



MAY 28 1988

PDR

L-86-226

Dr. J. Nelson Grace  
Regional Administrator, Region II  
U. S. Nuclear Regulatory Commission  
101 Marietta Street N.W., Suite 2900  
Atlanta, Georgia 30323

1. ~~Carter~~  
2. ~~Jape~~ Schubert  
3. Guenther

Re: Turkey Point Units 3 and 4.  
Docket Nos. 50-250 and 50-251  
IE Bulletin 85-03

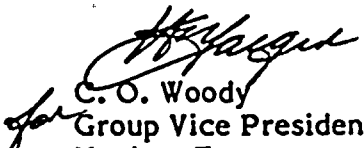
Dear Dr. Grace:

We have reviewed IE Bulletin 85-03 (Motor-Operated Valve Common Mode Failures During Plant Transients Due to Improper Switch Settings) as it applies to Turkey Point Units 3 and 4. Attached, please find the design basis information and program plans/schedules, for Turkey Point Units 3 and 4, as required by the Bulletin.

Please note that the current schedule for the next Unit 4 refueling outage (in Winter-Spring 1988) places the testing, referenced in Action 'C' of our response, beyond the time frame requested in the bulletin. This schedule is the earliest possible planned outage for performing required testing.

Should you or your staff have any questions on this information, please contact us.

Very truly yours,

  
C. O. Woody  
Group Vice President  
Nuclear Energy

COW/SAV:de

Attachment

cc: Harold F. Reis, Esquire  
USNRC Document Control Desk  
PNS-LI-86-157

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PDR ADCK 05000250  
Q PDR

extra copy  
original

STATE OF FLORIDA )  
 ) ss.  
COUNTY OF DADE )

H. E. Yaeger being first duly sworn, deposes and says:

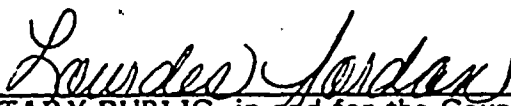
That he is Manager, Nuclear Maintenance of Florida Power & Light Company, the licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said Licensee.

  
H. E. Yaeger

Subscribed and sworn to before me this

28th day of May, 1986

  
NOTARY PUBLIC, in and for the County of  
Dade, State of Florida.

My commission expires: NOTARY PUBLIC STATE OF FLORIDA  
MY COMMISSION EXP. DEC. 8, 1988  
BONDED THRU GENERAL INS. WHO.

**TURKEY POINT PLANNED ACTIONS**  
**(I&E BULLETIN 85-03)**

- A. The design basis for each motor-operated valve in the Auxiliary Feedwater (AFW) and High Pressure Safety Injection (HPSI) systems was reviewed, documented, and included in this report as Attachment A.
- B. Actual torque switch settings will be calculated and maintained in a controlled document by October 17, 1986.
- C. Individual valve torque switch settings will be set to conform to the values in item B, above. The subject valves will be tested, to the extent where practical, at the maximum differential pressure, either using conventional differential pressure stroke testing or current maintenance techniques. In the interim period prior to the implementation of any revised switch settings, the subject MOV's will be evaluated, to the extent practical, to ensure that their operation and switch settings correspond to the most recent vendor supplied information. FPL is currently reviewing and evaluating all developments concerning alternative methods to full differential pressure testing to determine their acceptability. Justification will be provided, as deemed necessary, for those valves which cannot be practically tested at the maximum differential pressure established above. Where torque switch settings are unchanged, credit may be taken for testing done in the past. Testing for Unit 3 and Unit 4 will be completed during the next refueling outages for each unit.
- D. Applicable Plant maintenance procedures will be reviewed and revised if required to ensure torque switch settings are set per the values supplied in item B, above, by November 14, 1987. Proper switch settings will be maintained as per controlled document settings supplied in Item B.

A follow-up report will be submitted by January 14, 1988.

