	98.0% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1401***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1401***DURING***	.3	.439KV=	95.5% OF	.460 KV	
MOV1401***AFTER****	.3	.451KV=	98.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1426***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1426***DURING***	.3	.444KV=	96.5% OF	.460 KV	
MOV1426***AFTER****	.3	.452KV=	98.2% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV6386***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV6386***DURING***	.1	.443KV=	96.2% OF	.460 KV	
MOV6386***AFTER****	.1	.452KV=	98.2% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B08V	***PRIOR****	.449KV= 91.0% OF	.493KV	231.4	142.4	1.7	.0
3B08V	***DURING***	.443KV= 89.8% OF	.493KV	245.9	164.6	1.7	.0
3B08V	***AFTER****	.448KV= 90.8% OF	.493KV	236.0	145.2	1.7	.0

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S					MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT		
3B54	90.00 %					80.00 %		30.0		

* LOAD DATA *										

A/	K1	SPEED	OP PWR	OP	ST	R-OHMS	MOT	CABLE	0=ON	
A	FACTOR	3.6K=1	FACTOR	EFF	PF	T-T	SYN=2	RES REAC	1=OFF	
		<3.6K=2					IND=1			
		X	X	X	X/R		ANG	CABLE	CON	
		C&L	INT	GVD			DEG	RES REAC	FOR	
LT									S/C	
	V/D	OHMS	% R/X	TRANSF	REACT	REAC	ANG	CABLE	CON	
LT	MVA	FOR	FOR	MVA	-TOL	+TOL	DEG	RES REAC	FOR	
		REACT	REAC		OR	OR			S/C	
		OR ZX	OR XR		TRANSF	TRANSF				
		FOR	FOR		KV	TOL				
		TRANSF	TRANSF							
ED								CABLE	CON	
F								RES REAC	FOR	
									S/C	
									1 2 3 4 5 6 7 8 9 10	
000 (8.0)	2.000 (.850)(.920)(.200)(****)	(1.)	(.000)((.000)((0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
000	*****	*****	*****	*****	*****	*****	*** (.000)(.000)(1) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
2BUS113	(90.00) %	(70.70) %	(5.0)

```

( 90.00) %
*****
*  LOAD DATA  *
*****

```

0=ON
1=OFF
CON
FOR
S/C

VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

**T
Y
P
E**

1 MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT	X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C			
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C	
4 STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10 11
SWICHYD1	5000.00	19.000	1.008	4435.0	.000	.000	.000	(.000)	(.0)	(0.)	(.000)	(.000)	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)



BUS TIE CONNECTION DATA
***** ** ***** ****

Y	P TIE	BUS OR	BUS OR	TERM NAME
E NAME	NAME	NAME	NAME	AWAY FROM
	TOWARD	AWAY		TRANSF
	CENTRAL	FROM		(USE THIS
	TRANSF	CENTRAL		COL FOR
		TRANSF		3 -WIND
				TRANSF)

C	TRLIN	H1	2BUS113	(	.000)	(	.000)		
C	NHNSG	X1	3AA1		.000		.001		
C	NHNSG	Y1	3AB1		.000		.002		
T	3X03	H1	X1	Y1	40.000	233.000	4.160	4.160	.000
***	ZH-X=16.640 % RH-X= .670 % ZH-Y=16.900 % RH-Y= .680 % ZX-Y=30.420 % RX-Y= 1.220 %								
R	3AA2	3AA1	3AA2		(	.000)	(	.000)	
C	3AD	3AB2	3AD			.008		.017	
C	3B01	X2	3B01		(	.000)	(	.000)	
C	3B03	X4	3B03		(	.000)	(	.000)	
C	3B05V	3B01	3B05V			.001		.003	
C	3B05N	3B01	3B05N			.003		.003	
C	3B07	3B03	3B07			.006		.013	
C	3B08V	3B50	3B08V			.002		.004	
C	3B50	3B03	3B50			.005		.010	
C	3X04	3AA2	H2			.004		.003	
T	3X04	H2	X2		1.000	4.050	.480	.000	2.500
**	ZH-X= 5.540 % RH-X= .544 %								
C	3X06	3AA2	H4			.002		.002	
T	3X06	H4	X4		1.000	4.050	.480	.000	2.500
**	ZH-X= 5.620 % RH-X= .544 %								
R	3AB2	3AB1	3AB2		(	.000)	(	.000)	
C	3B02	X3	3B02		(	.000)	(	.000)	
C	3B04	X5	3B04		(	.000)	(	.000)	
C	3B06	3B02	3B06			.004		.009	
C	808N	3B04	808N			.013		.014	
C	3B52	3B04	3B52			.005		.010	
T	3X05	H3	X3		1.000	4.050	.480	.000	2.500
**	ZH-X= 5.710 % RH-X= .544 %								
C	3X05	3AB2	H3			.003		.003	
C	3X07	3AB2	H5			.004		.003	

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BUS TIE CONNECTION DATA
 --- --- ---

T (NOTE: "C"=CABLE "T"=TRANSFORMER "R"=REACTOR ***=IMP FOR 3-WIND **=IMP FOR 2-WIND)
 Y

P TIE BUS OR BUS OR TERM NAME
 E NAME TERM TERM AWAY FROM
 NAME NAME NAME CENTRAL
 TOWARD AWAY TRANSF
 CENTRAL FROM (USE THIS
 TRANSF CENTRAL COL FOR
 TRANSF TRANSF 3 -WIND
 TRANSF)

C				CABLE RESIS	CABLE REAC						
T	(A)	(B)	(C)	TRANSF RATED MVA	TERM (A) RATED VOLT	TERM (B) RATED VOLT	TERM (C) RATED VOLT	TRANSF TOL %			
R				CABLE RESIS	CABLE REAC	OHMS X	REACTOR X/R	+TOL FOR S/C	-TOL FOR V/D		

 C 3853 3801 3853 .002 .002
 C 3854 3804 3854 .002 .002
 T 3X07 H5 X5 1.000 4.050 .480 .000 2.500
 ** ZH-X= 5.710 % RH-X= .544 %

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SHORT CIRCUIT ANALYSIS

NOTE:

TYPE 1 FAULT= MEDIUM VOLTAGE FAULT CALCULATION
 TYPE 2 FAULT= LOW VOLTAGE POWER CIRCUIT BREAKER FAULT CALCULATION
 TYPE 3 FAULT= LOW VOLTAGE MOLDED CASE BREAKER FAULT CALCULATION

BASE MVA = 40.000

TYPE OF FAULT	FAULT BUS NAME	PER UNIT RESISTANCE	PER UNIT INT REACTANCE	PER UNIT C&L REACTANCE	X/R	INT KA	C&L KA	K3	K4	K5	BASE VOLTAGE (KV)
1	3AA1	.00527	.14057	.12754	24.0	42.7	69.6	1.08			4.160
1	3AA2	.00610	.21196	.18793	30.4	29.9	47.3	1.14			4.160
1	3AD	.02319	.25337	.22729	9.7	21.9	39.1	1.00			4.160
2	3B01	.17235	1.68031		9.7	28.7			1.06		.493
2	3B03	.18547	1.71547		9.2	27.9			1.06		.493
3	3B05V	.37479	2.08713		5.6	21.9				1.02	.493
3	3B05N	.54553	2.13570		3.9	20.7				1.00	.493
3	3B07	.88692	3.27630		3.7	13.4				1.00	.493
3	3B08V	.81101	3.13494		3.9	14.1				1.00	.493
1	3AB1	.00543	.14324	.12950	23.6	41.8	68.6	1.08			4.160
1	3AB2	.00624	.21427	.18898	29.8	29.5	47.0	1.14			4.160
2	3B02	.19651	1.91091		9.7	25.2			1.06		.493
2	3B04	.18807	1.92121		10.2	25.3			1.07		.493
3	3B06	.74700	3.01815		4.0	14.7				1.00	.493
3	808N	1.82550	3.95757		2.2	10.5				1.00	.493
2	3B50	.66636	2.73662		4.1	16.2			1.00		.493
3	3B52	.96749	3.50554		3.6	12.5				1.00	.493
3	3B53	.43255	1.95704		4.5	22.8				1.00	.493
3	3B54	.50002	2.26605		4.5	19.7				1.00	.493



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.864KV=100.4% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.834KV=100.4% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.859KV=100.4% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.028KV= 96.8% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.022KV= 96.7% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.027KV= 96.8% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.973KV= 95.5% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.967KV= 95.4% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.972KV= 95.5% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.989KV= 95.9% OF 4.160KV	5253.0	2987.8	.0	.0
3AA2	***DURING***	3.981KV= 95.7% OF 4.160KV	5253.0	2987.8	.0	.0
3AA2	***AFTER***	3.988KV= 95.9% OF 4.160KV	5253.0	2987.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.931KV= 94.5% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.923KV= 94.3% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.930KV= 94.5% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3801	***PRIOR***	.461KV= 93.6% OF .493KV	247.0	138.7	.0	.0
3801	***DURING***	.457KV= 92.8% OF .493KV	247.0	138.7	.0	.0
3801	***AFTER***	.461KV= 93.5% OF .493KV	247.0	138.7	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B03	***PRIOR***	.459KV= 93.2% OF	.493KV	82.6	51.3	205.0	1.5
3B03	***DURING***	.455KV= 92.2% OF	.493KV	82.6	51.3	200.8	1.5
3B03	***AFTER***	.459KV= 93.0% OF	.493KV	82.6	51.3	204.5	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B05V	***PRIOR***	.461KV= 93.5% OF	.493KV	83.0	51.6	13.8	.0
3B05V	***DURING***	.456KV= 92.5% OF	.493KV	131.7	144.2	28.6	.0
3B05V	***AFTER***	.460KV= 93.3% OF	.493KV	100.2	62.0	29.1	.0

STARTING MOTOR NAME HP

3C2A	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
3C2A	***DURING***	5.0	.448KV= 97.4% OF	.460 KV	
3C2A	***AFTER***	5.0	.455KV= 99.0% OF	.460 KV	

STARTING MOTOR NAME HP

3P10	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
3P10	***DURING***	.8	.455KV= 98.9% OF	.460 KV	
3P10	***AFTER***	.8	.459KV= 99.9% OF	.460 KV	

STARTING MOTOR NAME HP

3V34	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V34	***DURING***	5.0	.449KV= 97.6% OF	.460 KV	
3V34	***AFTER***	5.0	.456KV= 99.1% OF	.460 KV	

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STARTING MOTOR NAME	HP				
MOV1420***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1420***DURING***	5.2	.407KV=	88.5% OF	.460 KV	
MOV1420***AFTER****	5.2	.448KV=	97.3% OF	.460 KV	

STARTING MOTOR NAME	HP				
MOV1400***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1400***DURING***	.3	.453KV=	98.4% OF	.460 KV	
MOV1400***AFTER****	.3	.460KV=	99.9% OF	.460 KV	

STARTING MOTOR NAME	HP				
MOV1427***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1427***DURING***	.3	.450KV=	97.8% OF	.460 KV	
MOV1427***AFTER****	.3	.458KV=	99.7% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805H	***PRIOR****	.459KV= 93.1% OF	.493KV	215.5	135.0	13.7	.0
3805H	***DURING***	.455KV= 92.3% OF	.493KV	215.5	135.0	13.5	.0
3805H	***AFTER****	.458KV= 93.0% OF	.493KV	215.5	135.0	13.7	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3807	***PRIOR****	.453KV= 92.0% OF	.493KV	157.6	97.4	62.9	.3
3807	***DURING***	.445KV= 90.3% OF	.493KV	231.9	183.4	60.6	.3
3807	***AFTER****	.452KV= 91.7% OF	.493KV	175.2	108.2	62.5	.3

STARTING MOTOR NAME	HP				
MOV716A***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV716A***DURING***	1.3	.442KV=	96.1% OF	.460 KV	
MOV716A***AFTER****	1.3	.451KV=	98.1% OF	.460 KV	

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VOLTAGE DROP ANALYSIS CASE #= 1

STARTING MOTOR NAME	HP				
V29B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
V29B ***DURING***	1.0	.441KV=	95.9% OF	.460 KV	
V29B ***AFTER***	1.0	.447KV=	97.2% OF	.460 KV	
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR					
	HP				
E16C/17***PRIOR***	34.0	.437KV=	94.9% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***	34.0	.431KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER***	34.0	.436KV=	94.7% OF	.460 KV	* WARNING WARNING WARNING *
CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR					
	HP				
NS74B ***PRIOR***	50.5	.441KV=	95.8% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***DURING***	50.5	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***AFTER***	50.5	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *
STARTING MOTOR NAME	HP				
MOV1404***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1404***DURING***	.3	.440KV=	95.7% OF	.460 KV	
MOV1404***AFTER***	.3	.447KV=	97.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1417***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1417***DURING***	1.5	.434KV=	94.3% OF	.460 KV	
MOV1417***AFTER***	1.5	.446KV=	96.9% OF	.460 KV	

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VOLTAGE DROP ANALYSIS CASE #= 1

STARTING MOTOR NAME	HP					
MOV6552***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV6552***DURING***	.1	.441KV=	95.9% OF	.460 KV		
MOV6552***AFTER***	.1	.448KV=	97.3% OF	.460 KV		

STARTING MOTOR NAME	HP					
MOV6543***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV6543***DURING***	.1	.441KV=	95.9% OF	.460 KV		
MOV6543***AFTER***	.1	.448KV=	97.3% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3850	***PRIOR***	.451KV= 91.5% OF	.493KV	123.4	60.8	.0	.0
3850	***DURING***	.446KV= 90.4% OF	.493KV	123.4	60.8	.0	.0
3850	***AFTER***	.450KV= 91.3% OF	.493KV	123.4	60.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3A82	***PRIOR***	3.934KV= 94.6% OF	4.160KV	5253.2	2988.1	.0	.0
3A82	***DURING***	3.925KV= 94.4% OF	4.160KV	5253.2	2988.1	.0	.0
3A82	***AFTER***	3.932KV= 94.5% OF	4.160KV	5253.2	2988.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3802	***PRIOR***	.460KV= 93.3% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.454KV= 92.1% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.459KV= 93.1% OF	.493KV	207.0	113.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3804	***PRIOR***	.460KV= 93.3% OF	.493KV	123.5	77.5	.0	.0
3804	***DURING***	.457KV= 92.7% OF	.493KV	123.5	77.5	.0	.0
3804	***AFTER***	.460KV= 93.2% OF	.493KV	123.5	77.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3806	***PRIOR***	.457KV= 92.8% OF	.493KV	104.5	64.1	48.1	.1
3806	***DURING***	.447KV= 90.7% OF	.493KV	231.6	205.5	46.0	.1
3806	***AFTER***	.456KV= 92.5% OF	.493KV	133.8	81.9	47.8	.1



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STARTING MOTOR NAME	HP				
MOV381 ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV381 ***DURING***	.4	.444KV=	96.4% OF	.460 KV	
MOV381 ***AFTER****	.4	.455KV=	98.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV626 ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV626 ***DURING***	1.0	.434KV=	94.4% OF	.460 KV	
MOV626 ***AFTER****	1.0	.453KV=	98.4% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV716B***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV716B***DURING***	1.3	.441KV=	95.9% OF	.460 KV	
MOV716B***AFTER****	1.3	.453KV=	98.6% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV730 ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV730 ***DURING***	1.3	.440KV=	95.7% OF	.460 KV	
MOV730 ***AFTER****	1.3	.453KV=	98.5% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV744B***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV744B***DURING***	10.3	.389KV=	84.6% OF	.460 KV	
MOV744B***AFTER****	10.3	.444KV=	96.5% OF	.460 KV	

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STARTING MOTOR NAME	HP				
MOV843B***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV843B***DURING***	1.6	.426KV=	92.5% OF	.460 KV	
MOV843B***AFTER***	1.6	.452KV=	98.2% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV880B***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV880B***DURING***	2.0	.438KV=	95.1% OF	.460 KV	
MOV880B***AFTER***	2.0	.452KV=	98.3% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1402***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1402***DURING***	.3	.444KV=	96.4% OF	.460 KV	
MOV1402***AFTER***	.3	.455KV=	98.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1418***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1418***DURING***	1.5	.434KV=	94.2% OF	.460 KV	
MOV1418***AFTER***	1.5	.452KV=	98.3% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1425***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1425***DURING***	.3	.442KV=	96.1% OF	.460 KV	
MOV1425***AFTER***	.3	.454KV=	98.8% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1421***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1421***DURING***	5.3	.412KV=	89.6% OF	.460 KV	
MOV1421***AFTER***	5.3	.450KV=	97.8% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
B08N	***PRIOR***	.453KV= 92.0% OF	.493KV	117.9	72.4	21.5
B08N	***DURING***	.451KV= 91.4% OF	.493KV	117.9	72.4	21.2
B08N	***AFTER***	.453KV= 91.9% OF	.493KV	117.9	72.4	21.5

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B52	***PRIOR***	.460KV= 93.3% OF	.493KV	7.4	4.5	.9
3B52	***DURING***	.456KV= 92.4% OF	.493KV	20.0	63.4	16.2
3B52	***AFTER***	.459KV= 93.1% OF	.493KV	16.1	9.9	16.5
STARTING MOTOR NAME HP						
3C2B	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *	
3C2B	***DURING***	5.0	.454KV= 98.6% OF	.460 KV		
3C2B	***AFTER***	5.0	.458KV= 99.6% OF	.460 KV		
STARTING MOTOR NAME HP						
3V34B	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *	
3V34B	***DURING***	5.0	.455KV= 99.0% OF	.460 KV		
3V34B	***AFTER***	5.0	.459KV= 99.8% OF	.460 KV		
STARTING MOTOR NAME HP						
3P10B	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *	
3P10B	***DURING***	.8	.455KV= 99.0% OF	.460 KV		
3P10B	***AFTER***	.8	.459KV= 99.8% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3853	***PRIOR***	.461KV= 93.6% OF	.493KV	14.6	9.0	27.2
3853	***DURING***	.457KV= 92.8% OF	.493KV	14.6	9.0	26.7
3853	***AFTER***	.461KV= 93.5% OF	.493KV	14.6	9.0	27.1

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3854	***PRIOR***	.460KV= 93.3% OF	.493KV	14.6	9.0	24.8
3854	***DURING***	.457KV= 92.7% OF	.493KV	14.6	9.0	24.5
3854	***AFTER***	.460KV= 93.2% OF	.493KV	14.6	9.0	24.8



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VOLTAGE DROP ANALYSIS CASE #= 2

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
28BUS113	***PRIOR***	233.859KV=100.4% OF 233.000KV	.0	.0	.0	.0
28BUS113	***DURING***	233.440KV=100.2% OF 233.000KV	.0	.0	.0	.0
28BUS113	***AFTER***	233.815KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.027KV= 96.8% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	3.944KV= 94.8% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.019KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.972KV= 95.5% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.887KV= 93.4% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.963KV= 95.3% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.988KV= 95.9% OF 4.160KV	5253.0	2987.8	.0	.0
3AA2	***DURING***	3.869KV= 93.0% OF 4.160KV	5953.0	6356.1	.0	.0
3AA2	***AFTER***	3.977KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0

STARTING MOTOR NAME	HP				
3P210A ***PRIOR***	.0	.000KV= .0% OF	4.000 KV	* MOTOR NOT STARTED YET *	
3P210A ***DURING***	300.0	3.853KV= 96.3% OF	4.000 KV		
3P210A ***AFTER***	300.0	3.974KV= 99.3% OF	4.000 KV		

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STARTING MOTOR NAME HP

3P215A ***PRIOR**** .0 .000KV= .0% OF 4.000 KV * MOTOR NOT STARTED YET *
 3P215A ***DURING*** 350.0 3.849KV= 96.2% OF 4.000 KV
 3P215A ***AFTER**** 350.0 3.973KV= 99.3% OF 4.000 KV

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AD	***PRIOR****	3.930KV= 94.5% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.809KV= 91.6% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER****	3.918KV= 94.2% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B01	***PRIOR****	.461KV= 93.5% OF .493KV	247.0	138.7	.0	.0
3B01	***DURING***	.446KV= 90.5% OF .493KV	247.0	138.7	.0	.0
3B01	***AFTER****	.459KV= 93.2% OF .493KV	247.0	138.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B03	***PRIOR****	.459KV= 93.0% OF .493KV	82.6	51.3	204.5	1.5
3B03	***DURING***	.444KV= 90.1% OF .493KV	82.6	51.3	191.7	1.4
3B03	***AFTER****	.457KV= 92.8% OF .493KV	82.6	51.3	203.3	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B05V	***PRIOR****	.460KV= 93.3% OF .493KV	100.2	62.0	29.1	.0
3B05V	***DURING***	.446KV= 90.4% OF .493KV	100.2	62.0	27.3	.0
3B05V	***AFTER****	.459KV= 93.1% OF .493KV	100.2	62.0	29.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B05N	***PRIOR****	.458KV= 93.0% OF .493KV	215.5	135.0	13.7	.0
3B05N	***DURING***	.444KV= 90.0% OF .493KV	215.5	135.0	12.8	.0
3B05N	***AFTER****	.457KV= 92.7% OF .493KV	215.5	135.0	13.6	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B07	***PRIOR****	.452KV= 91.7% OF .493KV	175.2	108.2	62.5	.3
3B07	***DURING***	.438KV= 88.7% OF .493KV	175.2	108.2	58.5	.3
3B07	***AFTER****	.451KV= 91.4% OF .493KV	175.2	108.2	62.2	.3

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3808V	***PRIOR***	.448KV= 90.8% OF	.493KV	236.0	145.2	1.7	.0
3808V	***DURING***	.433KV= 87.8% OF	.493KV	236.0	145.2	1.6	.0
3808V	***AFTER***	.447KV= 90.6% OF	.493KV	236.0	145.2	1.7	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E16C/17***PRIOR***	34.0	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
E16C/17***DURING***	34.0	.420KV= 91.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
E16C/17***AFTER***	34.0	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V77/E23***PRIOR***	36.0	.442KV= 96.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
V77/E23***DURING***	36.0	.427KV= 92.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
V77/E23***AFTER***	36.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
HS74B ***PRIOR***	50.5	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
HS74B ***DURING***	50.5	.425KV= 92.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
HS74B ***AFTER***	50.5	.439KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
S77B ***PRIOR***	3.4	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
S77B ***DURING***	3.4	.428KV= 93.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
S77B ***AFTER***	3.4	.441KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.427KV=	92.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B50	***PRIOR***	.450KV= 91.3% OF	.493KV	123.4	60.8	.0	.0
3B50	***DURING***	.436KV= 88.3% OF	.493KV	123.4	60.8	.0	.0
3B50	***AFTER***	.449KV= 91.1% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.427KV=	92.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.932KV= 94.5% OF	4.160KV	5253.2	2988.1	.0	.0
3AB2	***DURING***	3.812KV= 91.6% OF	4.160KV	5932.2	6258.7	.0	.0
3AB2	***AFTER***	3.921KV= 94.3% OF	4.160KV	5770.9	3261.1	.0	.0

STARTING MOTOR NAME HP

3P210B	***PRIOR***	.0	.000KV=	.0% OF	4.000 KV	* MOTOR NOT STARTED YET *			
3P210B	***DURING***	300.0	3.797KV=	94.9% OF	4.000 KV				
3P210B	***AFTER***	300.0	3.918KV=	97.9% OF	4.000 KV				

STARTING MOTOR NAME HP

3P215B	***PRIOR***	.0	.000KV=	.0% OF	4.000 KV	* MOTOR NOT STARTED YET *			
3P215B	***DURING***	350.0	3.793KV=	94.8% OF	4.000 KV				
3P215B	***AFTER***	350.0	3.917KV=	97.9% OF	4.000 KV				

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B02	***PRIOR***	.459KV= 93.1% OF	.493KV	207.0	113.4	.0	.0
3B02	***DURING***	.445KV= 90.2% OF	.493KV	207.0	113.4	.0	.0
3B02	***AFTER***	.458KV= 92.8% OF	.493KV	207.0	113.4	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3804	***PRIOR***	.460KV= 93.2% OF	.493KV	123.5	77.5	.0	.0
3804	***DURING***	.445KV= 90.3% OF	.493KV	123.5	77.5	.0	.0
3804	***AFTER***	.458KV= 93.0% OF	.493KV	123.5	77.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3806	***PRIOR***	.456KV= 92.5% OF	.493KV	133.8	81.9	47.8	.1
3806	***DURING***	.441KV= 89.5% OF	.493KV	133.8	81.9	44.8	.1
3806	***AFTER***	.454KV= 92.2% OF	.493KV	133.8	81.9	47.5	.1

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
B08N	***PRIOR***	.453KV= 91.9% OF	.493KV	117.9	72.4	21.5	12.6
B08N	***DURING***	.438KV= 88.9% OF	.493KV	117.9	72.4	20.1	11.8
B08N	***AFTER***	.452KV= 91.6% OF	.493KV	117.9	72.4	21.3	12.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3852	***PRIOR***	.459KV= 93.1% OF	.493KV	16.1	9.9	16.5	.0
3852	***DURING***	.445KV= 90.2% OF	.493KV	16.1	9.9	15.4	.0
3852	***AFTER***	.458KV= 92.9% OF	.493KV	16.1	9.9	16.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3853	***PRIOR***	.461KV= 93.5% OF	.493KV	14.6	9.0	27.1	.0
3853	***DURING***	.446KV= 90.5% OF	.493KV	14.6	9.0	25.4	.0
3853	***AFTER***	.460KV= 93.2% OF	.493KV	14.6	9.0	26.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3854	***PRIOR***	.460KV= 93.2% OF	.493KV	14.6	9.0	24.8	.0
3854	***DURING***	.445KV= 90.3% OF	.493KV	14.6	9.0	23.2	.0
3854	***AFTER***	.458KV= 92.9% OF	.493KV	14.6	9.0	24.6	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
2BUS113	***PRIOR***	233.815KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.651KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.794KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AA1	***PRIOR***	4.019KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	3.987KV= 95.8% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.015KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AB1	***PRIOR***	3.963KV= 95.3% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.931KV= 94.5% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.959KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AA2	***PRIOR***	3.977KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.930KV= 94.5% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.971KV= 95.5% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AD	***PRIOR***	3.918KV= 94.2% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.872KV= 93.1% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.913KV= 94.1% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3801	***PRIOR***	.459KV= 93.2% OF .493KV	247.0	138.7	.0	.0
3801	***DURING***	.419KV= 85.0% OF .493KV	436.2	1201.1	.0	.0
3801	***AFTER***	.455KV= 92.3% OF .493KV	446.9	238.3	.0	.0

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STARTING MOTOR NAME HP

3P214A ***PRIOR**** .0 .000KV= .0% OF .460 KV * MOTOR NOT STARTED YET *
 3P214A ***DURING*** 250.0 .378KV= 82.2% OF .460 KV
 3P214A ***AFTER**** 250.0 .449KV= 97.6% OF .460 KV

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3803	***PRIOR****	.457KV= 92.8% OF	.493KV	82.6	51.3	203.3	1.5
3803	***DURING***	.448KV= 90.9% OF	.493KV	82.6	51.3	195.0	1.4
3803	***AFTER****	.456KV= 92.5% OF	.493KV	82.6	51.3	202.2	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805V	***PRIOR****	.459KV= 93.1% OF	.493KV	100.2	62.0	29.0	.0
3805V	***DURING***	.418KV= 84.8% OF	.493KV	100.2	62.0	24.1	.0
3805V	***AFTER****	.455KV= 92.2% OF	.493KV	100.2	62.0	28.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805H	***PRIOR****	.457KV= 92.7% OF	.493KV	215.5	135.0	13.6	.0
3805H	***DURING***	.416KV= 84.5% OF	.493KV	215.5	135.0	11.3	.0
3805H	***AFTER****	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3807	***PRIOR****	.451KV= 91.4% OF	.493KV	175.2	108.2	62.2	.3
3807	***DURING***	.437KV= 88.7% OF	.493KV	243.9	212.8	58.5	.3
3807	***AFTER****	.449KV= 91.0% OF	.493KV	200.5	123.3	61.6	.3

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STARTING MOTOR NAME		HP				
3V30C	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V30C	***DURING***	30.0	.393KV=	85.4% OF	.460 KV	
3V30C	***AFTER***	30.0	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V2B	***PRIOR***	60.0	.442KV=	96.1% OF	.460 KV	* WARNING WARNING WARNING *
3V2B	***DURING***	60.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *
3V2B	***AFTER***	60.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
MOV744A	***PRIOR***	10.5	.442KV=	96.2% OF	.460 KV	* WARNING WARNING WARNING *
MOV744A	***DURING***	10.5	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *
MOV744A	***AFTER***	10.5	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B08V	***PRIOR***	.447KV= 90.6% OF	.493KV	236.0	145.2	1.7	.0
3B08V	***DURING***	.437KV= 88.6% OF	.493KV	236.0	145.2	1.7	.0
3B08V	***AFTER***	.445KV= 90.3% OF	.493KV	236.0	145.2	1.7	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V1D	***PRIOR***	100.0	.442KV=	96.2% OF	.460 KV	* WARNING WARNING WARNING *
3V1D	***DURING***	100.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *
3V1D	***AFTER***	100.0	.441KV=	95.9% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V11	***PRIOR***	10.0	.443KV=	96.3% OF	.460 KV	* WARNING WARNING WARNING *
V11	***DURING***	10.0	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *
V11	***AFTER***	10.0	.442KV=	96.0% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16C/17***PRIOR***	34.0	.434KV=	94.4% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***	34.0	.425KV=	92.3% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER***	34.0	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P42B ***PRIOR***	3.0	.443KV=	96.3% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***DURING***	3.0	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***AFTER***	3.0	.442KV=	96.0% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V77/E23***PRIOR***	36.0	.441KV=	95.9% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***DURING***	36.0	.431KV=	93.7% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***AFTER***	36.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
NS74B ***PRIOR***	50.5	.439KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***DURING***	50.5	.429KV=	93.2% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***AFTER***	50.5	.437KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77B ***PRIOR***	3.4	.441KV=	96.0% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***DURING***	3.4	.432KV=	93.9% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***AFTER***	3.4	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S78B ***PRIOR***	3.4	.442KV=	96.1% OF	.460 KV	* WARNING WARNING WARNING *
S78B ***DURING***	3.4	.432KV=	94.0% OF	.460 KV	* WARNING WARNING WARNING *
S78B ***AFTER***	3.4	.441KV=	95.8% OF	.460 KV	* WARNING WARNING WARNING *



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VOLTAGE DROP ANALYSIS CASE #= 3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B50	***PRIOR***	.449KV= 91.1% OF	.493KV	123.4	60.8	.0	.0
3B50	***DURING***	.439KV= 89.1% OF	.493KV	123.4	60.8	.0	.0
3B50	***AFTER***	.448KV= 90.8% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.921KV= 94.3% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***DURING***	3.874KV= 93.1% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***AFTER***	3.916KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B02	***PRIOR***	.458KV= 92.8% OF	.493KV	207.0	113.4	.0	.0
3B02	***DURING***	.448KV= 90.9% OF	.493KV	207.0	113.4	.0	.0
3B02	***AFTER***	.457KV= 92.6% OF	.493KV	207.0	113.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B04	***PRIOR***	.458KV= 93.0% OF	.493KV	123.5	77.5	.0	.0
3B04	***DURING***	.418KV= 84.9% OF	.493KV	311.1	1107.6	.0	.0
3B04	***AFTER***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0	.0

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STARTING MOTOR NAME HP

3P214B	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3P214B	***DURING***	250.0	.371KV=	80.7% OF	.460 KV	* WARNING WARNING WARNING *
3P214B	***AFTER***	250.0	.447KV=	97.2% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B06	***PRIOR***	.454KV= 92.2% OF	.493KV	133.8	81.9	47.5	.1
3B06	***DURING***	.442KV= 89.7% OF	.493KV	201.9	194.4	44.9	.1
3B06	***AFTER***	.453KV= 91.8% OF	.493KV	158.8	97.1	47.1	.1

STARTING MOTOR NAME HP

3V30A	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V30A	***DURING***	30.0	.408KV=	88.7% OF	.460 KV	
3V30A	***AFTER***	30.0	.442KV=	96.0% OF	.460 KV	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
MOV744B	***PRIOR***	10.3	.442KV=	96.2% OF	.460 KV	* WARNING WARNING WARNING *
MOV744B	***DURING***	10.3	.430KV=	93.4% OF	.460 KV	* WARNING WARNING WARNING *
MOV744B	***AFTER***	10.3	.441KV=	95.8% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
B08N	***PRIOR***	.452KV= 91.6% OF	.493KV	117.9	72.4	21.3	12.5
B08N	***DURING***	.411KV= 83.4% OF	.493KV	117.9	72.4	17.7	10.4
B08N	***AFTER***	.447KV= 90.8% OF	.493KV	117.9	72.4	20.9	12.3

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B52	***PRIOR***	.458KV= 92.9% OF	.493KV	16.1	9.9	16.4	.0
3B52	***DURING***	.418KV= 84.8% OF	.493KV	16.1	9.9	13.6	.0
3B52	***AFTER***	.454KV= 92.0% OF	.493KV	16.1	9.9	16.1	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B53	***PRIOR***	.460KV= 93.2% OF	.493KV	14.6	9.0	26.9	.0
3B53	***DURING***	.419KV= 85.0% OF	.493KV	14.6	9.0	22.4	.0
3B53	***AFTER***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0

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VOLTAGE DROP ANALYSIS CASE # 3

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3854	***PRIOR***	.458KV= 92.9% OF	.493KV	14.6	9.0	24.6	.0
3854	***DURING***	.418KV= 84.9% OF	.493KV	14.6	9.0	20.5	.0
3854	***AFTER***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS113	***PRIOR***	233.794KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.786KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.792KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AA1	***PRIOR***	4.015KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.012KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.015KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AB1	***PRIOR***	3.959KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.959KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.959KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AA2	***PRIOR***	3.971KV= 95.5% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.967KV= 95.4% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.971KV= 95.5% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AD	***PRIOR***	3.913KV= 94.1% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.913KV= 94.1% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.913KV= 94.1% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B01	***PRIOR***	.455KV= 92.3% OF .493KV	446.9	238.3	.0	.0
3B01	***DURING***	.455KV= 92.2% OF .493KV	446.9	238.3	.0	.0
3B01	***AFTER***	.455KV= 92.3% OF .493KV	446.9	238.3	.0	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3803	***PRIOR***	.456KV= 92.5% OF	.493KV	82.6	51.3	202.2	1.5
3803	***DURING***	.452KV= 91.7% OF	.493KV	82.6	51.3	198.4	1.4
3803	***AFTER***	.455KV= 92.4% OF	.493KV	82.6	51.3	201.6	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805V	***PRIOR***	.455KV= 92.2% OF	.493KV	100.2	62.0	28.4	.0
3805V	***DURING***	.454KV= 92.1% OF	.493KV	100.2	62.0	28.3	.0
3805V	***AFTER***	.454KV= 92.2% OF	.493KV	100.2	62.0	28.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805N	***PRIOR***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0
3805N	***DURING***	.452KV= 91.7% OF	.493KV	215.5	135.0	13.3	.0
3805N	***AFTER***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3807	***PRIOR***	.449KV= 91.0% OF	.493KV	200.5	123.3	61.6	.3
3807	***DURING***	.444KV= 90.2% OF	.493KV	200.5	123.3	60.4	.3
3807	***AFTER***	.448KV= 90.9% OF	.493KV	200.5	123.3	61.4	.3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V30C	***PRIOR***	30.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30C	***DURING***	30.0	.429KV= 93.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30C	***AFTER***	30.0	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *



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VOLTAGE DROP ANALYSIS CASE # 4

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V2B	***PRIOR***	60.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING
3V2B	***DURING***	60.0	.436KV=	94.7% OF	.460 KV	*	WARNING	WARNING
3V2B	***AFTER***	60.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
MOV744A	***PRIOR***	10.5	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING
MOV744A	***DURING***	10.5	.436KV=	94.7% OF	.460 KV	*	WARNING	WARNING
MOV744A	***AFTER***	10.5	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B08V	***PRIOR***	.445KV= 90.3% OF	.493KV	236.0	145.2	1.7 .0
3B08V	***DURING***	.436KV= 88.5% OF	.493KV	304.2	250.5	1.7 .0
3B08V	***AFTER***	.444KV= 90.0% OF	.493KV	261.3	160.4	1.7 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V1D	***PRIOR***	100.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING
3V1D	***DURING***	100.0	.432KV=	94.0% OF	.460 KV	*	WARNING	WARNING
3V1D	***AFTER***	100.0	.440KV=	95.5% OF	.460 KV	*	WARNING	WARNING

