



Carolina Power & Light Company

September 16, 1981

File: NG-3514(B)

Serial No.: NO-81-1523

Office of Nuclear Reactor Regulation
ATTENTION: Mr. T. A. Ippolito, Chief
Operating Reactors Branch No. 2
United States Nuclear Regulatory Commission
Washington, D.C. 20555



BRUNSWICK STEAM ELECTRIC PLANT UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324
LICENSE NOS. DPR-71 AND DPR-62
ENVIRONMENTAL QUALIFICATION OF
SAFETY-RELATED ELECTRICAL EQUIPMENT

Dear Mr. Ippolito:

Attached please find Carolina Power & Light Company's (CP&L) response to the Safety Evaluation for the Environmental Qualification of Safety-Related Electrical Equipment for the Brunswick Steam Electric Plant which was forwarded in your letter of June 3, 1981. The information contained in the Final Technical Evaluation Report (TER) forwarded by your office on July 21, 1981, was used to modify the listing of accepted equipment and forms the basis to which this response is directed.

In certain cases CP&L has been unable to determine from the SER and TER the specific basis for your findings and concerns. The attached response reaffirms CP&L's previously submitted basis for considering these particular items qualified. In some other cases, CP&L is still involved in testing programs for which results will be forthcoming in the future. Those results and a schedule for any resulting corrective actions will be forwarded to you after receipt and evaluation by CP&L. Finally, CP&L has designated other equipment for replacement and provided tentative schedules for that replacement. The tentative schedules are based on expected completion times of test programs, anticipated procurement lead times derived from extensive development of procurement specifications and scheduled unit outages.

In some cases, the proposed schedules exceed the present deadline for providing fully qualified equipment; however, CP&L is continuing to pursue a responsible, expeditious program to achieve documented environmental qualification of safety-related electrical equipment within the time and personnel constraints of scheduled refueling outages.

A048
3
111

8109220492 810916
PDR ADDCK 05000324
PDR

411 Fayetteville Street • P. O. Box 1551 • Raleigh, N. C. 27602

As stated in our letter of April 9, 1981, CP&L still believes that there are no known concerns relating to the environmental qualification of safety-related electrical equipment which would interfere with the safe, continued operation of the Brunswick Steam Electric Plant. For this reason, along with the basis for our schedules stated above, CP&L believes that our schedules are justified.

If you have any questions on this response, please contact our staff.

Yours very truly,

Ma M. D. Utley
for E. E. Utley

Executive Vice President
Power Supply and
Engineering & Construction

JJS/lr (7143)
Attachment

cc: Mr. J. Van Vliet (NRC)

BRUNSWICK STEAM ELECTRIC PLANT - UNITS NOS. 1 & 2

DOCKET NOS. 50-325/324, LICENSE NOS. DPR 71/62

RESPONSE TO THE NRC ENVIRONMENTAL QUALIFICATION OF SAFETY-RELATED ELECTRICAL
EQUIPMENT - SAFETY EVALUATION REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULA-
TION, EQUIPMENT QUALIFICATION BRANCH FOR CAROLINA POWER & LIGHT COMPANY
BRUNSWICK UNIT NOS. 1 & 2

September 1981
CAROLINA POWER & LIGHT COMPANY
RALEIGH, N. C.

SECTION I Response to the NRC Environmental Qualification of Safety-Related Electrical Equipment - Safety Evaluation Report by the Office of Nuclear Reactor Regulation Equipment Qualification Branch for Carolina Power & Light Company Brunswick Units 1 & 2, Docket No. 50-325/324.

1.0 Introduction

Carolina Power & Light Company (CP&L) has reviewed the Safety Evaluation Report (SER) issued by the NRC Office of Nuclear Reactor Regulation Equipment Qualification Branch, and transmitted by NRC letter dated June 3, 1981, and submits this response within the prescribed 90-day period stating our positions, critiques, and actions to be taken in meeting the requirements of NRC IE Bulletin 79-01B and subsequent revisions. The basis for our evaluations to date are the DOR Guidelines as applied to an operating license (OL) plant and limited to electrical equipment in the harsh environments as defined within the DOR Guidelines and subsequent revisions.

The format of our response is as follows:

Section I - Response to the NRC Evaluation

Follows the issued SER paragraph numbering and titling which requested additional information or solicited some position by CP&L.

Section II - Revised System Component Evaluation Work Sheets (SCEWS)

Section III - Proposed Corrective Actions for Outstanding Items

Identifies items which will either be replaced, tested, or other means used to establish equipment qualification.

Section IV - Justification for Continued Operation.

Reiterates CP&L's original position and NRC's acceptance concerning continued operation of Brunswick Units 1 & 2 during the continued efforts being expended to meet NRC IE Bulletin 79-01B, its revisions, and existing licensing orders pertaining to equipment qualification.

2.0 Background

This SER paragraph and subparagraphs provide information only and require no response.

3.0 Staff Evaluation

This SER paragraph provides information only and requires no response.

3.0 Staff Evaluation (Cont'd)

3.1 Completeness of Safety-Related Equipment

We have re-listed all systems which contain safety-related devices including those which are outside the harsh environment. This list is included as Enclosure 1, Safety-Related Systems List (Revised). It should be noted that a system listed in Enclosure 1 could contain as few as one safety-related device.