ATTACHMENT A

IEB 85-03  
Item A  
Page 1 of 11

TURKEY POINT UNITS 3 & 4  
IE BULLETIN 85-03, ITEM A

HIGH HEAD SAFETY INJECTION SYSTEM  
AND  
AUXILIARY FEEDWATER SYSTEM  
MOTOR OPERATED VALVES

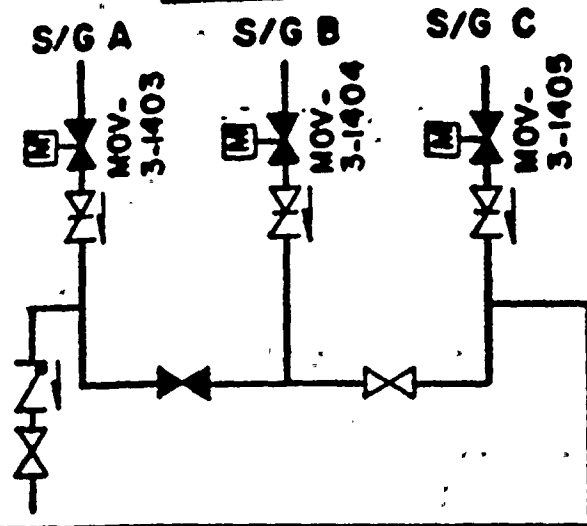


TURKEY POINT UNITS 3 & 4  
DESIGN BASES FOR OPERATION OF AFW SYSTEM MOV'S

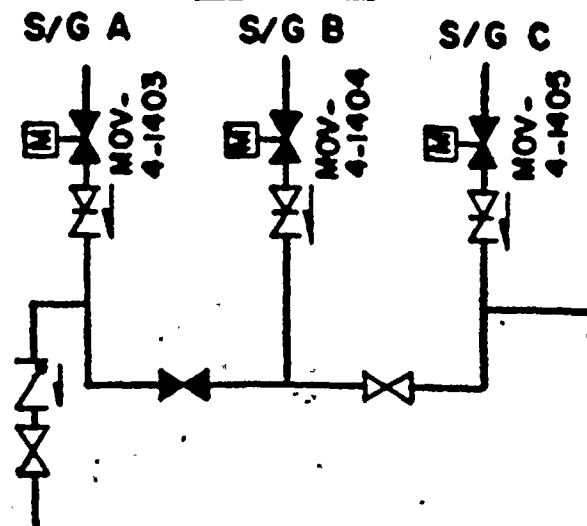
<u>Valve Function</u>	<u>Valve Tag No.</u>	<u>Postulated Upstream Condition</u>	<u>Postulated Downstream Condition</u>	<u>Notes</u>
Auto Open on AFW Start Signal	MOV-3-1403 MOV-3-1404 MOV-3-1405 MOV-4-1403 MOV-4-1404 MOV-4-1405	Note 1	Note 2	Steam generator Steam isolation (normally closed)
Manually Close from Control Room	MOV-3-1403 MOV-3-1404 MOV-3-1405 MOV-4-1403 MOV-4-1404 MOV-4-1405	Note 1	Note 2	Steam generator Steam isolation
Manually Open from Control Room	MOV-6459A MOV-6459B MOV-6459C	Note 1	Note 2	AFW pump steam turbine trip and throttle valve (normally open)
Manually Close from Control Room	MOV-6459A MOV-6459B MOV-6459C	Note 1	Note 2	AFW pump steam turbine trip and throttle valve

- Notes: 1) Lowest steam generator safety valve setpoint plus 3% accumulation.  
2) Atmospheric pressure.