STARTING MOTOR NAME

		HP						
3V30B	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	*	MOTOR NOT STARTED YET	*
3V30B	***DURING***	30.0	.394KV=	85.7% OF	.460 KV			
3V30B	***AFTER***	30.0	.429KV=	93.3% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
V11	***PRIOR***	10.0	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING
V11	***DURING***	10.0	.433KV=	94.0% OF	.460 KV	*	WARNING	WARNING
V11	***AFTER***	10.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16C/17***PRIOR***	34.0	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***	34.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER***	34.0	.431KV=	93.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16D ***PRIOR***	36.0	.442KV=	96.0% OF	.460 KV	* WARNING WARNING WARNING *
E16D ***DURING***	36.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *
E16D ***AFTER***	36.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P42B ***PRIOR***	3.0	.442KV=	96.0% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***DURING***	3.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***AFTER***	3.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V77/E23***PRIOR***	36.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***DURING***	36.0	.431KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***AFTER***	36.0	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
HS74B ***PRIOR***	50.5	.437KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *
HS74B ***DURING***	50.5	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *
HS74B ***AFTER***	50.5	.436KV=	94.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77B ***PRIOR***	3.4	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***DURING***	3.4	.431KV=	93.8% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***AFTER***	3.4	.439KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78B	***PRIOR***	3.4	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***DURING***	3.4	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***AFTER***	3.4	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.430KV=	93.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
MOV1417	***PRIOR***	1.5	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV1417	***DURING***	1.5	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV1417	***AFTER***	1.5	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3850	***PRIOR***	.448KV= 90.8% OF	.493KV	123.4	60.8	.0	.0
3850	***DURING***	.440KV= 89.3% OF	.493KV	123.4	60.8	.0	.0
3850	***AFTER***	.446KV= 90.5% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.432KV=	93.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.916KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***DURING***	3.915KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***AFTER***	3.916KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3802	***PRIOR***	.457KV= 92.6% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.457KV= 92.6% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.457KV= 92.6% OF	.493KV	207.0	113.4	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3804	***PRIOR***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0	.0
3804	***DURING***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0	.0
3804	***AFTER***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3806	***PRIOR***	.453KV= 91.8% OF	.493KV	158.8	97.1	47.1	.1
3806	***DURING***	.453KV= 91.8% OF	.493KV	158.8	97.1	47.1	.1
3806	***AFTER***	.453KV= 91.8% OF	.493KV	158.8	97.1	47.1	.1

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE					
MOV744B***PRIOR***	10.3	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV744B***DURING***	10.3	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV744B***AFTER***	10.3	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
B08N	***PRIOR***	.447KV= 90.8% OF	.493KV	117.9	72.4	20.9	12.3
B08N	***DURING***	.447KV= 90.7% OF	.493KV	117.9	72.4	20.9	12.3
B08N	***AFTER***	.447KV= 90.8% OF	.493KV	117.9	72.4	20.9	12.3

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3852	***PRIOR***	.454KV= 92.0% OF	.493KV	16.1	9.9	16.1	.0
3852	***DURING***	.454KV= 92.0% OF	.493KV	16.1	9.9	16.1	.0
3852	***AFTER***	.454KV= 92.0% OF	.493KV	16.1	9.9	16.1	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3853	***PRIOR***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0
3853	***DURING***	.455KV= 92.2% OF	.493KV	14.6	9.0	26.4	.0
3853	***AFTER***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0



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VOLTAGE DROP ANALYSIS CASE #= 4

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B54	***PRIOR***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0
3B54	***DURING***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0
3B54	***AFTER***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0



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VOLTAGE DROP ANALYSIS CASE #= 5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS113	***PRIOR***	233.792KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.792KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.792KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AA1	***PRIOR***	4.015KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.015KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.015KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AB1	***PRIOR***	3.959KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.959KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.959KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AA2	***PRIOR***	3.971KV= 95.5% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.971KV= 95.5% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.971KV= 95.5% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AD	***PRIOR***	3.913KV= 94.1% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.913KV= 94.1% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.913KV= 94.1% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B01	***PRIOR***	.455KV= 92.3% OF .493KV	446.9	238.3	.0	.0
3B01	***DURING***	.455KV= 92.3% OF .493KV	446.9	238.3	.0	.0
3B01	***AFTER***	.455KV= 92.3% OF .493KV	446.9	238.3	.0	.0



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VOLTAGE DROP ANALYSIS CASE #= 5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3803	***PRIOR***	.455KV= 92.4% OF	.493KV	82.6	51.3	201.6	1.5
3803	***DURING***	.455KV= 92.4% OF	.493KV	82.6	51.3	201.6	1.5
3803	***AFTER***	.455KV= 92.4% OF	.493KV	82.6	51.3	201.6	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3805V	***PRIOR***	.454KV= 92.2% OF	.493KV	100.2	62.0	28.4	.0
3805V	***DURING***	.454KV= 92.2% OF	.493KV	100.2	62.0	28.4	.0
3805V	***AFTER***	.454KV= 92.2% OF	.493KV	100.2	62.0	28.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3805N	***PRIOR***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0
3805N	***DURING***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0
3805N	***AFTER***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3807	***PRIOR***	.448KV= 90.9% OF	.493KV	200.5	123.3	61.4	.3
3807	***DURING***	.448KV= 90.9% OF	.493KV	200.5	123.3	61.4	.3
3807	***AFTER***	.448KV= 90.9% OF	.493KV	200.5	123.3	61.4	.3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
3V30C	***PRIOR***	30.0	.433KV= 94.2% OF	.460 KV	*	WARNING WARNING WARNING	*
3V30C	***DURING***	30.0	.433KV= 94.2% OF	.460 KV	*	WARNING WARNING WARNING	*
3V30C	***AFTER***	30.0	.433KV= 94.2% OF	.460 KV	*	WARNING WARNING WARNING	*

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VOLTAGE DROP ANALYSIS CASE #= 5

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V2B	***PRIOR***	60.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V2B	***DURING***	60.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V2B	***AFTER***	60.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
MOV744A	***PRIOR***	10.5	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV744A	***DURING***	10.5	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV744A	***AFTER***	10.5	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B08V	***PRIOR***	.444KV= 90.0% OF	.493KV	261.3	160.4	1.7 .0
3B08V	***DURING***	.444KV= 90.0% OF	.493KV	261.3	160.4	1.7 .0
3B08V	***AFTER***	.444KV= 90.0% OF	.493KV	261.3	160.4	1.7 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V1D	***PRIOR***	100.0	.440KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***DURING***	100.0	.440KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***AFTER***	100.0	.440KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30B	***PRIOR***	30.0	.429KV=	93.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***DURING***	30.0	.429KV=	93.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***AFTER***	30.0	.429KV=	93.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V11	***PRIOR***	10.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***DURING***	10.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***AFTER***	10.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16C/17***PRIOR****	34.0	.431KV=	93.8% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***	34.0	.431KV=	93.8% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER****	34.0	.431KV=	93.8% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E160 ***PRIOR****	36.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *
E160 ***DURING***	36.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *
E160 ***AFTER****	36.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P42B ***PRIOR****	3.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***DURING***	3.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***AFTER****	3.0	.440KV=	95.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V77/E23***PRIOR****	36.0	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***DURING***	36.0	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***AFTER****	36.0	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
NS74B ***PRIOR****	50.5	.436KV=	94.7% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***DURING***	50.5	.436KV=	94.7% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***AFTER****	50.5	.436KV=	94.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77B ***PRIOR****	3.4	.439KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***DURING***	3.4	.439KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***AFTER****	3.4	.439KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *

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VOLTAGE DROP ANALYSIS CASE #= 5

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S788	***PRIOR***	3.4	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S788	***DURING***	3.4	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S788	***AFTER***	3.4	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
MOV1417	***PRIOR***	1.5	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV1417	***DURING***	1.5	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
MOV1417	***AFTER***	1.5	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B50	***PRIOR***	.446KV= 90.5% OF	.493KV	123.4	60.8	.0	.0
3B50	***DURING***	.446KV= 90.5% OF	.493KV	123.4	60.8	.0	.0
3B50	***AFTER***	.446KV= 90.5% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.916KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***DURING***	3.916KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***AFTER***	3.916KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B02	***PRIOR***	.457KV= 92.6% OF	.493KV	207.0	113.4	.0	.0
3B02	***DURING***	.457KV= 92.6% OF	.493KV	207.0	113.4	.0	.0
3B02	***AFTER***	.457KV= 92.6% OF	.493KV	207.0	113.4	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B04	***PRIOR***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0	.0
3B04	***DURING***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0	.0
3B04	***AFTER***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B06	***PRIOR***	.453KV= 91.8% OF	.493KV	158.8	97.1	47.1	.1
3B06	***DURING***	.453KV= 91.8% OF	.493KV	158.8	97.1	47.1	.1
3B06	***AFTER***	.453KV= 91.8% OF	.493KV	158.8	97.1	47.1	.1

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
MOV744B***PRIOR***	10.3	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744B***DURING***	10.3	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744B***AFTER***	10.3	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
B08N	***PRIOR***	.447KV= 90.8% OF	.493KV	117.9	72.4	20.9	12.3
B08N	***DURING***	.447KV= 90.8% OF	.493KV	117.9	72.4	20.9	12.3
B08N	***AFTER***	.447KV= 90.8% OF	.493KV	117.9	72.4	20.9	12.3

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B52	***PRIOR***	.454KV= 92.0% OF	.493KV	16.1	9.9	16.1	.0
3B52	***DURING***	.454KV= 92.0% OF	.493KV	16.1	9.9	16.1	.0
3B52	***AFTER***	.454KV= 92.0% OF	.493KV	16.1	9.9	16.1	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B53	***PRIOR***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0
3B53	***DURING***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0
3B53	***AFTER***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0



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VOLTAGE DROP ANALYSIS CASE #= 5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3854	***PRIOR***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0
3854	***DURING***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0
3854	***AFTER***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0



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VOLTAGE DROP ANALYSIS CASE #= 6

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
2BUS113	***PRIOR***	233.796KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.748KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.789KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AA1	***PRIOR***	4.015KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.006KV= 96.3% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.014KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AB1	***PRIOR***	3.960KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.950KV= 95.0% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.959KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AA2	***PRIOR***	3.972KV= 95.5% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.958KV= 95.1% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.970KV= 95.4% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3AD	***PRIOR***	3.914KV= 94.1% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.900KV= 93.8% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.912KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3801	***PRIOR***	.455KV= 92.3% OF .493KV	446.9	238.3	.0	.0
3801	***DURING***	.454KV= 92.0% OF .493KV	446.9	238.3	.0	.0
3801	***AFTER***	.455KV= 92.3% OF .493KV	446.9	238.3	.0	.0



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VOLTAGE DROP ANALYSIS CASE #= 6

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3803	***PRIOR***	.456KV= 92.5% OF	.493KV	82.6	51.3	202.1	1.5
3803	***DURING***	.444KV= 90.0% OF	.493KV	82.6	51.3	191.1	1.4
3803	***AFTER***	.454KV= 92.2% OF	.493KV	82.6	51.3	200.6	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805V	***PRIOR***	.455KV= 92.2% OF	.493KV	91.9	57.0	28.4	.0
3805V	***DURING***	.453KV= 91.9% OF	.493KV	91.9	57.0	28.2	.0
3805V	***AFTER***	.455KV= 92.2% OF	.493KV	91.9	57.0	28.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805N	***PRIOR***	.453KV= 91.9% OF	.493KV	215.5	135.0	13.4	.0
3805N	***DURING***	.451KV= 91.5% OF	.493KV	215.5	135.0	13.3	.0
3805N	***AFTER***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3807	***PRIOR***	.449KV= 91.1% OF	.493KV	182.9	112.6	61.7	.3
3807	***DURING***	.425KV= 86.2% OF	.493KV	318.7	429.1	55.2	.3
3807	***AFTER***	.445KV= 90.4% OF	.493KV	244.6	150.9	60.7	.3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V1C	***PRIOR***	100.0	.445KV= 96.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1C	***DURING***	100.0	.420KV= 91.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1C	***AFTER***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

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VOLTAGE DROP ANALYSIS CASE #= 6

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V30C	***PRIOR***	30.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING
3V30C	***DURING***	30.0	.409KV=	88.9% OF	.460 KV	*	WARNING	WARNING
3V30C	***AFTER***	30.0	.431KV=	93.6% OF	.460 KV	*	WARNING	WARNING

STARTING MOTOR NAME

		HP						
3V3C	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	*	MOTOR NOT STARTED YET	*
3V3C	***DURING***	75.0	.396KV=	86.0% OF	.460 KV	*		
3V3C	***AFTER***	75.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V2B	***PRIOR***	60.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING
3V2B	***DURING***	60.0	.416KV=	90.4% OF	.460 KV	*	WARNING	WARNING
3V2B	***AFTER***	60.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B08V	***PRIOR***	.444KV= 90.1% OF	.493KV	257.5	158.1	1.7
3B08V	***DURING***	.431KV= 87.5% OF	.493KV	257.5	158.1	1.6
3B08V	***AFTER***	.443KV= 89.8% OF	.493KV	257.5	158.1	1.7

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V1D	***PRIOR***	100.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING
3V1D	***DURING***	100.0	.427KV=	92.9% OF	.460 KV	*	WARNING	WARNING
3V1D	***AFTER***	100.0	.439KV=	95.3% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V30B	***PRIOR***	30.0	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING
3V30B	***DURING***	30.0	.417KV=	90.6% OF	.460 KV	*	WARNING	WARNING
3V30B	***AFTER***	30.0	.428KV=	93.1% OF	.460 KV	*	WARNING	WARNING



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
V11	***PRIOR***	10.0	.441KV=	95.8% OF	.460 KV	*	WARNING WARNING WARNING *
V11	***DURING***	10.0	.428KV=	93.0% OF	.460 KV	*	WARNING WARNING WARNING *
V11	***AFTER***	10.0	.439KV=	95.4% OF	.460 KV	*	WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
E16C/17	***PRIOR***	34.0	.432KV=	94.0% OF	.460 KV	*	WARNING WARNING WARNING *
E16C/17	***DURING***	34.0	.419KV=	91.1% OF	.460 KV	*	WARNING WARNING WARNING *
E16C/17	***AFTER***	34.0	.430KV=	93.6% OF	.460 KV	*	WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
E16D	***PRIOR***	36.0	.441KV=	95.9% OF	.460 KV	*	WARNING WARNING WARNING *
E16D	***DURING***	36.0	.428KV=	93.0% OF	.460 KV	*	WARNING WARNING WARNING *
E16D	***AFTER***	36.0	.439KV=	95.5% OF	.460 KV	*	WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
P42B	***PRIOR***	3.0	.441KV=	95.8% OF	.460 KV	*	WARNING WARNING WARNING *
P42B	***DURING***	3.0	.428KV=	93.0% OF	.460 KV	*	WARNING WARNING WARNING *
P42B	***AFTER***	3.0	.439KV=	95.4% OF	.460 KV	*	WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
V77/E23	***PRIOR***	36.0	.439KV=	95.4% OF	.460 KV	*	WARNING WARNING WARNING *
V77/E23	***DURING***	36.0	.426KV=	92.5% OF	.460 KV	*	WARNING WARNING WARNING *
V77/E23	***AFTER***	36.0	.437KV=	95.0% OF	.460 KV	*	WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
NS74B	***PRIOR***	50.5	.436KV=	94.9% OF	.460 KV	*	WARNING WARNING WARNING *
NS74B	***DURING***	50.5	.423KV=	92.0% OF	.460 KV	*	WARNING WARNING WARNING *
NS74B	***AFTER***	50.5	.435KV=	94.5% OF	.460 KV	*	WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S77B	***PRIOR***	3.4	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***DURING***	3.4	.426KV=	92.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***AFTER***	3.4	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78B	***PRIOR***	3.4	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***DURING***	3.4	.427KV=	92.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***AFTER***	3.4	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.439KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.425KV=	92.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B50	***PRIOR***	.447KV= 90.7% OF	.493KV	123.4	60.8	.0	.0
3B50	***DURING***	.434KV= 88.1% OF	.493KV	123.4	60.8	.0	.0
3B50	***AFTER***	.445KV= 90.3% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.426KV=	92.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.916KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***DURING***	3.903KV= 93.8% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***AFTER***	3.915KV= 94.1% OF	4.160KV	5770.9	3261.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B02	***PRIOR***	.457KV= 92.8% OF	.493KV	207.0	113.4	.0	.0
3B02	***DURING***	.445KV= 90.2% OF	.493KV	207.0	113.4	.0	.0
3B02	***AFTER***	.456KV= 92.4% OF	.493KV	207.0	113.4	.0	.0



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VOLTAGE DROP ANALYSIS CASE #= 6

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3B04	***PRIOR***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0	.0
3B04	***DURING***	.453KV= 91.8% OF	.493KV	323.7	171.8	.0	.0
3B04	***AFTER***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3B06	***PRIOR***	.454KV= 92.1% OF	.493KV	129.5	79.3	47.4	.1
3B06	***DURING***	.433KV= 87.8% OF	.493KV	270.1	411.1	43.1	.1
3B06	***AFTER***	.451KV= 91.5% OF	.493KV	191.1	117.5	46.8	.1

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30A	***PRIOR***	30.0	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***DURING***	30.0	.421KV= 91.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***AFTER***	30.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

STARTING MOTOR NAME HP

3V3A	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *			
3V3A	***DURING***	75.0	.406KV= 88.3% OF	.460 KV				
3V3A	***AFTER***	75.0	.445KV= 96.7% OF	.460 KV				

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
B08N	***PRIOR***	.448KV= 90.8% OF	.493KV	117.9	72.4	20.9	12.3
B08N	***DURING***	.446KV= 90.4% OF	.493KV	117.9	72.4	20.8	12.2
B08N	***AFTER***	.447KV= 90.7% OF	.493KV	117.9	72.4	20.9	12.3

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3B52	***PRIOR***	.454KV= 92.1% OF	.493KV	16.1	9.9	16.1	.0
3B52	***DURING***	.452KV= 91.7% OF	.493KV	16.1	9.9	16.0	.0
3B52	***AFTER***	.454KV= 92.0% OF	.493KV	16.1	9.9	16.1	.0



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VOLTAGE DROP ANALYSIS CASE #= 6

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3853	***PRIOR***	.455KV= 92.4% OF	.493KV	14.6	9.0	26.5	.0
3853	***DURING***	.454KV= 92.0% OF	.493KV	14.6	9.0	26.3	.0
3853	***AFTER***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3854	***PRIOR***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0
3854	***DURING***	.453KV= 91.8% OF	.493KV	14.6	9.0	24.0	.0
3854	***AFTER***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0

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VOLTAGE DROP ANALYSIS CASE #= 7

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS113	***PRIOR***	233.785KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.761KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.781KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AA1	***PRIOR***	4.014KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.006KV= 96.3% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.013KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AB1	***PRIOR***	3.958KV= 95.1% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.956KV= 95.1% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.957KV= 95.1% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AA2	***PRIOR***	3.970KV= 95.4% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.957KV= 95.1% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.968KV= 95.4% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AD	***PRIOR***	3.910KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.909KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.910KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B01	***PRIOR***	.455KV= 92.3% OF .493KV	446.9	238.3	.0	.0
3B01	***DURING***	.453KV= 92.0% OF .493KV	446.9	238.3	.0	.0
3B01	***AFTER***	.455KV= 92.2% OF .493KV	446.9	238.3	.0	.0

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VOLTAGE DROP ANALYSIS CASE #= 7

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3803	***PRIOR***	.454KV= 92.2% OF	.493KV	82.6	51.3	200.6	1.5
3803	***DURING***	.442KV= 89.6% OF	.493KV	82.6	51.3	189.8	1.4
3803	***AFTER***	.453KV= 91.8% OF	.493KV	82.6	51.3	199.0	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3805V	***PRIOR***	.455KV= 92.2% OF	.493KV	91.9	57.0	28.4	.0
3805V	***DURING***	.453KV= 91.9% OF	.493KV	91.9	57.0	28.2	.0
3805V	***AFTER***	.454KV= 92.1% OF	.493KV	91.9	57.0	28.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3805N	***PRIOR***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0
3805N	***DURING***	.451KV= 91.5% OF	.493KV	215.5	135.0	13.3	.0
3805N	***AFTER***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3807	***PRIOR***	.445KV= 90.4% OF	.493KV	244.6	150.9	60.7	.3
3807	***DURING***	.433KV= 87.8% OF	.493KV	244.6	150.9	57.3	.3
3807	***AFTER***	.444KV= 90.0% OF	.493KV	244.6	150.9	60.2	.3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP						
3V1C	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1C	100.0	.428KV= 93.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1C	100.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30C	***PRIOR***	30.0	.431KV=	93.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30C	***DURING***	30.0	.417KV=	90.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30C	***AFTER***	30.0	.429KV=	93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V3C	***PRIOR***	75.0	.439KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3C	***DURING***	75.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3C	***AFTER***	75.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
P207A	***PRIOR***	6.0	.443KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
P207A	***DURING***	6.0	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
P207A	***AFTER***	6.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V2B	***PRIOR***	60.0	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V2B	***DURING***	60.0	.424KV=	92.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V2B	***AFTER***	60.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V65A	***PRIOR***	2.0	.442KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V65A	***DURING***	2.0	.430KV=	93.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V65A	***AFTER***	2.0	.440KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3808V	***PRIOR***	.443KV= 89.8% OF	.493KV	257.5	158.1	1.7	.0
3808V	***DURING***	.417KV= 84.6% OF	.493KV	388.9	462.0	1.5	.0
3808V	***AFTER***	.439KV= 88.9% OF	.493KV	319.3	196.4	1.7	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V1D	***PRIOR***	100.0	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *
3V1D	***DURING***	100.0	.413KV=	89.8% OF	.460 KV	* WARNING WARNING WARNING *
3V1D	***AFTER***	100.0	.434KV=	94.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
3V30B	***PRIOR***	30.0	.428KV=	93.1% OF	.460 KV	* WARNING WARNING WARNING *
3V30B	***DURING***	30.0	.402KV=	87.4% OF	.460 KV	* WARNING WARNING WARNING *
3V30B	***AFTER***	30.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *

STARTING MOTOR NAME

HP

3V3B	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3V3B	***DURING***	75.0	.387KV=	84.2% OF	.460 KV	
3V3B	***AFTER***	75.0	.431KV=	93.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V11	***PRIOR***	10.0	.439KV=	95.4% OF	.460 KV	* WARNING WARNING WARNING *
V11	***DURING***	10.0	.413KV=	89.9% OF	.460 KV	* WARNING WARNING WARNING *
V11	***AFTER***	10.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V29B	***PRIOR***	1.0	.442KV=	96.0% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***DURING***	1.0	.416KV=	90.5% OF	.460 KV	* WARNING WARNING WARNING *
V29B	***AFTER***	1.0	.438KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
E16C/17	***PRIOR***	34.0	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17	***DURING***	34.0	.404KV=	87.9% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17	***AFTER***	34.0	.426KV=	92.6% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
E16D	***PRIOR***	36.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
E16D	***DURING***	36.0	.414KV=	89.9% OF	.460 KV	* WARNING WARNING WARNING *
E16D	***AFTER***	36.0	.435KV=	94.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
P42B	***PRIOR***	3.0	.439KV=	95.4% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***DURING***	3.0	.413KV=	89.9% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***AFTER***	3.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V77/E23	***PRIOR***	36.0	.437KV=	95.0% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***DURING***	36.0	.411KV=	89.4% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***AFTER***	36.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
NS74B	***PRIOR***	50.5	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***DURING***	50.5	.409KV=	88.9% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***AFTER***	50.5	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
S77B	***PRIOR***	3.4	.438KV=	95.1% OF	.460 KV	* WARNING WARNING WARNING *
S77B	***DURING***	3.4	.412KV=	89.6% OF	.460 KV	* WARNING WARNING WARNING *
S77B	***AFTER***	3.4	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
S78B	***PRIOR***	3.4	.438KV=	95.2% OF	.460 KV	* WARNING WARNING WARNING *
S78B	***DURING***	3.4	.413KV=	89.7% OF	.460 KV	* WARNING WARNING WARNING *
S78B	***AFTER***	3.4	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.437KV= 94.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S75B	***DURING***	5.0	.411KV= 89.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S75B	***AFTER***	5.0	.433KV= 94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B50	***PRIOR***	.445KV= 90.3% OF	.493KV	123.4	60.8	.0	.0
3B50	***DURING***	.424KV= 86.0% OF	.493KV	123.4	60.8	.0	.0
3B50	***AFTER***	.442KV= 89.6% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C	***DURING***	150.0	.415KV= 90.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C	***AFTER***	150.0	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.913KV= 94.1% OF	4.160KV	5850.1	3301.8	.0	.0
3AB2	***DURING***	3.912KV= 94.0% OF	4.160KV	5850.1	3301.8	.0	.0
3AB2	***AFTER***	3.913KV= 94.1% OF	4.160KV	5850.1	3301.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B02	***PRIOR***	.456KV= 92.4% OF	.493KV	207.0	113.4	.0	.0
3B02	***DURING***	.455KV= 92.4% OF	.493KV	207.0	113.4	.0	.0
3B02	***AFTER***	.455KV= 92.4% OF	.493KV	207.0	113.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B04	***PRIOR***	.454KV= 92.0% OF	.493KV	323.7	171.8	.0	.0
3B04	***DURING***	.454KV= 92.0% OF	.493KV	323.7	171.8	.0	.0
3B04	***AFTER***	.454KV= 92.0% OF	.493KV	323.7	171.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B06	***PRIOR***	.451KV= 91.5% OF	.493KV	191.1	117.5	46.7	.1
3B06	***DURING***	.451KV= 91.4% OF	.493KV	191.1	117.5	46.7	.1
3B06	***AFTER***	.451KV= 91.4% OF	.493KV	191.1	117.5	46.7	.1

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V30A	***PRIOR***	30.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30A	***DURING***	30.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30A	***AFTER***	30.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
B08N	***PRIOR***	.447KV= 90.7% OF	.493KV	117.9	72.4	20.9	12.3
B08N	***DURING***	.447KV= 90.7% OF	.493KV	117.9	72.4	20.9	12.2
B08N	***AFTER***	.447KV= 90.7% OF	.493KV	117.9	72.4	20.9	12.3

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3852	***PRIOR***	.453KV= 92.0% OF	.493KV	16.1	9.9	16.0	.0
3852	***DURING***	.453KV= 91.9% OF	.493KV	16.1	9.9	16.0	.0
3852	***AFTER***	.453KV= 92.0% OF	.493KV	16.1	9.9	16.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3853	***PRIOR***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0
3853	***DURING***	.454KV= 92.0% OF	.493KV	14.6	9.0	26.3	.0
3853	***AFTER***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3854	***PRIOR***	.454KV= 92.0% OF	.493KV	14.6	9.0	24.1	.0
3854	***DURING***	.454KV= 92.0% OF	.493KV	14.6	9.0	24.1	.0
3854	***AFTER***	.454KV= 92.0% OF	.493KV	14.6	9.0	24.1	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.781KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.781KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.781KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.013KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	4.013KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.013KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.957KV= 95.1% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.957KV= 95.1% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.957KV= 95.1% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.968KV= 95.4% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.968KV= 95.4% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.968KV= 95.4% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.910KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.910KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.910KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3B01	***PRIOR***	.455KV= 92.2% OF .493KV	446.9	238.3	.0	.0
3B01	***DURING***	.455KV= 92.2% OF .493KV	446.9	238.3	.0	.0
3B01	***AFTER***	.455KV= 92.2% OF .493KV	446.9	238.3	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B03	***PRIOR***	.453KV= 91.8% OF	.493KV	82.6	51.3	199.0	1.5
3B03	***DURING***	.453KV= 91.8% OF	.493KV	82.6	51.3	199.0	1.5
3B03	***AFTER***	.453KV= 91.8% OF	.493KV	82.6	51.3	199.0	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B05V	***PRIOR***	.454KV= 92.1% OF	.493KV	91.9	57.0	28.4	.0
3B05V	***DURING***	.454KV= 92.1% OF	.493KV	91.9	57.0	28.4	.0
3B05V	***AFTER***	.454KV= 92.1% OF	.493KV	91.9	57.0	28.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B05N	***PRIOR***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0
3B05N	***DURING***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0
3B05N	***AFTER***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3B07	***PRIOR***	.444KV= 90.0% OF	.493KV	244.6	150.9	60.2	.3
3B07	***DURING***	.444KV= 90.0% OF	.493KV	244.6	150.9	60.2	.3
3B07	***AFTER***	.444KV= 90.0% OF	.493KV	244.6	150.9	60.2	.3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V1C	***PRIOR***	100.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1C	***DURING***	100.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1C	***AFTER***	100.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V30C	***PRIOR***	30.0	.429KV= 93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30C	***DURING***	30.0	.429KV= 93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30C	***AFTER***	30.0	.429KV= 93.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V3C	***PRIOR***	75.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3C	***DURING***	75.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3C	***AFTER***	75.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
P207A	***PRIOR***	6.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
P207A	***DURING***	6.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
P207A	***AFTER***	6.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V2B	***PRIOR***	60.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V2B	***DURING***	60.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V2B	***AFTER***	60.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V65A	***PRIOR***	2.0	.440KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V65A	***DURING***	2.0	.440KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V65A	***AFTER***	2.0	.440KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
3808V	***PRIOR***	.439KV= 88.9% OF	.493KV	319.3	196.4	1.7	.0
3808V	***DURING***	.439KV= 88.9% OF	.493KV	319.3	196.4	1.7	.0
3808V	***AFTER***	.439KV= 88.9% OF	.493KV	319.3	196.4	1.7	.0

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VOLTAGE DROP ANALYSIS CASE #= 8

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V1D	***PRIOR***	100.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***DURING***	100.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***AFTER***	100.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30B	***PRIOR***	30.0	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***DURING***	30.0	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***AFTER***	30.0	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V3B	***PRIOR***	75.0	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3B	***DURING***	75.0	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3B	***AFTER***	75.0	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V11	***PRIOR***	10.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***DURING***	10.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***AFTER***	10.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V29B	***PRIOR***	1.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29B	***DURING***	1.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29B	***AFTER***	1.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E16C/17	***PRIOR***	34.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16C/17	***DURING***	34.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16C/17	***AFTER***	34.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
E16D	***PRIOR***	36.0	.435KV=	94.6% OF	.460 KV	* WARNING WARNING WARNING *
E16D	***DURING***	36.0	.435KV=	94.6% OF	.460 KV	* WARNING WARNING WARNING *
E16D	***AFTER***	36.0	.435KV=	94.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
P42B	***PRIOR***	3.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***DURING***	3.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *
P42B	***AFTER***	3.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
V77/E23	***PRIOR***	36.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***DURING***	36.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23	***AFTER***	36.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
NS74B	***PRIOR***	50.5	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***DURING***	50.5	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *
NS74B	***AFTER***	50.5	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
S77B	***PRIOR***	3.4	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *
S77B	***DURING***	3.4	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *
S77B	***AFTER***	3.4	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP				
S78B	***PRIOR***	3.4	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *
S78B	***DURING***	3.4	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *
S78B	***AFTER***	3.4	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.433KV= 94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S75B	***DURING***	5.0	.433KV= 94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S75B	***AFTER***	5.0	.433KV= 94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B50	***PRIOR***	.442KV= 89.6% OF	.493KV	123.4	60.8	.0	.0
3B50	***DURING***	.442KV= 89.6% OF	.493KV	123.4	60.8	.0	.0
3B50	***AFTER***	.442KV= 89.6% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C	***DURING***	150.0	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C	***AFTER***	150.0	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3A82	***PRIOR***	3.913KV= 94.1% OF	4.160KV	5850.1	3301.8	.0	.0
3A82	***DURING***	3.913KV= 94.1% OF	4.160KV	5850.1	3301.8	.0	.0
3A82	***AFTER***	3.913KV= 94.1% OF	4.160KV	5850.1	3301.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B02	***PRIOR***	.455KV= 92.4% OF	.493KV	207.0	113.4	.0	.0
3B02	***DURING***	.455KV= 92.4% OF	.493KV	207.0	113.4	.0	.0
3B02	***AFTER***	.455KV= 92.4% OF	.493KV	207.0	113.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B04	***PRIOR***	.454KV= 92.0% OF	.493KV	323.7	171.8	.0	.0
3B04	***DURING***	.454KV= 92.0% OF	.493KV	323.7	171.8	.0	.0
3B04	***AFTER***	.454KV= 92.0% OF	.493KV	323.7	171.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B06	***PRIOR***	.451KV= 91.4% OF	.493KV	191.1	117.5	46.7	.1
3B06	***DURING***	.451KV= 91.4% OF	.493KV	191.1	117.5	46.7	.1
3B06	***AFTER***	.451KV= 91.4% OF	.493KV	191.1	117.5	46.7	.1

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
3V30A	***PRIOR***	30.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30A	***DURING***	30.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30A	***AFTER***	30.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
B08N	***PRIOR***	.447KV= 90.7% OF	.493KV	117.9	72.4	20.9	12.3
B08N	***DURING***	.447KV= 90.7% OF	.493KV	117.9	72.4	20.9	12.3
B08N	***AFTER***	.447KV= 90.7% OF	.493KV	117.9	72.4	20.9	12.3

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3852	***PRIOR***	.453KV= 92.0% OF	.493KV	16.1	9.9	16.0	.0
3852	***DURING***	.453KV= 92.0% OF	.493KV	16.1	9.9	16.0	.0
3852	***AFTER***	.453KV= 92.0% OF	.493KV	16.1	9.9	16.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3853	***PRIOR***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0
3853	***DURING***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0
3853	***AFTER***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3854	***PRIOR***	.454KV= 92.0% OF	.493KV	14.6	9.0	24.1	.0
3854	***DURING***	.454KV= 92.0% OF	.493KV	14.6	9.0	24.1	.0
3854	***AFTER***	.454KV= 92.0% OF	.493KV	14.6	9.0	24.1	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS113	***PRIOR***	233.785KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	231.883KV= 99.5% OF 233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.572KV=100.2% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AA1	***PRIOR***	4.013KV= 96.5% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	3.358KV= 80.7% OF 4.160KV	9654.6	29095.4	.0	.0
3AA1	***AFTER***	3.947KV= 94.9% OF 4.160KV	9564.0	5218.3	.0	.0

STARTING MOTOR NAME

HP

3P1A	***PRIOR***	.0	.000KV= .0% OF 4.000 KV	* MOTOR NOT STARTED YET *
3P1A	***DURING***	7000.0	3.289KV= 82.2% OF 4.000 KV	
3P1A	***AFTER***	7000.0	3.936KV= 98.4% OF 4.000 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AB1	***PRIOR***	3.958KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.861KV= 92.8% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.948KV= 94.9% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AA2	***PRIOR***	3.968KV= 95.4% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.303KV= 79.4% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.901KV= 93.8% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AD	***PRIOR***	3.912KV= 94.0% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.813KV= 91.7% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.901KV= 93.8% OF 4.160KV	626.8	409.1	.0	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B01	***PRIOR***	.455KV= 92.2% OF	.493KV	446.9	238.3	.0 .0
3B01	***DURING***	.372KV= 75.5% OF	.493KV	446.9	238.3	.0 .0
3B01	***AFTER***	.447KV= 90.6% OF	.493KV	446.9	238.3	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR	
3P201A	***PRIOR***	150.0	.445KV= 96.8% OF	.460 KV		* WARNING	WARNING	WARNING *
3P201A	***DURING***	150.0	.361KV= 78.4% OF	.460 KV		* WARNING	WARNING	WARNING *
3P201A	***AFTER***	150.0	.437KV= 95.0% OF	.460 KV		* WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR	
3P214A	***PRIOR***	250.0	.449KV= 97.6% OF	.460 KV		* WARNING	WARNING	WARNING *
3P214A	***DURING***	250.0	.365KV= 79.4% OF	.460 KV		* WARNING	WARNING	WARNING *
3P214A	***AFTER***	250.0	.441KV= 95.8% OF	.460 KV		* WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR	
3S6A	***PRIOR***	150.0	.444KV= 96.6% OF	.460 KV		* WARNING	WARNING	WARNING *
3S6A	***DURING***	150.0	.359KV= 78.2% OF	.460 KV		* WARNING	WARNING	WARNING *
3S6A	***AFTER***	150.0	.436KV= 94.8% OF	.460 KV		* WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B03	***PRIOR***	.453KV= 91.8% OF	.493KV	82.6	51.3	199.0 1.5
3B03	***DURING***	.369KV= 74.9% OF	.493KV	82.6	51.3	132.6 1.0
3B03	***AFTER***	.444KV= 90.1% OF	.493KV	82.6	51.3	191.9 1.4

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P212	***PRIOR***	100.0	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P212	***DURING***	100.0	.359KV=	78.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P212	***AFTER***	100.0	.436KV=	94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B05V	***PRIOR***	.454KV= 92.1% OF	.493KV	91.9	57.0	28.4 .0
3B05V	***DURING***	.372KV= 75.4% OF	.493KV	91.9	57.0	19.0 .0
3B05V	***AFTER***	.446KV= 90.5% OF	.493KV	91.9	57.0	27.4 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3C2A	***PRIOR***	5.0	.450KV=	97.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3C2A	***DURING***	5.0	.366KV=	79.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3C2A	***AFTER***	5.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P10	***PRIOR***	.8	.454KV=	98.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P10	***DURING***	.8	.371KV=	80.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P10	***AFTER***	.8	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V1A	***PRIOR***	100.0	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1A	***DURING***	100.0	.358KV=	77.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1A	***AFTER***	100.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V34	***PRIOR***	5.0	.450KV=	97.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V34	***DURING***	5.0	.367KV=	79.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V34	***AFTER***	5.0	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B05N	***PRIOR***	.453KV= 91.8% OF	.493KV	215.5	135.0	13.3 .0
3B05N	***DURING***	.370KV= 75.0% OF	.493KV	215.5	135.0	8.9 .0
3B05N	***AFTER***	.444KV= 90.1% OF	.493KV	215.5	135.0	12.9 .0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V14A	***PRIOR***	7.5	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V14A	***DURING***	7.5	.355KV=	77.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V14A	***AFTER***	7.5	.432KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V18	***PRIOR***	7.5	.446KV=	97.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V18	***DURING***	7.5	.362KV=	78.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V18	***AFTER***	7.5	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V19A	***PRIOR***	15.0	.449KV=	97.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V19A	***DURING***	15.0	.365KV=	79.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V19A	***AFTER***	15.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V31B	***PRIOR***	3.0	.449KV=	97.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V31B	***DURING***	3.0	.365KV=	79.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V31B	***AFTER***	3.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V4	***PRIOR***	5.0	.447KV=	97.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V4	***DURING***	5.0	.363KV=	79.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V4	***AFTER***	5.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
3V6A	***PRIOR***	7.5	.449KV=	97.6% OF	.460 KV	*	WARNING WARNING WARNING *
3V6A	***DURING***	7.5	.365KV=	79.4% OF	.460 KV	*	WARNING WARNING WARNING *
3V6A	***AFTER***	7.5	.441KV=	95.8% OF	.460 KV	*	WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
P51A	***PRIOR***	1.0	.451KV=	98.1% OF	.460 KV	*	WARNING WARNING WARNING *
P51A	***DURING***	1.0	.368KV=	80.0% OF	.460 KV	*	WARNING WARNING WARNING *
P51A	***AFTER***	1.0	.443KV=	96.3% OF	.460 KV	*	WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
3X03	***PRIOR***	7.0	.451KV=	98.1% OF	.460 KV	*	WARNING WARNING WARNING *
3X03	***DURING***	7.0	.368KV=	80.0% OF	.460 KV	*	WARNING WARNING WARNING *
3X03	***AFTER***	7.0	.443KV=	96.3% OF	.460 KV	*	WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
3X01	***PRIOR***	170.0	.450KV=	97.8% OF	.460 KV	*	WARNING WARNING WARNING *
3X01	***DURING***	170.0	.366KV=	79.6% OF	.460 KV	*	WARNING WARNING WARNING *
3X01	***AFTER***	170.0	.441KV=	96.0% OF	.460 KV	*	WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
3P90C	***PRIOR***	2.0	.451KV=	98.0% OF	.460 KV	*	WARNING WARNING WARNING *
3P90C	***DURING***	2.0	.368KV=	79.9% OF	.460 KV	*	WARNING WARNING WARNING *
3P90C	***AFTER***	2.0	.443KV=	96.2% OF	.460 KV	*	WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP					
3P90B	***PRIOR***	2.0	.451KV=	98.0% OF	.460 KV	*	WARNING WARNING WARNING *
3P90B	***DURING***	2.0	.367KV=	79.9% OF	.460 KV	*	WARNING WARNING WARNING *
3P90B	***AFTER***	2.0	.442KV=	96.2% OF	.460 KV	*	WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P90A ***PRIOR****	2.0	.451KV= 98.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3P90A ***DURING***	2.0	.367KV= 79.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3P90A ***AFTER****	2.0	.442KV= 96.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3XS75/7***PRIOR****	20.0	.447KV= 97.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3XS75/7***DURING***	20.0	.363KV= 78.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3XS75/7***AFTER****	20.0	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3807	***PRIOR****	.444KV= 90.0% OF	.493KV	244.6	150.9	60.2 .3
3807	***DURING***	.359KV= 72.8% OF	.493KV	244.6	150.9	39.4 .2
3807	***AFTER****	.435KV= 88.3% OF	.493KV	244.6	150.9	57.9 .3

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P203A ***PRIOR****	15.0	.443KV= 96.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3P203A ***DURING***	15.0	.357KV= 77.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3P203A ***AFTER****	15.0	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V1C ***PRIOR****	100.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3V1C ***DURING***	100.0	.353KV= 76.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3V1C ***AFTER****	100.0	.431KV= 93.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V30C ***PRIOR****	30.0	.429KV= 93.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3V30C ***DURING***	30.0	.340KV= 74.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
3V30C ***AFTER****	30.0	.420KV= 91.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V3C	***PRIOR***	75.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V3C	***DURING***	75.0	.350KV= 76.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V3C	***AFTER***	75.0	.428KV= 93.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
P207A	***PRIOR***	6.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
P207A	***DURING***	6.0	.355KV= 77.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
P207A	***AFTER***	6.0	.432KV= 94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
T206	***PRIOR***	1.5	.442KV= 96.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
T206	***DURING***	1.5	.357KV= 77.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
T206	***AFTER***	1.5	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V2B	***PRIOR***	60.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V2B	***DURING***	60.0	.348KV= 75.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V2B	***AFTER***	60.0	.426KV= 92.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V65A	***PRIOR***	2.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V65A	***DURING***	2.0	.355KV= 77.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V65A	***AFTER***	2.0	.432KV= 93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
P42A	***PRIOR***	7.5	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
P42A	***DURING***	7.5	.357KV= 77.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
P42A	***AFTER***	7.5	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3808V	***PRIOR***	.439KV= 88.9% OF	.493KV	319.3	196.4	1.7	.0
3808V	***DURING***	.352KV= 71.4% OF	.493KV	319.3	196.4	1.1	.0
3808V	***AFTER***	.430KV= 87.2% OF	.493KV	319.3	196.4	1.6	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V1D	***PRIOR***	100.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***DURING***	100.0	.347KV=	75.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***AFTER***	100.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30B	***PRIOR***	30.0	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***DURING***	30.0	.334KV=	72.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***AFTER***	30.0	.415KV=	90.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V3B	***PRIOR***	75.0	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3B	***DURING***	75.0	.343KV=	74.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3B	***AFTER***	75.0	.423KV=	91.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V11	***PRIOR***	10.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***DURING***	10.0	.347KV=	75.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***AFTER***	10.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V29B	***PRIOR***	1.0	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29B	***DURING***	1.0	.351KV=	76.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29B	***AFTER***	1.0	.429KV=	93.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

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VOLTAGE DROP ANALYSIS CASE #= 9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16C/17***PRIOR***	34.0	.426KV=	92.6% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***DURING***	34.0	.337KV=	73.2% OF	.460 KV	* WARNING WARNING WARNING *
E16C/17***AFTER***	34.0	.417KV=	90.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E16D ***PRIOR***	36.0	.435KV=	94.6% OF	.460 KV	* WARNING WARNING WARNING *
E16D ***DURING***	36.0	.348KV=	75.5% OF	.460 KV	* WARNING WARNING WARNING *
E16D ***AFTER***	36.0	.426KV=	92.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P42B ***PRIOR***	3.0	.435KV=	94.5% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***DURING***	3.0	.347KV=	75.5% OF	.460 KV	* WARNING WARNING WARNING *
P42B ***AFTER***	3.0	.426KV=	92.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V77/E23***PRIOR***	36.0	.433KV=	94.1% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***DURING***	36.0	.345KV=	75.0% OF	.460 KV	* WARNING WARNING WARNING *
V77/E23***AFTER***	36.0	.424KV=	92.2% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
NS74B ***PRIOR***	50.5	.430KV=	93.6% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***DURING***	50.5	.342KV=	74.3% OF	.460 KV	* WARNING WARNING WARNING *
NS74B ***AFTER***	50.5	.422KV=	91.7% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
S77B ***PRIOR***	3.4	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***DURING***	3.4	.346KV=	75.1% OF	.460 KV	* WARNING WARNING WARNING *
S77B ***AFTER***	3.4	.425KV=	92.3% OF	.460 KV	* WARNING WARNING WARNING *

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VOLTAGE DROP ANALYSIS CASE # 9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S788	***PRIOR***	3.4	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
S788	***DURING***	3.4	.346KV=	75.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
S788	***AFTER***	3.4	.425KV=	92.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.433KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.345KV=	74.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3B50	***PRIOR***	.442KV= 89.7% OF	.493KV	123.4	60.8	.0 .0
3B50	***DURING***	.356KV= 72.3% OF	.493KV	123.4	60.8	.0 .0
3B50	***AFTER***	.434KV= 87.9% OF	.493KV	123.4	60.8	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.434KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.346KV=	75.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.425KV=	92.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3A82	***PRIOR***	3.914KV= 94.1% OF	4.160KV	5770.9	3261.1	.0 .0
3A82	***DURING***	3.816KV= 91.7% OF	4.160KV	5770.9	3261.1	.0 .0
3A82	***AFTER***	3.904KV= 93.8% OF	4.160KV	5770.9	3261.1	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3B02	***PRIOR***	.456KV= 92.4% OF	.493KV	207.0	113.4	.0 .0
3B02	***DURING***	.444KV= 90.0% OF	.493KV	207.0	113.4	.0 .0
3B02	***AFTER***	.454KV= 92.2% OF	.493KV	207.0	113.4	.0 .0



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201B	***PRIOR***	150.0	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201B	***DURING***	150.0	.431KV= 93.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201B	***AFTER***	150.0	.441KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3804	***PRIOR***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0	.0
3804	***DURING***	.442KV= 89.6% OF	.493KV	323.7	171.8	.0	.0
3804	***AFTER***	.453KV= 91.8% OF	.493KV	323.7	171.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3806	***PRIOR***	.451KV= 91.5% OF	.493KV	191.1	117.5	46.8	.1
3806	***DURING***	.439KV= 89.0% OF	.493KV	191.1	117.5	44.3	.1
3806	***AFTER***	.450KV= 91.2% OF	.493KV	191.1	117.5	46.5	.1

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30A	***PRIOR***	30.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***DURING***	30.0	.428KV= 93.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***AFTER***	30.0	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E16A/17	***PRIOR***	34.0	.443KV= 96.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16A/17	***DURING***	34.0	.430KV= 93.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16A/17	***AFTER***	34.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
808M	***PRIOR***	.447KV= 90.7% OF	.493KV	117.9	72.4	20.9	12.3
808M	***DURING***	.435KV= 88.3% OF	.493KV	117.9	72.4	19.8	11.6
808M	***AFTER***	.446KV= 90.5% OF	.493KV	117.9	72.4	20.8	12.2

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3852	***PRIOR***	.454KV= 92.0% OF	.493KV	16.1	9.9	16.1	.0
3852	***DURING***	.442KV= 89.6% OF	.493KV	16.1	9.9	15.2	.0
3852	***AFTER***	.452KV= 91.7% OF	.493KV	16.1	9.9	16.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3853	***PRIOR***	.455KV= 92.3% OF	.493KV	14.6	9.0	26.4	.0
3853	***DURING***	.373KV= 75.6% OF	.493KV	14.6	9.0	17.7	.0
3853	***AFTER***	.447KV= 90.6% OF	.493KV	14.6	9.0	25.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3854	***PRIOR***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0
3854	***DURING***	.442KV= 89.7% OF	.493KV	14.6	9.0	22.9	.0
3854	***AFTER***	.453KV= 91.8% OF	.493KV	14.6	9.0	24.0	.0

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VOLTAGE DROP ANALYSIS CASE #=10

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.974KV=100.4% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	232.232KV= 99.7% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.748KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.022KV= 96.7% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	3.934KV= 94.6% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.011KV= 96.4% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	4.021KV= 96.6% OF 4.160KV	4111.2	2564.9	.0	.0
3AB1	***DURING***	3.406KV= 81.9% OF 4.160KV	9282.9	27364.1	.0	.0
3AB1	***AFTER***	3.946KV= 94.9% OF 4.160KV	8986.7	5610.4	.0	.0

STARTING MOTOR NAME

HP

3P200B	***PRIOR***	.0	.000KV= .0% OF 4.000 KV	* MOTOR NOT STARTED YET *
3P200B	***DURING***	6000.0	3.290KV= 82.3% OF 4.000 KV	
3P200B	***AFTER***	6000.0	3.929KV= 98.2% OF 4.000 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.977KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.888KV= 93.5% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.966KV= 95.3% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR.
3AD	***PRIOR***	3.974KV= 95.5% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.350KV= 80.5% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.900KV= 93.7% OF 4.160KV	626.8	409.1	.0	.0



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VOLTAGE DROP ANALYSIS CASE #=10

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3801	***PRIOR***	.456KV= 92.5% OF	.493KV	446.9	238.3	.0	.0
3801	***DURING***	.445KV= 90.3% OF	.493KV	446.9	238.3	.0	.0
3801	***AFTER***	.455KV= 92.2% OF	.493KV	446.9	238.3	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3803	***PRIOR***	.454KV= 92.0% OF	.493KV	82.6	51.3	200.1	1.5
3803	***DURING***	.443KV= 89.8% OF	.493KV	82.6	51.3	190.5	1.4
3803	***AFTER***	.452KV= 91.8% OF	.493KV	82.6	51.3	198.8	1.4

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805V	***PRIOR***	.455KV= 92.4% OF	.493KV	91.9	57.0	28.5	.0
3805V	***DURING***	.445KV= 90.2% OF	.493KV	91.9	57.0	27.2	.0
3805V	***AFTER***	.454KV= 92.1% OF	.493KV	91.9	57.0	28.4	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3805N	***PRIOR***	.454KV= 92.0% OF	.493KV	215.5	135.0	13.4	.0
3805N	***DURING***	.443KV= 89.8% OF	.493KV	215.5	135.0	12.8	.0
3805N	***AFTER***	.452KV= 91.7% OF	.493KV	215.5	135.0	13.3	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
3807	***PRIOR***	.445KV= 90.2% OF	.493KV	244.6	150.9	60.5	.3
3807	***DURING***	.434KV= 88.0% OF	.493KV	244.6	150.9	57.5	.3
3807	***AFTER***	.443KV= 89.9% OF	.493KV	244.6	150.9	60.1	.3

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V1C ***PRIOR****	100.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*
3V1C ***DURING***	100.0	.429KV= 93.3% OF	.460 KV	* WARNING WARNING WARNING	*
3V1C ***AFTER****	100.0	.439KV= 95.4% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V30C ***PRIOR****	30.0	.430KV= 93.5% OF	.460 KV	* WARNING WARNING WARNING	*
3V30C ***DURING***	30.0	.418KV= 90.9% OF	.460 KV	* WARNING WARNING WARNING	*
3V30C ***AFTER****	30.0	.428KV= 93.1% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V3C ***PRIOR****	75.0	.438KV= 95.2% OF	.460 KV	* WARNING WARNING WARNING	*
3V3C ***DURING***	75.0	.427KV= 92.7% OF	.460 KV	* WARNING WARNING WARNING	*
3V3C ***AFTER****	75.0	.437KV= 94.9% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
P207A ***PRIOR****	6.0	.442KV= 96.1% OF	.460 KV	* WARNING WARNING WARNING	*
P207A ***DURING***	6.0	.431KV= 93.6% OF	.460 KV	* WARNING WARNING WARNING	*
P207A ***AFTER****	6.0	.441KV= 95.8% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V2B ***PRIOR****	60.0	.436KV= 94.8% OF	.460 KV	* WARNING WARNING WARNING	*
3V2B ***DURING***	60.0	.425KV= 92.3% OF	.460 KV	* WARNING WARNING WARNING	*
3V2B ***AFTER****	60.0	.435KV= 94.5% OF	.460 KV	* WARNING WARNING WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V65A ***PRIOR****	2.0	.442KV= 96.0% OF	.460 KV	* WARNING WARNING WARNING	*
3V65A ***DURING***	2.0	.430KV= 93.6% OF	.460 KV	* WARNING WARNING WARNING	*
3V65A ***AFTER****	2.0	.440KV= 95.7% OF	.460 KV	* WARNING WARNING WARNING	*



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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
P42A	***PRIOR***	7.5	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42A	***DURING***	7.5	.432KV=	93.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42A	***AFTER***	7.5	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3808V	***PRIOR***	.440KV= 89.2% OF	.493KV	319.3	196.4	1.7 .0
3808V	***DURING***	.428KV= 86.9% OF	.493KV	319.3	196.4	1.6 .0
3808V	***AFTER***	.438KV= 88.9% OF	.493KV	319.3	196.4	1.7 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V1D	***PRIOR***	100.0	.436KV=	94.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***DURING***	100.0	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V1D	***AFTER***	100.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30B	***PRIOR***	30.0	.425KV=	92.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***DURING***	30.0	.414KV=	89.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V30B	***AFTER***	30.0	.424KV=	92.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V3B	***PRIOR***	75.0	.432KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3B	***DURING***	75.0	.421KV=	91.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3V3B	***AFTER***	75.0	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V11	***PRIOR***	10.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***DURING***	10.0	.424KV=	92.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
V11	***AFTER***	10.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V29B	***PRIOR***	1.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29B	***DURING***	1.0	.427KV=	92.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
V29B	***AFTER***	1.0	.437KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E16C/17	***PRIOR***	34.0	.427KV=	92.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16C/17	***DURING***	34.0	.416KV=	90.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16C/17	***AFTER***	34.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E16D	***PRIOR***	36.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16D	***DURING***	36.0	.425KV=	92.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16D	***AFTER***	36.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
P42B	***PRIOR***	3.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42B	***DURING***	3.0	.425KV=	92.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
P42B	***AFTER***	3.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V77/E23	***PRIOR***	36.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *
V77/E23	***DURING***	36.0	.423KV=	91.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
V77/E23	***AFTER***	36.0	.433KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
NS74B	***PRIOR***	50.5	.432KV=	93.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74B	***DURING***	50.5	.420KV=	91.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
NS74B	***AFTER***	50.5	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S77B	***PRIOR***	3.4	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***DURING***	3.4	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77B	***AFTER***	3.4	.433KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78B	***PRIOR***	3.4	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***DURING***	3.4	.424KV=	92.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78B	***AFTER***	3.4	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S75B	***PRIOR***	5.0	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***DURING***	5.0	.422KV=	91.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
S75B	***AFTER***	5.0	.432KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3850	***PRIOR***	.443KV= 89.9% OF	.493KV	123.4	60.8	.0	.0
3850	***DURING***	.432KV= 87.6% OF	.493KV	123.4	60.8	.0	.0
3850	***AFTER***	.442KV= 89.6% OF	.493KV	123.4	60.8	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3P201C	***PRIOR***	150.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***DURING***	150.0	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
3P201C	***AFTER***	150.0	.433KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3AB2	***PRIOR***	3.977KV= 95.6% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***DURING***	3.353KV= 80.6% OF	4.160KV	5770.9	3261.1	.0	.0
3AB2	***AFTER***	3.902KV= 93.8% OF	4.160KV	5770.9	3261.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3802	***PRIOR***	.463KV= 94.0% OF	.493KV	207.0	113.4	.0	.0
3802	***DURING***	.388KV= 78.6% OF	.493KV	207.0	113.4	.0	.0
3802	***AFTER***	.454KV= 92.1% OF	.493KV	207.0	113.4	.0	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3P201B ***PRIOR****	150.0	.451KV= 97.9% OF	.460 KV	* WARNING	WARNING
3P201B ***DURING***	150.0	.373KV= 81.0% OF	.460 KV	* WARNING	WARNING
3P201B ***AFTER****	150.0	.441KV= 95.9% OF	.460 KV	* WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3V1B ***PRIOR****	100.0	.451KV= 98.0% OF	.460 KV	* WARNING	WARNING
3V1B ***DURING***	100.0	.373KV= 81.0% OF	.460 KV	* WARNING	WARNING
3V1B ***AFTER****	100.0	.441KV= 96.0% OF	.460 KV	* WARNING	WARNING

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3804	***PRIOR****	.462KV= 93.6% OF	.493KV	323.7	171.8	.0
3804	***DURING***	.386KV= 78.2% OF	.493KV	323.7	171.8	.0
3804	***AFTER****	.453KV= 91.8% OF	.493KV	323.7	171.8	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
3S7B ***PRIOR****	150.0	.453KV= 98.5% OF	.460 KV	* WARNING	WARNING
3S7B ***DURING***	150.0	.376KV= 81.6% OF	.460 KV	* WARNING	WARNING
3S7B ***AFTER****	150.0	.444KV= 96.5% OF	.460 KV	* WARNING	WARNING

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3806	***PRIOR****	.459KV= 93.0% OF	.493KV	191.1	117.5	48.4
3806	***DURING***	.382KV= 77.6% OF	.493KV	191.1	117.5	33.6
3806	***AFTER****	.450KV= 91.2% OF	.493KV	191.1	117.5	46.5

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V30A	***PRIOR***	30.0	.448KV= 97.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***DURING***	30.0	.369KV= 80.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30A	***AFTER***	30.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3V3A	***PRIOR***	75.0	.453KV= 98.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V3A	***DURING***	75.0	.375KV= 81.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V3A	***AFTER***	75.0	.444KV= 96.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E16A/17	***PRIOR***	34.0	.450KV= 97.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16A/17	***DURING***	34.0	.372KV= 81.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16A/17	***AFTER***	34.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V88	***PRIOR***	40.0	.453KV= 98.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V88	***DURING***	40.0	.375KV= 81.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V88	***AFTER***	40.0	.444KV= 96.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
B08N	***PRIOR***	.455KV= 92.3% OF	.493KV	117.9	72.4	21.6	12.7
B08N	***DURING***	.378KV= 76.7% OF	.493KV	117.9	72.4	15.0	8.8
B08N	***AFTER***	.446KV= 90.4% OF	.493KV	117.9	72.4	20.8	12.2

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B52	***PRIOR***	.461KV= 93.5% OF	.493KV	16.1	9.9	16.6	.0
3B52	***DURING***	.385KV= 78.2% OF	.493KV	16.1	9.9	11.6	.0
3B52	***AFTER***	.452KV= 91.7% OF	.493KV	16.1	9.9	16.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B53	***PRIOR***	.456KV= 92.5% OF	.493KV	14.6	9.0	26.5	.0
3B53	***DURING***	.445KV= 90.3% OF	.493KV	14.6	9.0	25.3	.0
3B53	***AFTER***	.455KV= 92.2% OF	.493KV	14.6	9.0	26.4	.0

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VOLTAGE DROP ANALYSIS CASE #=10

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3B54	***PRIOR***	.462KV= 93.6% OF .493KV	14.6	9.0	25.0	.0
3B54	***DURING***	.386KV= 78.3% OF .493KV	14.6	9.0	17.4	.0
3B54	***AFTER***	.453KV= 91.8% OF .493KV	14.6	9.0	24.0	.0



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VOLTAGE DROP ANALYSIS CASE #=11

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS113	***PRIOR***	233.821KV=100.4% OF233.000KV	.0	.0	.0	.0
2BUS113	***DURING***	233.675KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS113	***AFTER***	233.803KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA1	***PRIOR***	4.021KV= 96.7% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***DURING***	3.992KV= 96.0% OF 4.160KV	4110.5	2562.7	.0	.0
3AA1	***AFTER***	4.018KV= 96.6% OF 4.160KV	4110.5	2562.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AB1	***PRIOR***	3.964KV= 95.3% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***DURING***	3.935KV= 94.6% OF 4.160KV	8222.3	5129.7	.0	.0
3AB1	***AFTER***	3.961KV= 95.2% OF 4.160KV	8222.3	5129.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AA2	***PRIOR***	3.980KV= 95.7% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***DURING***	3.937KV= 94.6% OF 4.160KV	5770.8	3260.8	.0	.0
3AA2	***AFTER***	3.975KV= 95.6% OF 4.160KV	5770.8	3260.8	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3AD	***PRIOR***	3.919KV= 94.2% OF 4.160KV	626.8	409.1	.0	.0
3AD	***DURING***	3.877KV= 93.2% OF 4.160KV	626.8	409.1	.0	.0
3AD	***AFTER***	3.915KV= 94.1% OF 4.160KV	626.8	409.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
3B01	***PRIOR***	.462KV= 93.6% OF .493KV	247.0	138.7	.0	.0
3B01	***DURING***	.422KV= 85.5% OF .493KV	438.7	1215.3	.0	.0
3B01	***AFTER***	.457KV= 92.8% OF .493KV	446.9	238.3	.0	.0

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STARTING MOTOR NAME

HP

3P214A	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
3P214A	***DURING***	250.0	.381KV=	82.7% OF	.460 KV	
3P214A	***AFTER***	250.0	.452KV=	98.2% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3803	***PRIOR***	.458KV= 92.9% OF	.493KV	82.6	51.3	203.9	1.5
3803	***DURING***	.453KV= 91.9% OF	.493KV	82.6	51.3	199.3	1.5
3803	***AFTER***	.458KV= 92.8% OF	.493KV	82.6	51.3	203.4	1.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3805V	***PRIOR***	.462KV= 93.7% OF	.493KV	8.8	5.4	29.3	.0
3805V	***DURING***	.422KV= 85.5% OF	.493KV	8.8	5.4	24.5	.0
3805V	***AFTER***	.458KV= 92.8% OF	.493KV	8.8	5.4	28.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3805N	***PRIOR***	.459KV= 93.2% OF	.493KV	215.5	135.0	13.7	.0
3805N	***DURING***	.419KV= 85.0% OF	.493KV	215.5	135.0	11.4	.0
3805N	***AFTER***	.455KV= 92.3% OF	.493KV	215.5	135.0	13.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3807	***PRIOR***	.452KV= 91.7% OF	.493KV	162.8	100.1	62.5	.3
3807	***DURING***	.447KV= 90.6% OF	.493KV	162.8	100.1	61.0	.3
3807	***AFTER***	.451KV= 91.5% OF	.493KV	162.8	100.1	62.3	.3

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30C	***PRIOR***	30.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30C	***DURING***	30.0	.432KV= 93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30C	***AFTER***	30.0	.437KV= 94.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3B08V	***PRIOR***	.447KV= 90.7% OF	.493KV	237.5	145.7	1.7 .0
3B08V	***DURING***	.442KV= 89.6% OF	.493KV	237.5	145.7	1.7 .0
3B08V	***AFTER***	.447KV= 90.6% OF	.493KV	237.5	145.7	1.7 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V30B	***PRIOR***	30.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30B	***DURING***	30.0	.427KV= 92.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V30B	***AFTER***	30.0	.432KV= 94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
3V3B	***PRIOR***	75.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V3B	***DURING***	75.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3V3B	***AFTER***	75.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
E16C/17	***PRIOR***	34.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16C/17	***DURING***	34.0	.430KV= 93.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16C/17	***AFTER***	34.0	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
V77/E23	***PRIOR***	36.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V77/E23	***DURING***	36.0	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V77/E23	***AFTER***	36.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
NS74B	***PRIOR***	50.5	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
NS74B	***DURING***	50.5	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
NS74B	***AFTER***	50.5	.439KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
S77B	***PRIOR***	3.4	.442KV= 96.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S77B	***DURING***	3.4	.437KV= 94.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S77B	***AFTER***	3.4	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
S75B	***PRIOR***	5.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S75B	***DURING***	5.0	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
S75B	***AFTER***	5.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B50	***PRIOR***	.450KV= 91.2% OF	.493KV	123.4	60.8	.0 .0
3B50	***DURING***	.444KV= 90.1% OF	.493KV	123.4	60.8	.0 .0
3B50	***AFTER***	.449KV= 91.1% OF	.493KV	123.4	60.8	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
3P201C	***PRIOR***	150.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C	***DURING***	150.0	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
3P201C	***AFTER***	150.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3AB2	***PRIOR***	3.922KV= 94.3% OF	4.160KV	5770.9	3261.1	.0 .0
3AB2	***DURING***	3.880KV= 93.3% OF	4.160KV	5770.9	3261.1	.0 .0
3AB2	***AFTER***	3.917KV= 94.2% OF	4.160KV	5770.9	3261.1	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
3B02	***PRIOR***	.458KV= 93.0% OF	.493KV	123.7	61.6	.0 .0
3B02	***DURING***	.453KV= 92.0% OF	.493KV	123.7	61.6	.0 .0
3B02	***AFTER***	.458KV= 92.9% OF	.493KV	123.7	61.6	.0 .0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3804	***PRIOR***	.458KV= 93.0% OF	.493KV	123.5	77.5	.0
3804	***DURING***	.419KV= 85.0% OF	.493KV	311.7	1110.6	.0
3804	***AFTER***	.454KV= 92.1% OF	.493KV	323.7	171.8	.0

STARTING MOTOR NAME HP

3P214B	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *	
3P214B	***DURING***	250.0	.372KV= 80.8% OF	.460 KV	* WARNING WARNING WARNING *	
3P214B	***AFTER***	250.0	.447KV= 97.3% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3806	***PRIOR***	.454KV= 92.0% OF	.493KV	191.1	117.5	47.3
3806	***DURING***	.449KV= 91.0% OF	.493KV	191.1	117.5	46.3
3806	***AFTER***	.453KV= 91.9% OF	.493KV	191.1	117.5	47.2

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
808N	***PRIOR***	.452KV= 91.6% OF	.493KV	117.9	72.4	21.3
808N	***DURING***	.412KV= 83.5% OF	.493KV	117.9	72.4	17.7
808N	***AFTER***	.448KV= 90.8% OF	.493KV	117.9	72.4	20.9

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3852	***PRIOR***	.458KV= 92.9% OF	.493KV	16.1	9.9	16.4
3852	***DURING***	.419KV= 84.9% OF	.493KV	16.1	9.9	13.7
3852	***AFTER***	.454KV= 92.1% OF	.493KV	16.1	9.9	16.1

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
3853	***PRIOR***	.462KV= 93.7% OF	.493KV	14.6	9.0	27.2
3853	***DURING***	.422KV= 85.5% OF	.493KV	14.6	9.0	22.7
3853	***AFTER***	.458KV= 92.8% OF	.493KV	14.6	9.0	26.7

CALCULATION NO. EC-145
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VOLTAGE DROP ANALYSIS CASE #11

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
3B54	***PRIOR***	.458KV= 93.0% OF	.493KV	14.6	9.0	24.6	.0
3B54	***DURING***	.419KV= 85.0% OF	.493KV	14.6	9.0	20.6	.0
3B54	***AFTER***	.454KV= 92.1% OF	.493KV	14.6	9.0	24.2	.0

*****END OF JOB*****

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DATA VERIFICATION

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123456789012345678901234567890123456789012345678901234567890								
FILE: \AUXSYS\U4APP8.DAT								
STEADY STATE SET @ 96% AND STARTING @ 82% FOR SAFETY BUSES								
STEADY STATE SET @ 90% AND STARTING @ 80% FOR NON-SAFETY BUSES								
EBASCO SERVICES INC.								
TURKEY POINT UNIT NO. 4. ELECTRICAL AUXILIARY SYSTEM DESIGN								
AUX SYS FED THRU THE S/U TRF. PSB-1.								
BUS 4AA2 ALIGNED TO 4AD, BUS 4B50 ALIGNED TO 4B03								
SEQUENCED LOADING FOR CALCULATION EC-145, REV. 4								
(3/08/91)								
*A 1-11	1	1	40.00	6.0	6.0	0.85	0.85	0.92 0.92 0.20 0.20
1 4AA1	350.0	4.76	80.00	42.45	4.16	1.10	3.00	
1 4AA2	350.0	4.76	80.00	42.45	4.16	1.10	3.00	
1 4AD	250.0	4.76	80.00	30.3	4.16	1.10	3.00	
2 4B01	30.0	0.48	0.00					
2 4B03	30.0	0.48	0.00					
3 4B05V	25.0	0.48	0.00					
3 4B05H	25.0	0.48	0.00					
3 4B07	25.0	0.48	0.00					
3 4B08	25.0	0.48	0.00					
2 4B50	30.0	0.48	0.00					
1 4AB1	350.0	4.76	80.00	42.45	4.16	1.10	3.00	
1 4AB2	350.0	4.76	80.00	42.45	4.16	1.10	3.00	
2 4B02	30.0	0.48	0.00					
2 4B04	30.0	0.48	0.00					
3 4B06	25.0	0.48	0.00					
3 4B52	25.0	0.48	0.00					
3 4B51	25.0	0.48	0.00					
3 4B53	25.0	0.48	0.00					
3 4B54	25.0	0.48	0.00					
9								
4AA1	96.0	82.0	30					
1 4P1A	7000.0	4.0	6.49	0.0	1.0	0.90	0.959	1 .0028 .0062
6 4P1A	11111111211							
7 7000.0								
1 4P200A	6000.0	4.0	6.32	0.0	2.0		0.0	1 .0038 .0111
6 4P200A	1 00000000000			5061.0	5061.0	5061.0	5061.0	5061.0 5061.0 5061.0
7 5061.0	5061.0	5061.0						
4AA2	96.0	82.0	30					
1 4P11A	400.0	4.0	5.09	0.0	2.0	0.85	0.938	1 .0291 .0256
6 4P11A	00000000000							
7								
1 4P210A	300.0	4.0	6.22	0.0	2.0	0.89	0.934	1 .0260 .0228
6 4P210A	12000000000							
7								
1 4P211A	450.0	4.0	4.74	0.0	2.0		0.0	1 .0291 .0256
6 4P211A	00000000000							
7								
1 4P215A	350.0	4.0	6.4	0.0	1.0	0.88	0.94	1 .0308 .0271
6 4P215A	12000000000							



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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
7								
1 4P3A	800.0	4.0	5.94	0.0	2.0	0.89	0.944	1 .0281 .0247
6 4P3A	000000000000	700.00	700.00	700.00	700.00	700.00	700.00	700.0 700.00
7 700.00	700.00	700.00						
1 4P6A	2250.0	4.0	7.06	0.0	2.0	0.90	0.958	1 .0031 .0040
6 4P6A	000000000000	2210.0	2210.0	2210.0	2210.0	2210.0	2210.0	2210. 2210.0
7 2210.0	2210.0	2210.0						
1 4P7A	1250.0	4.0	4.57	0.0	2.0	0.0		1 .0286 .0374
6 4P7A	000000000000							
7								
1 4P7C	1250.0	4.0	4.57	0.0	2.0	0.0		1 .0279 .0364
6 4P7C	000000000000							
7								
1 4P9A	325.0	4.0	5.8	0.0	2.0	0.82	0.928	1 .0453 .0398
6 4P9A	000000000000							
7								
2 DG4A	3.75	4.16	1.000	.077	.145	.693	30.00	0 .0111 .0369
6 DG4A	1 111111111111							
7								
4AD	96.0	82.0	30					
1 4P211C	450.0	4.0	4.74	0.0	2.0	0.0		1 .0444 .0390
6 4P211C	000000000000							
7								
1 4P9C	325.0	4.0	5.8	0.0	2.0	0.82	0.928	0.00 1 .0363 .0319
6 4P9C	000000000000							
7								
4B01	96.0	82.0	30					
1 4P201A	150.0	.460	5.800	0.0	2.0	0.90	.925	1 .0206 .0223
6 4P201A	000000000000							
7								
1 4P214A	250.0	.460	6.540	0.0	1.0	0.91	0.94	0.15 1 .0067 .0148
6 4P214A	112000000002							
7								
1 4S6A	150.0	.460	6.05	0.0	2.0	0.0		1 .0134 .0146
6 4S6A	000000000000							
7								
4 PH4B12	150.0	.480	1.000	0.0	0.0	0.0		.0070 .0101
6 PH4B12	111111111111							
7								
4B53	90.0	80.0	30					
1 HVACHP	18.0	.460	1.000	0.0	2.0	0.0		1
6 HVACHP	000000000000							
7								
4 HVACKW	27.0	.480	1.000	0.0	0.0	0.0		1
6 HVACKW	000000000000							
7								
4B03	96.0	82.0	30					
1 4K10	100.0	.460		0.0	2.0	0.0		1 .0217 .0148
6 4K10	1 111111111111							
7								

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
1 4P212	100.0	.460	0.0	2.0	0.0		1 .0449	.0306
6 4P212	000000000000							
7								
1 4P32	200.0	.460	0.0	2.0	0.0		1 .0111	.0225
6 4P32	1 111111111111							
7								
4 PH4X09	300.0	.480	1.000	0.0	0.0	0.0	.0048	.0069
6 PH4X09	000000000000							
7								
4B05V	96.0	82.0	30					
1 4P31	40.0	.460	0.0	2.0	0.0		1 .0507	.0122
6 4P31	1 111111111111							
7								
1 4P36	25.0	.460	0.0	2.0	0.0		1 .0550	.0060
6 4P36	1 111111111111							
7								
1 4P37	8.0	.460	0.0	2.0	0.0		1 .2303	.0050
6 4P37	1 111111111111							
7								
1 4P40	20.0	.460	0.0	2.0	0.0		1 .3342	.0106
6 4P40	1 111111111111							
7								
1 4T08	50.0	.460	0.0	2.0	0.0		1 .0154	.0058
6 4T08	1 111111111111							
7								
1 4V1C	100.0	.460	7.75	0.0	2.0	0.0	1 .0347	.0236
6 4V1C	000000000001							
7								
1 4V30B	30.0	.460	5.39	0.0	2.0	0.0	1 .2817	.0343
6 4V30B	112000000000							
7								
1 4V3B	75.0	.460	6.06	0.0	2.0	0.0	1 .0328	.0223
6 4V3B	111112000000							
7								
1 4C1	75.0	.460	0.0	2.0	0.0		1 .0200	.0136
6 4C1	1 111111111111							
7								
4 STAT1CL	01.0	.480	1.000	0.0	0.0	0.0		
6 STAT1CL	000000000000							
7								
1 MOV1420	5.2	.460	5.66	2.0	0.85	.54 0.6	1 .7312	.0159
6 MOV1420	200001111111							
7								
1 MOV1400	.33	.460	7.33	2.0	0.85	.48 0.6	1 .6663	.0145
6 MOV1400	200001111111							
7								
1 MOV1427	.25	.460	4.91	2.0	0.85	.50 0.6	1 1.290	.0280
6 MOV1427	200001111111							
7								
4B05N	90.0	80.0	30					