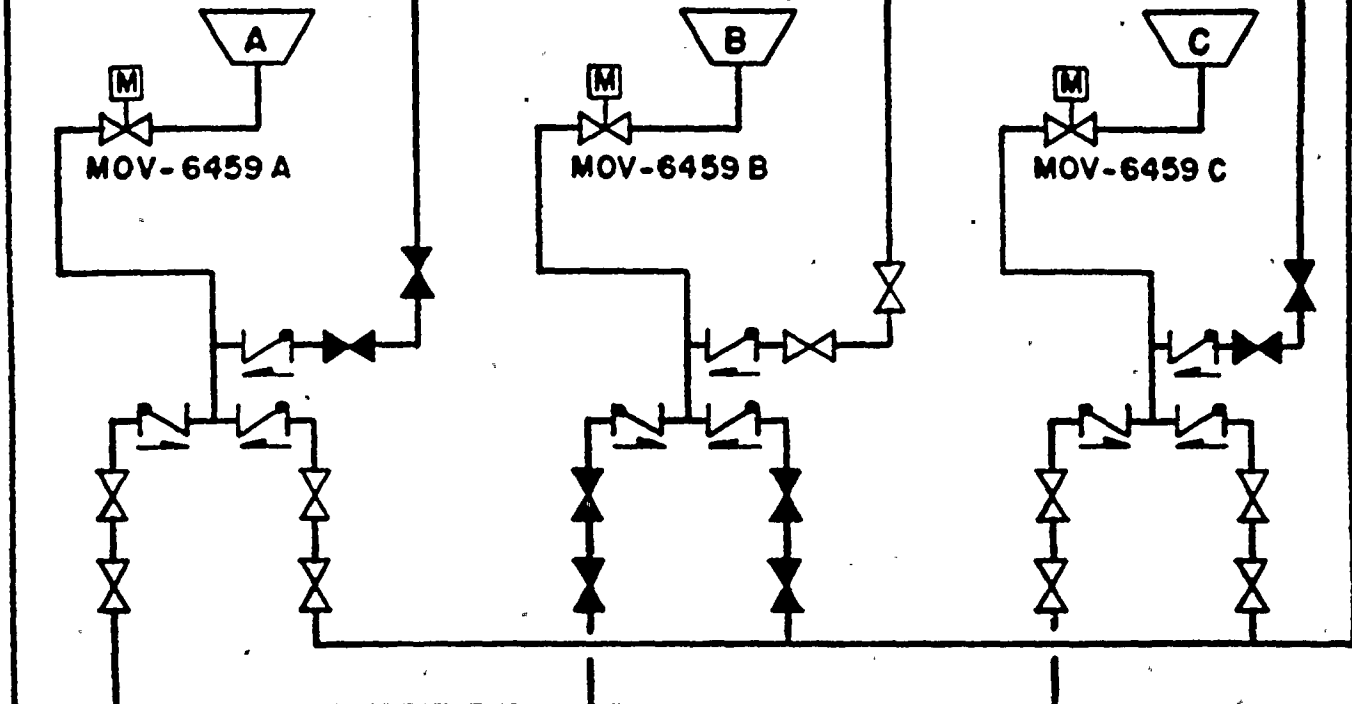
**UNIT #3**



**UNIT #4**



**STEAM DRIVEN AUX. FEEDWATER PUMPS**



DIVISION ENGINEER

**TURKEY POINT—UNIT 3 & 4  
STEAM SIDE-AUX. FEEDWATER  
SYSTEM—SIMPLIFIED SCHEMATIC  
FLORIDA POWER & LIGHT COMPANY**

DATE

SCALE

WV BY C. COLLINS  
CKED  
RECT

Data Summary

<u>Component ID, Manufacturer, ps, Model, ps, Rating</u>	<u>Valve Operator</u>	<u>Valve Function</u>	<u>Design Basis AP Open/Close</u>	<u>Test AP Open/Close</u>	<u>Switch Settings Prior to Adjustments as a Result of Bulletin Open/Close</u>	<u>Final Switch Settings in Re- sponse to Bulletin Open/Close</u>
V-3-1403** Llworth ite 10#	Limitorque SMB-00 1900 rpm	Steam Generator 3A Steam Isolation	1118 psid/ 1118 psid			
V-3-1404** Llworth ite 00#	Limitorque SMB-500 1750 rpm	Steam Generator 3B Steam Isolation	1118 psid/ 1118 psid			
V-3-1405** Llworth ite 00#	Limitorque SMB-00 1900 rpm	Steam Generator 3C Steam Isolation	1118 psid/ 1118 psid			
V-4-1403 edian lobe 3-8472-N4* inch 00#	Limitorque SMB-00 1900 rpm	Steam Generator 4A Steam Isolation	1118 psid/ 1118 psid			