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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
1 4C19		0.5 .460	0.0	2.0	0.0		1 .2638 .0057	
6 4C19	1	111111111111						
7								
1 4P15		3.0 .460	0.0	2.0	0.0		1 .4874 .0106	
6 4P15	1	111111111111						
7								
1 4P19A		0.5 .460	0.0	2.0	0.0		1 .4338 .0094	
6 4P19A	1	111111111111						
7								
1 4P19B		0.5 .460	0.0	2.0	0.0		1 .4561 .0099	
6 4P19B	1	111111111111						
7								
1 4P232B		10.0 .460	0.0	2.0	0.0		1 1.163 .0253	
6 4P232B	1	111111111111						
7								
1 4P28A		3.0 .460	0.0	2.0	0.0		1 .2974 .0065	
6 4P28A	1	111111111111						
7								
1 4P34A		0.75 .460	0.0	2.0	0.0		1 .6865 .0149	
6 4P34A	1	111111111111						
7								
1 4P4		10.0 .460	0.0	2.0	0.0		1 .4942 .0107	
6 4P4	1	111111111111						
7								
1 4P43		5.0 .460	0.0	2.0	0.0		1 1.073 .0233	
6 4P43	1	111111111111						
7								
1 4P49		0.75 .460	0.0	2.0	0.0		1 .3287 .0071	
6 4P49	1	111111111111						
7								
1 4P5		40.0 .460	0.0	2.0	0.0		1 .1010 .0242	
6 4P5	1	111111111111						
7								
1 4T9		25.0 .460	0.0	2.0	0.0		1 .1575 .0173	
6 4T9	1	111111111111						
7								
1 4V14A		7.5 .460	0.0	2.0	0.0		1 .7558 .0164	
6 4V14A		000000000000						
7								
1 4V5		0.5 .460	0.0	2.0	0.0		1 .1520 .0033	
6 4V5		000000000000						
7								
1 4V16		2.0 .460	0.0	2.0	0.0		1 .3041 .0066	
6 4V16		000000000000						
7								
1 4V18		7.5 .460	0.0	2.0	0.0		1 .4427 .0096	
6 4V18		000000000000						
7								
1 4V19A		15.0 .460	0.0	2.0	0.0		1 .1165 .0037	
6 4V19A		000000000000						

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
7								
1 4V31B	3.0	.460	0.0	2.0	0.0		1 .7222	.0157
6 4V31B	000000000000							
7								
1 4V32B	0.75	.460	0.0	2.0	0.0		1 1.096	.0238
6 4V32B	000000000000							
7								
1 4V4	5.0	.460	0.0	2.0	0.0		1 .4986	.0108
6 4V4	000000000000							
7								
1 4V6A	7.5	.460	0.0	2.0	0.0		1 .3197	.0069
6 4V6A	000000000000							
7								
1 4F20A/B	1.5	.460	0.0	2.0	0.0		1 .3342	.0106
6 4F20A/B	000000000000							
7								
1 4P90A	2.0	.460	0.0	2.0	0.0		1 .6809	.0217
6 4P90A	000000000000							
7								
1 4P90B	2.0	.460	0.0	2.0	0.0		1 .6809	.0217
6 4P90B	000000000000							
7								
1 4P90C	2.0	.460	0.0	2.0	0.0		1 .6809	.0217
6 4P90C	000000000000							
7								
4 D10	3.0	.480 1.000	0.0	0.0	0.0		1 .9190	.1007
6 D10	000000000000							
7								
1 4XS75/76	20.0	.460	0.0	2.0 0.81	0.0		1 .1816	.0199
6 4XS75/76	000000000000							
7								
4 STATICL	260.0	.480 1.000	0.0	0.0	0.0			
6 STATICL	000000000000							
7								
4B07	96.0	82.0 30						
1 E16F	36.0	.460	0.0	2.0	0.0		1 .0563	.0118
6 E16F	000000000000							
7								
1 4P203A	15.0	.460	0.0	2.0	0.0		1 .0776	.0141
6 4P203A	000000000000							
7								
1 4V1A	100.0	.460 7.75	0.0	2.0	0.0		1 .0135	.0092
6 4V1A	000000000001							
7								
1 P207B	6.0	.460	0.0	2.0	0.0		1 .3712	.0081
6 P207B	111111111111							
7								
1 4V2A	60.0	.460	0.0	2.0	0.0		1 .0476	.0207
6 4V2A	000000000000							
7								

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
4 4D25	1.0	.480	1.000	0.0	0.0	0.0		.0481 .0115
6 4D25	000000000000							
7								
4 STAT1CL	1.0	.480	1.000	0.0	0.0	0		
6 STAT1CL	000000000000							
7								
1 MOV1426	0.25	.460	4.91	2.0	0.85	.5	0.6	1 .4248 .0092
6 MOV1426	20000111111							
7								
1 MOV6386	0.13	.460	7.11	2.0	0.85	.32	0.6	1 .7582 .0241
6 MOV6386	20000111111							
7								
1 MOV1401	0.33	.460	7.33	2.0	0.85	.48	0.6	1 1.478 .0321
6 MOV1401	20000111111							
7								
1 MOV880A	2.0	.460	3.71	2.0	0.85	.63	0.6	1 .2996 .0065
6 MOV880A	20000111111							
7								
1 MOV716A	1.3	.460	3.75	2.0	0.85	.6	0.6	1 .3242 .0070
6 MOV716A	20000111111							
7								
1 MOV744A	10.3	.460	7.22	2.0	0.85	.8	0.6	1 .4764 .0213
6 MOV744A	20000111111							
7								
1 MOV843A	1.58	.460	7.43	2.0	0.85	.5	0.6	1 .5344 .0116
6 MOV843A	20000111111							
7								
4808	96.0	82.0	30					
1 4V1B	100.0	.460	7.75	0.0	2.0	0.0		1 .0122 .0083
6 4V1B	000000000001							
7								
1 4V30A	30.0	.460	5.39	0.0	2.0	0.0		1 .0625 .0100
6 4V30A	111200000000							
7								
1 4V3A	75.0	.460	6.06	0.0	2.0	0.0		1 .0195 .0133
6 4V3A	111111200000							
7								
1 S77A	5.0	.460	0.0	2.0	0.0			1 .2780 .0089
6 S77A	000000000000		3.4	3.4	3.4	3.4	3.4	3.4 3.4
7 3.4	3.4	3.4						
1 S78A	5.0	.460	0.0	2.0	0.0			1 .2696 .0086
6 S78A	000000000000		3.4	3.4	3.4	3.4	3.4	3.4 3.4
7 3.4	3.4	3.4						
1 S75A	5.0	.460	0.0	2.0	0.0			1 .3370 .0107
6 S75A	000000000000							
7								
1 NS74A	60.0	.460	0.0	2.0	0.0			1 .0285 .0130
6 NS74A	000000000000		50.5	50.5	50.5	50.5	50.5	50.5 50.5
7 50.5	50.5	50.5						
1 E168/17	34.0	.460	0.0	2.0	0.0			1 .1985 .0204



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	1	2	3	4	5	6	7	8
123456789012345678901234567890123456789012345678901234567890								
6 E168/17	000000000000							
7								
1 V8A	40.0 .460		0.0	2.0	0.0		1 .0343	.0082
6 V8A	000000000000							
7								
1 V10	10.0 .460		0.0	2.0	0.0		1 .5948	.0129
6 V10	000000000000							
7								
1 V29A	1.0 .460		0.0	2.0	0.0		1 .3061	.0097
6 V29A	200000000000							
7								
1 V76/232	36.0 .460		0.0	2.0	0.0		1 .0888	.0075
6 V76/232	000000000000							
7								
4 3025A	18.7 .480 1.000						.0166	.0040
6 3025A	000000000000							
4 3002A	25.0 .480 1.000						.0075	.0034
6 3002A	000000000000							
4 STAT1CL	1.0 .480 1.000	0.0	0.0		0.0			
6 STAT1CL	000000000000							
7								
1 MOV1404	0.33 .460 3.60		2.0	0.85	.29 0.6		1 .3608	.0115
6 MOV1404	200001111111							
7								
1 MOV1417	1.5 .460 5.71		2.0	0.85	.5 0.6		1 .3678	.0117
6 MOV1417	200001111111							
7								
1 MOV6552A	0.13 .460 7.11		2.0	0.85	.32 0.6		1 .3819	.0122
6 MOV6552A	200001111111							
7								
1 MOV6543A	0.13 .460 7.11		2.0	0.85	.32 0.6		1 .3356	.0107
6 MOV6543A	200001111111							
7								
4B50	96.0 82.0 30							
1 4P201C	150.0 .460 5.800	0.0	2.0	0.90	0.0		1 .0136	.0147
6 4P201C	000000000000							
7								
4B51	96.0 82.0 30							
1 4P244A	1.0 .460	0.0	2.0		0.0		1 .1081	.0034
6 4P244A	200000000000							
7								
1 4V63A	2.0 .460	0.0	2.0		0.0		1 .0590	.0019
6 4V63A	200000000000							
7								
1 4V70A	0.5 .460	0.0	2.0		0.0		1 .1123	.0036
6 4V70A	000000000000							
7								
1 4V65A	2.0 .460	0.0	2.0		0.0		1 .0744	.0024
6 4V65A	000000000000							
7								

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1234567890123456789012345678901234567890123456789012345678901234567890								
1 4V67A	40.0	.460	0.0	2.0	0.0		1 .0092	.0042
6 4V67A	200000000000							
7								
1 4V64A	3.0	.460	0.0	2.0	0.0		1 .0323	.0010
6 4V64A	000000000000							
7								
1 4P241A	1.0	.460	0.0	2.0	0.0		1 .2190	.0070
6 4P241A	200000000000							
7								
1 4S226A	15.0	.460	0.0	2.0	0.0		1 .0748	.0082
6 4S226A	200000000000							
7								
1 4V68A	40.0	.460	0.0	2.0	0.0		1 .0103	.0047
6 4V68A	200000000000							
7								
1 4P245A	0.75	.460	0.0	2.0	0.0		1 .1081	.0034
6 4P245A	200000000000							
7								
1 4V69A	40.0	.460	0.0	2.0	0.0		1 .0116	.0053
6 4V69A	200000000000							
7								
1 4S231A	9.5	.460	0.0	2.0	0.0		1 .0777	.0040
6 4S231A	000000000000							
7								
1 4S230	7.0	.460	0.0	2.0	0.0		1 .1236	.0039
6 4S230	000000000000							
7								
4 STATICL	1.0	.480	1.000	0.0	0.0	0.0		
6 STATICL	000000000000							
7								
4AB1	96.0	82.0	30					
1 4P200B	6000.0	4.0	6.32	0.0	2.0	0.0	1 .0032	.0097
6 4P200B	000000000020	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0
7 5061.0	6000.0	5061.0						
1 4P200C	6000.0	4.0	6.32	0.0	2.0	0.0	1 .0050	.0135
6 4P200C	1 000000000000	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0
7 5061.0	5061.0	5061.0						
4AB2	96.0	82.0	30					
1 4P11B	400.0	4.0	5.09	0.0	2.0	0.85	0.938	0.00
6 4P11B	000000000000							
7								
1 4P210B	300.0	4.0	6.22	0.0	2.0	0.89	0.934	
6 4P210B	120000000000							
7								
1 4P211B	450.0	4.0	4.74	0.0	2.0	0.0	1 .0297	.0261
6 4P211B	000000000000							
7								
1 4P215B	350.0	4.0	6.4	0.0	1.0	0.88	0.94	
6 4P215B	120000000000							
7								

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
1 4P3B	800.0	4.0	5.94	0.0	2.0	0.89	0.944	1 .0226 .0199
6 4P3B	00000000000							
7 700.00	700.00	700.00						
1 4P6B	2250.0	4.0	7.06	0.0	2.0	0.90	0.958	1 .0029 .0037
6 4P6B	00000000000							
7 2210.0	2210.0	2210.0						
1 4P7D	1250.0	4.0	4.57	0.0	2.0		0.0	1 .0267 .0349
6 4P7D	00000000000							
7								
1 4P7B	1250.0	4.0	4.57	0.0	2.0		0.0	1 .0275 .0359
6 4P7B	00000000000							
7								
1 4P9B	325.0	4.0	5.8	0.0	2.0	0.82	0.928	1 .0452 .0398
6 4P9B	00000000000							
7								
2 DG4B	3.75	4.16	1.000		.077	.145	.693	0 .0150 .0504
6 DG4B	1	11111111111						
7								
4B02	96.0	82.0	30					
1 4P201B	150.0	.460	5.800	0.0	2.0	0.90	0.925	1 .0271 .0294
6 4P201B	00000000000							
7								
1 4V1D	100.0	.460	7.75	0.0	2.0		0.0	1 .0576 .0392
6 4V1D	00000000001							
7								
4B04	96.0	82.0	30					
1 4P214B	250.0	.460	6.540	0.0	1.0	0.91	0.94	1 .0057 .0124
6 4P214B	112000000002							
7								
1 4S7B	150.0	.460		0.0	2.0		0.0	1 .0110 .0119
6 4S7B	00000000000							
7 75.0	75.0	75.0						
4 PH4B13	150.0	.480	1.000	0.0	0.0		0.0	1 .0055 .0079
6 PH4B13	11111111111							
7								
4B54	90.0	80.0	30					
1 HVACHP	18.0	.460	1.000	0.0	2.0		0.0	1
6 HVACHP	00000000000							
7								
4 HVACKW	27.0	.480	1.000	0.0	0.0		0.0	1
6 HVACKW	00000000000							
7								
4B06	96.0	82.0	30					
1 4P203B	15.0	.460		0.0	2.0		0.0	1 .1355 .0325
6 4P203B	00000000000							
7								
1 E16A/17A	34.0	.460		0.0	2.0		0.0	1 .0747 .0075
6 E16A/17A	00000000000							
7								
1 4V20	20.0	.460		0.0	2.0		0.0	1 .1943 .0101

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 4V20	1	1111111111						
7								
1 4V19B		15.0 .460	0.0	2.0	0.0		1 .4535	.0144
6 4V19B		00000000000						
7								
1 4V2B		60.0 .460	0.0	2.0	0.0		1 .0668	.0251
6 4V2B		00000000000						
7								
1 4V30C		30.0 .460 5.39	0.0	2.0	0.0		1 .2307	.0302
6 4V30C		11200000000						
7								
1 4V3C		75.0 .460 6.06	0.0	2.0	0.0		1 .0429	.0292
6 4V3C		11111200000						
7								
1 4V9		20.0 .460	0.0	2.0	0.0		1 .2172	.0112
6 4V9	1	1111111111						
7								
1 4V36		2.0 .460	0.0	2.0	0.0		1 .8474	.0184
6 4V36		00000000000						
7								
4 4D02		25.0 .480 1.000					.0172	.0117
6 4D02		00000000000						
4 STATICL		10.0 .480 1.000	0.0	0.0	0.0			
6 STATICL		00000000000						
7								
1 MOV381		0.42 .460 5.26	2.0	0.85	.49 0.6		1 .6999	.0152
6 MOV381		20000111111						
7								
1 MOV626		1.0 .460 5.71	2.0	0.85	.39 0.6		1 .7781	.0169
6 MOV626		20000111111						
7								
1 MOV716B		1.3 .460 3.75	2.0	0.85	.60 0.6		1 .4914	.0156
6 MOV716B		20000111111						
7								
1 MOV730		1.3 .460 3.75	2.0	0.85	.60 0.6		1 .7110	.0155
6 MOV730		20000111111						
7								
1 MOV744B		10.5 .460 7.22	2.0	0.85	.80 0.6		1 .4934	.0169
6 MOV744B		20000111111						
7								
1 MOV843B		1.58 .460 7.43	2.0	0.85	.50 0.6		1 .6887	.0150
6 MOV843B		20000111111						
7								
1 MOV880B		2.0 .460 3.71	2.0	0.85	.63 0.6		1 .6775	.0147
6 MOV880B		20000111111						
7								
1 MOV1402		0.33 .460 7.33	2.0	0.85	.48 0.6		1 .6596	.0143
6 MOV1402		20000111111						
7								
1 MOV1418		1.5 .460 5.71	2.0	0.85	.50 0.6		1 .5855	.0186

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1234567890123456789012345678901234567890123456789012345678901234567890								
6 MOV1418	20000111111							
7								
1 MOV1421	5.2 .460	5.66		2.0 0.85	.54 0.6		1 .7312	.0159
6 MOV1421	20000111111							
7								
1 MOV1425	0.25 .460	4.91		2.0 0.85	.50 0.6		1 .9704	.0211
6 MOV1425	20000111111							
7								
4852	96.0 82.0	30						
1 4P2448	1.0 .460		0.0 2.0		0.0		1 .1179	.0038
6 4P2448	20000000000							
7								
1 4V638	2.0 .460		0.0 2.0		0.0		1 .0562	.0018
6 4V638	00000000000							
7								
1 4V708	0.5 .460		0.0 2.0		0.0		1 .1432	.0046
6 4V708	00000000000							
7								
1 4V658	2.0 .460		0.0 2.0		0.0		1 .0646	.0021
6 4V658	00000000000							
7								
1 4V678	40.0 .460		0.0 2.0		0.0		1 .0084	.0038
6 4V678	20000000000							
7								
1 4V648	3.0 .460		0.0 2.0		0.0		1 .0323	.0010
6 4V648	00000000000							
7								
1 4P2418	1.0 .460		0.0 2.0		0.0		1 .2429	.0077
6 4P2418	20000000000							
7								
1 4S2268	15.0 .460		0.0 2.0		0.0		1 .0513	.0056
6 4S2268	20000000000							
7								
1 4V688	40.0 .460		0.0 2.0		0.0		1 .0103	.0047
6 4V688	20000000000							
7								
1 4P2458	0.75 .460		0.0 2.0		0.0		1 .1179	.0038
6 4P2458	20000000000							
7								
1 4V698	40.0 .460		0.0 2.0		0.0		1 .0111	.0051
6 4V698	20000000000							
7								
1 4S2318	9.5 .460		0.0 2.0		0.0		1 .0829	.0040
6 4S2318	00000000000							
7								
4 STATICL	1.0 .480 1.000		0.0 0.0		0.0			
6 STATICL	00000000000							
7								
2BUS114								
3 SWICHYD	15000 19.21.008	4435						



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1234567890123456789012345678901234567890123456789012345678901234567890								
6 SWICHYD								
9								
C TRLIN H1	2BUS114							
C NONSG X1	4AA1			.0005	.0018			
C NONSG Y1	4AB1			.0005	.0021			
T 4X03 H1	X1	Y1		40.0	233.03	4.16	4.16	
				16.64	0.67	16.64	0.67	29.89 1.19
R 4AA2 4AA1	4AA2			0.0	0.0	0.04	80.00	0.00 0.00
C 4AD 4AA2	4AD			.0100	.0223			
C 4B01 X2	4B01			0.0	0.0			
C 4B03 X4	4B03			0.0	0.0			
C 4B05V 4B01	4B05V			.0020	.0041			
C 4B05N 4B01	4B05N			.0046	.0050			
C 4B07 4B03	4B07			.0037	.0075			
C 4B08 4B50	4B08			.0004	.0009			
C 4B50 4B03	4B50			.0026	.0053			
C 4B51 4B01	4B51			.0109	.0219			
C 4X04 4AA2	H2			.0035	.0031			
T 4X04 H2	X2			1.0	4.055	0.48		2.5
				5.63	0.544			
C 4X06 4AA2	H4			.0025	.0022			
T 4X06 H4	X4			1.0	4.055	0.48		2.5
				5.61	0.544			
R 4AB2 4AB1	4AB2			0.0	0.0	0.04	80.00	0.00 0.00
C 4B02 X3	4B02			0.0	0.0			
C 4B04 X5	4B04			0.0	0.0			
C 4B06 4B02	4B06			.0025	.0050			
C 4B52 4B04	4B52			.0119	.0240			
T 4X05 H3	X3			1.0	4.055	0.48		2.5
				5.61	0.544			
C 4X05 4AB2	H3			.0032	.0028			
C 4X07 4AB2	H5			.0039	.0034			
C 4B53 4B01	4B53			.0018	.0020			
C 4B54 4B04	4B54			.0027	.0029			
T 4X07 H5	X5			1.0	4.055	0.48		2.5
				5.65	0.544			

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FILE: \AUXSYS\U4APP8.DAT
STEADY STATE SET @ 96% AND STARTING @ 82% FOR SAFETY BUSES
STEADY STATE SET @ 90% AND STARTING @ 80% FOR NON-SAFETY BUSES
EBASCO SERVICES INC.
TURKEY POINT UNIT NO. 4: ELECTRICAL AUXILIARY SYSTEM DESIGN
AUX SYS FED THRU THE S/U TRF. PSB-1.
BUS 4AA2 ALIGNED TO 4AD, BUS 4B50 ALIGNED TO 4B03
SEQUENCED LOADING FOR CALCULATION EC-145, REV. 4
(3/08/91)

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GENERAL INSTRUCTION CARD DATA

NUMBER OF VOLTAGE DROP CASES	S/C CASE 1=YES 2=NO	TYPE OF OUTPUT	BASE MVA
1-11	1	SHORT	40.000

OPTIONAL USER SELECTED ASSUMED DATA

DATA							
LRA/FLA >1KV	LRA/FLA <=1KV	OP PF >1KV	OP PF <=1KV	OP EFF >1KV	OP EFF <=1KV	ST PF >1KV	ST PF <=1KV
6.00	6.00	.85	.85	.92	.92	.20	.20



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SHORT CIRCUIT & REACTANCE SIZING PARAMETERS

1	BUS NAME	MVA CLASS	RATED MAX KV	RATED C&L KA	RATED SC @ MAX KV	HPFV KV	"S" FACTOR	MIN CPT	FIXED K3	PERMISSIBLE INT CAP OF BREAKER KA@ HPFV	ASSYM MULT FOR C&L
2	BUS NAME	INT KA	HPFV KV	FIXED K4	K6 FACTOR	K6 BREAK OFF					
3	BUS NAME	INT KA	HPFV KV	FIXED K5	K7 FACTOR	K7 BREAK OFF					
1	4AA1	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	4AA2	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	4AD	250.00	4.760	80.0	30.30	4.160	1.100	3.000	(*****)	34.67	(1.60)
2	4B01	30.00	.480(*****)	(1.00)	.00						
2	4B03	30.00	.480(*****)	(1.00)	.00						
3	4B05V	25.00	.480(*****)	(1.00)	.00						
3	4B05N	25.00	.480(*****)	(1.00)	.00						
3	4B07	25.00	.480(*****)	(1.00)	.00						
3	4B08	25.00	.480(*****)	(1.00)	.00						
2	4B50	30.00	.480(*****)	(1.00)	.00						
1	4AB1	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	4AB2	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
2	4B02	30.00	.480(*****)	(1.00)	.00						
2	4B04	30.00	.480(*****)	(1.00)	.00						
3	4B06	25.00	.480(*****)	(1.00)	.00						
3	4B52	25.00	.480(*****)	(1.00)	.00						
3	4B51	25.00	.480(*****)	(1.00)	.00						
3	4B53	25.00	.480(*****)	(1.00)	.00						
3	4B54	25.00	.480(*****)	(1.00)	.00						

NOTE: TYPE 1 FAULT= MEDIUM VOLTAGE FAULT CALCULATION
 TYPE 2 FAULT= LOW VOLTAGE POWER CIRCUIT BREAKER FAULT CALCULATION
 TYPE 3 FAULT= LOW VOLTAGE MOLDED CASE BREAKER FAULT CALCULATION
 (*****) = COMPUTER WILL CALCULATE K FACTOR

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[illegible]

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*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

[illegible]

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
4AD	96.00 %	82.00 %	30.0

1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C	
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	X R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C	

STATIC NAME	RATED KVA	RATED KV	RATED PF							CABLE RES	CON REAC	FOR S/C	1	2	3	4	5	6	7	8	9	10	11	
1 4P211C	450.00	4.000	4.740	(1:2)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.044	.039	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 4P9C	325.00	4.000	5.800	(1.2)	2.000	.	.820	.928	(.200)	(****)	(1.)	.036	.032	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
4B01														96.00 %		82.00 %		30.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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																		VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
1 MOTOR NAME														RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES	REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
2 GEN NAME														RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES	REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
3 SYSTEM NAME														S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES	REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
4 STATIC NAME														RATED KVA	RATED KV	RATED PF									CABLE RES	REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

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	BUS NAME				MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT													
	4853				90.00 %				80.00 %				30.0													
T Y P E					*****																					
					* LOAD DATA *																					

1	MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES	REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)											
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES	REAC	CON FOR S/C												
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES	REAC	CON FOR S/C												
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES	REAC	CON FOR S/C												
																1	2	3	4	5	6	7	8	9	10	11
1	HVACHP	18.00	.460	1.000	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	(.000)	(.000)	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)											
4	HVACKW	27.00	.480	1.000	*****	*****	*****	*****	*****	*****	***	(.000)	(.000)	(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)											

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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT									
4B03														96.00 %		82.00 %		30.0									
*****														* LOAD DATA *		*****											
																		0=ON 1=OFF									
																		VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)									

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BUS NAME				MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT													
4805N				90.00 %				80.00 %				30.0													
				***** * LOAD DATA * *****																					
1	MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 OP FACTOR <3.6K=2	PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES	CABLE REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)										
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES	CABLE REAC	CON FOR S/C											
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	X R/X FOR REAC OR %R FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES	CABLE REAC	CON FOR S/C											
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES	CABLE REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11

1	4C19	.50	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.264	.006	1	1	1	1	1	1	1	1	1	1	1	1
1	4P15	3.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.487	.011	1	1	1	1	1	1	1	1	1	1	1	1
1	4P19A	.50	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.434	.009	1	1	1	1	1	1	1	1	1	1	1	1
1	4P19B	.50	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.456	.010	1	1	1	1	1	1	1	1	1	1	1	1
1	4P232B	10.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	1.163	.025	1	1	1	1	1	1	1	1	1	1	1	1
1	4P28A	3.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.297	.007	1	1	1	1	1	1	1	1	1	1	1	1
1	4P34A	.75	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.687	.015	1	1	1	1	1	1	1	1	1	1	1	1
1	4P4	10.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.494	.011	1	1	1	1	1	1	1	1	1	1	1	1
1	4P43	5.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	1.073	.023	1	1	1	1	1	1	1	1	1	1	1	1
1	4P49	.75	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.329	.007	1	1	1	1	1	1	1	1	1	1	1	1
1	4P5	40.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.101	.024	1	1	1	1	1	1	1	1	1	1	1	1
1	4T9	25.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.157	.017	1	1	1	1	1	1	1	1	1	1	1	1
1	4V14A	7.50	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.756	.016	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V5	.50	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.152	.003	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V16	2.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.304	.007	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V18	7.50	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.443	.010	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V19A	15.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.116	.004	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V31B	3.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.722	.016	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V32B	.75	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	1.096	.024	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V4	5.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.499	.011	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V6A	7.50	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.320	.007	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4F20A/B	1.50	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.334	.011	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4P90A	2.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.681	.022	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4P90B	2.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.681	.022	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4P90C	2.00	.460(6.000)	(	8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.681	.022	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
4	D10	3.00	.480 1.000	*****	*****	*****	*****	*****	*****	*****	*****	.919	.101	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)



T Y P E	***** * LOAD DATA * *****																			
1 MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)							
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT	X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C										
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C								
4 STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C								
1 4XS75/7	20.00	.460(6.000)(8.0)	2.000	.810 (.920)(.200)****)	(1.)	.182	.020 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0.										
4 STATICL	260.00	.480 1.000	*****	*****	*****	*****	*****	***	(.000)(.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0.									



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		BUS NAME				MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT	
		4B07				96.00 %				82.00 %				30.0	

						* LOAD DATA *									

TYPE	1 MOTOR	RATED	RATED	LRA/	K1	SPEED	OP	PWR	OP	ST	R-OHMS	MOT	CABLE	0=ON 1=OFF CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
	NAME	HP	KV	FLA	FACTOR	3.6K=1 <3.6K=2	FACTOR	FACTOR	EFF	PF	T-T	SYN=2 IND=1	RES	REAC	
2 GEN	RATED	RATED	PU				X	X	X	X/R		ANG	CABLE	CON	
NAME	MVA	KV	OP				C&L	INT	GVD			DEG	RES	REAC	FOR S/C
			VOLT												
3 SYSTEM	S/C	X/R	PU	V/D	OHMS	% R/X	TRANSF	REACT	REAC	ANG	CABLE	CON			
NAME	MVA		OP	MVA	FOR	FOR	MVA	-TOL	+TOL	DEG	RES	REAC	FOR		
			VOLT		REACT	REACT		OR	OR				S/C		
					OR Z% FOR	OR X% FOR		TRANSF KV	TRANSF TOL						
4 STATIC	RATED	RATED	RATED								CABLE	CON			
NAME	KVA	KV	PF								RES	REAC	FOR S/C		

1 E16F	36.00	.460(6.000)(	8.0)	2.000	(.850)(.920)(	.200)(****)	(1.)	.056	.012	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)				
1 4P203A	15.00	.460(6.000)(	8.0)	2.000	(.850)(.920)(	.200)(****)	(1.)	.078	.014	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)				
1 4V1A	100.00	.460 7.750 (	1.2)	2.000	(.850)(.920)(	.200)(****)	(1.)	.014	.009	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)				
1 P207B	6.00	.460(6.000)(	8.0)	2.000	(.850)(.920)(	.200)(****)	(1.)	.371	.008	(0)	1 1 1 1 1 1 1 1 1 1 1 1				
1 4V2A	60.00	.460(6.000)(	1.2)	2.000	(.850)(.920)(	.200)(****)	(1.)	.048	.021	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)				
4 4D25	1.00	.480 1.000	*****	*****	*****	*****	*****	*****	.048	.012	(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)			
4 STAT1CL	1.00	.480 1.000	*****	*****	*****	*****	*****	*****	.000	.000	(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)			
1 MOV1426	.25	.460 4.900 (	8.0)	2.000	.850	.500	.600	(****)	(1.)	.425	.009	(0)	2 (0)(0)(0)(0)	1 1 1 1 1 1	
1 MOV6386	.13	.460 7.100 (	8.0)	2.000	.850	.320	.600	(****)	(1.)	.758	.024	(0)	2 (0)(0)(0)(0)	1 1 1 1 1 1	
1 MOV1401	.33	.460 7.300 (	8.0)	2.000	.850	.480	.600	(****)	(1.)	1.478	.032	(0)	2 (0)(0)(0)(0)	1 1 1 1 1 1	
1 MOV880A	2.00	.460 3.700 (	8.0)	2.000	.850	.630	.600	(****)	(1.)	.300	.007	(0)	2 (0)(0)(0)(0)	1 1 1 1 1 1	
1 MOV716A	1.30	.460 3.700 (	8.0)	2.000	.850	.600	.600	(****)	(1.)	.324	.007	(0)	2 (0)(0)(0)(0)	1 1 1 1 1 1	
1 MOV744A	10.30	.460 7.200 (	8.0)	2.000	.850	.800	.600	(****)	(1.)	.476	.021	(0)	2 (0)(0)(0)(0)	1 1 1 1 1 1	
1 MOV843A	1.58	.460 7.400 (8.0)	2.000	.850	.500	.600	(****)	(1.)	.534	.012	(0)	2 (0)(0)(0)(0)	1 1 1 1 1 1	

JOB ID 3/08/91
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PAGE 25

T Y P E	BUS NAME				MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT	
	4808				96.00 %				82.00 %					
1	MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 OP 3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C	
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C	
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10 11
1	4V18	100.00	.460	7.750 (	1.2)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.012	.008 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0) 1
1	4V30A	30.00	.460	5.390 (	8.0)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.063	.010 (0)	1 1 1 2 (0)(0)(0)(0)(0)(0)(0)
1	4V3A	75.00	.460	6.060 (	1.2)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.020	.013 (0)	1 1 1 1 1 2 (0)(0)(0)(0)
1	S77A	5.00	.460	(6.000)	8.0)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.278	.009 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	S78A	5.00	.460	(6.000)	8.0)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.270	.009 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	S75A	5.00	.460	(6.000)	8.0)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.337	.011 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	NS74A	60.00	.460	(6.000)	1.2)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.029	.013 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	E16B/17	34.00	.460	(6.000)	8.0)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.199	.020 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	V8A	40.00	.460	(6.000)	8.0)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.034	.008 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	V10	10.00	.460	(6.000)	8.0)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.595	.013 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	V29A	1.00	.460	(6.000)	8.0)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.306	.010 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	V76/232	36.00	.460	(6.000)	8.0)	2.000 (	.850)	(.920)	(.200)	(****)	(1.)	.089	.007 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
4	3025A	18.70	.480	1.000	*****	*****	*****	*****	*****	*****	***	.017	.004 (1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
4	3002A	25.00	.480	1.000	*****	*****	*****	*****	*****	*****	***	.007	.003 (1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)
4	STAT1CL	1.00	.480	1.000	*****	*****	*****	*****	*****	*****	***	(.000)	(.000)	(1)(0)(0)(0)(0)(0)(0)(0)(0)(0)
1	MOV1404	.33	.460	3.600 (	8.0)	2.000	.850	.290	.600	(****)	(1.)	.361	.012 (0)	2 (0)(0)(0)(0)(0) 1 1 1 1 1 1
1	MOV1417	1.50	.460	5.700 (	8.0)	2.000	.850	.500	.600	(****)	(1.)	.368	.012 (0)	2 (0)(0)(0)(0)(0) 1 1 1 1 1 1
1	MOV6552	.13	.460	7.100 (	8.0)	2.000	.850	.320	.600	(****)	(1.)	.382	.012 (0)	2 (0)(0)(0)(0)(0) 1 1 1 1 1 1
1	MOV6543	.13	.460	7.100 (	8.0)	2.000	.850	.320	.600	(****)	(1.)	.336	.011 (0)	2 (0)(0)(0)(0)(0) 1 1 1 1 1 1

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE *****

[illegible]

[illegible]

BUS NAME		MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT				
4851		96.00 % ***** * LOAD DATA * *****		82.00 %	30.0				
A/A	K1 FACTOR	SPEED OP PWR 3.6K=1 FACTOR X C&L	OP EFF	ST PF	R-OHMS T-T	HOT SYN=2 IND=1	CABLE RES REAC	O=ON 1=OFF CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
LT		X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C		
LT	V/D HVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR X% FOR TRANSF	TRANSF MVA -TOL OR TRANSF KV	REACT +TOL OR TRANSF TOL	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C
TED F							CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.108 .003 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.059 .002 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.112 .004 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.074 .002 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.009 .004 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.032 .001 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.219 .007 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.075 .008 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.010 .005 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.108 .003 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.012 .005 (0)	2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.078 .004 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000)(8.0)	2.000 (.850)(.920)(.200)*****(1.)	.124 .004 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)					
000 *****)	*****)	*****)	*****)	*****)	*****)	*****)	(.000)(.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
4AB1	96.00 %	82.00 %	30.0

	* LOAD DATA *		

P E 1	LOAD DATA *****											0=ON 1=OFF		VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)											
	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP FACTOR	PWR EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C												
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C												
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C												
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11	
*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****																									
DEVICE NAME		CASE: 1	2	3	4	5	6	7	8	9	10	11													
1	4P200C	RATED HP	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00												
1	4P200B	RATED HP	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	6000.00	5061.00											

30.0

82.00 %

[illegible]



MAX # WARNINGS FOR LOW VOLT
30.0

1 MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C	
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C	
4 STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10
1 4P201B	150.00	.460	5.800 (	1.2)	2.000	.900	.925 (	.200)(****)	(1.)	.027	.029 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	
1 4V1D	100.00	.460	7.750 (	1.2)	2.000	(.850)	(.920)	(.200)(****)	(1.)	.058	.039 (0)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	

EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

JOB ID 3/08/91
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BUS NAME					MIN ALLOWABLE VOLTAGE FOR S S					MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS					MAX # WARNINGS FOR LOW VOLT										
4806					96.00 %					82.00 %					30.0										
					***** * LOAD DATA * *****																				
T Y P E	1 MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)											
														0=ON 1=OFF											
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG		CABLE RES REAC	CON FOR S/C												
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REACT OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG		CABLE RES REAC	CON FOR S/C												
4 STATIC NAME	RATED KVA	RATED KV	RATED PF									CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11	

1	4P203B	15.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.135	.032	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	E16A/17	34.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.075	.007	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V20	20.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.194	.010	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	4V19B	15.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.454	.014	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V2B	60.00	.460(6.000)(	1.2)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.067	.025	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V30C	30.00	.460 5.390 (	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.231	.030	(0)	1	1	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V3C	75.00	.460 6.060 (	1.2)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.043	.029	(0)	1	1	1	1	1	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	4V9	20.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.217	.011	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	4V36	2.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.847	.018	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
4	4D02	25.00	.480 1.000	*****	*****	*****	*****	*****	*****	.017	.012	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
4	STATICL	10.00	.480 1.000	*****	*****	*****	*****	*****	*****	.000)(	.000)(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	MOV381	.42	.460 5.200 (	8.0)	2.000	.850	.490	.600	(****)	(1.)	.700	.015	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV626	1.00	.460 5.700 (	8.0)	2.000	.850	.390	.600	(****)	(1.)	.778	.017	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV716B	1.30	.460 3.700 (	8.0)	2.000	.850	.600	.600	(****)	(1.)	.491	.016	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV730	1.30	.460 3.700 (	8.0)	2.000	.850	.600	.600	(****)	(1.)	.711	.015	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV744B	10.50	.460 7.200 (	8.0)	2.000	.850	.800	.600	(****)	(1.)	.493	.017	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV843B	1.58	.460 7.400 (	8.0)	2.000	.850	.500	.600	(****)	(1.)	.689	.015	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV880B	2.00	.460 3.700 (	8.0)	2.000	.850	.630	.600	(****)	(1.)	.678	.015	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV1402	.33	.460 7.300 (	8.0)	2.000	.850	.480	.600	(****)	(1.)	.660	.014	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV1418	1.50	.460 5.700 (	8.0)	2.000	.850	.500	.600	(****)	(1.)	.586	.019	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV1421	5.20	.460 5.600 (	8.0)	2.000	.850	.540	.600	(****)	(1.)	.731	.016	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1
1	MOV1425	.25	.460 4.900 (	8.0)	2.000	.850	.500	.600	(****)	(1.)	.970	.021	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1	1

[illegible]



" JOB ID 3/08/91
 VERIFICATION BY
 PAGE 35

	BUS NAME				MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	2BUS114				(90.00) %				(70.70) %				(5.0)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
T Y P E					***** * LOAD DATA * *****								0=ON 1=OFF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 OP FACTOR <3.6K=2	PWR OP EFF	ST PF	R-OHMS T-T	HOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR %R FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
4	STATIC NAME	RATED KVA	RATED KV	RATED PF							CABLE RES REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
5	SWICHYD	15000.00	19.000	1.008	4435.0	.000	.000	.000	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)</

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BUS TIE CONNECTION DATA

T (NOTE: "C"=CABLE "T"=TRANSFORMER "R"=REACTOR ***=IMP FOR 3-WIND **=IMP FOR 2-WIND)

Y
 P TIE BUS OR BUS OR TERM NAME
 E NAME TERM TERM AWAY FROM
 NAME NAME NAME CENTRAL
 TOWARD AWAY TRANSF
 CENTRAL FROM (USE THIS
 TRANSF CENTRAL COL FOR
 TRANSF TRANSF 3 -WIND
 TRANSF)

C				CABLE RESIS	CABLE REAC						
T	(A)	(B)	(C)	TRANSF RATED MVA	TERM (A) RATED VOLT	TERM (B) RATED VOLT	TERM (C) RATED VOLT	TRANSF TOL %			
R				CABLE RESIS	CABLE REAC	OHMS X	REACTOR X/R	+TOL FOR S/C	-TOL FOR V/D		

C	TRLIN	H1	2BUS114	(.000)	(.000)							
C	NONSG	X1	4AA1	.001	.002							
C	NONSG	Y1	4AB1	.001	.002							
T	4X03	H1	X1 Y1	40.000	233.000	4.160	4.160	.000				
***	ZH-X=	16.640 %	RH-X=	.670 %	ZH-Y=	16.640 %	RH-Y=	.670 %	ZX-Y=	29.890 %	RX-Y=	1.190 %
R	4AA2	4AA1	4AA2	(.000)	(.000)	.04	80.0	(.00)	(.00)			
C	4AD	4AA2	4AD	.010	.022							
C	4B01	X2	4B01	(.000)	(.000)							
C	4B03	X4	4B03	(.000)	(.000)							
C	4B05V	4B01	4B05V	.002	.004							
C	4B05N	4B01	4B05N	.005	.005							
C	4B07	4B03	4B07	.004	.007							
C	4B08	4B50	4B08	.000	.001							
C	4B50	4B03	4B50	.003	.005							
C	4B51	4B01	4B51	.011	.022							
C	4X04	4AA2	H2	.004	.003							
T	4X04	H2	X2	1.000	4.050	.480	.000	2.500				
**	ZH-X=	5.630 %	RH-X=	.544 %								
C	4X06	4AA2	H4	.002	.002							
T	4X06	H4	X4	1.000	4.050	.480	.000	2.500				
**	ZH-X=	5.610 %	RH-X=	.544 %								
R	4AB2	4AB1	4AB2	(.000)	(.000)	.04	80.0	(.00)	(.00)			
C	4B02	X3	4B02	(.000)	(.000)							
C	4B04	X5	4B04	(.000)	(.000)							
C	4B06	4B02	4B06	.002	.005							
C	4B52	4B04	4B52	.012	.024							
T	4X05	H3	X3	1.000	4.050	.480	.000	2.500				
**	ZH-X=	5.610 %	RH-X=	.544 %								
C	4X05	4AB2	H3	.003	.003							
C	4X07	4AB2	H5	.004	.003							



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BUS TIE CONNECTION DATA
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T (NOTE: "C"=CABLE "T"=TRANSFORMER "R"=REACTOR ***=IMP FOR 3-WIND **=IMP FOR 2-WIND)

Y
 P TIE BUS OR BUS OR TERM NAME
 E NAME TERM TERM AWAY FROM
 NAME NAME NAME CENTRAL
 TOWARD AWAY TRANSF
 CENTRAL FROM (USE THIS
 TRANSF CENTRAL COL FOR
 TRANSF 3 -WIND
 TRANSF)

C	(A)	(B)	(C)	CABLE	CABLE				
				RESIS	REAC				
T				TRANSF	TERM (A)	TERM (B)	TERM (C)	TRANSF	
				RATED	RATED	RATED	RATED	TOL	
				MVA	VOLT	VOLT	VOLT	%	
R				CABLE	CABLE	OHMS	REACTOR	+TOL	-TOL
				RESIS	REAC	X	X/R	FOR	FOR
								S/C	V/D

 C 4853 4801 4853 .002 .002
 C 4854 4804 4854 .003 .003
 T 4X07 H5 X5 1.000 4.055 .480 .000 2.500
 ** ZH-X= 5.650 % RH-X= .544 %

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SHORT CIRCUIT ANALYSIS

NOTE:

TYPE 1 FAULT= MEDIUM VOLTAGE FAULT CALCULATION
 TYPE 2 FAULT= LOW VOLTAGE POWER CIRCUIT BREAKER FAULT CALCULATION
 TYPE 3 FAULT= LOW VOLTAGE MOLDED CASE BREAKER FAULT CALCULATION

BASE MVA = 40.000

TYPE OF FAULT	FAULT BUS NAME	PER UNIT RESISTANCE	PER UNIT INT REACTANCE	PER UNIT C&L REACTANCE	X/R	INT KA	C&L KA	K3	K4	K5	BASE VOLTAGE (KV)
1	4AA1	.00522	.14008	.12599	23.9	42.8	70.5	1.08			4.160
1	4AA2	.00603	.21072	.18486	30.1	30.0	48.1	1.14			4.160
1	4AD	.02788	.26141	.23452	8.3	21.2	37.9	1.00			4.160
2	4B01	.17155	1.67501		9.8	28.8			1.06		.493
2	4B03	.18084	1.71332		9.5	28.0			1.06		.493
3	4B05V	.45906	2.25166		4.9	19.8				1.00	.493
3	4B05H	.89129	2.45499		2.8	17.5				1.00	.493
3	4B07	.64953	2.71660		4.2	16.3				1.00	.493
3	4B08	.48274	2.38108		4.9	18.8				1.00	.493
2	4B50	.44575	2.28082		5.1	19.6			1.00		.493
1	4AB1	.00554	.14283	.12977	23.3	41.7	68.4	1.07			4.160
1	4AB2	.00636	.21508	.19157	29.8	29.3	46.4	1.14			4.160
2	4B02	.19813	1.91499		9.7	25.2			1.06		.493
2	4B04	.18352	1.91285		10.4	25.5			1.07		.492
3	4B06	.54857	2.58296		4.7	17.3				1.00	.493
3	4B52	1.52251	5.17961		3.4	8.5				1.00	.492
3	4B51	1.42218	4.68568		3.3	9.3				1.00	.493
3	4B53	.46713	2.00352		4.3	22.2				1.00	.493
3	4B54	.62774	2.39021		3.8	18.5				1.00	.492

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VOLTAGE DROP ANALYSIS CASE # 1

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.877KV=100.4% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.770KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.862KV=100.4% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.017KV= 96.6% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.996KV= 96.1% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.014KV= 96.5% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.985KV= 95.8% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.964KV= 95.3% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.982KV= 95.7% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.974KV= 95.5% OF 4.160KV	5252.9	2987.7	.0	.0
4AA2	***DURING***	3.944KV= 94.8% OF 4.160KV	5252.9	2987.7	.0	.0
4AA2	***AFTER***	3.970KV= 95.4% OF 4.160KV	5252.9	2987.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AD	***PRIOR***	3.971KV= 95.5% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.940KV= 94.7% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.967KV= 95.4% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B01	***PRIOR***	.462KV= 93.6% OF .493KV	245.7	137.3	.0	.0
4B01	***DURING***	.436KV= 88.5% OF .493KV	245.7	137.3	.0	.0
4B01	***AFTER***	.458KV= 92.9% OF .493KV	245.7	137.3	.0	.0

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VOLTAGE DROP ANALYSIS CASE #= 1

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4803	***PRIOR***	.457KV= 92.7% OF	.493KV	83.0	51.6	270.5	2.4
4803	***DURING***	.450KV= 91.2% OF	.493KV	83.0	51.6	261.8	2.3
4803	***AFTER***	.456KV= 92.5% OF	.493KV	83.0	51.6	269.3	2.4

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4805V	***PRIOR***	.461KV= 93.5% OF	.493KV	82.6	51.3	.9	.0
4805V	***DURING***	.435KV= 88.3% OF	.493KV	112.4	83.6	.8	.0
4805V	***AFTER***	.457KV= 92.8% OF	.493KV	90.9	56.3	.9	.0

STARTING MOTOR NAME

HP

MOV1420***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1420***DURING***	5.2	.393KV= 85.3% OF	.460 KV	
MOV1420***AFTER***	5.2	.446KV= 97.0% OF	.460 KV	

STARTING MOTOR NAME

HP

MOV1400***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1400***DURING***	.3	.431KV= 93.8% OF	.460 KV	
MOV1400***AFTER***	.3	.457KV= 99.3% OF	.460 KV	

STARTING MOTOR NAME

HP

MOV1427***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1427***DURING***	.3	.432KV= 93.8% OF	.460 KV	
MOV1427***AFTER***	.3	.456KV= 99.2% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4805N	***PRIOR***	.458KV= 92.9% OF	.493KV	62.8	40.1	239.6	.0
4805N	***DURING***	.433KV= 87.8% OF	.493KV	62.8	40.1	214.1	.0
4805N	***AFTER***	.455KV= 92.3% OF	.493KV	62.8	40.1	236.2	.0

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VOLTAGE DROP ANALYSIS CASE # 1

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW KVAR		STATIC KW KVAR	
4807	***PRIOR***	.454KV= 92.1% OF	.493KV	172.8	106.8	1.8
4807	***DURING***	.445KV= 90.2% OF	.493KV	246.4	189.1	1.7
4807	***AFTER***	.453KV= 91.8% OF	.493KV	190.3	117.5	1.8
STARTING MOTOR NAME		HP				
MOV1426	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *	
MOV1426	***DURING***	.3	.443KV= 96.4% OF	.460 KV		
MOV1426	***AFTER***	.3	.452KV= 98.3% OF	.460 KV		
STARTING MOTOR NAME		HP				
MOV6386	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *	
MOV6386	***DURING***	.1	.442KV= 96.1% OF	.460 KV		
MOV6386	***AFTER***	.1	.452KV= 98.3% OF	.460 KV		
STARTING MOTOR NAME		HP				
MOV1401	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *	
MOV1401	***DURING***	.3	.436KV= 94.8% OF	.460 KV		
MOV1401	***AFTER***	.3	.451KV= 98.0% OF	.460 KV		
STARTING MOTOR NAME		HP				
MOV880A	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *	
MOV880A	***DURING***	2.0	.441KV= 95.8% OF	.460 KV		
MOV880A	***AFTER***	2.0	.451KV= 98.1% OF	.460 KV		

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STARTING MOTOR NAME	HP				
MOV716A***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV716A***DURING***	1.3	.442KV=	96.0% OF	.460 KV	
MOV716A***AFTER***	1.3	.452KV=	98.2% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV744A***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV744A***DURING***	10.3	.395KV=	85.9% OF	.460 KV	
MOV744A***AFTER***	10.3	.442KV=	96.2% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV843A***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV843A***DURING***	1.6	.430KV=	93.6% OF	.460 KV	
MOV843A***AFTER***	1.6	.450KV=	97.8% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4808	***PRIOR***	.452KV= 91.7% OF	.493KV	231.8	142.6	39.6
4808	***DURING***	.444KV= 90.1% OF	.493KV	246.2	165.0	38.2
4808	***AFTER***	.451KV= 91.5% OF	.493KV	236.3	145.4	39.4

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
E168/17***PRIOR***	34.0	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *
E168/17***DURING***	34.0	.431KV=	93.8% OF	.460 KV	* WARNING WARNING WARNING *
E168/17***AFTER***	34.0	.438KV=	95.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
V10 ***PRIOR***	10.0	.441KV=	96.0% OF	.460 KV	* WARNING WARNING WARNING *
V10 ***DURING***	10.0	.433KV=	94.2% OF	.460 KV	* WARNING WARNING WARNING *
V10 ***AFTER***	10.0	.440KV=	95.7% OF	.460 KV	* WARNING WARNING WARNING *

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STARTING MOTOR NAME	HP					
V29A ***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
V29A ***DURING***	1.0	.443KV=	96.4% OF	.460 KV		
V29A ***AFTER***	1.0	.450KV=	97.9% OF	.460 KV		
STARTING MOTOR NAME	HP					
MOV1404***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV1404***DURING***	.3	.442KV=	96.2% OF	.460 KV		
MOV1404***AFTER***	.3	.450KV=	97.9% OF	.460 KV		
STARTING MOTOR NAME	HP					
MOV1417***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV1417***DURING***	1.5	.437KV=	95.0% OF	.460 KV		
MOV1417***AFTER***	1.5	.449KV=	97.6% OF	.460 KV		
STARTING MOTOR NAME	HP					
MOV6552***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV6552***DURING***	.1	.443KV=	96.3% OF	.460 KV		
MOV6552***AFTER***	.1	.451KV=	98.0% OF	.460 KV		
STARTING MOTOR NAME	HP					
MOV6543***PRIOR***	.0	.000KV=	.0% OF	.460 KV		* MOTOR NOT STARTED YET *
MOV6543***DURING***	.1	.443KV=	96.3% OF	.460 KV		
MOV6543***AFTER***	.1	.451KV=	98.0% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4850	***PRIOR***	.453KV= 91.8% OF	.493KV	122.8	60.2	.0 .0
4850	***DURING***	.445KV= 90.2% OF	.493KV	122.8	60.2	.0 .0
4850	***AFTER***	.452KV= 91.6% OF	.493KV	122.8	60.2	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4851	***PRIOR***	.461KV= 93.4% OF	.493KV	17.9	11.1	.9 .0
4851	***DURING***	.400KV= 81.1% OF	.493KV	144.7	597.2	.7 .0
4851	***AFTER***	.451KV= 91.5% OF	.493KV	131.5	81.4	.9 .0

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STARTING MOTOR NAME	HP				
4P244A ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P244A ***DURING***	1.0	.399KV=	86.8% OF	.460 KV	
4P244A ***AFTER****	1.0	.451KV=	98.0% OF	.460 KV	
STARTING MOTOR NAME	HP				
4V63A ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V63A ***DURING***	2.0	.399KV=	86.8% OF	.460 KV	
4V63A ***AFTER****	2.0	.451KV=	98.0% OF	.460 KV	
STARTING MOTOR NAME	HP				
4V67A ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V67A ***DURING***	40.0	.397KV=	86.3% OF	.460 KV	
4V67A ***AFTER****	40.0	.450KV=	97.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
4P241A ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P241A ***DURING***	1.0	.399KV=	86.8% OF	.460 KV	
4P241A ***AFTER****	1.0	.451KV=	98.0% OF	.460 KV	
STARTING MOTOR NAME	HP				
4S226A ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4S226A ***DURING***	15.0	.396KV=	86.1% OF	.460 KV	
4S226A ***AFTER****	15.0	.449KV=	97.6% OF	.460 KV	

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STARTING MOTOR NAME	HP				
4V68A ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V68A ***DURING***	40.0	.397KV=	86.3% OF	.460 KV	
4V68A ***AFTER****	40.0	.450KV=	97.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
4P245A ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P245A ***DURING***	.8	.400KV=	86.9% OF	.460 KV	
4P245A ***AFTER****	.8	.451KV=	98.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
4V69A ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V69A ***DURING***	40.0	.397KV=	86.2% OF	.460 KV	
4V69A ***AFTER****	40.0	.450KV=	97.9% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR****	3.952KV= 95.0% OF	4.160KV	5252.4	2987.2	.0 .0
4AB2	***DURING***	3.922KV= 94.3% OF	4.160KV	5252.4	2987.2	.0 .0
4AB2	***AFTER****	3.948KV= 94.9% OF	4.160KV	5252.4	2987.2	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR****	.462KV= 93.8% OF	.493KV	206.9	113.0	.0 .0
4B02	***DURING***	.454KV= 92.1% OF	.493KV	206.9	113.0	.0 .0
4B02	***AFTER****	.461KV= 93.5% OF	.493KV	206.9	113.0	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR****	.466KV= 94.6% OF	.492KV	61.1	38.0	.0 .0
4B04	***DURING***	.442KV= 89.8% OF	.492KV	61.1	38.0	.0 .0
4B04	***AFTER****	.463KV= 94.0% OF	.492KV	61.1	38.0	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B06	***PRIOR****	.461KV= 93.5% OF	.493KV	104.2	63.8	32.2 .0
4B06	***DURING***	.450KV= 91.4% OF	.493KV	230.2	204.3	30.8 .0
4B06	***AFTER****	.459KV= 93.2% OF	.493KV	135.4	82.8	32.0 .0

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STARTING MOTOR NAME	HP				
MOV381 ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV381 ***DURING***	.4	.447KV=	97.1% OF	.460 KV	
MOV381 ***AFTER***	.4	.458KV=	99.7% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV626 ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV626 ***DURING***	1.0	.437KV=	95.1% OF	.460 KV	
MOV626 ***AFTER***	1.0	.456KV=	99.2% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV7168***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV7168***DURING***	1.3	.446KV=	96.9% OF	.460 KV	
MOV7168***AFTER***	1.3	.458KV=	99.5% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV730 ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV730 ***DURING***	1.3	.444KV=	96.5% OF	.460 KV	
MOV730 ***AFTER***	1.3	.457KV=	99.3% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV7448***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV7448***DURING***	10.5	.398KV=	86.5% OF	.460 KV	
MOV7448***AFTER***	10.5	.449KV=	97.6% OF	.460 KV	

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STARTING MOTOR NAME	HP				
MOV8438***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV8438***DURING***	1.6	.432KV=	93.9% OF	.460 KV	
MOV8438***AFTER***	1.6	.456KV=	99.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV8808***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV8808***DURING***	2.0	.441KV=	95.9% OF	.460 KV	
MOV8808***AFTER***	2.0	.456KV=	99.1% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1402***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1402***DURING***	.3	.447KV=	97.1% OF	.460 KV	
MOV1402***AFTER***	.3	.459KV=	99.7% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1418***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1418***DURING***	1.5	.439KV=	95.4% OF	.460 KV	
MOV1418***AFTER***	1.5	.457KV=	99.3% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1421***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1421***DURING***	5.2	.406KV=	88.3% OF	.460 KV	
MOV1421***AFTER***	5.2	.448KV=	97.4% OF	.460 KV	
STARTING MOTOR NAME	HP				
MOV1425***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
MOV1425***DURING***	.3	.448KV=	97.3% OF	.460 KV	
MOV1425***AFTER***	.3	.459KV=	99.7% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B52	***PRIOR***	.465KV= 94.4% OF	.492KV	13.8	8.5	.9 .0
4B52	***DURING***	.403KV= 81.8% OF	.492KV	140.0	595.2	.7 .0
4B52	***AFTER***	.456KV= 92.5% OF	.492KV	125.8	77.9	.9 .0

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STARTING MOTOR NAME	HP				
4P244B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P244B ***DURING***	1.0	.402KV=	87.5% OF	.460 KV	
4P244B ***AFTER***	1.0	.455KV=	99.0% OF	.460 KV	
STARTING MOTOR NAME	HP				
4V67B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V67B ***DURING***	40.0	.400KV=	87.0% OF	.460 KV	
4V67B ***AFTER***	40.0	.455KV=	98.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
4P241B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P241B ***DURING***	1.0	.402KV=	87.4% OF	.460 KV	
4P241B ***AFTER***	1.0	.455KV=	98.9% OF	.460 KV	
STARTING MOTOR NAME	HP				
4S226B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4S226B ***DURING***	15.0	.400KV=	87.0% OF	.460 KV	
4S226B ***AFTER***	15.0	.454KV=	98.7% OF	.460 KV	
STARTING MOTOR NAME	HP				
4V68B ***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V68B ***DURING***	40.0	.400KV=	86.9% OF	.460 KV	
4V68B ***AFTER***	40.0	.455KV=	98.8% OF	.460 KV	

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STARTING MOTOR NAME	HP					
4P245B ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
4P245B ***DURING***	.8	.402KV=	87.5% OF	.460 KV		
4P245B ***AFTER****	.8	.455KV=	99.0% OF	.460 KV		
STARTING MOTOR NAME	HP					
4V69B ***PRIOR****	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *	
4V69B ***DURING***	40.0	.400KV=	86.9% OF	.460 KV		
4V69B ***AFTER****	40.0	.455KV=	98.8% OF	.460 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B53	***PRIOR****	.462KV= 93.6% OF	.493KV	14.6	9.0	25.0	.0
4B53	***DURING***	.436KV= 88.5% OF	.493KV	14.6	9.0	22.3	.0
4B53	***AFTER****	.458KV= 92.9% OF	.493KV	14.6	9.0	24.6	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B54	***PRIOR****	.466KV= 94.6% OF	.492KV	14.6	9.0	25.4	.0
4B54	***DURING***	.442KV= 89.8% OF	.492KV	14.6	9.0	22.9	.0
4B54	***AFTER****	.463KV= 94.0% OF	.492KV	14.6	9.0	25.1	.0

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VOLTAGE DROP ANALYSIS CASE # 2

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.862KV=100.4% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.442KV=100.2% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.817KV=100.4% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.014KV= 96.5% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.930KV= 94.5% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.006KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.982KV= 95.7% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.897KV= 93.7% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.974KV= 95.5% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.970KV= 95.4% OF 4.160KV	5252.9	2987.7	.0	.0
4AA2	***DURING***	3.850KV= 92.5% OF 4.160KV	5943.8	6327.0	.0	.0
4AA2	***AFTER***	3.959KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0

STARTING MOTOR NAME HP

4P210A	***PRIOR***	.0	.000KV= .0% OF 4.000 KV	* MOTOR NOT STARTED YET *
4P210A	***DURING***	300.0	3.839KV= 96.0% OF 4.000 KV	
4P210A	***AFTER***	300.0	3.957KV= 98.9% OF 4.000 KV	

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VOLTAGE DROP ANALYSIS CASE #= 2

STARTING MOTOR NAME	HP				
4P215A ***PRIOR****	.0	.000KV=	.0% OF	4.000 KV	* MOTOR NOT STARTED YET *
4P215A ***DURING***	350.0	3.834KV=	95.8% OF	4.000 KV	
4P215A ***AFTER****	350.0	3.956KV=	98.9% OF	4.000 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AD	***PRIOR****	3.967KV= 95.4% OF 4.160KV		626.9	409.2	.0	.0
4AD	***DURING***	3.846KV= 92.5% OF 4.160KV		626.9	409.2	.0	.0
4AD	***AFTER****	3.955KV= 95.1% OF 4.160KV		626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B01	***PRIOR****	.458KV= 92.9% OF .493KV		245.7	137.3	.0	.0
4B01	***DURING***	.444KV= 90.0% OF .493KV		245.7	137.3	.0	.0
4B01	***AFTER****	.457KV= 92.7% OF .493KV		245.7	137.3	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B03	***PRIOR****	.456KV= 92.5% OF .493KV		83.0	51.6	269.3	2.4
4B03	***DURING***	.441KV= 89.5% OF .493KV		83.0	51.6	252.2	2.3
4B03	***AFTER****	.455KV= 92.2% OF .493KV		83.0	51.6	267.6	2.4

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05V	***PRIOR****	.457KV= 92.8% OF .493KV		90.9	56.3	.9	.0
4B05V	***DURING***	.443KV= 89.8% OF .493KV		90.9	56.3	.9	.0
4B05V	***AFTER****	.456KV= 92.5% OF .493KV		90.9	56.3	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05N	***PRIOR****	.455KV= 92.3% OF .493KV		62.8	40.1	236.2	.0
4B05N	***DURING***	.440KV= 89.3% OF .493KV		62.8	40.1	221.3	.0
4B05N	***AFTER****	.454KV= 92.0% OF .493KV		62.8	40.1	234.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B07	***PRIOR****	.453KV= 91.8% OF .493KV		190.3	117.5	1.8	.0
4B07	***DURING***	.438KV= 88.8% OF .493KV		190.3	117.5	1.7	.0
4B07	***AFTER****	.451KV= 91.5% OF .493KV		190.3	117.5	1.8	.0

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VOLTAGE DROP ANALYSIS CASE # 2

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV744A***PRIOR***	10.3	.442KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744A***DURING***	10.3	.427KV=	92.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744A***AFTER***	10.3	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4808	***PRIOR***	.451KV=	91.5% OF	.493KV	236.3	145.4	39.4 .0
4808	***DURING***	.436KV=	88.4% OF	.493KV	236.3	145.4	36.9 .0
4808	***AFTER***	.450KV=	91.2% OF	.493KV	236.3	145.4	39.2 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E168/17***PRIOR***	34.0	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***DURING***	34.0	.423KV=	92.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***AFTER***	34.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V10	10.0	.440KV=	95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10	10.0	.425KV=	92.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10	10.0	.439KV=	95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4850	***PRIOR***	.452KV=	91.6% OF	.493KV	122.8	60.2	.0 .0
4850	***DURING***	.437KV=	88.6% OF	.493KV	122.8	60.2	.0 .0
4850	***AFTER***	.450KV=	91.3% OF	.493KV	122.8	60.2	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4851	***PRIOR***	.451KV=	91.5% OF	.493KV	131.5	81.4	.9 .0
4851	***DURING***	.436KV=	88.5% OF	.493KV	131.5	81.4	.8 .0
4851	***AFTER***	.450KV=	91.2% OF	.493KV	131.5	81.4	.9 .0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW KVAR		STATIC KW KVAR	
4AB2	***PRIOR***	3.948KV=	94.9% OF	4.160KV	5252.4	2987.2	.0 .0
4AB2	***DURING***	3.827KV=	92.0% OF	4.160KV	5935.6	6287.2	.0 .0
4AB2	***AFTER***	3.936KV=	94.6% OF	4.160KV	5770.1	3260.2	.0 .0
STARTING MOTOR NAME		HP					
4P210B	***PRIOR***	.0	.000KV=	.0% OF	4.000 KV	* MOTOR NOT STARTED YET *	
4P210B	***DURING***	300.0	3.816KV=	95.4% OF	4.000 KV		
4P210B	***AFTER***	300.0	3.934KV=	98.3% OF	4.000 KV		
STARTING MOTOR NAME		HP					
4P215B	***PRIOR***	.0	.000KV=	.0% OF	4.000 KV	* MOTOR NOT STARTED YET *	
4P215B	***DURING***	350.0	3.811KV=	95.3% OF	4.000 KV		
4P215B	***AFTER***	350.0	3.933KV=	98.3% OF	4.000 KV		

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.461KV= 93.5% OF .493KV	206.9	113.0	.0	.0
4B02	***DURING***	.447KV= 90.6% OF .493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.460KV= 93.3% OF .493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR***	.463KV= 94.0% OF .492KV	61.1	38.0	.0	.0
4B04	***DURING***	.449KV= 91.1% OF .492KV	61.1	38.0	.0	.0
4B04	***AFTER***	.462KV= 93.7% OF .492KV	61.1	38.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B06	***PRIOR***	.459KV= 93.2% OF .493KV	135.4	82.8	32.0	.0
4B06	***DURING***	.445KV= 90.2% OF .493KV	135.4	82.8	30.0	.0
4B06	***AFTER***	.458KV= 92.9% OF .493KV	135.4	82.8	31.8	.0

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VOLTAGE DROP ANALYSIS CASE #= 2

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4852	***PRIOR***	.456KV= 92.5% OF	.492KV	125.8	77.9	.9	.0
4852	***DURING***	.441KV= 89.5% OF	.492KV	125.8	77.9	.8	.0
4852	***AFTER***	.454KV= 92.2% OF	.492KV	125.8	77.9	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4853	***PRIOR***	.458KV= 92.9% OF	.493KV	14.6	9.0	24.6	.0
4853	***DURING***	.444KV= 90.0% OF	.493KV	14.6	9.0	23.1	.0
4853	***AFTER***	.457KV= 92.7% OF	.493KV	14.6	9.0	24.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4854	***PRIOR***	.463KV= 94.0% OF	.492KV	14.6	9.0	25.1	.0
4854	***DURING***	.448KV= 91.0% OF	.492KV	14.6	9.0	23.6	.0
4854	***AFTER***	.461KV= 93.7% OF	.492KV	14.6	9.0	24.9	.0



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VOLTAGE DROP ANALYSIS CASE #= 3

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS114	***PRIOR***	233.817KV=100.4% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.653KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.796KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA1	***PRIOR***	4.006KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.973KV= 95.5% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.002KV= 96.2% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AB1	***PRIOR***	3.974KV= 95.5% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.940KV= 94.7% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.970KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA2	***PRIOR***	3.959KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.912KV= 94.0% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.953KV= 95.0% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AD	***PRIOR***	3.955KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.908KV= 94.0% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.950KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B01	***PRIOR***	.457KV= 92.7% OF .493KV	245.7	137.3	.0	.0
4B01	***DURING***	.413KV= 83.8% OF .493KV	429.0	1160.1	.0	.0
4B01	***AFTER***	.452KV= 91.7% OF .493KV	445.6	231.0	.0	.0

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STARTING MOTOR NAME

HP

4P214A	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P214A	***DURING***	250.0	.373KV=	81.2% OF	.460 KV	* WARNING WARNING WARNING *
4P214A	***AFTER***	250.0	.446KV=	97.0% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4B03	***PRIOR***	.455KV= 92.2% OF	.493KV	83.0	51.6	267.6	2.4
4B03	***DURING***	.449KV= 91.1% OF	.493KV	83.0	51.6	260.9	2.3
4B03	***AFTER***	.454KV= 92.1% OF	.493KV	83.0	51.6	266.9	2.4

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4B05V	***PRIOR***	.456KV= 92.5% OF	.493KV	90.9	56.3	.9	.0
4B05V	***DURING***	.411KV= 83.3% OF	.493KV	133.4	161.5	.7	.0
4B05V	***AFTER***	.451KV= 91.5% OF	.493KV	116.3	71.5	.9	.0

STARTING MOTOR NAME

HP

4V30B	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V30B	***DURING***	30.0	.379KV=	82.4% OF	.460 KV	* WARNING WARNING WARNING *
4V30B	***AFTER***	30.0	.435KV=	94.6% OF	.460 KV	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

MOV1420	***PRIOR***	5.2	.445KV=	96.6% OF	.460 KV	* WARNING WARNING WARNING *
MOV1420	***DURING***	5.2	.398KV=	86.5% OF	.460 KV	* WARNING WARNING WARNING *
MOV1420	***AFTER***	5.2	.439KV=	95.5% OF	.460 KV	* WARNING WARNING WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4B05N	***PRIOR***	.454KV= 92.0% OF	.493KV	62.8	40.1	234.8	.0
4B05N	***DURING***	.410KV= 83.1% OF	.493KV	62.8	40.1	191.6	.0
4B05N	***AFTER***	.449KV= 91.0% OF	.493KV	62.8	40.1	229.8	.0

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VOLTAGE DROP ANALYSIS CASE # 3

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B07	***PRIOR***	.451KV= 91.5% OF	.493KV	190.3	117.5	1.8	.0
4B07	***DURING***	.446KV= 90.4% OF	.493KV	190.3	117.5	1.7	.0
4B07	***AFTER***	.451KV= 91.4% OF	.493KV	190.3	117.5	1.8	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
MOV744A***PRIOR***	10.3	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744A***DURING***	10.3	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744A***AFTER***	10.3	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B08	***PRIOR***	.450KV= 91.2% OF	.493KV	236.3	145.4	39.2	.0
4B08	***DURING***	.444KV= 90.0% OF	.493KV	236.3	145.4	38.2	.0
4B08	***AFTER***	.449KV= 91.0% OF	.493KV	236.3	145.4	39.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
E168/17***PRIOR***	34.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***DURING***	34.0	.431KV= 93.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***AFTER***	34.0	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
V10	10.0	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10	10.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10	10.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B50	***PRIOR***	.450KV= 91.3% OF	.493KV	122.8	60.2	.0	.0
4B50	***DURING***	.444KV= 90.1% OF	.493KV	122.8	60.2	.0	.0
4B50	***AFTER***	.449KV= 91.2% OF	.493KV	122.8	60.2	.0	.0

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VOLTAGE DROP ANALYSIS CASE # 3

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B51	***PRIOR***	.450KV= 91.2% OF	.493KV	131.5	81.4	.9	.0
4B51	***DURING***	.405KV= 82.2% OF	.493KV	131.5	81.4	.7	.0
4B51	***AFTER***	.445KV= 90.2% OF	.493KV	131.5	81.4	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.936KV= 94.6% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.888KV= 93.5% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.931KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.460KV= 93.3% OF	.493KV	206.9	113.0	.0	.0
4B02	***DURING***	.450KV= 91.3% OF	.493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.459KV= 93.0% OF	.493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR***	.462KV= 93.7% OF	.492KV	61.1	38.0	.0	.0
4B04	***DURING***	.421KV= 85.4% OF	.492KV	250.7	1116.9	.0	.0
4B04	***AFTER***	.458KV= 92.9% OF	.492KV	260.8	131.2	.0	.0

STARTING MOTOR NAME HP

4P214B	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P214B	***DURING***	250.0	.386KV= 84.0% OF	.460 KV	
4P214B	***AFTER***	250.0	.453KV= 98.4% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B06	***PRIOR***	.458KV= 92.9% OF	.493KV	135.4	82.8	31.8	.0
4B06	***DURING***	.447KV= 90.6% OF	.493KV	182.4	210.6	30.3	.0
4B06	***AFTER***	.457KV= 92.6% OF	.493KV	160.7	98.0	31.6	.0



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VOLTAGE DROP ANALYSIS CASE # 3

STARTING MOTOR NAME

HP

4V30C	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V30C	***DURING***	30.0	.418KV=	91.0% OF	.460 KV	
4V30C	***AFTER***	30.0	.444KV=	96.4% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4852	***PRIOR***	.454KV= 92.2% OF	.492KV	125.8	77.9	.9	.0
4852	***DURING***	.412KV= 83.8% OF	.492KV	125.8	77.9	.7	.0
4852	***AFTER***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4853	***PRIOR***	.457KV= 92.7% OF	.493KV	14.6	9.0	24.5	.0
4853	***DURING***	.413KV= 83.7% OF	.493KV	14.6	9.0	20.0	.0
4853	***AFTER***	.452KV= 91.7% OF	.493KV	14.6	9.0	23.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4854	***PRIOR***	.461KV= 93.7% OF	.492KV	14.6	9.0	24.9	.0
4854	***DURING***	.420KV= 85.4% OF	.492KV	14.6	9.0	20.7	.0
4854	***AFTER***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
2BUS114	***PRIOR***	233.796KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.787KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.795KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AA1	***PRIOR***	4.002KV= 96.2% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.999KV= 96.1% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.001KV= 96.2% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AB1	***PRIOR***	3.970KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.970KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AA2	***PRIOR***	3.953KV= 95.0% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.948KV= 94.9% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.953KV= 95.0% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AD	***PRIOR***	3.950KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.945KV= 94.8% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.949KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B01	***PRIOR***	.452KV= 91.7% OF .493KV	445.6	231.0	.0	.0
4B01	***DURING***	.451KV= 91.5% OF .493KV	445.6	231.0	.0	.0
4B01	***AFTER***	.452KV= 91.6% OF .493KV	445.6	231.0	.0	.0

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VOLTAGE DROP ANALYSIS CASE #= 4

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4803	***PRIOR***	.454KV= 92.1% OF	.493KV	83.0	51.6	266.9	2.4
4803	***DURING***	.449KV= 91.1% OF	.493KV	83.0	51.6	261.1	2.3
4803	***AFTER***	.453KV= 92.0% OF	.493KV	83.0	51.6	266.1	2.4

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4805V	***PRIOR***	.451KV= 91.5% OF	.493KV	116.3	71.5	.9	.0
4805V	***DURING***	.450KV= 91.3% OF	.493KV	116.3	71.5	.9	.0
4805V	***AFTER***	.451KV= 91.4% OF	.493KV	116.3	71.5	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V30B	***PRIOR***	30.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30B	***DURING***	30.0	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30B	***AFTER***	30.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV1420	***PRIOR***	5.2	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1420	***DURING***	5.2	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1420	***AFTER***	5.2	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4805N	***PRIOR***	.449KV= 91.0% OF	.493KV	62.8	40.1	229.8	.0
4805N	***DURING***	.448KV= 90.9% OF	.493KV	62.8	40.1	229.2	.0
4805N	***AFTER***	.449KV= 91.0% OF	.493KV	62.8	40.1	229.7	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4807	***PRIOR***	.451KV= 91.4% OF	.493KV	190.3	117.5	1.8	.0
4807	***DURING***	.446KV= 90.4% OF	.493KV	190.3	117.5	1.7	.0
4807	***AFTER***	.450KV= 91.3% OF	.493KV	190.3	117.5	1.8	.0

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VOLTAGE DROP ANALYSIS CASE # 4

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
MOV744A***PRIOR***	10.3	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744A***DURING***	10.3	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744A***AFTER***	10.3	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B08	***PRIOR***	.449KV= 91.0% OF	.493KV	236.3	145.4	39.0	.0
4B08	***DURING***	.442KV= 89.6% OF	.493KV	270.1	281.1	37.8	.0
4B08	***AFTER***	.448KV= 90.8% OF	.493KV	260.9	160.5	38.9	.0

STARTING MOTOR NAME

	HP				
4V30A ***PRIOR***	.0	.000KV= .0% OF	.460 KV	*	MOTOR NOT STARTED YET *
4V30A ***DURING***	30.0	.434KV= 94.4% OF	.460 KV		
4V30A ***AFTER***	30.0	.444KV= 96.5% OF	.460 KV		