**TURKEY POINT UNITS 3 &  
AUXILIARY FEEDWATER S'**

IEB 85-03  
Item A  
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Data Summary

<u>Component ID, Manufacturer, Size, Model, Size, Rating</u>	<u>Valve Operator</u>	<u>Valve Function</u>	<u>Design Basis AP Open/Close</u>	<u>Test AP Open/Close</u>	<u>Switch Settings Prior to Adjustments as a Result of Bulletin Open/Close</u>	<u>Final Switch Settings in Re- sponse to Bulletin Open/Close</u>
OV-4-1404 Plan lobe B-8472-N4* inch 00#	Limitorque SMB-500 1750 rpm	Steam Generator 4B Steam Isolation	1118 psid/ 1118 psid			
OV-4-1405 Plan lobe B-8472-N4* inch 00#	Limitorque SMB-00 1900 rpm	Steam Generator 4C Steam Isolation	1118 psid/ 1118 psid			
OV-6459A Impel Corp. lobe P-1794* "00#	Limitorque SNB-000 1900 rpm	A-AFW Pump Trip and Throttle Valve	1118 psid/ 1118 psid			
OV-6459B Impel Corp. lobe P-1794* "00#	Limitorque SNB-000 1900 rpm	B-AFW Pump Trip and Throttle Valve	1118 psid/ 1118 psid			

TURKEY POINT UNITS 3 & 4  
AUXILIARY FEEDWATER SYSTEM

Data Summary

<u>Valve</u>	<u>Valve Operator</u>	<u>Valve Function</u>	<u>Design Basis AP Open/Close</u>	<u>Test AP Open/Close</u>	<u>Switch Settings Prior to Adjustments as a Result of Bulletin Open/Close</u>	<u>Final Switch Settings in Response to Bulletin Open/Close</u>
Component ID, Manufacturer, ps, Model, ps, Rating	Manufacturer, Model, Motor RPM, Output Speed (RPM)					
MOV-6459C Impel Corp. lobe P-1794* "	Limitorque SMB-000 1900 rpm	C-AFW Pump Trip and Throttle Valve	1118 psid/ 1118 psid			
00#						

\* - Denotes drawing number

\*\* - These valves are to be changed out to the valve type indicated for MOV-4-1403, 4-1404 and 4-1405 during the next refueling outage. Motor operators and differential pressures will remain the same. This document will be revised accordingly at that time.