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
E168/17***PRIOR***	34.0	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***DURING***	34.0	.429KV= 93.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***AFTER***	34.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
V10 ***PRIOR***	10.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10 ***DURING***	10.0	.431KV= 93.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10 ***AFTER***	10.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B50	***PRIOR***	.449KV= 91.2% OF	.493KV	122.8	60.2	.0	.0
4B50	***DURING***	.443KV= 89.8% OF	.493KV	122.8	60.2	.0	.0
4B50	***AFTER***	.448KV= 91.0% OF	.493KV	122.8	60.2	.0	.0

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VOLTAGE DROP ANALYSIS CASE # 4

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B51	***PRIOR***	.445KV= 90.2% OF	.493KV	131.5	81.4	.9	.0
4B51	***DURING***	.444KV= 90.1% OF	.493KV	131.5	81.4	.9	.0
4B51	***AFTER***	.445KV= 90.2% OF	.493KV	131.5	81.4	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4AB2	***PRIOR***	3.931KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.931KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.931KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B02	***PRIOR***	.459KV= 93.0% OF	.493KV	206.9	113.0	.0	.0
4B02	***DURING***	.459KV= 93.0% OF	.493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.459KV= 93.0% OF	.493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B04	***PRIOR***	.458KV= 92.9% OF	.492KV	260.8	131.2	.0	.0
4B04	***DURING***	.458KV= 92.9% OF	.492KV	260.8	131.2	.0	.0
4B04	***AFTER***	.458KV= 92.9% OF	.492KV	260.8	131.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B06	***PRIOR***	.457KV= 92.6% OF	.493KV	160.7	98.0	31.6	.0
4B06	***DURING***	.457KV= 92.6% OF	.493KV	160.7	98.0	31.6	.0
4B06	***AFTER***	.457KV= 92.6% OF	.493KV	160.7	98.0	31.6	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B52	***PRIOR***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0
4B52	***DURING***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0
4B52	***AFTER***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4853	***PRIOR***	.452KV= 91.7% OF	.493KV	14.6	9.0	23.9	.0
4853	***DURING***	.451KV= 91.6% OF	.493KV	14.6	9.0	23.9	.0
4853	***AFTER***	.452KV= 91.7% OF	.493KV	14.6	9.0	23.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4854	***PRIOR***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0
4854	***DURING***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0
4854	***AFTER***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0

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VOLTAGE DROP ANALYSIS CASE #= 5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.795KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.795KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.795KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.001KV= 96.2% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	4.001KV= 96.2% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.001KV= 96.2% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.970KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.970KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.970KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.953KV= 95.0% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.953KV= 95.0% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.953KV= 95.0% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AD	***PRIOR***	3.949KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.949KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.949KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B01	***PRIOR***	.452KV= 91.6% OF .493KV	445.6	231.0	.0	.0
4B01	***DURING***	.452KV= 91.6% OF .493KV	445.6	231.0	.0	.0
4B01	***AFTER***	.452KV= 91.6% OF .493KV	445.6	231.0	.0	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B03	***PRIOR***	.453KV= 92.0% OF	.493KV	83.0	51.6	266.1	2.4
4B03	***DURING***	.453KV= 92.0% OF	.493KV	83.0	51.6	266.1	2.4
4B03	***AFTER***	.453KV= 92.0% OF	.493KV	83.0	51.6	266.1	2.4

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05V	***PRIOR***	.451KV= 91.4% OF	.493KV	116.3	71.5	.9	.0
4B05V	***DURING***	.451KV= 91.4% OF	.493KV	116.3	71.5	.9	.0
4B05V	***AFTER***	.451KV= 91.4% OF	.493KV	116.3	71.5	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V30B	***PRIOR***	30.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30B	***DURING***	30.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30B	***AFTER***	30.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
MOV1420	***PRIOR***	5.2	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1420	***DURING***	5.2	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV1420	***AFTER***	5.2	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05N	***PRIOR***	.449KV= 91.0% OF	.493KV	62.8	40.1	229.7	.0
4B05N	***DURING***	.449KV= 91.0% OF	.493KV	62.8	40.1	229.7	.0
4B05N	***AFTER***	.449KV= 91.0% OF	.493KV	62.8	40.1	229.7	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B07	***PRIOR***	.450KV= 91.3% OF	.493KV	190.3	117.5	1.8	.0
4B07	***DURING***	.450KV= 91.3% OF	.493KV	190.3	117.5	1.8	.0
4B07	***AFTER***	.450KV= 91.3% OF	.493KV	190.3	117.5	1.8	.0

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VOLTAGE DROP ANALYSIS CASE # 5

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
MOV744A***PRIOR***	10.3	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744A***DURING***	10.3	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
MOV744A***AFTER***	10.3	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4808	***PRIOR***	.448KV= 90.8% OF	.493KV	260.9	160.5	38.9 .0
4808	***DURING***	.448KV= 90.8% OF	.493KV	260.9	160.5	38.9 .0
4808	***AFTER***	.448KV= 90.8% OF	.493KV	260.9	160.5	38.9 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
E168/17***PRIOR***	34.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***DURING***	34.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***AFTER***	34.0	.435KV= 94.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
V10	10.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10	10.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10	10.0	.437KV= 95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4850	***PRIOR***	.448KV= 91.0% OF	.493KV	122.8	60.2	.0 .0
4850	***DURING***	.448KV= 91.0% OF	.493KV	122.8	60.2	.0 .0
4850	***AFTER***	.448KV= 91.0% OF	.493KV	122.8	60.2	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4851	***PRIOR***	.445KV= 90.2% OF	.493KV	131.5	81.4	.9 .0
4851	***DURING***	.445KV= 90.2% OF	.493KV	131.5	81.4	.9 .0
4851	***AFTER***	.445KV= 90.2% OF	.493KV	131.5	81.4	.9 .0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.931KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.931KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.931KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.459KV= 93.0% OF	.493KV	206.9	113.0	.0	.0
4B02	***DURING***	.459KV= 93.0% OF	.493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.459KV= 93.0% OF	.493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR***	.458KV= 92.9% OF	.492KV	260.8	131.2	.0	.0
4B04	***DURING***	.458KV= 92.9% OF	.492KV	260.8	131.2	.0	.0
4B04	***AFTER***	.458KV= 92.9% OF	.492KV	260.8	131.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B06	***PRIOR***	.457KV= 92.6% OF	.493KV	160.7	98.0	31.6	.0
4B06	***DURING***	.457KV= 92.6% OF	.493KV	160.7	98.0	31.6	.0
4B06	***AFTER***	.457KV= 92.6% OF	.493KV	160.7	98.0	31.6	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B52	***PRIOR***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0
4B52	***DURING***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0
4B52	***AFTER***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B53	***PRIOR***	.452KV= 91.7% OF	.493KV	14.6	9.0	23.9	.0
4B53	***DURING***	.452KV= 91.7% OF	.493KV	14.6	9.0	23.9	.0
4B53	***AFTER***	.452KV= 91.7% OF	.493KV	14.6	9.0	23.9	.0

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VOLTAGE DROP ANALYSIS CASE #= 5

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B54	***PRIOR***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0
4B54	***DURING***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0
4B54	***AFTER***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0

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VOLTAGE DROP ANALYSIS CASE # 6

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
2BUS114	***PRIOR***	233.798KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.749KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.791KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AA1	***PRIOR***	4.002KV= 96.2% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.992KV= 96.0% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.001KV= 96.2% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AB1	***PRIOR***	3.971KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.961KV= 95.2% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AA2	***PRIOR***	3.954KV= 95.0% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.939KV= 94.7% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.952KV= 95.0% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AD	***PRIOR***	3.950KV= 95.0% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.936KV= 94.6% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.948KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B01	***PRIOR***	.452KV= 91.7% OF .493KV	445.6	231.0	.0	.0
4B01	***DURING***	.439KV= 89.0% OF .493KV	445.6	231.0	.0	.0
4B01	***AFTER***	.450KV= 91.4% OF .493KV	445.6	231.0	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B03	***PRIOR***	.454KV= 92.1% OF	.493KV	83.0	51.6	266.8
4B03	***DURING***	.452KV= 91.7% OF	.493KV	83.0	51.6	264.7
4B03	***AFTER***	.454KV= 92.0% OF	.493KV	83.0	51.6	266.5

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B05V	***PRIOR***	.451KV= 91.5% OF	.493KV	108.0	66.5	.9
4B05V	***DURING***	.434KV= 88.0% OF	.493KV	199.9	419.0	.8
4B05V	***AFTER***	.449KV= 91.0% OF	.493KV	169.6	104.7	.9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4V1C	***PRIOR***	100.0	.442KV= 96.2% OF	.460 KV	* WARNING	WARNING	WARNING *
4V1C	***DURING***	100.0	.425KV= 92.4% OF	.460 KV	* WARNING	WARNING	WARNING *
4V1C	***AFTER***	100.0	.440KV= 95.7% OF	.460 KV	* WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4V30B	***PRIOR***	30.0	.435KV= 94.6% OF	.460 KV	* WARNING	WARNING	WARNING *
4V30B	***DURING***	30.0	.418KV= 90.8% OF	.460 KV	* WARNING	WARNING	WARNING *
4V30B	***AFTER***	30.0	.433KV= 94.1% OF	.460 KV	* WARNING	WARNING	WARNING *

STARTING MOTOR NAME

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4V3B	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *		
4V3B	***DURING***	75.0	.410KV= 89.0% OF	.460 KV			
4V3B	***AFTER***	75.0	.443KV= 96.2% OF	.460 KV			

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B05N	***PRIOR***	.449KV= 91.0% OF	.493KV	62.8	40.1	230.0
4B05N	***DURING***	.436KV= 88.3% OF	.493KV	62.8	40.1	216.6
4B05N	***AFTER***	.447KV= 90.7% OF	.493KV	62.8	40.1	228.3



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4B07	***PRIOR***	.451KV= 91.4% OF	.493KV	172.8	106.8	1.8	.0
4B07	***DURING***	.449KV= 91.1% OF	.493KV	172.8	106.8	1.8	.0
4B07	***AFTER***	.451KV= 91.4% OF	.493KV	172.8	106.8	1.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4B08	***PRIOR***	.448KV= 91.0% OF	.493KV	257.2	158.2	39.0	.0
4B08	***DURING***	.447KV= 90.6% OF	.493KV	257.2	158.2	38.7	.0
4B08	***AFTER***	.448KV= 90.9% OF	.493KV	257.2	158.2	38.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
E16B/17***PRIOR***	34.0	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16B/17***DURING***	34.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16B/17***AFTER***	34.0	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
V10	10.0	.438KV= 95.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10	10.0	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10	10.0	.438KV= 95.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4B50	***PRIOR***	.449KV= 91.1% OF	.493KV	122.8	60.2	.0	.0
4B50	***DURING***	.447KV= 90.7% OF	.493KV	122.8	60.2	.0	.0
4B50	***AFTER***	.449KV= 91.0% OF	.493KV	122.8	60.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4B51	***PRIOR***	.445KV= 90.3% OF	.493KV	131.5	81.4	.9	.0
4B51	***DURING***	.432KV= 87.5% OF	.493KV	131.5	81.4	.8	.0
4B51	***AFTER***	.443KV= 89.9% OF	.493KV	131.5	81.4	.9	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
4S226A	***PRIOR***	15.0	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4S226A	***DURING***	15.0	.429KV= 93.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4S226A	***AFTER***	15.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.932KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.918KV= 94.2% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.930KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.459KV= 93.2% OF	.493KV	206.9	113.0	.0	.0
4B02	***DURING***	.447KV= 90.6% OF	.493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.458KV= 92.9% OF	.493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR***	.458KV= 92.9% OF	.492KV	260.8	131.2	.0	.0
4B04	***DURING***	.456KV= 92.6% OF	.492KV	260.8	131.2	.0	.0
4B04	***AFTER***	.457KV= 92.9% OF	.492KV	260.8	131.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B06	***PRIOR***	.458KV= 92.8% OF	.493KV	129.4	79.0	31.8	.0
4B06	***DURING***	.440KV= 89.3% OF	.493KV	227.6	433.8	29.4	.0
4B06	***AFTER***	.455KV= 92.4% OF	.493KV	191.2	117.4	31.5	.0

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STARTING MOTOR NAME

HP

4V3C	***PRIOR***	.0	.000KV=	.0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V3C	***DURING***	75.0	.408KV=	88.7% OF	.460 KV	
4V3C	***AFTER***	75.0	.447KV=	97.3% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4852	***PRIOR***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0
4852	***DURING***	.449KV= 91.1% OF	.492KV	125.8	77.9	.9	.0
4852	***AFTER***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4853	***PRIOR***	.452KV= 91.7% OF	.493KV	14.6	9.0	24.0	.0
4853	***DURING***	.439KV= 89.0% OF	.493KV	14.6	9.0	22.6	.0
4853	***AFTER***	.451KV= 91.4% OF	.493KV	14.6	9.0	23.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4854	***PRIOR***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0
4854	***DURING***	.456KV= 92.6% OF	.492KV	14.6	9.0	24.3	.0
4854	***AFTER***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0

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VOLTAGE DROP ANALYSIS CASE #= 7

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.791KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.766KV=100.3% OF233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.788KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.001KV= 96.2% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.992KV= 96.0% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.000KV= 96.1% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.968KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.952KV= 95.0% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.939KV= 94.7% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.950KV= 94.9% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AD	***PRIOR***	3.948KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.935KV= 94.6% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.946KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B01	***PRIOR***	.450KV= 91.4% OF .493KV	445.6	231.0	.0	.0
4B01	***DURING***	.449KV= 91.0% OF .493KV	445.6	231.0	.0	.0
4B01	***AFTER***	.450KV= 91.3% OF .493KV	445.6	231.0	.0	.0

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VOLTAGE DROP ANALYSIS CASE #= 7

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4803	***PRIOR***	.454KV= 92.0% OF	.493KV	83.0	51.6	266.5	2.4
4803	***DURING***	.441KV= 89.4% OF	.493KV	83.0	51.6	251.1	2.2
4803	***AFTER***	.452KV= 91.7% OF	.493KV	83.0	51.6	264.5	2.4

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P212	***PRIOR***	100.0	.443KV= 96.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P212	***DURING***	100.0	.429KV= 93.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P212	***AFTER***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4805V	***PRIOR***	.449KV= 91.0% OF	.493KV	169.6	104.7	.9	.0
4805V	***DURING***	.447KV= 90.7% OF	.493KV	169.6	104.7	.9	.0
4805V	***AFTER***	.449KV= 91.0% OF	.493KV	169.6	104.7	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V1C	***PRIOR***	100.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V1C	***DURING***	100.0	.438KV= 95.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V1C	***AFTER***	100.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V30B	***PRIOR***	30.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30B	***DURING***	30.0	.431KV= 93.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30B	***AFTER***	30.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4805N	***PRIOR***	.447KV= 90.7% OF	.493KV	62.8	40.1	228.3	.0
4805N	***DURING***	.446KV= 90.4% OF	.493KV	62.8	40.1	226.6	.0
4805N	***AFTER***	.447KV= 90.7% OF	.493KV	62.8	40.1	228.1	.0



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VOLTAGE DROP ANALYSIS CASE #= 7

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4807	***PRIOR***	.451KV= 91.4% OF	.493KV	172.8	106.8	1.8	.0
4807	***DURING***	.437KV= 88.7% OF	.493KV	172.8	106.8	1.7	.0
4807	***AFTER***	.449KV= 91.1% OF	.493KV	172.8	106.8	1.7	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4808	***PRIOR***	.448KV= 90.9% OF	.493KV	257.2	158.2	38.9	.0
4808	***DURING***	.429KV= 87.0% OF	.493KV	341.6	512.6	35.7	.0
4808	***AFTER***	.446KV= 90.4% OF	.493KV	318.5	196.2	38.5	.0

STARTING MOTOR NAME

HP

4V3A	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
4V3A	***DURING***	75.0	.414KV= 90.1% OF	.460 KV	
4V3A	***AFTER***	75.0	.442KV= 96.0% OF	.460 KV	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

HP

E168/17	***PRIOR***	34.0	.436KV= 94.7% OF	.460 KV	* WARNING WARNING WARNING *
E168/17	***DURING***	34.0	.416KV= 90.4% OF	.460 KV	* WARNING WARNING WARNING *
E168/17	***AFTER***	34.0	.433KV= 94.1% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

HP

V10	***PRIOR***	10.0	.438KV= 95.1% OF	.460 KV	* WARNING WARNING WARNING *
V10	***DURING***	10.0	.418KV= 90.8% OF	.460 KV	* WARNING WARNING WARNING *
V10	***AFTER***	10.0	.435KV= 94.5% OF	.460 KV	* WARNING WARNING WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V76/232***PRIOR***	36.0	.442KV= 96.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
V76/232***DURING***	36.0	.423KV= 91.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
V76/232***AFTER***	36.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B50	***PRIOR***	.449KV= 91.0% OF	.493KV	122.8	60.2	.0 .0
4B50	***DURING***	.431KV= 87.3% OF	.493KV	122.8	60.2	.0 .0
4B50	***AFTER***	.446KV= 90.5% OF	.493KV	122.8	60.2	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201C ***PRIOR***	150.0	.443KV= 96.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4P201C ***DURING***	150.0	.425KV= 92.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4P201C ***AFTER***	150.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B51	***PRIOR***	.443KV= 89.9% OF	.493KV	131.5	81.4	.9 .0
4B51	***DURING***	.442KV= 89.6% OF	.493KV	131.5	81.4	.8 .0
4B51	***AFTER***	.443KV= 89.9% OF	.493KV	131.5	81.4	.9 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S226A ***PRIOR***	15.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4S226A ***DURING***	15.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4S226A ***AFTER***	15.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S230 ***PRIOR***	7.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4S230 ***DURING***	7.0	.440KV= 95.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4S230 ***AFTER***	7.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AB2	***PRIOR***	3.930KV= 94.5% OF	4.160KV	5770.1	3260.2	.0 .0
4AB2	***DURING***	3.929KV= 94.4% OF	4.160KV	5770.1	3260.2	.0 .0
4AB2	***AFTER***	3.930KV= 94.5% OF	4.160KV	5770.1	3260.2	.0 .0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4802	***PRIOR***	.458KV= 92.9% OF	.493KV	206.9	113.0	.0	.0
4802	***DURING***	.458KV= 92.8% OF	.493KV	206.9	113.0	.0	.0
4802	***AFTER***	.458KV= 92.9% OF	.493KV	206.9	113.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4804	***PRIOR***	.457KV= 92.9% OF	.492KV	260.8	131.2	.0	.0
4804	***DURING***	.457KV= 92.9% OF	.492KV	260.8	131.2	.0	.0
4804	***AFTER***	.457KV= 92.9% OF	.492KV	260.8	131.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4806	***PRIOR***	.455KV= 92.4% OF	.493KV	191.2	117.4	31.5	.0
4806	***DURING***	.455KV= 92.3% OF	.493KV	191.2	117.4	31.4	.0
4806	***AFTER***	.455KV= 92.4% OF	.493KV	191.2	117.4	31.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4852	***PRIOR***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0
4852	***DURING***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0
4852	***AFTER***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4853	***PRIOR***	.451KV= 91.4% OF	.493KV	14.6	9.0	23.8	.0
4853	***DURING***	.449KV= 91.0% OF	.493KV	14.6	9.0	23.6	.0
4853	***AFTER***	.450KV= 91.3% OF	.493KV	14.6	9.0	23.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4854	***PRIOR***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0
4854	***DURING***	.457KV= 92.8% OF	.492KV	14.6	9.0	24.5	.0
4854	***AFTER***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.788KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.788KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.788KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.000KV= 96.1% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	4.000KV= 96.1% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.000KV= 96.1% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.950KV= 94.9% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.950KV= 94.9% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.950KV= 94.9% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AD	***PRIOR***	3.946KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.946KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.946KV= 94.9% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4B01	***PRIOR***	.450KV= 91.3% OF .493KV	445.6	231.0	.0	.0
4B01	***DURING***	.450KV= 91.3% OF .493KV	445.6	231.0	.0	.0
4B01	***AFTER***	.450KV= 91.3% OF .493KV	445.6	231.0	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR	
4B03	***PRIOR***	.452KV= 91.7% OF	.493KV	83.0	51.6	264.5	2.4
4B03	***DURING***	.452KV= 91.7% OF	.493KV	83.0	51.6	264.5	2.4
4B03	***AFTER***	.452KV= 91.7% OF	.493KV	83.0	51.6	264.5	2.4

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4P212	***PRIOR***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P212	***DURING***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P212	***AFTER***	100.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR	
4B05V	***PRIOR***	.449KV= 91.0% OF	.493KV	169.6	104.7	.9	.0
4B05V	***DURING***	.449KV= 91.0% OF	.493KV	169.6	104.7	.9	.0
4B05V	***AFTER***	.449KV= 91.0% OF	.493KV	169.6	104.7	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V1C	***PRIOR***	100.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1C	***DURING***	100.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1C	***AFTER***	100.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP							
4V30B	***PRIOR***	30.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***DURING***	30.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***AFTER***	30.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR	
4B05N	***PRIOR***	.447KV= 90.7% OF	.493KV	62.8	40.1	228.1	.0
4B05N	***DURING***	.447KV= 90.7% OF	.493KV	62.8	40.1	228.1	.0
4B05N	***AFTER***	.447KV= 90.7% OF	.493KV	62.8	40.1	228.1	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B07	***PRIOR***	.449KV= 91.1% OF	.493KV	172.8	106.8	1.7	.0
4B07	***DURING***	.449KV= 91.1% OF	.493KV	172.8	106.8	1.7	.0
4B07	***AFTER***	.449KV= 91.1% OF	.493KV	172.8	106.8	1.7	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B08	***PRIOR***	.446KV= 90.4% OF	.493KV	318.5	196.2	38.5	.0
4B08	***DURING***	.446KV= 90.4% OF	.493KV	318.5	196.2	38.5	.0
4B08	***AFTER***	.446KV= 90.4% OF	.493KV	318.5	196.2	38.5	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP						
E16B/17***PRIOR***	34.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16B/17***DURING***	34.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
E16B/17***AFTER***	34.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP						
V10 ***PRIOR***	10.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10 ***DURING***	10.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V10 ***AFTER***	10.0	.435KV= 94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP						
V76/232***PRIOR***	36.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232***DURING***	36.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
V76/232***AFTER***	36.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B50	***PRIOR***	.446KV= 90.5% OF	.493KV	122.8	60.2	.0	.0
4B50	***DURING***	.446KV= 90.5% OF	.493KV	122.8	60.2	.0	.0
4B50	***AFTER***	.446KV= 90.5% OF	.493KV	122.8	60.2	.0	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201C	150.0	***PRIOR***	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C	150.0	***DURING***	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C	150.0	***AFTER***	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B51	***PRIOR***	.443KV= 89.9% OF	.493KV	131.5	81.4	.9 .0
4B51	***DURING***	.443KV= 89.9% OF	.493KV	131.5	81.4	.9 .0
4B51	***AFTER***	.443KV= 89.9% OF	.493KV	131.5	81.4	.9 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S226A	15.0	***PRIOR***	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S226A	15.0	***DURING***	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S226A	15.0	***AFTER***	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S230	7.0	***PRIOR***	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S230	7.0	***DURING***	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S230	7.0	***AFTER***	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.930KV= 94.5% OF	4.160KV	5770.1	3260.2	.0 .0
4AB2	***DURING***	3.930KV= 94.5% OF	4.160KV	5770.1	3260.2	.0 .0
4AB2	***AFTER***	3.930KV= 94.5% OF	4.160KV	5770.1	3260.2	.0 .0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.458KV= 92.9% OF	.493KV	206.9	113.0	.0 .0
4B02	***DURING***	.458KV= 92.9% OF	.493KV	206.9	113.0	.0 .0
4B02	***AFTER***	.458KV= 92.9% OF	.493KV	206.9	113.0	.0 .0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4804	***PRIOR***	.457KV= 92.9% OF	.492KV	260.8	131.2	.0	.0
4804	***DURING***	.457KV= 92.9% OF	.492KV	260.8	131.2	.0	.0
4804	***AFTER***	.457KV= 92.9% OF	.492KV	260.8	131.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4806	***PRIOR***	.455KV= 92.4% OF	.493KV	191.2	117.4	31.5	.0
4806	***DURING***	.455KV= 92.4% OF	.493KV	191.2	117.4	31.5	.0
4806	***AFTER***	.455KV= 92.4% OF	.493KV	191.2	117.4	31.5	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4852	***PRIOR***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0
4852	***DURING***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0
4852	***AFTER***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4853	***PRIOR***	.450KV= 91.3% OF	.493KV	14.6	9.0	23.8	.0
4853	***DURING***	.450KV= 91.3% OF	.493KV	14.6	9.0	23.8	.0
4853	***AFTER***	.450KV= 91.3% OF	.493KV	14.6	9.0	23.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4854	***PRIOR***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0
4854	***DURING***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0
4854	***AFTER***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0

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VOLTAGE DROP ANALYSIS CASE # 9

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
2BUS114	***PRIOR***	233.788KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	231.879KV= 99.5% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.571KV=100.2% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA1	***PRIOR***	4.000KV= 96.1% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.335KV= 80.2% OF 4.160KV	9577.4	28859.9	.0	.0
4AA1	***AFTER***	3.931KV= 94.5% OF 4.160KV	9561.0	5210.9	.0	.0

STARTING MOTOR NAME

HP

4P1A	***PRIOR***	.0	.000KV= .0% OF 4.000 KV	* MOTOR NOT STARTED YET *
4P1A	***DURING***	7000.0	3.282KV= 82.0% OF 4.000 KV	
4P1A	***AFTER***	7000.0	3.923KV= 98.1% OF 4.000 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AB1	***PRIOR***	3.969KV= 95.4% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.866KV= 92.9% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.958KV= 95.1% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC	
			KW	KVAR	KW	KVAR
4AA2	***PRIOR***	3.950KV= 94.9% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.274KV= 78.7% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.881KV= 93.3% OF 4.160KV	5770.5	3260.7	.0	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P11A	***PRIOR***	400.0	3.946KV=	98.7% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P11A	***DURING***	400.0	3.270KV=	81.7% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P11A	***AFTER***	400.0	3.877KV=	96.9% OF	4.000 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P210A	***PRIOR***	300.0	3.948KV=	98.7% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P210A	***DURING***	300.0	3.272KV=	81.8% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P210A	***AFTER***	300.0	3.879KV=	97.0% OF	4.000 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P211A	***PRIOR***	450.0	3.946KV=	98.6% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P211A	***DURING***	450.0	3.269KV=	81.7% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P211A	***AFTER***	450.0	3.877KV=	96.9% OF	4.000 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P215A	***PRIOR***	350.0	3.947KV=	98.7% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P215A	***DURING***	350.0	3.270KV=	81.8% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P215A	***AFTER***	350.0	3.878KV=	96.9% OF	4.000 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P3A	***PRIOR***	700.0	3.944KV=	98.6% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P3A	***DURING***	700.0	3.267KV=	81.7% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P3A	***AFTER***	700.0	3.875KV=	96.9% OF	4.000 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P6A	***PRIOR***	2210.0	3.948KV=	98.7% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P6A	***DURING***	2210.0	3.272KV=	81.8% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P6A	***AFTER***	2210.0	3.879KV=	97.0% OF	4.000 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P7A	***PRIOR***	1250.0	3.937KV=	98.4% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P7A	***DURING***	1250.0	3.258KV=	81.5% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P7A	***AFTER***	1250.0	3.868KV=	96.7% OF	4.000 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P7C	***PRIOR***	1250.0	3.937KV=	98.4% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P7C	***DURING***	1250.0	3.259KV=	81.5% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P7C	***AFTER***	1250.0	3.868KV=	96.7% OF	4.000 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P9A	***PRIOR***	325.0	3.945KV=	98.6% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P9A	***DURING***	325.0	3.269KV=	81.7% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P9A	***AFTER***	325.0	3.876KV=	96.9% OF	4.000 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AD	***PRIOR***	3.946KV= 94.9% OF	4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.270KV= 78.6% OF	4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.877KV= 93.2% OF	4.160KV	626.9	409.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P211C	***PRIOR***	450.0	3.940KV=	98.5% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P211C	***DURING***	450.0	3.262KV=	81.6% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P211C	***AFTER***	450.0	3.871KV=	96.8% OF	4.000 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P9C	***PRIOR***	325.0	3.942KV=	98.6% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P9C	***DURING***	325.0	3.265KV=	81.6% OF	4.000 KV	*	WARNING	WARNING	WARNING *
4P9C	***AFTER***	325.0	3.874KV=	96.8% OF	4.000 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B01	***PRIOR***	.450KV= 91.3% OF	.493KV	445.6	231.0	.0	.0
4B01	***DURING***	.366KV= 74.2% OF	.493KV	445.6	231.0	.0	.0
4B01	***AFTER***	.442KV= 89.6% OF	.493KV	445.6	231.0	.0	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201A	150.0	***PRIOR***	.442KV= 96.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201A	150.0	***DURING***	.356KV= 77.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201A	150.0	***AFTER***	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P214A	250.0	***PRIOR***	.444KV= 96.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P214A	250.0	***DURING***	.359KV= 78.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P214A	250.0	***AFTER***	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S6A	150.0	***PRIOR***	.444KV= 96.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S6A	150.0	***DURING***	.359KV= 78.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S6A	150.0	***AFTER***	.436KV= 94.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B03	***PRIOR***	.452KV= 91.7% OF	.493KV	83.0	51.6	264.5
4B03	***DURING***	.368KV= 74.7% OF	.493KV	83.0	51.6	175.7
4B03	***AFTER***	.444KV= 90.0% OF	.493KV	83.0	51.6	254.7

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P212	100.0	***PRIOR***	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P212	100.0	***DURING***	.355KV= 77.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P212	100.0	***AFTER***	.432KV= 94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B05V	***PRIOR***	.449KV= 91.0% OF	.493KV	169.6	104.7	.9
4B05V	***DURING***	.364KV= 73.8% OF	.493KV	169.6	104.7	.6
4B05V	***AFTER***	.440KV= 89.3% OF	.493KV	169.6	104.7	.8

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V1C	***PRIOR***	100.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1C	***DURING***	100.0	.353KV=	76.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1C	***AFTER***	100.0	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V30B	***PRIOR***	30.0	.433KV=	94.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***DURING***	30.0	.344KV=	74.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***AFTER***	30.0	.424KV=	92.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V3B	***PRIOR***	75.0	.442KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3B	***DURING***	75.0	.356KV=	77.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3B	***AFTER***	75.0	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	KVAR	STATIC KW	KVAR
4805N	***PRIOR***	.447KV= 90.7% OF	.493KV	62.8	40.1	228.1 .0
4805N	***DURING***	.363KV= 73.6% OF	.493KV	62.8	40.1	150.4 .0
4805N	***AFTER***	.439KV= 88.9% OF	.493KV	62.8	40.1	219.5 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V14A	***PRIOR***	7.5	.437KV=	94.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V14A	***DURING***	7.5	.350KV=	76.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V14A	***AFTER***	7.5	.428KV=	93.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V5	***PRIOR***	.5	.447KV=	97.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V5	***DURING***	.5	.363KV=	78.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V5	***AFTER***	.5	.438KV=	95.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V16	***PRIOR***	2.0	.446KV=	96.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V16	***DURING***	2.0	.362KV=	78.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V16	***AFTER***	2.0	.437KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V18	***PRIOR***	7.5	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V18	***DURING***	7.5	.356KV=	77.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V18	***AFTER***	7.5	.432KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V19A	***PRIOR***	15.0	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V19A	***DURING***	15.0	.359KV=	78.1% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V19A	***AFTER***	15.0	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V31B	***PRIOR***	3.0	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V31B	***DURING***	3.0	.358KV=	77.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V31B	***AFTER***	3.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V32B	***PRIOR***	.8	.446KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V32B	***DURING***	.8	.361KV=	78.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V32B	***AFTER***	.8	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V4	***PRIOR***	5.0	.442KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V4	***DURING***	5.0	.357KV=	77.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V4	***AFTER***	5.0	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V6A	***PRIOR***	7.5	.443KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V6A	***DURING***	7.5	.358KV=	77.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V6A	***AFTER***	7.5	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4F20A/B	***PRIOR***	1.5	.446KV=	97.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
4F20A/B	***DURING***	1.5	.362KV=	78.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4F20A/B	***AFTER***	1.5	.438KV=	95.1% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P90A	***PRIOR***	2.0	.445KV=	96.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90A	***DURING***	2.0	.360KV=	78.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90A	***AFTER***	2.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P90B	***PRIOR***	2.0	.445KV=	96.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90B	***DURING***	2.0	.360KV=	78.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90B	***AFTER***	2.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4P90C	***PRIOR***	2.0	.445KV=	96.6% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90C	***DURING***	2.0	.360KV=	78.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4P90C	***AFTER***	2.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING *

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VOLTAGE DROP ANALYSIS CASE #= 9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4XS75/7***PRIOR***	20.0	.440KV=	95.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4XS75/7***DURING***	20.0	.354KV=	77.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4XS75/7***AFTER***	20.0	.431KV=	93.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B07	***PRIOR***	.449KV= 91.1% OF	.493KV	172.8	106.8	1.7	.0
4B07	***DURING***	.365KV= 73.9% OF	.493KV	172.8	106.8	1.2	.0
4B07	***AFTER***	.440KV= 89.3% OF	.493KV	172.8	106.8	1.7	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E16F	36.0	.445KV=	96.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16F	36.0	.359KV=	78.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E16F	36.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P203A	15.0	.447KV=	97.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P203A	15.0	.362KV=	78.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P203A	15.0	.438KV=	95.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V1A	100.0	.445KV=	96.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V1A	100.0	.360KV=	78.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V1A	100.0	.437KV=	95.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V2A	60.0	.442KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V2A	60.0	.357KV=	77.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V2A	60.0	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B08	***PRIOR***	.446KV= 90.4% OF	.493KV	318.5	196.2	38.5	.0
4B08	***DURING***	.360KV= 73.1% OF	.493KV	318.5	196.2	25.2	.0
4B08	***AFTER***	.437KV= 88.6% OF	.493KV	318.5	196.2	37.0	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V1B	***PRIOR***	100.0	.442KV=	96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1B	***DURING***	100.0	.357KV=	77.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V1B	***AFTER***	100.0	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V30A	***PRIOR***	30.0	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30A	***DURING***	30.0	.356KV=	77.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30A	***AFTER***	30.0	.433KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V3A	***PRIOR***	75.0	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3A	***DURING***	75.0	.356KV=	77.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3A	***AFTER***	75.0	.433KV=	94.2% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S77A	***PRIOR***	3.4	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77A	***DURING***	3.4	.358KV=	77.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
S77A	***AFTER***	3.4	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
S78A	***PRIOR***	3.4	.444KV=	96.5% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78A	***DURING***	3.4	.358KV=	77.9% OF	.460 KV	*	WARNING	WARNING	WARNING *
S78A	***AFTER***	3.4	.435KV=	94.6% OF	.460 KV	*	WARNING	WARNING	WARNING *

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VOLTAGE DROP ANALYSIS CASE #= 9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
S75A	***PRIOR***	5.0	.442KV=	96.2% OF	.460 KV	*	WARNING	WARNING
S75A	***DURING***	5.0	.357KV=	77.5% OF	.460 KV	*	WARNING	WARNING
S75A	***AFTER***	5.0	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
NS74A	***PRIOR***	50.5	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING
NS74A	***DURING***	50.5	.356KV=	77.5% OF	.460 KV	*	WARNING	WARNING
NS74A	***AFTER***	50.5	.434KV=	94.3% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
E168/17	***PRIOR***	34.0	.433KV=	94.1% OF	.460 KV	*	WARNING	WARNING
E168/17	***DURING***	34.0	.345KV=	74.9% OF	.460 KV	*	WARNING	WARNING
E168/17	***AFTER***	34.0	.424KV=	92.2% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
V8A	***PRIOR***	40.0	.443KV=	96.2% OF	.460 KV	*	WARNING	WARNING
V8A	***DURING***	40.0	.357KV=	77.6% OF	.460 KV	*	WARNING	WARNING
V8A	***AFTER***	40.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
V10	***PRIOR***	10.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING
V10	***DURING***	10.0	.347KV=	75.5% OF	.460 KV	*	WARNING	WARNING
V10	***AFTER***	10.0	.426KV=	92.6% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
V29A	***PRIOR***	1.0	.445KV=	96.7% OF	.460 KV	*	WARNING	WARNING
V29A	***DURING***	1.0	.360KV=	78.2% OF	.460 KV	*	WARNING	WARNING
V29A	***AFTER***	1.0	.436KV=	94.9% OF	.460 KV	*	WARNING	WARNING

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VOLTAGE DROP ANALYSIS CASE #= 9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V76/232***PRIOR****	36.0	.439KV= 95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
V76/232***DURING***	36.0	.353KV= 76.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
V76/232***AFTER****	36.0	.431KV= 93.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B50	***PRIOR****	.446KV= 90.5% OF	.493KV	122.8	60.2	.0	.0
4B50	***DURING***	.361KV= 73.3% OF	.493KV	122.8	60.2	.0	.0
4B50	***AFTER****	.438KV= 88.8% OF	.493KV	122.8	60.2	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201C ***PRIOR****	150.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4P201C ***DURING***	150.0	.355KV= 77.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4P201C ***AFTER****	150.0	.432KV= 93.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B51	***PRIOR****	.443KV= 89.9% OF	.493KV	131.5	81.4	.9	.0
4B51	***DURING***	.357KV= 72.5% OF	.493KV	131.5	81.4	.6	.0
4B51	***AFTER****	.435KV= 88.1% OF	.493KV	131.5	81.4	.8	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P244A ***PRIOR****	1.0	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4P244A ***DURING***	1.0	.357KV= 77.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4P244A ***AFTER****	1.0	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V63A ***PRIOR****	2.0	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4V63A ***DURING***	2.0	.357KV= 77.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*	
4V63A ***AFTER****	2.0	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*	