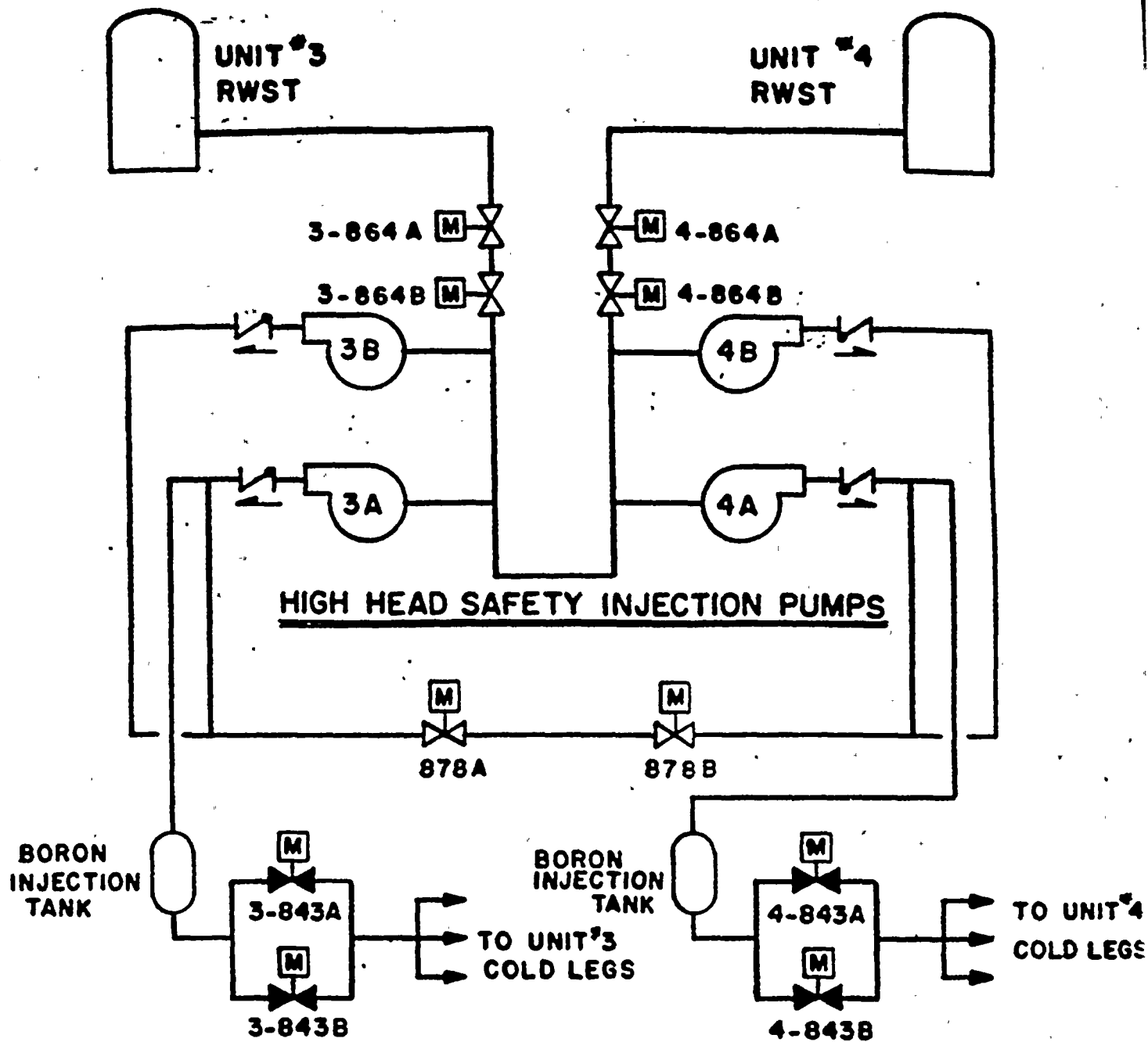


TURKEY POING UNITS 3 & 4  
DESIGN BASES FOR OPERATION OF SAFETY INJECTION  
SYSTEM MOV'S

<u>Valve Function</u>	<u>Valve Tag No.</u>	<u>Postulated Upstream Condition</u>	<u>Postulated Downstream Condition</u>	<u>Notes</u>
Manually close from Control Room	3-864A 3-864B 4-864A 4-864B	Note 1	Note 5	RWST suction valves (normally open)
Manually open from Control Room	3-864A 3-864B 4-864A 4-864B	Note 1	Note 5	RWST suction valves
Manually open from Control Room	878A 878B	Note 2	Note 5	HHSI pump discharge cross- connect (normally open)
Manually close from Control Room	878A 878B	Note 2	Note 5	HHSI pump discharge cross- connect
Auto open on safety injection signal	3-843A 3-843B 4-843A 4-843B	Note 3	Note 5	HHSI pump discharge to cold leg isolation (normally closed)
Manually close from Control Room	3-843A 3-843B 4-843A 4-843B	Note 4	Note 5	HHSI pump discharge to cold leg isolation

- Notes:
- 1) Head due to maximum RWST level
  - 2) HHSI pump shutoff head
  - 3) Pressurizer safety valve setpoint
  - 4) HHSI pump shutoff head plus RHR pump shutoff head
  - 5) Atmospheric pressure





APPROVED:

DIVISION ENGINEER

FORM 1249 REV. 10/80

DRAWN BY	C. C.
CHECKED	
CORRECT	

NO.	DATE	REVISION	BY	CM	CORR	APP

**TURKEY POINT - UNIT 3 & 4  
SAFETY INJECTION SYSTEM  
SIMPLIFIED SCHEMATIC**  
FLORIDA POWER & LIGHT COMPANY  
DATE  
SCALE