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V70A ***PRIOR***	.5	.443KV=	96.3% OF	.460 KV	* WARNING WARNING WARNING *
4V70A ***DURING***	.5	.357KV=	77.6% OF	.460 KV	* WARNING WARNING WARNING *
4V70A ***AFTER***	.5	.434KV=	94.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V65A ***PRIOR***	2.0	.443KV=	96.3% OF	.460 KV	* WARNING WARNING WARNING *
4V65A ***DURING***	2.0	.357KV=	77.6% OF	.460 KV	* WARNING WARNING WARNING *
4V65A ***AFTER***	2.0	.434KV=	94.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V67A ***PRIOR***	40.0	.442KV=	96.2% OF	.460 KV	* WARNING WARNING WARNING *
4V67A ***DURING***	40.0	.356KV=	77.4% OF	.460 KV	* WARNING WARNING WARNING *
4V67A ***AFTER***	40.0	.434KV=	94.3% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4V64A ***PRIOR***	3.0	.443KV=	96.3% OF	.460 KV	* WARNING WARNING WARNING *
4V64A ***DURING***	3.0	.357KV=	77.6% OF	.460 KV	* WARNING WARNING WARNING *
4V64A ***AFTER***	3.0	.434KV=	94.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4P241A ***PRIOR***	1.0	.443KV=	96.3% OF	.460 KV	* WARNING WARNING WARNING *
4P241A ***DURING***	1.0	.357KV=	77.6% OF	.460 KV	* WARNING WARNING WARNING *
4P241A ***AFTER***	1.0	.434KV=	94.4% OF	.460 KV	* WARNING WARNING WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP				
4S226A ***PRIOR***	15.0	.441KV=	95.9% OF	.460 KV	* WARNING WARNING WARNING *
4S226A ***DURING***	15.0	.355KV=	77.1% OF	.460 KV	* WARNING WARNING WARNING *
4S226A ***AFTER***	15.0	.432KV=	94.0% OF	.460 KV	* WARNING WARNING WARNING *

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VOLTAGE DROP ANALYSIS CASE # 9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V68A	***PRIOR***	40.0	.442KV= 96.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V68A	***DURING***	40.0	.356KV= 77.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V68A	***AFTER***	40.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P245A	***PRIOR***	.8	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245A	***DURING***	.8	.357KV= 77.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P245A	***AFTER***	.8	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V69A	***PRIOR***	40.0	.442KV= 96.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69A	***DURING***	40.0	.356KV= 77.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V69A	***AFTER***	40.0	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S231A	***PRIOR***	9.5	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231A	***DURING***	9.5	.356KV= 77.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231A	***AFTER***	9.5	.433KV= 94.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S230	***PRIOR***	7.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S230	***DURING***	7.0	.355KV= 77.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S230	***AFTER***	7.0	.433KV= 94.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.930KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.826KV= 92.0% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.919KV= 94.2% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.458KV= 92.9% OF	.493KV	206.9	113.0	.0	.0
4B02	***DURING***	.445KV= 90.3% OF	.493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.456KV= 92.6% OF	.493KV	206.9	113.0	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4804	***PRIOR***	.457KV= 92.9% OF	.492KV	260.8	131.2	.0	.0
4804	***DURING***	.445KV= 90.3% OF	.492KV	260.8	131.2	.0	.0
4804	***AFTER***	.456KV= 92.6% OF	.492KV	260.8	131.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4806	***PRIOR***	.455KV= 92.4% OF	.493KV	191.2	117.4	31.5	.0
4806	***DURING***	.443KV= 89.8% OF	.493KV	191.2	117.4	29.7	.0
4806	***AFTER***	.454KV= 92.1% OF	.493KV	191.2	117.4	31.3	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP	VOLTAGE						
4V30C	***PRIOR***	30.0	.442KV= 96.2% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30C	***DURING***	30.0	.429KV= 93.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30C	***AFTER***	30.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4852	***PRIOR***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0
4852	***DURING***	.437KV= 88.8% OF	.492KV	125.8	77.9	.8	.0
4852	***AFTER***	.449KV= 91.1% OF	.492KV	125.8	77.9	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR		STATIC		
			KW	KVAR	KW	KVAR	
4853	***PRIOR***	.450KV= 91.3% OF	.493KV	14.6	9.0	23.8	.0
4853	***DURING***	.366KV= 74.3% OF	.493KV	14.6	9.0	15.7	.0
4853	***AFTER***	.442KV= 89.6% OF	.493KV	14.6	9.0	22.9	.0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
HVACHP	***PRIOR***	18.0	.450KV= 97.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
HVACHP	***DURING***	18.0	.366KV= 79.6% OF	.460 KV	*	WARNING	WARNING	WARNING	*
HVACHP	***AFTER***	18.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR		STATIC	
				KW	KVAR	KW	KVAR
4B54	***PRIOR***	.457KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0
4B54	***DURING***	.445KV= 90.3% OF	.492KV	14.6	9.0	23.2	.0
4B54	***AFTER***	.456KV= 92.6% OF	.492KV	14.6	9.0	24.4	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS114	***PRIOR***	233.974KV=100.4% OF233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	232.217KV= 99.7% OF233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.751KV=100.3% OF233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA1	***PRIOR***	4.009KV= 96.4% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.915KV= 94.1% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	3.998KV= 96.1% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AB1	***PRIOR***	4.030KV= 96.9% OF 4.160KV	4111.1	2563.0	.0	.0
4AB1	***DURING***	3.414KV= 82.1% OF 4.160KV	9329.8	27789.2	.0	.0
4AB1	***AFTER***	3.957KV= 95.1% OF 4.160KV	8982.9	5598.0	.0	.0

STARTING MOTOR NAME HP

4P200B	***PRIOR***	.0	.000KV= .0% OF 4.000 KV	* MOTOR NOT STARTED YET *
4P200B	***DURING***	6000.0	3.337KV= 83.4% OF 4.000 KV	
4P200B	***AFTER***	6000.0	3.946KV= 98.6% OF 4.000 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA2	***PRIOR***	3.960KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.865KV= 92.9% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.948KV= 94.9% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AD	***PRIOR***	3.956KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.861KV= 92.8% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.944KV= 94.8% OF 4.160KV	626.9	409.2	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4801	***PRIOR***	.451KV= 91.6% OF	.493KV	445.6	231.0	.0
4801	***DURING***	.440KV= 89.2% OF	.493KV	445.6	231.0	.0
4801	***AFTER***	.450KV= 91.3% OF	.493KV	445.6	231.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4803	***PRIOR***	.453KV= 92.0% OF	.493KV	83.0	51.6	265.9
4803	***DURING***	.442KV= 89.6% OF	.493KV	83.0	51.6	252.4
4803	***AFTER***	.452KV= 91.7% OF	.493KV	83.0	51.6	264.2

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

4P212	***PRIOR***	100.0	.442KV= 96.1% OF	.460 KV	* WARNING	WARNING	WARNING	*
4P212	***DURING***	100.0	.430KV= 93.5% OF	.460 KV	* WARNING	WARNING	WARNING	*
4P212	***AFTER***	100.0	.441KV= 95.8% OF	.460 KV	* WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4805V	***PRIOR***	.450KV= 91.2% OF	.493KV	169.6	104.7	.9
4805V	***DURING***	.438KV= 88.8% OF	.493KV	169.6	104.7	.8
4805V	***AFTER***	.448KV= 90.9% OF	.493KV	169.6	104.7	.9

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR
 HP

4V1C	***PRIOR***	100.0	.441KV= 95.9% OF	.460 KV	* WARNING	WARNING	WARNING	*
4V1C	***DURING***	100.0	.429KV= 93.3% OF	.460 KV	* WARNING	WARNING	WARNING	*
4V1C	***AFTER***	100.0	.440KV= 95.6% OF	.460 KV	* WARNING	WARNING	WARNING	*

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
4V30B	***PRIOR***	30.0	.434KV= 94.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***DURING***	30.0	.422KV= 91.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30B	***AFTER***	30.0	.432KV= 94.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B05N	***PRIOR***	.448KV= 90.9% OF	.493KV	62.8	40.1	229.3	.0
4B05N	***DURING***	.437KV= 88.5% OF	.493KV	62.8	40.1	217.5	.0
4B05N	***AFTER***	.447KV= 90.6% OF	.493KV	62.8	40.1	227.8	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B07	***PRIOR***	.450KV= 91.3% OF	.493KV	172.8	106.8	1.8	.0
4B07	***DURING***	.438KV= 88.9% OF	.493KV	172.8	106.8	1.7	.0
4B07	***AFTER***	.449KV= 91.0% OF	.493KV	172.8	106.8	1.7	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B08	***PRIOR***	.447KV= 90.6% OF	.493KV	318.5	196.2	38.7	.0
4B08	***DURING***	.435KV= 88.2% OF	.493KV	318.5	196.2	36.7	.0
4B08	***AFTER***	.445KV= 90.3% OF	.493KV	318.5	196.2	38.4	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
4V30A	***PRIOR***	30.0	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30A	***DURING***	30.0	.431KV= 93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V30A	***AFTER***	30.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP						
4V3A	***PRIOR***	75.0	.443KV= 96.3% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3A	***DURING***	75.0	.431KV= 93.7% OF	.460 KV	*	WARNING	WARNING	WARNING *
4V3A	***AFTER***	75.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING *

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
E168/17***PRIOR***	34.0	.434KV=	94.4% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***DURING***	34.0	.422KV=	91.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
E168/17***AFTER***	34.0	.433KV=	94.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V10 ***PRIOR***	10.0	.436KV=	94.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10 ***DURING***	10.0	.424KV=	92.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V10 ***AFTER***	10.0	.435KV=	94.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
V76/232***PRIOR***	36.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V76/232***DURING***	36.0	.429KV=	93.2% OF	.460 KV	*	WARNING	WARNING	WARNING	*
V76/232***AFTER***	36.0	.439KV=	95.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B50	***PRIOR***	.448KV=	90.8% OF	.493KV	122.8	60.2	.0 .0
4B50	***DURING***	.436KV=	88.4% OF	.493KV	122.8	60.2	.0 .0
4B50	***AFTER***	.446KV=	90.5% OF	.493KV	122.8	60.2	.0 .0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4P201C ***PRIOR***	150.0	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C ***DURING***	150.0	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4P201C ***AFTER***	150.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B51	***PRIOR***	.444KV=	90.1% OF	.493KV	131.5	81.4	.9 .0
4B51	***DURING***	.432KV=	87.7% OF	.493KV	131.5	81.4	.8 .0
4B51	***AFTER***	.443KV=	89.8% OF	.493KV	131.5	81.4	.9 .0

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CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S226A ***PRIOR***	15.0	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S226A ***DURING***	15.0	.430KV=	93.5% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S226A ***AFTER***	15.0	.441KV=	95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S231A ***PRIOR***	9.5	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231A ***DURING***	9.5	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S231A ***AFTER***	9.5	.442KV=	96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4S230 ***PRIOR***	7.0	.443KV=	96.3% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S230 ***DURING***	7.0	.431KV=	93.7% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4S230 ***AFTER***	7.0	.441KV=	95.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.991KV= 95.9% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.368KV= 81.0% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.918KV= 94.2% OF	4.160KV	5770.1	3260.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.465KV= 94.4% OF	.493KV	206.9	113.0	.0	.0
4B02	***DURING***	.390KV= 79.1% OF	.493KV	206.9	113.0	.0	.0
4B02	***AFTER***	.456KV= 92.6% OF	.493KV	206.9	113.0	.0	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP								
4V1D ***PRIOR***	100.0	.451KV=	98.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V1D ***DURING***	100.0	.373KV=	81.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V1D ***AFTER***	100.0	.442KV=	96.1% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR***	.465KV= 94.4% OF	.492KV	260.8	131.2	.0	.0
4B04	***DURING***	.389KV= 79.1% OF	.492KV	260.8	131.2	.0	.0
4B04	***AFTER***	.456KV= 92.6% OF	.492KV	260.8	131.2	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4806	***PRIOR***	.463KV= 93.9% OF	.493KV	191.2	117.4	32.5	.0
4806	***DURING***	.387KV= 78.5% OF	.493KV	191.2	117.4	22.7	.0
4806	***AFTER***	.454KV= 92.1% OF	.493KV	191.2	117.4	31.3	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V19B	***PRIOR***	15.0	.451KV= 98.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V19B	***DURING***	15.0	.373KV= 81.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V19B	***AFTER***	15.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V2B	***PRIOR***	60.0	.454KV= 98.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V2B	***DURING***	60.0	.377KV= 81.9% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V2B	***AFTER***	60.0	.445KV= 96.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

		HP							
4V30C	***PRIOR***	30.0	.450KV= 97.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30C	***DURING***	30.0	.372KV= 80.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*
4V30C	***AFTER***	30.0	.441KV= 95.8% OF	.460 KV	*	WARNING	WARNING	WARNING	*

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4852	***PRIOR***	.457KV= 92.9% OF	.492KV	125.8	77.9	.9	.0
4852	***DURING***	.381KV= 77.3% OF	.492KV	125.8	77.9	.6	.0
4852	***AFTER***	.449KV= 91.1% OF	.492KV	125.8	77.9	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4853	***PRIOR***	.452KV= 91.6% OF	.493KV	14.6	9.0	23.9	.0
4853	***DURING***	.440KV= 89.2% OF	.493KV	14.6	9.0	22.7	.0
4853	***AFTER***	.450KV= 91.3% OF	.493KV	14.6	9.0	23.7	.0



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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B54	***PRIOR***	.465KV= 94.4% OF	.492KV	14.6	9.0	25.3	.0
4B54	***DURING***	.389KV= 79.0% OF	.492KV	14.6	9.0	17.8	.0
4B54	***AFTER***	.456KV= 92.6% OF	.492KV	14.6	9.0	24.3	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
2BUS114	***PRIOR***	233.824KV=100.4% OF 233.000KV	.0	.0	.0	.0
2BUS114	***DURING***	233.676KV=100.3% OF 233.000KV	.0	.0	.0	.0
2BUS114	***AFTER***	233.806KV=100.3% OF 233.000KV	.0	.0	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA1	***PRIOR***	4.008KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***DURING***	3.978KV= 95.6% OF 4.160KV	4109.3	2559.5	.0	.0
4AA1	***AFTER***	4.004KV= 96.3% OF 4.160KV	4109.3	2559.5	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AB1	***PRIOR***	3.974KV= 95.5% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***DURING***	3.944KV= 94.8% OF 4.160KV	8219.6	5120.4	.0	.0
4AB1	***AFTER***	3.971KV= 95.5% OF 4.160KV	8219.6	5120.4	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AA2	***PRIOR***	3.962KV= 95.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***DURING***	3.919KV= 94.2% OF 4.160KV	5770.5	3260.7	.0	.0
4AA2	***AFTER***	3.957KV= 95.1% OF 4.160KV	5770.5	3260.7	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4AD	***PRIOR***	3.958KV= 95.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***DURING***	3.916KV= 94.1% OF 4.160KV	626.9	409.2	.0	.0
4AD	***AFTER***	3.953KV= 95.0% OF 4.160KV	626.9	409.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4B01	***PRIOR***	.457KV= 92.8% OF .493KV	245.7	137.3	.0	.0
4B01	***DURING***	.417KV= 84.6% OF .493KV	432.9	1181.7	.0	.0
4B01	***AFTER***	.453KV= 91.9% OF .493KV	445.6	231.0	.0	.0

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STARTING MOTOR NAME

HP

4P214A ***PRIOR**** .0 .000KV= .0% OF .460 KV * MOTOR NOT STARTED YET *
 4P214A ***DURING*** 250.0 .377KV= 82.0% OF .460 KV
 4P214A ***AFTER**** 250.0 .447KV= 97.2% OF .460 KV

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4803	***PRIOR****	.457KV= 92.8% OF .493KV	83.0	51.6	270.7	2.4
4803	***DURING***	.452KV= 91.7% OF .493KV	83.0	51.6	264.6	2.4
4803	***AFTER****	.457KV= 92.7% OF .493KV	83.0	51.6	270.0	2.4

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4805V	***PRIOR****	.457KV= 92.6% OF .493KV	87.0	53.4	.9	.0
4805V	***DURING***	.416KV= 84.5% OF .493KV	87.0	53.4	.8	.0
4805V	***AFTER****	.452KV= 91.7% OF .493KV	87.0	53.4	.9	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

NAME OF BUS	CONDITION	HP	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4V30B	***PRIOR****	30.0	.441KV= 95.8% OF .460 KV	62.8	40.1	235.2	.0
4V30B	***DURING***	30.0	.399KV= 86.8% OF .460 KV	62.8	40.1	195.6	.0
4V30B	***AFTER****	30.0	.436KV= 94.9% OF .460 KV	62.8	40.1	230.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4805N	***PRIOR****	.454KV= 92.1% OF .493KV	62.8	40.1	235.2	.0
4805N	***DURING***	.414KV= 84.0% OF .493KV	62.8	40.1	195.6	.0
4805N	***AFTER****	.450KV= 91.2% OF .493KV	62.8	40.1	230.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS	MOTOR KW	MOTOR KVAR	STATIC KW	STATIC KVAR
4807	***PRIOR****	.456KV= 92.4% OF .493KV	91.1	56.2	1.8	.0
4807	***DURING***	.451KV= 91.4% OF .493KV	91.1	56.2	1.8	.0
4807	***AFTER****	.455KV= 92.3% OF .493KV	91.1	56.2	1.8	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4808	***PRIOR***	.452KV= 91.7% OF	.493KV	236.8	145.6	39.6	.0
4808	***DURING***	.447KV= 90.7% OF	.493KV	236.8	145.6	38.7	.0
4808	***AFTER***	.452KV= 91.6% OF	.493KV	236.8	145.6	39.5	.0

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP						
E168/17	***PRIOR***	34.0	.440KV= 95.6% OF	.460 KV	*	WARNING	WARNING
E168/17	***DURING***	34.0	.434KV= 94.4% OF	.460 KV	*	WARNING	WARNING
E168/17	***AFTER***	34.0	.439KV= 95.4% OF	.460 KV	*	WARNING	WARNING

CAUTION: POSSIBLE VOLTAGE PROBLEM ON THE FOLLOWING MOTOR

	HP						
V10	***PRIOR***	10.0	.442KV= 96.0% OF	.460 KV	*	WARNING	WARNING
V10	***DURING***	10.0	.436KV= 94.8% OF	.460 KV	*	WARNING	WARNING
V10	***AFTER***	10.0	.441KV= 95.9% OF	.460 KV	*	WARNING	WARNING

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4850	***PRIOR***	.453KV= 91.8% OF	.493KV	122.8	60.2	.0	.0
4850	***DURING***	.448KV= 90.8% OF	.493KV	122.8	60.2	.0	.0
4850	***AFTER***	.452KV= 91.7% OF	.493KV	122.8	60.2	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4851	***PRIOR***	.450KV= 91.3% OF	.493KV	131.5	81.4	.9	.0
4851	***DURING***	.410KV= 83.1% OF	.493KV	131.5	81.4	.7	.0
4851	***AFTER***	.446KV= 90.5% OF	.493KV	131.5	81.4	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4AB2	***PRIOR***	3.937KV= 94.6% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***DURING***	3.894KV= 93.6% OF	4.160KV	5770.1	3260.2	.0	.0
4AB2	***AFTER***	3.933KV= 94.5% OF	4.160KV	5770.1	3260.2	.0	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B02	***PRIOR***	.461KV= 93.4% OF	.493KV	123.3	61.1	.0	.0
4B02	***DURING***	.455KV= 92.4% OF	.493KV	123.3	61.1	.0	.0
4B02	***AFTER***	.460KV= 93.3% OF	.493KV	123.3	61.1	.0	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B04	***PRIOR***	.462KV= 93.8% OF	.492KV	61.1	38.0	.0	.0
4B04	***DURING***	.421KV= 85.6% OF	.492KV	251.2	1120.2	.0	.0
4B04	***AFTER***	.458KV= 93.0% OF	.492KV	260.8	131.2	.0	.0

STARTING MOTOR NAME

HP

4P214B	***PRIOR***	.0	.000KV= .0% OF	.460 KV	* MOTOR NOT STARTED YET *
4P214B	***DURING***	250.0	.387KV= 84.1% OF	.460 KV	
4P214B	***AFTER***	250.0	.453KV= 98.4% OF	.460 KV	

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B06	***PRIOR***	.458KV= 92.9% OF	.493KV	191.2	117.4	31.8	.0
4B06	***DURING***	.453KV= 91.8% OF	.493KV	191.2	117.4	31.1	.0
4B06	***AFTER***	.457KV= 92.8% OF	.493KV	191.2	117.4	31.7	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B52	***PRIOR***	.454KV= 92.3% OF	.492KV	125.8	77.9	.9	.0
4B52	***DURING***	.413KV= 83.9% OF	.492KV	125.8	77.9	.7	.0
4B52	***AFTER***	.450KV= 91.4% OF	.492KV	125.8	77.9	.9	.0

NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B53	***PRIOR***	.457KV= 92.7% OF	.493KV	14.6	9.0	24.5	.0
4B53	***DURING***	.417KV= 84.6% OF	.493KV	14.6	9.0	20.4	.0
4B53	***AFTER***	.453KV= 91.9% OF	.493KV	14.6	9.0	24.1	.0

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NAME OF BUS	CONDITION	VOLTAGE AT BUS		MOTOR KW	KVAR	STATIC KW	KVAR
4B54	***PRIOR***	.461KV= 93.7% OF	.492KV	14.6	9.0	25.0	.0
4B54	***DURING***	.421KV= 85.5% OF	.492KV	14.6	9.0	20.8	.0
4B54	***AFTER***	.458KV= 92.9% OF	.492KV	14.6	9.0	24.5	.0

*****END OF JOB*****

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DATA VERIFICATION

	1	2	3	4	5	6	7	8
123456789012345678901234567890123456789012345678901234567890								
FILE: \AUXSYS\U3APP9.DAT								
STEADY STATE SET @ 96% AND STARTING @ 82% FOR SAFETY BUSES								
STEADY STATE SET @ 90% AND STARTING @ 80% FOR NON-SAFETY BUSES								
EBASCO SERVICES INC.								
TURKEY POINT UNIT No 3. ELECTRICAL AUXILIARY SYSTEM DESIGN								
AUX SYS FED THRU THE S/U TRF.PSB-1.								
BUS 3AA2 ALIGNED TO 3AD, BUS 3B50 ALIGNED TO 3B04								
SEQUENCED LOADING FOR CALCULATION EC-145, REV. 4								
(3/06/91)								
*A 1-11	1	1	40.00	6.0	6.0	0.85	0.85	0.92 0.20 0.20
1 3AA1	350.0	4.76	80.00	42.45	4.16	1.10	3.00	
1 3AA2	350.0	4.76	80.00	42.45	4.16	1.10	3.00	
1 3AD	250.0	4.76	80.00	30.3	4.16	1.10	3.00	
2 3B01	30.0	0.48	0.00					
2 3B03	30.0	0.48	0.00					
3 3B05V	25.0	0.48	0.00					
3 3B05N	25.0	0.48	0.00					
3 3B07	25.0	0.48	0.00					
3 3B08V	25.0	0.48	0.00					
1 3AB1	350.0	4.76	80.00	42.45	4.16	1.10	3.00	
1 3AB2	350.0	4.76	80.00	42.45	4.16	1.10	3.00	
2 3B02	30.0	0.48	0.00					
2 3B04	30.0	0.48	0.00					
3 3B06	25.0	0.48	0.00					
3 B08N	25.0	0.48	0.00					
2 3B50	30.0	0.48	0.00					
3 3B52	25.0	0.48	0.00					
3 3B53	25.0	0.48	0.00					
3 3B54	25.0	0.48	0.00					
9								
3AA1	96.0	82.0	30					
1 3P1A	7000.0	4.0 6.49	0.0	1.0	0.90	0.959	1 .0036 .0080	
6 3P1A	1 11111111211							
7 7000.0								
1 3P200A	6000.0	4.0 6.32	0.0	2.0	0.0		1 .0046 .0133	
6 3P200A	00000000000	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0 5061.0	
7 5061.0	5061.0	5061.0						
3AA2	96.0	82.0	30					
1 3P11A	400.0	4.0 5.09	0.0	2.0	0.85	0.938	1 .0360 .0317	
6 3P11A	00000000000							
7								
1 3P210A	300.0	4.0 6.22	0.0	2.0	0.89	0.934	1 .0363 .0319	
6 3P210A	12000000000							
7								
1 3P211A	450.0	4.0 4.74	0.0	2.0	0.0		1 .0374 .0329	
6 3P211A	00000000000							
7								
1 3P215A	350.0	4.0 6.4	0.0	1.0	0.88	0.94	1 .0393 .0346	
6 3P215A	12000000000							



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DATA VERIFICATION

	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
7								
1 3P3A	800.0	4.0	5.94	0.0	2.0	0.89	0.944	1 .0340 .0299
6 3P3A	00000000000			700.00	700.00	700.00	700.00	700.00 700.0 700.00
7 700.00	700.00	700.00						
1 3P6A	2250.0	4.0	7.06	0.0	2.0	0.90	0.958	1 .0029 .0037
6 3P6A	00000000000			2210.0	2210.0	2210.0	2210.0	2210.0 2210.0 2210.0
7 2210.0	2210.0	2210.0						
1 3P7A	1250.0	4.0	4.57	0.0	2.0		0.0	1 .0276 .0360
6 3P7A	00000000000							
7								
1 3P7C	1250.0	4.0	4.57	0.0	2.0		0.0	1 .0278 .0363
6 3P7C	00000000000							
7								
1 3P9A	325.0	4.0	5.8	0.0	2.0	0.82	0.928	1 .0440 .0387
6 3P9A	00000000000							
7								
2 DG3A	3.0	4.16	1.000		.270	.405	1.534	30.00 0 .0032 .0107
6 DG3A	1	11111111111						
7								
3AD	96.0	82.0	30					
1 3P211C	450.0	4.0	4.74	0.0	2.0		0.0	1 .0382 .0336
6 3P211C	00000000000							
7								
1 3P9C	325.0	4.0	5.8	0.0	2.0	0.82	0.928	0.00 1 .0298 .0262
6 3P9C	00000000000							
7								
3B01	96.0	82.0	30					
1 3P201A	150.0	.460	5.800	0.0	2.0	0.90	.925	1 .0254 .0275
6 3P201A	00000000000							
7								
1 3P214A	250.0	.460	6.540	0.0	1.0	0.905	0.94	.15 1 .0065 .0150
6 3P214A	112000000002							
7								
1 3S6A	150.0	.460	6.05	0.0	2.0		0.0	1 .0240 .0260
6 3S6A	00000000000							
7								
4 PH3B12	150.0	.480	1.000	0.0	0.0		0.0	.0079 .0115
6 PH3B12	11111111111							
7								
3B03	96.0	82.0	30					
1 3P212	100.0	.460		0.0	2.0		0.0	1 .0346 .0235
6 3P212	00000000000							
7								
1 3P32	200.0	.460		0.0	2.0		0.0	1 .0108 .0217
6 3P32	1	11111111111						
7								
1 P39B	250.0	.460	6.490	0.0	2.0	0.89	0.928	1 .0184 .0405
6 P39B	1	11111111111						
7								
4 PH3X09	225.0	.480	1.000	0.0	0.0		0.0	.0052 .0075

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 PH3X09	00000000000							
7								
3805V	96.0	82.0	30					
1 3C2A	5.0	.460		0.0	2.0	0.0	1	.5366 .0117
6 3C2A	20000000000							
7								
1 3P10	0.75	.460		0.0	2.0	0.0	1	.5612 .0122
6 3P10	20000000000							
7								
1 3P31	40.0	.460		0.0	2.0	.902	1	.0577 .0138
6 3P31	1 11111111111							
7								
1 3P36	25.0	.460		0.0	2.0	0.0	1	.0646 .0071
6 3P36	1 11111111111							
7								
1 3P37	8.0	.460		0.0	2.0	0.0	1	.2437 .0053
6 3P37	1 11111111111							
7								
1 3P40	15.0	.460		0.0	2.0	0.0	1	.3847 .0122
6 3P40	1 11111111111							
7								
1 3T08	50.0	.460		0.0	2.0	0.0	1	.0162 .0061
6 3T08	1 11111111111							
7								
1 3V1A	100.0	.460	7.75	0.0	2.0	0.0	1	.0453 .0309
6 3V1A	00000000001							
7								
1 3V34	5.0	.460		0.0	2.0	0.0	1	.4807 .0104
6 3V34	20000000000							
7								
1 3C1	75.0	.460		0.0	2.0	0.0	1	.0237 .0161
6 3C1	1 11111111111							
7								
4 3C13A	17.0	.480	1.000	0.0	0.0	0.0		.2517 .0130
6 3C13A	20000000000							
4 STAT1CL	15.0	.480	1.000	0.0	0.0	0.0		
6 STAT1CL	00000000000							
7								
1 MOV1420	5.2	.460	5.66	2.0	0.85	.54 0.6	1	.8027 .0174
6 MOV1420	20000111111							
7								
1 MOV1400	.33	.460	7.33	2.0	0.85	.48 0.6		.6037 .0131
6 MOV1400	20000111111							
7								
1 MOV1427	.25	.460	4.91	2.0	0.85	.5 0.6		2.148 .0467
6 MOV1427	20000111111							
7								
3805M	90.0	80.0	30					
1 3P15	3.0	.460		0.0	2.0	0.0	1	.5903 .0128
6 3P15	1 11111111111							

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1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890							
7							
1 3P19D	0.5 .460	0.0	2.0	0.0		1 .7491 .0163	
6 3P19D	1 11111111111						
7							
1 3P19A	0.5 .460	0.0	2.0	0.0		1 .7267 .0158	
6 3P19A	1 11111111111						
7							
1 3P19B	0.5 .460	0.0	2.0	0.0		1 .7379 .0160	
6 3P19B	1 11111111111						
7							
1 3P19C	0.5 .460	0.0	2.0	0.0		1 .7491 .0163	
6 3P19C	00000000000						
7							
1 3P232A	10.0 .460	0.0	2.0	0.0		1 1.547 .0336	
6 3P232A	1 11111111111						
7							
1 3P28A	3.0 .460	0.0	2.0	0.0		1 .1968 .0043	
6 3P28A	1 11111111111						
7							
1 3P34A	0.75 .460	0.0	2.0	0.0		1 .8184 .0178	
6 3P34A	1 11111111111						
7							
1 3P4	10.0 .460	0.0	2.0	0.0		1 .5970 .0130	
6 3P4	1 11111111111						
7							
1 3P43	5.0 .460	0.0	2.0	0.0		1 .5411 .0118	
6 3P43	1 11111111111						
7							
1 3P49	0.75 .460	0.0	2.0	0.0		1 .2728 .0059	
6 3P49	1 11111111111						
7							
1 3P5	40.0 .460	0.0	2.0	0.0		1 .0358 .0086	
6 3P5	1 11111111111						
7							
1 3V14A	7.5 .460	0.0	2.0	0.0		1 .8832 .0192	
6 3V14A	00000000000						
7							
1 3V16	2.0 .460	0.0	2.0	0.0		1 .2102 .0046	
6 3V16	00000000000						
7							
1 3V18	7.5 .460	0.0	2.0	0.0		1 .4740 .0103	
6 3V18	00000000000						
7							
1 3V19A	15.0 .460	0.0	2.0	0.0		1 .1348 .0043	
6 3V19A	00000000000						
7							
1 3V31B	3.0 .460	0.0	2.0	0.0		1 .6596 .0143	
6 3V31B	00000000000						
7							
1 3V32B	0.75 .460	0.0	2.0	0.0		1 .4897 .0106	

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 3V32B	000000000000							
7								
1 3V4	5.0 .460		0.0	2.0	0.0		1 .5791	.0126
6 3V4	000000000000							
7								
1 3V6A	7.5 .460		0.0	2.0	0.0		1 .2683	.0058
6 3V6A	000000000000							
7								
1 P51A	1.0 .460		0.0	2.0	0.0		1 .7491	.0163
6 P51A	000000000000							
7								
1 3X03	7.0 .460		0.0	2.0	0.0		1 .1025	.0112
6 3X03	000000000000							
7								
1 3NF20A/B	1.5 .460		0.0	2.0	0.0		1 .1685	.0054
6 3NF20A/B	000000000000							
7								
1 3X02	9.0 .460		0.0	2.0	0.0		1 .0726	.0080
6 3X02	000000000000							
7								
1 3V5	0.5 .460		0.0	2.0	0.0		1 .2035	.0044
6 3V5	000000000000							
7								
1 3X01	170.0 .460		0.0	2.0	0.0		1 .0055	.0060
6 3X01	000000000000							
7								
1 3P90C	2.0 .460		0.0	2.0	0.0		1 .4774	.0152
6 3P90C	000000000000							
7								
1 3P90B	2.0 .460		0.0	2.0	0.0		1 .4858	.0155
6 3P90B	000000000000							
7								
1 3P90A	2.0 .460		0.0	2.0	0.0		1 .4858	.0155
6 3P90A	000000000000							
7								
1 3XS75/76	20.0 .460		0.0	2.0 0.81	0.0		1 .1388	.0152
6 3XS75/76	000000000000							
7								
4 STATICL	15.0 .480 1.000		0.0	0.0	0.0			
6 STATICL	000000000000							
7								
3B07	96.0 82.0 30							
1 3P203A	15.0 .460		0.0	2.0	0.0		1 .0358	.0086
6 3P203A	000000000000							
7								
1 3V1C	100.0 .460 7.75		0.0	2.0	0.0		1 .0177	.0121
6 3V1C	000000000001							
7								
1 3V30C	30.0 .460 5.39		0.0	2.0	0.0 0.42		1 .2617	.0312
6 3V30C	112000000000							

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
7								
1 3V3C	75.0	.460	6.06	0.0	2.0	0.0	0.35	1 .0358 .0243
6 3V3C	11111	200000						
7								
1 P207A	6.0	.460	0.0	2.0	0.0			1 .2616 .0057
6 P207A	000000000000							
7								
1 T206	1.5	.460	0.0	2.0	0.0			1 .5881 .0128
6 T206	000000000000							
7								
1 3V2B	60.0	.460	0.0	2.0	0.0			1 .0657 .0247
6 3V2B	000000000000							
7								
1 3V65A	2.0	.460	0.0	2.0	0.0			1 .8550 .0272
6 3V65A	000000000000							
7								
1 P42A	7.5	.460	0.0	2.0	0.0			1 .1334 .0042
6 P42A	000000000000							
7								
4 3D02	71.0	.480	1.000					.0248 .0169
6 3D02	000000000000							
4 STAT1CL	1.0	.480	1.000	0.0	0.0	0.0		
6 STAT1CL	11111111111							
7								
1 MOV716A	1.3	.460	3.75	2.0	0.85	.60	0.6	1 .3130 .0068
6 MOV716A	20000111111							
7								
1 MOV744A	10.5	.460	7.22	2.0	0.85	.80	0.6	1 .3838 .0267
6 MOV744A	20000111111							
7								
1 MOV843A	1.58	.460	7.43	2.0	0.85	.50	0.6	1 .2594 .0056
6 MOV843A	20000111111							
7								
1 MOV880A	2.0	.460	3.71	2.0	0.85	.63	0.6	1 .2795 .0061
6 MOV880A	20000111111							
7								
1 MOV1401	0.33	.460	7.33	2.0	0.85	.48	0.6	1 1.019 .0222
6 MOV1401	20000111111							
7								
1 MOV1426	0.25	.460	4.91	2.0	0.85	.50	0.6	1 .3354 .0073
6 MOV1426	20000111111							
7								
1 MOV6386	0.13	.460	7.11	2.0	0.85	.32	0.6	1 .7048 .0224
6 MOV6386	20000111111							
7								
3853	90.0	80.0	30					
1 HVACHP	18	.460	0.0	2.0	0.0			1
6 HVACHP	000000000000							
7								
4 HVACKW	27	.460	1.000	0.0	0.0	0.0		1

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 HVACKW	00000000000							
7								
3808V	96.0	82.0	30					
1 3V1D	100.0	.460	7.75	0.0	2.0	0.0	1	.0161 .0109
6 3V1D	00000000001							
7								
1 3V30B	30.0	.460	5.39	0.0	2.0	0.0 0.42	1	.2490 .0294
6 3V30B	11120000000							
7								
1 3V3B	75.0	.460	6.06	0.0	2.0	0.0 0.35	1	.0379 .0258
6 3V3B	11111120000							
7								
1 V11	10.0	.460		0.0	2.0	0.0	1	.2035 .0044
6 V11	00000000000							
7								
1 V29B	1.0	.460		0.0	2.0	0.0	1	.5335 .0170
6 V29B	20000000000							
7								
1 E16C/17C	34.0	.460		0.0	2.0	0.0	1	.1880 .0206
6 E16C/17C	00000000000							
7								
1 C1	75.0	.460		0.0	2.0	0.0	1	.0249 .0170
6 C1	1 11111111111							
7								
1 E16D	36.0	.460		0.0	2.0	0.0	1	.0480 .0087
6 E16D	00000000000							
7								
1 P42B	3.0	.460		0.0	2.0	0.0	1	.6708 .0146
6 P42B	00000000000							
7								
1 V77/E231	36.0	.460		0.0	2.0	0.0	1	.0773 .0142
6 V77/E231	00000000000							
7								
1 NS74B	60.0	.460		0.0	2.0	0.0	1	.0691 .0315
6 NS74B	00000000000		50.5	50.5	50.5	50.5	50.5	50.5 50.5
7 50.5	50.5	50.5						
1 S77B	5.0	.460		0.0	2.0	0.0	1	.8073 .0257
6 S77B	00000000000		3.4	3.4	3.4	3.4	3.4	3.4 3.4
7 3.4	3.4	3.4						
1 S78B	5.0	.460		0.0	2.0	0.0	1	.7160 .0228
6 S78B	00000000000		3.4	3.4	3.4	3.4	3.4	3.4 3.4
7 3.4	3.4	3.4						
1 S75B	5.0	.460		0.0	2.0	0.0	1	.6388 .0203
6 S75B	00000000000							
7								
4 4D25A	1.0	.480	1.000					.0473 .0113
6 4D25A	00000000000							
4 4D02A	70.6	.480	1.000					.0229 .0104
6 4D02A	11111111111							
4 STATICL	1.0	.480	1.000	0.0	0.0	0.0		



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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 STATICL	000000000000							
7								
1 MOV1404	0.33 .460	3.60		2.0 0.85	.29 0.6		1 .5911	.0188
6 MOV1404	20000111111							
7								
1 MOV1417	1.5 .460	5.71		2.0 0.85	.50 0.6		1 .4629	.0101
6 MOV1417	20000111111							
7								
1 MOV6552B	0.13 .460	7.11		2.0 0.85	.32 0.6		1 .5082	.0162
6 MOV6552B	20000111111							
7								
1 MOV6543B	0.13 .460	7.11		2.0 0.85	.32 0.6		1 .4605	.0147
6 MOV6543B	20000111111							
7								
3B50	96.0 82.0	30						
1 3P201C	150.0 .460 5.800	0.0	2.0 0.90	0.0			1 .0206	.0223
6 3P201C	000000000000							
7								
3A81	96.0 82.0	30						
1 3P200B	6000.0 4.0 6.32	0.0 2.0	0.0				1 .0050	.0148
6 3P200B	000000000020	5061.0 5061.0	5061.0 5061.0	5061.0 5061.0	5061.0 5061.0	5061.0 5061.0		
7 5061.0	6000.0 5061.0							
1 3P200C	6000.0 4.0 6.32	0.0 2.0	0.0				1 .0051	.0148
6 3P200C	1 000000000000	5061.0 5061.0	5061.0 5061.0	5061.0 5061.0	5061.0 5061.0	5061.0 5061.0		
7 5061.0	5061.0 5061.0							
3A82	96.0 82.0	30						
1 3P11B	400.0 4.0 5.09	0.0 2.0	0.85 0.938	0.00 0.00			1 .0295	.0259
6 3P11B	000000000000							
7								
1 3P210B	300.0 4.0 6.22	0.0 2.0	0.89 0.934				1 .0343	.0302
6 3P210B	120000000000							
7								
1 3P211B	450.0 4.0 4.74	0.0 2.0	0.0				1 .0371	.0326
6 3P211B	000000000000							
7								
1 3P215B	350.0 4.0 6.4	0.0 1.0	0.88 0.94				1 .0371	.0326
6 3P215B	120000000000							
7								
1 3P3B	800.0 4.0 5.94	0.0 2.0	0.89 0.944				1 .0274	.0241
6 3P3B	000000000000	700.00 700.00	700.00 700.00	700.00 700.00	700.00 700.00	700.00 700.00		
700.0 700.00								
7 700.00 700.00 700.00								
1 3P6B	2250.0 4.0 7.06	0.0 2.0	0.90 0.958				1 .0035	.0046
6 3P6B	000000000000	2210.0 2210.0	2210.0 2210.0	2210.0 2210.0	2210.0 2210.0	2210.0 2210.0		
7 2210.0	2210.0 2210.0							
1 3P7D	1250.0 4.0 4.57	0.0 2.0	0.0				1 .0292	.0381
6 3P7D	000000000000							
7								
1 3P7B	1250.0 4.0 4.57	0.0 2.0	0.0				1 .0288	.0376
6 3P7B	000000000000							

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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
7								
1 3P98	325.0	4.0 5.8	0.0	2.0	0.82 0.928	0.00	0.00	1 .0449 .0395
6 3P98	00000000000							
7								
2 0G3B	3.0 4.16	1.000	.270	.405	1.534 30.00		0	.0033 .0110
6 0G3B	1 11111111111							
7								
3802	96.0 82.0	30						
1 3P201B	150.0 .460	5.800	0.0	2.0	0.90 0.925		1	.0325 .0352
6 3P201B	00000000000							
7								
1 3V1B	100.0 .460	7.75	0.0	2.0	0.0		1	.0514 .0350
6 3V1B	00000000001							
7								
3804	96.0 82.0	30						
1 3P214B	250.0 .460	6.540	0.0	1.0	0.91 0.94 .15		1	.0077 .0178
6 3P214B	112000000002							
7								
1 3S7B	150.0 .460		0.0	2.0	0.0		1	.0197 .0214
6 3S7B	00000000000							
7								
1 3H1	240.0 .460		0.0	2.0	0.0		1	.0070 .0047
6 3H1	1 11111111111							
7								
4 PH3B13	150.0 .480	1.000	0.0	0.0	0.0			.0062 .0090
6 PH3B13	11111111111							
7								
3806	96.0 82.0	30						
1 3P203B	15.0 .460		0.0	2.0	0.0		1	.1235 .0296
6 3P203B	00000000000							
7								
1 3V20	20.0 .460		0.0	2.0	0.0		1	.1828 .0095
6 3V20	1 11111111111							
7								
1 3V2A	60.0 .460		0.0	2.0	0.0		1	.0541 .0204
6 3V2A	11111111111							
7								
1 3V30A	30.0 .460	5.39	0.0	2.0	0.0 0.42		1	.1939 .0256
6 3V30A	112000000000							
7								
1 3V3A	75.0 .460	6.06	0.0	2.0	0.0 0.35		1	.0320 .0218
6 3V3A	11111200000							
7								
1 3V9	20.0 .460		0.0	2.0	0.0		1	.1960 .0101
6 3V9	1 11111111111							
7								
1 E16A/17A	34.0 .460		0.0	2.0	0.0		1	.1308 .0143
6 E16A/17A	00000000000							
7								
1 E16E	36.0 .460		0.0	2.0	0.0		1	.0386 .0079



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	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
6 E16E	00000000000							
7								
1 3V68	2.0 .460		0.0	2.0	0.0		1 .6395	.0139
6 3V68	00000000000							
7								
1 V88	40.0 .460		0.0	2.0	0.0		1 .0716	.0172
6 V88	00000000000							
7								
4 3025	52.4 .480 1.000						.0362	.0087
6 3025	00000000000							
4 STATI CL	1.0 .480 1.000	0.0	0.0		0.0			
6 STATI CL	00000000000							
7								
1 MOV381	0.42 .460 5.26		2.0	0.85	.49 0.6		1 .7200	.0156
6 MOV381	20000111111							
7								
1 MOV626	1.0 .460 5.71		2.0	0.85	.39 0.6		1 .7915	.0172
6 MOV626	20000111111							
7								
1 MOV7168	1.3 .460 3.75		2.0	0.85	.60 0.6		1 .6663	.0145
6 MOV7168	20000111111							
7								
1 MOV730	1.3 .460 3.75		2.0	0.85	.60 0.6		1 .7960	.0173
6 MOV730	20000111111							
7								
1 MOV7448	10.3 .460 7.22		2.0	0.85	.80 0.6		1 .5685	.0197
6 MOV7448	20000111111							
7								
1 MOV8438	1.58 .460 7.43		2.0	0.85	.50 0.6		1 .8184	.0178
6 MOV8438	20000111111							
7								
1 MOV8808	2.0 .460 3.71		2.0	0.85	.63 0.6		1 .7312	.0159
6 MOV8808	20000111111							
7								
1 MOV1402	0.33 .460 7.33		2.0	0.85	.48 0.6		1 .6395	.0139
6 MOV1402	20000111111							
7								
1 MOV1418	1.5 .460 5.71		2.0	0.85	.50 0.6		1 .7088	.0154
6 MOV1418	20000111111							
7								
1 MOV1425	0.33 .460 5.26		2.0	0.85	.38 0.6		1 .9861	.0214
6 MOV1425	20000111111							
7								
1 MOV1421	5.3 .460 8.57		2.0	0.85	.76 0.6		1 .5277	.0115
6 MOV1421	20000111111							
7								
808W	90.0 80.0 30							
1 3P2048	6.0 .460	0.0	2.0	0.0			1 .2974	.0065
6 3P2048	00000000000							
7								

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DATA VERIFICATION

	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
1 3P268	3.0	.460	0.0	2.0	0.0		1	.3712 .0081
6 3P268	1	11111111111						
7								
1 P208	20.0	.460	0.0	2.0	0.0		1	.1192 .0062
6 P208	00000000000							
7								
1 4P268	3.0	.460	0.0	2.0	0.0		1	.4942 .0107
6 4P268	1	11111111111						
7								
1 P84A	20.0	.460	0.0	2.0	0.0		1	.1157 .0060
6 P84A	1	11111111111						
7								
1 3P24B	3.0	.460	0.0	2.0	0.0		1	.5322 .0116
6 3P24B	00000000000							
7								
1 P20	0.5	.460	0.0	2.0	0.0		1	.8542 .0186
6 P20	00000000000							
7								
1 P21	0.5	.460	0.0	2.0	0.0		1	.8787 .0191
6 P21	00000000000							
7								
1 3P25B	3.0	.460	0.0	2.0	0.0		1	.3376 .0073
6 3P25B	00000000000							
7								
1 P22	0.5	.460	0.0	2.0	0.0		1	.8765 .0191
6 P22	00000000000							
7								
1 P220	3.0	.460	0.0	2.0	0.0		1	.2706 .0059
6 P220	00000000000							
7								
1 4P24B	3.0	.460	0.0	2.0	0.0		1	.4718 .0103
6 4P24B	1	11111111111						
7								
1 4P25B	3.0	.460	0.0	2.0	0.0		1	.4942 .0107
6 4P25B	1	11111111111						
7								
1 P84B	20.0	.460	0.0	2.0	0.0		1	.1166 .0060
6 P84B	1	11111111111						
7								
1 4P16A	50.0	.460	0.0	2.0	0.0		1	.0541 .0130
6 4P16A	00000000000							
7								
1 3P16A	50.0	.460	0.0	2.0	0.0		1	.0541 .0130
6 3P16A	00000000000							
7								
1 3V36A	2.0	.460	0.0	2.0	0.0		1	.3399 .0074
6 3V36A	00000000000							
7								
1 V78	5.0	.460	0.0	2.0	0.0		1	.2934 .0093
6 V78	00000000000							

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DATA VERIFICATION

	1	2	3	4	5	6	7	8
123456789012345678901234567890123456789012345678901234567890								
7								
4 NS233M	27.4	.480	0.85	0.0	0.0	0.0	1	.1162 .0129
6 NS233M	000000000000							
7								
4 STAT1CL	1.0	.480	1.000	0.0	0.0	0.0		
6 STAT1CL	000000000000							
7								
3B52	96.0	82.0	30					
1 3C2B	5.0	.460		0.0	2.0	0.0	1	.1250 .0040
6 3C2B	200000000000							
7								
1 3V34B	5.0	.460		0.0	2.0	0.0	1	.0208 .0023
6 3V34B	200000000000							
7								
1 3P10B	0.75	.460		0.0	2.0	0.0	1	.1615 .0051
6 3P10B	200000000000							
7								
1 3V65B	2.0	.460		0.0	2.0	0.0	1	1.003 .0319
6 3V65B	000000000000							
7								
1 3S230	7.0	.460		0.0	2.0	0.0	1	.3964 .0423
6 3S230	000000000000							
7								
4 3C13B	17.0	.480	1.000					.0182 .0020
6 3C13B	200000000000							
7								
4 STAT1CL	1.0	.480	1.000	0.0	0.0	0.0		
6 STAT1CL	000000000000							
7								
3B54	90.0	80.0	30					
1 HVACHP	18.0	.460	1.000	0.0	2.0	0.0	1	
6 HVACHP	000000000000							
7								
4 HVACKW	27.0	.480	1.000	0.0	0.0	0.0	1	
6 HVACKW	000000000000							
7								
2BUS113								
3 SWICHYD	15000	19.21.008	4435					
6 SWICHYD								
9								
C TRLIN H1	2BUS113							
C NONSG X1	3AA1			.0002	.0010			
C NONSG Y1	3AB1			.0003	.0016			
T 3X03 H1	X1	Y1		40.0	233.03	4.16	4.16	
				16.64	0.67	16.90	0.68	30.42 1.22
R 3AA2 3AA1	3AA2			0.0	0.0	0.04	80.00	0.00 0.00
C 3AD 3AA2	3AD			.0072	.0160			
C 3B01 X2	3B01			0.0	0.0			
C 3B03 X4	3B03			0.0	0.0			
C 3B05V 3B01	3B05V			.0013	.0027			

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DATA VERIFICATION

1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890							
C 3805N 3801	3805N		.0030 .0033				
C 3807 3803	3807		.0064 .0129				
C 3808V 3850	3808V		0.002 .0040				
C 3850 3804	3850		.0049 .0099				
C 3X04 3AA2	H2		.0035 .0031				
T 3X04 H2	X2		1.0 4.055 0.48		2.5		
			5.54 0.544				
C 3X06 3AA2	H4		.0025 .0022				
T 3X06 H4	X4		1.0 4.055 0.48		2.5		
			5.62 0.544				
R 3A82 3A81	3A82		0.0 0.0	0.04 80.00	0.00 0.00		
C 3802 X3	3802		0.0 0.0				
C 3804 X5	3804		0.0 0.0				
C 3806 3802	3806		.0045 .0090				
C 808N 3804	808N		.0132 .0143				
C 3852 3804	3852		.0048 .0098				
T 3X05 H3	X3		1.0 4.055 0.48		2.5		
			5.71 0.544				
C 3X05 3A82	H3		.0032 .0028				
C 3X07 3A82	H5		.0039 .0034				
C 3853 3801	3853		.0016 .0017				
C 3854 3804	3854		.0019 .0021				
T 3X07 H5	X5		1.0 4.055 0.48		2.5		
			5.71 0.544				

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FILE: \AUXSYS\U3APP9.DAT
STEADY STATE SET @ 96% AND STARTING @ 82% FOR SAFETY BUSES
STEADY STATE SET @ 90% AND STARTING @ 80% FOR NON-SAFETY BUSES
EBASCO SERVICES INC.
TURKEY POINT UNIT No 3. ELECTRICAL AUXILIARY SYSTEM DESIGN
AUX SYS FED THRU THE S/U TRF.PSB-1.
BUS 3AA2 ALIGNED TO 3AD, BUS 3B50 ALIGNED TO 3B04
SEQUENCED LOADING FOR CALCULATION EC-145, REV. 4
(3/06/91)

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GENERAL INSTRUCTION CARD DATA

NUMBER S/C TYPE
 OF CASE OF
 VOLTAGE 1=YES OUTPUT
 DROP 2=NO BASE
 CASES MVA
 1-11 1 SHORT 40.000

OPTIONAL USER SELECTED ASSUMED DATA

DATA							
LRA/FLA >1KV	LRA/FLA <=1KV	OP PF >1KV	OP PF <=1KV	OP EFF >1KV	OP EFF <=1KV	ST PF >1KV	ST PF <=1KV
6.00	6.00	.85	.85	.92	.92	.20	.20



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SHORT CIRCUIT & REACTANCE SIZING PARAMETERS

1	BUS NAME	MVA CLASS	RATED MAX KV	RATED C&L KA	RATED SC @ MAX KV	HPFV KV	"S" FACTOR	MIN CPT	FIXED K3	PERMISSIBLE INT CAP OF BREAKER KA@ HPFV	ASSYM MULT FOR C&L
2	BUS NAME	INT KA	HPFV KV	FIXED K4	K6 FACTOR	K6 BREAK OFF					
3	BUS NAME	INT KA	HPFV KV	FIXED K5	K7 FACTOR	K7 BREAK OFF					

1	3AA1	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	3AA2	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	3AD	250.00	4.760	80.0	30.30	4.160	1.100	3.000	(*****)	34.67	(1.60)
2	3B01	30.00	.480(*****)	(1.00)	.00						
2	3B03	30.00	.480(*****)	(1.00)	.00						
3	3B05V	25.00	.480(*****)	(1.00)	.00						
3	3B05N	25.00	.480(*****)	(1.00)	.00						
3	3B07	25.00	.480(*****)	(1.00)	.00						
3	3B08V	25.00	.480(*****)	(1.00)	.00						
1	3AB1	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
1	3AB2	350.00	4.760	80.0	42.45	4.160	1.100	3.000	(*****)	48.57	(1.60)
2	3B02	30.00	.480(*****)	(1.00)	.00						
2	3B04	30.00	.480(*****)	(1.00)	.00						
3	3B06	25.00	.480(*****)	(1.00)	.00						
3	3B08N	25.00	.480(*****)	(1.00)	.00						
2	3B50	30.00	.480(*****)	(1.00)	.00						
3	3B52	25.00	.480(*****)	(1.00)	.00						
3	3B53	25.00	.480(*****)	(1.00)	.00						
3	3B54	25.00	.480(*****)	(1.00)	.00						

NOTE: TYPE 1 FAULT= MEDIUM VOLTAGE FAULT CALCULATION
 TYPE 2 FAULT= LOW VOLTAGE POWER CIRCUIT BREAKER FAULT CALCULATION
 TYPE 3 FAULT= LOW VOLTAGE MOLDED CASE BREAKER FAULT CALCULATION
 (*****) = COMPUTER WILL CALCULATE K FACTOR

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BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3AA2	96.00 %	82.00 %	30.0

```

          96.00 %
*****
*  LOAD DATA  *
*****

```

0=ON
1=OFF
CON
FOR
S/C

VOLTAGE DROP
CONDITION CODES
(0=ON;1=OFF;2=STARTING)

	MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 $<3.6K=2$	PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 INO=1	CABLE RES REAC	0=ON 1=OFF COM FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)	
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT	X C&L	X INT	X GVD	X/R		ANG DEG		CABLE RES REAC	COM FOR S/C		
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	COM FOR S/C		
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	COM FOR S/C		
1	3P11A	400.00	4.000	5.090	(1.2)	2.000	.850	.938	(.200)(****)	(1.)	.036	.032	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)		
1	3P210A	300.00	4.000	6.220	(1.2)	2.000	.890	.934	(.200)(****)	(1.)	.036	.032	(0) 1 2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)		
1	3P211A	450.00	4.000	4.740	(1.2)	2.000	(.850)(	.920)(	( .200)(****)	(1.)	.037	.033	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	
1	3P215A	350.00	4.000	6.400	(1.0)	1.000	.880	.940	(.200)(****)	(1.)	.039	.035	(0) 1 2 (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)		
1	3P3A	800.00	4.000	5.940	(1.2)	2.000	.890	.944	(.200)(****)	(1.)	.034	.030	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)		
1	3P6A	2250.00	4.000	7.060	(1.0)	2.000	.900	.958	(.200)(****)	(1.)	.003	.004	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)		
1	3P7A	1250.00	4.000	4.570	(1.0)	2.000	(.850)(	.920)(	( .200)(****)	(1.)	.028	.036	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	
1	3P7C	1250.00	4.000	4.570	(1.0)	2.000	(.850)(	.920)(	( .200)(****)	(1.)	.028	.036	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	
1	3P9A	325.00	4.000	5.800	(1.2)	2.000	.820	.928	(.200)(****)	(1.)	.044	.039	(0) (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)		
2	DG3A	3.00	4.160	1.000	*****	.270	.405	1.534	30.000	****	(0.)	.003	.011	1 1 1 1 1 1 1 1 1 1 1 1	

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

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Journal of Interpersonal Violence

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T Y P E	BUS NAME				MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT			
	3AD				96.00 % ***** * LOAD DATA * *****				82.00 %				30.0			
1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP FACTOR	PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)	
2	GEN NAME	RATED HVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG		CABLE RES REAC	CON FOR S/C		
3	SYSTEM NAME	S/C HVA	X/R	PU OP VOLT	V/D HVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REACT OR XR FOR TRANSF	TRANSF HVA	REACT -TOL OR TRANSF KV	REACT +TOL OR TRANSF TOL	ANG DEG		CABLE RES REAC	CON FOR S/C		
4	STATIC NAME	RATED KVA	RATED KV	RATED PF									CABLE RES REAC	CON FOR S/C		
1	3P211C	450.00	4.000	4.740 (1.2)	2.000 (.850)(.920)(.200)(****)	(1.)	.038	.034 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)			
1	3P9C	325.00	4.000	5.800 (1.2)	2.000	.820	.928 (.200)(****)	(1.)	.030	.026 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)			

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BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX	# WARNINGS FOR LOW VOLT									
3801														96.00 %				82.00 %					30.0									
														*****								0=ON 1=OFF										
														* LOAD DATA *																		

DATE	TIME	FROM	TO	SUBJECT	REMARKS
1964-01-15	14:30	101	102	103	104
1964-01-15	15:00	105	106	107	108
1964-01-15	15:30	109	110	111	112
1964-01-15	16:00	113	114	115	116
1964-01-15	16:30	117	118	119	120
1964-01-15	17:00	121	122	123	124
1964-01-15	17:30	125	126	127	128
1964-01-15	18:00	129	130	131	132
1964-01-15	18:30	133	134	135	136
1964-01-15	19:00	137	138	139	140
1964-01-15	19:30	141	142	143	144
1964-01-15	20:00	145	146	147	148
1964-01-15	20:30	149	150	151	152
1964-01-15	21:00	153	154	155	156
1964-01-15	21:30	157	158	159	160
1964-01-15	22:00	161	162	163	164
1964-01-15	22:30	165	166	167	168
1964-01-15	23:00	169	170	171	172
1964-01-15	23:30	173	174	175	176
1964-01-15	00:00	177	178	179	180
1964-01-15	00:30	181	182	183	184
1964-01-15	01:00	185	186	187	188
1964-01-15	01:30	189	190	191	192
1964-01-15	02:00	193	194	195	196
1964-01-15	02:30	197	198	199	200
1964-01-15	03:00	201	202	203	204
1964-01-15	03:30	205	206	207	208
1964-01-15	04:00	209	210	211	212
1964-01-15	04:30	213	214	215	216
1964-01-15	05:00	217	218	219	220
1964-01-15	05:30	221	222	223	224
1964-01-15	06:00	225	226	227	228
1964-01-15	06:30	229	230	231	232
1964-01-15	07:00	233	234	235	236
1964-01-15	07:30	237	238	239	240
1964-01-15	08:00	241	242	243	244
1964-01-15	08:30	245	246	247	248
1964-01-15	09:00	249	250	251	252
1964-01-15	09:30	253	254	255	256
1964-01-15	10:00	257	258	259	260
1964-01-15	10:30	261	262	263	264
1964-01-15	11:00	265	266	267	268
1964-01-15	11:30	269	270	271	272
1964-01-15	12:00	273	274	275	276
1964-01-15	12:30	277	278	279	280
1964-01-15	13:00	281	282	283	284
1964-01-15	13:30	285	286	287	288
1964-01-15	14:00	289	290	291	292
1964-01-15	14:30	293	294	295	296
1964-01-15	15:00	297	298	299	300

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S						MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT	
3B03	96.00 %						82.00 %		30.0	
	***** * LOAD DATA * *****									
A/A	K1 FACTOR	SPEED OP PWR 3.6K=1 FACTOR 3.6K=2	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)	
LT	X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C			
LT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C	
ATED F							CABLE RES REAC	CON FOR S/C	1 2 3 4 5 6 7 8 9 10	
000)(1.2)	2.000 (.850)(.920)(.200)(****)	(1.)	.035	.023 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	
000)(1.2)	2.000 (.850)(.920)(.200)(****)	(1.)	.011	.022 1	1 1 1 1 1 1 1 1 1 1	
490 (1.2)	2.000	.890	.928 (.200)(****)	(1.)	.018	.041 1	1 1 1 1 1 1 1 1 1 1	
000 *****	*****	*****	*****	*****	*****	***	.005	.007 (1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	

U.S. AIR FORCE
 100-100000-100000
 100-100000-100000

[illegible]

2000.01.14 4:15
 11 2 101 12.0.0.0
 X 00.00
 11 2 101 12.0.0.0
 11 2 101 12.0.0.0

34.8 21.1
1.2032[illegible]

02741 051X6
10 87

1000 1000
 1000 1000

[illegible]

EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

JOB ID 3/06/91
 VERIFICATION BY
 PAGE 22

BUS NAME															MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT										
3805V															96.00 %		82.00 %		30.0										
***** * LOAD DATA * *****																													
																			0=ON 1=OFF										
																			VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)										

03/20/2009 09:01 AM 2009 09/20 09:01 AM
09/20/2009 09:01 AM 2009 09/20 09:01 AM
09/20/2009 09:01 AM 2009 09/20 09:01 AM

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BUS NAME		MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT	
3B05N		90.00 %		80.00 %		30.0	

* LOAD DATA *							

						0=ON	
						1=OFF	
A/	K1	SPEED OP PWR	OP	ST	R-OHMS	HOT	CABLE
A	FACTOR	3.6K=1 FACTOR	EFF	PF	T-T	SYN=2	RES REAC
		<3.6K=2				IND=1	
							VOLTAGE DROP
							CONDITION CODES
							(0=ON;1=OFF;2=STARTING)

2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C												
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C											
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11

1	3P15	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.590	.013	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3P190	.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.749	.016	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3P19A	.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.727	.016	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3P19B	.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.738	.016	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3P19C	.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.749	.016	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3P232A	10.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	1.547	.034	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3P28A	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.197	.004	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3P34A	.75	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.818	.018	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3P4	10.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.597	.013	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3P43	5.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.541	.012	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3P49	.75	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.273	.006	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3P5	40.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.036	.009	1	1	1	1	1	1	1	1	1	1	1	1	1
1	3V14A	7.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.883	.019	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V16	2.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.210	.005	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V18	7.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.474	.010	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V19A	15.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.135	.004	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V31B	3.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.660	.014	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V32B	.75	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.490	.011	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V4	5.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.579	.013	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V6A	7.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.268	.006	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	P51A	1.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.749	.016	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3X03	7.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.102	.011	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3NF20A/	1.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.169	.005	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3X02	9.00	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.073	.008	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3V5	.50	.460(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.204	.004	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1	3X01	170.00	.460(6.000)(	1.2)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.005	.006	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

T Y P E	***** * LOAD DATA * *****												0=ON 1=OFF	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)											
	1 MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C												
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG		CABLE RES REAC	CON FOR S/C												
3 SYSTEM NAME	S/C MVA	X/R.	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG		CABLE RES REAC	CON FOR S/C												
4 STATIC NAME	RATED KVA	RATED KV	RATED PF									CABLE RES REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10	11	

1 3P90C	2.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.477	.015	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)												
1 3P90B	2.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.486	.015	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)												
1 3P90A	2.00	.460(6.000)(	8.0)	2.000	(.850)(	.920)(	.200)(****)	(1.)	.486	.015	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)												
1 3XS75/7	20.00	.460(6.000)(	8.0)	2.000	.810	(.920)(	.200)(****)	(1.)	.139	.015	(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)												
4 STATICL	15.00	.480 1.000	*****	*****	*****	*****	*****	*****	***	(.000)(	.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)												

[illegible]

BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX	# WARNINGS FOR LOW VOLT										
3B07	96.00 %				82.00 %				30.0											

* LOAD DATA *																				

A/	K1	SPEED OP	PWR	OP	ST	R-OHMS	MOT	CABLE	0=ON											
A	FACTOR	3.6K=1	FACTOR	EFF	PF	T-T	SYN=2	RES REAC	1=OFF											
		<3.6K=2					IND=1		CON	VOLTAGE DROP										
									FOR	CONDITION CODES										
									S/C	(0=ON;1=OFF;2=STARTING)										
		X	X	X	X/R		ANG	CABLE	CON											
		C&L	INT	GVD			DEG	RES REAC	FOR											
LT									S/C											
	V/D	OHMS	% R/X	TRANSF	REACT	REAC	ANG	CABLE	CON											
	MVA	FOR	FOR	MVA	-TOL	+TOL	DEG	RES REAC	FOR											
LT		REACT	REAC		OR	OR			S/C											
		OR ZX	OR XR		TRANSF	TRANSF														
		FOR	FOR		KV	TOL														
		TRANSF	TRANSF																	
ATED								CABLE	CON											
F								RES REAC	FOR											
									S/C											
										1 2 3 4 5 6 7 8 9 10										
0000	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.036	.009	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
750	(1.2)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.018	.012	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
390	(8.0)	2.000	(.850)	(.920)	.420	(****)	(1.)	.262	.031	(0)	1	1	2	(0)	(0)	(0)	(0)	(0)	(0)
060	(1.2)	2.000	(.850)	(.920)	.350	(****)	(1.)	.036	.024	(0)	1	1	1	1	1	2	(0)	(0)	(0)
0000	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.262	.006	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
0000	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.588	.013	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
0000	(1.2)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.066	.025	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
0000	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.855	.027	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
0000	(8.0)	2.000	(.850)	(.920)	(.200)	(****)	(1.)	.133	.004	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
000	*****	*****	*****	*****	*****	*****	*****	*****	.025	.017	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
000	*****	*****	*****	*****	*****	*****	*****	*****	(.000)	(.000)	(1)	1	1	1	1	1	1	1	1	1
700	(8.0)	2.000	.850	.600	.600	(****)	(1.)	.313	.007	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1
200	(8.0)	2.000	.850	.800	.600	(****)	(1.)	.384	.027	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1
400	(8.0)	2.000	.850	.500	.600	(****)	(1.)	.259	.006	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1
700	(8.0)	2.000	.850	.630	.600	(****)	(1.)	.280	.006	(0)									

[illegible]

EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

JOB ID 3/06/91
 VERIFICATION BY
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BUS NAME													MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT										
3853													90.00 %		80.00 %		30.0										
***** * LOAD DATA * *****																											
													0=ON 1=OFF														
1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)													
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R	ANG DEG	CABLE RES REAC	CON FOR S/C															
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C														
	STATIC NAME	RATED KVA	RATED KV	RATED PF											CABLE RES REAC	CON FOR S/C											
1	HVACHP	18.00	.460(6.000)(8.0)	2.000	(.850)(.920)(.200)(****)	(1.)	(.000)(.000)(0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)																		
4	HVACKW	27.00	.460 1.000	*****	*****	*****	*****	*****	*****	***	***	(.000)(.000)(1)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)														

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 REVISION B

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BUS NAME	MIN ALLOWABLE VOLTAGE FOR S S	MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS	MAX # WARNINGS FOR LOW VOLT
3B08V	96.00 %	82.00 %	30.0

1 MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 OP 3.6K=2	PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES	REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)									
2 GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R	ANG DEG		CABLE RES	REAC	CON FOR S/C										
3 SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR TRANSF	% R/X FOR REAC OR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES	REAC	CON FOR S/C										
4 STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES	REAC	CON FOR S/C	1	2	3	4	5	6	7	8	9	10

1 3V10	100.00	.460	7.750 (	1.2)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.016	.011	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 3V30B	30.00	.460	5.390 (	8.0)	2.000 (	.850)(	.920)	.420	(****)(1.)	.249	.029	(0)	1	1	1	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 3V3B	75.00	.460	6.060 (	1.2)	2.000 (	.850)(	.920)	.350	(****)(1.)	.038	.026	(0)	1	1	1	1	1	1	2	(0)	(0)	(0)	(0)
1 V11	10.00	.460	(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)	(****)(1.)	.204	.004	(0)	1	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 V29B	1.00	.460	(6.000)(	8.0)	2.000 (	.850)(	.920)	.200)	(****)(1.)	.534	.017	(0)	2	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 E16C/17	34.00	.460	(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)	(****)(1.)	.188	.021	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 C1	75.00	.460	(6.000)(	1.2)	2.000 (	.850)(	.920)(	.200)	(****)(1.)	.025	.017	1	1	1	1	1	1	1	1	1	1	1	1
1 E16D	36.00	.460	(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)	(****)(1.)	.048	.009	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 P42B	3.00	.460	(6.000)(	8.0)	2.000 (	.850)(	.920)	.200)	(****)(1.)	.671	.015	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 V77/E23	36.00	.460	(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)	(****)(1.)	.077	.014	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 HS74B	60.00	.460	(6.000)(	1.2)	2.000 (	.850)(	.920)	.200)	(****)(1.)	.069	.032	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 S77B	5.00	.460	(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)	(****)(1.)	.807	.026	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 S78B	5.00	.460	(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)	(****)(1.)	.716	.023	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 S75B	5.00	.460	(6.000)(	8.0)	2.000 (	.850)(	.920)(	.200)	(****)(1.)	.639	.020	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
4 4D25A	1.00	.480	1.000	*****	*****	*****	*****	*****	****	***	.047	.011	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
4 4002A	70.60	.480	1.000	*****	*****	*****	*****	*****	****	***	.023	.010	(1)	1	1	1	1	1	1	1	1	1	1
4 STAT1CL	1.00	.480	1.000	*****	*****	*****	*****	*****	****	***	(.000)(	.000)	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
1 MOV1404	.33	.460	3.600 (	8.0)	2.000	.850	.290	.600	(****)(1.)	.591	.019	(0)	2	(0)	(0)	(0)	(0)	1	1	1	1	1	1
1 MOV1417	1.50	.460	5.700 (	8.0)	2.000	.850	.500	.60															

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE *****

[illegible]

ADDITIONAL INFORMATION
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EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

JOB ID 3/06/91
 VERIFICATION BY
 PAGE 27

BUS NAME														MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT											
3850														96.00 %				82.00 %				30:0											
														***** * LOAD DATA * *****																			
T Y P E	1	MOTOR NAME	RATED HP	RATED KV	LRA/FLA	K1 FACTOR	SPEED 3.6K=1 OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR OP.PWR 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BUS NAME		MIN ALLOWABLE VOLTAGE FOR S S		MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS		MAX # WARNINGS FOR LOW VOLT				
3AB1		96.00 %		82.00 %		30.0				

* LOAD DATA *										

						0=ON 1=OFF				
A/	K1	SPEED OP	PWR	OP	ST	R-OHMS	MOT	CABLE	CON	VOLTAGE DROP
A	FACTOR	3.6K=1	FACTOR	EFF	PF	T-T	SYN=2	RES	REAC	CONDITION CODES
		<3.6K=2					IND=1			(0=ON;1=OFF;2=STARTING)

2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R	ANG DEG		CABLE RES	REAC REAC	COW FOR S/C
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR ZX FOR TRANSF	% R/X FOR REACT OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES	REAC REAC	COW FOR S/C
4	STATIC NAME	RATED KVA	RATED KV	RATED PF								CABLE RES	REAC REAC	COW FOR S/C
														1 2 3 4 5 6 7 8 9 10 11
1	3P2008	6000.00	4.000	6.320 (	1.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.005	.015 (0)	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	2 (0)
1	3P200C	6000.00	4.000	6.320 (	1.0)	2.000 (	.850)(	.920)(	.200)(****)	(1.)	.005	.015 1	(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	0
*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****														
	DEVICE NAME		CASE: 1	2	3	4	5	6	7	8	9	10	11	
1	3P200C	RATED HP	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	
1	3P2008	RATED HP	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	5061.00	6000.00	5061.00	

SECRET

RECEIVED: 11 JULY 1963
 10:47 AM
 FROM: AIR MAIL 200 10010

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[The following page contains extremely faint, illegible markings and noise.]

[illegible]

EBASCO SERVICES INCORPORATED
 AUXSYS4078-12/31/89
 ELECTRICAL AUXILIARY DESIGN

JOB ID 3/06/91
 VERIFICATION BY
 PAGE 29

BUS NAME				MIN ALLOWABLE VOLTAGE FOR S S				MIN ALLOWABLE VOLTAGE WHEN STARTING OTHER MOTORS				MAX # WARNINGS FOR LOW VOLT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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1	MOTOR NAME	RATED HP	RATED KV	LRA/ FLA	K1 FACTOR	SPEED 3.6K=1 <3.6K=2	OP PWR FACTOR	OP EFF	ST PF	R-OHMS T-T	MOT SYN=2 IND=1	CABLE RES REAC	CON FOR S/C	VOLTAGE DROP CONDITION CODES (0=ON;1=OFF;2=STARTING)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
2	GEN NAME	RATED MVA	RATED KV	PU OP VOLT		X C&L	X INT	X GVD	X/R		ANG DEG	CABLE RES REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
3	SYSTEM NAME	S/C MVA	X/R	PU OP VOLT	V/D MVA	OHMS FOR REACT OR Z% FOR TRANSF	% R/X FOR REAC OR XR FOR TRANSF	TRANSF MVA	REACT -TOL OR TRANSF KV	REAC +TOL OR TRANSF TOL	ANG DEG	CABLE RES REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
4	STATIC NAME	RATED KVA	RATED KV	RATED PF									CABLE RES REAC	CON FOR S/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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1	3P11B	400.00	4.000	5.090	(1.2)	2.000	.850	.938	(.200)	(****)	(1.)	.030	.026	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0

*****CHANGES TO LOAD DATA FOR VOLTAGE DROP CASE*****

DEVICE NAME	CASE: 1	2	3	4	5	6	7	8	9	10	11
1 3P6B	RATED HP	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00	2210.00
1 3P3B	RATED HP	700.00	700.00	700.00	700.00	700.00	700.00	800.00	800.00	700.00	700.00

1. NAME OF THE PARTY
 2. NAME OF THE PARTY
 3. NAME OF THE PARTY

22 1 223

8 CO.22

 * ATAD CASH *

[illegible][illegible][illegible][illegible]