TURKEY POINT UNITS 3 & 4  
SAFETY INJECTION SYSTEM

IEB 85-03  
Item A  
Page 9 of 11

Data Summary

<u>Component ID, Manufacturer, Type, Model, Size, Rating</u>	<u>Valve Operator</u>	<u>Valve Function</u>	<u>Design Basis AP Open/Close</u>	<u>Test AP Open/Close</u>	<u>Switch Settings Prior to Adjustments as a Result of Bulletin Open/Close</u>	<u>Final Switch Settings in Re- sponse to Bulletin Open/Close</u>
3-864A Anchor/Darling Gate 16x14x16-S70 300#	Limitorque SMB-0 1750 rpm	Unit 3 RWST To HHSI Pump Suction	25 psid/ 25 psid			
3-864B Anchor/Darling Gate 16x14x16-S70 300#	Limitorque SMB-0 1750 rpm	Unit 3 RWST To HHSI Pump Suction	25 psid/ 25 psid			
4-864A Anchor/Darling Gate 16x14x16-S70 300#	Limitorque SMB-0 1750 rpm	Unit 4 RWST To HHSI Pump Suction	25 psid/ 25 psid			
4-864B Anchor/Darling Gate 16x14x16-S70 300#	Limitorque SMB-0 1750 rpm	Unit 4 RWST To HHSI Pump Suction	25 psid/ 25 psid			



TURKEY POINT UNITS 3 & 4  
SAFETY INJECTION SYSTEM  
Data Summary

<u>Valve</u>	<u>Valve Operator</u>	<u>Valve Function</u>	<u>Design Basis AP Open/Close</u>	<u>Test AP Open/Close</u>	<u>Switch Settings Prior to Adjustments as a Result of Bulletin Open/Close</u>	<u>Final Switch Settings in Response to Bulletin Open/Close</u>
<b>Component ID, Manufacturer, Type, Model, Size, Rating</b>	<b>Manufacturer, Model, Motor RPM, Output Speed (RPM)</b>					
878 A Anchor/Darling Gate 4" No. S 200 900#	Limitorque SMB-00 1700 rpm	Safety Injection Pump Cross- Connect	1452 psid/ 1452 psid			
878 B Anchor/Darling Gate 4" No. S 200 900#	Limitorque SMB-00 1750 rpm	Safety Injection Pump Cross- Connect	1452 psid/ 1452 psid			
3-843 A Anchor/Darling Gate 4" No. S350 1500#	Limitorque SMB-0 3400 rpm	Safety Injection Pump Discharge Isolation to Unit 3 Cold Legs	2485 psid/ 1548 psid			
3-843 B Anchor/Darling Gate 4" No. S350 1500#	Limitorque SMB-0 3400 rpm	Safety Injection Pump Discharge Isolation to Unit 3 Cold Legs	2485 psid/ 1548 psid			

TURKEY POINT UNITS 3 & 4  
SAFETY INJECTION SYSTEM

Data Summary

<u>Valve</u>	<u>Valve Operator</u>	<u>Valve Function</u>	<u>Design Basis AP Open/Close</u>	<u>Test AP Open/Close</u>	<u>Switch Settings Prior to Adjustments as a Result of Bulletin Open/Close</u>	<u>Final Switch Settings in Response to Bulletin Open/Close</u>
Component ID, Manufacturer, Type, Model, Size, Rating	Manufacturer, Model, Motor RPM, Output Speed (RPM)					
4-843 A Anchor/Darling Gate 4" No. S350 1500#	Limitorque SMB-0 3400 rpm	Safety Injection Pump Discharge Isolation to Unit 4 Cold Legs	2485 psid/ 1548 psid			
4-843 B Anchor/Darling Gate 4" No. S350 1500#	Limitorque SMB-0 3400 rpm	Safety Injection Pump Discharge Isolation to Unit 4 Cold Legs	2485 psid/ 1548 psid			