At present, CP&L is developing new Emergency Instructions incorporating TMI emergency guidelines as part of a TMI action item requirement. These new instructions are scheduled for 1982 implementation. When reviewed and accepted for plant operational use, they will be reviewed for components and display instrumentation within plant harsh environment. If new instrumentation is required to meet these emergency procedures or if additional instrumentation is referenced by these procedures, a list will be compiled and System Component Evaluation Work Sheets (SCEWS) provided to the NRC. It is anticipated that this work effort can be completed by the date finally adopted by the NRC for full compliance with IE Bulletin 79-01B.

3.3 Temperature Pressure and Humidity Conditions Inside Containment

Within SER, paragraph 3.3, CP&L was requested "... to verify, that the LOCA design profile was used for equipment qualification purposes."

Except where otherwise noted in our November 1, 1980 submittal, the LOCA Design Profile was used for Equipment Qualification purposes.

3.5 Submergence

The potential for loss of safety-related equipment due to flooding in the Reactor Building was included in the original Plant Design Review. Additionally, in order to reduce the potential for pipe ruptures, all 8" and larger piping within the Reactor Building was designed and supported to withstand a seismic event.

In the highly unlikely event of a crack or rupture in piping at an elevation above the Reactor Building basement, damaging water accumulation will not occur due to the stairwells and floor openings which will allow gravity drainage to the basement. The Reactor Building basement is divided into separate compartments each containing one train of safety equipment. This compartmentalization precludes flooding of redundant trains due to a large pipe break in the basement.

CP&L feels that potential for loss of plant safety due to flooding of safety-related equipment was sufficiently addressed in the original design.

3.5 Submergence (Cont'd)

For the reasons stated above, CP&L does not feel that submergence is a credible issue for qualification of equipment in the Brunswick reactor buildings.

3.7 Aging

CP&L's general concept with respect to the aging issue is as follows:

By 12-31-82 we will establish a qualified life for each device and identify the component(s) which limits the qualified life. This will be accomplished by review of Test Reports, Material Data and other available industry data (EPRI, etc.).

This qualified life list will form a baseline to be integrated into the inspection and replacement program. This revised program will require inspection/replacement of the subject components at intervals as defined by the data base qualified life list subject to such flexibility as is determined necessary to enable the use of scheduled outages for replacement work.

The details of the program implementation have yet to be determined and therefore it is impossible to assess at this time the magnitude of these changes to plant procedures, practices and maintenance programs. CP&L is deferring any commitment to implementing this program by the date established by the NRC until after the Commission rules on the staff's 7/31/81 recommendation for extension of the deadline for completing action on IEB-79-01B. CP&L will advise the NRC within thirty days after the Commission's action on the staff's recommendation whether the program can be completed by the deadline the Commission sets forth. If CP&L feels that compliance with this deadline is not practical, we will pursue this conflict as an issue in the hearing requested by our letters of June 17 and June 26, 1981.

In the interim between the list development and program implementation any items found to be at or near the end of their qualified life will be separately analyzed and dealt with accordingly.

Enclosure 2, Comparison of Equipment and Materials Identified in DOR Guidelines, Appendix C, is a list of materials and their uses requested as an addition to Appendix C of the DOR Guidelines. Threshold values of radiation susceptibility which will be developed within the above program will be transmitted when available.

4.0 Qualification of Equipment

The Brunswick #1 & #2 SER for Environmental Qualification of Safety-Related Electrical Equipment, dated June 3, 1981, separated master list hardware into three (3) categories: First, equipment requiring immediate corrective action (Appendix A); Second, equipment requiring additional qualification information and/or corrective action (Appendix B); Third, equipment considered acceptable (Appendix C). Descriptive NRC evaluation within each category was addressed in SER sections 4.1, 4.2, and 4.3 respectively.

4.1 Equipment Requiring Immediate Corrective Action (Appendix A)

Brunswick had no equipment in this category.

4.2 Equipment Requiring Additional Information and/or Corrective Action (Appendix B)

and

4.3 Equipment Considered Acceptable or Conditionally Acceptable (Appendix C)

The component list set forth in Appendix B of the SER was developed from a draft Technical Evaluation Report of Brunswick IEB-79-01B 90 Day submittal. CP&L strongly objects to the use of a draft TER to develop a Safety Evaluation Report. After receipt of the final TER in July, CP&L compared that list of equipment qualification deficiencies against Appendix B of the SER and found substantial differences. This comparison results in a number of components being deleted from Appendix B of the SER and added to Appendix C (listing of components considered acceptable). CP&L has enclosed Enclosure 3, Items Determined Fully Qualified Per Final TER - Equipment Environmental Qualification, which lists the Appendix B deletions and total Appendix C listing based on our review of the final TER. No conditional deficiencies are noted for these items, therefore, no updating of work sheets will be performed.

The remaining items within Appendix B are addressed within Section III, Proposed Corrective Actions for Outstanding Items. They are divided into three (3) major categories. One, items which will be replaced due to lack of sufficient environmental qualification data or marginal test parameter value comparisons. Two, items which are to undergo tests to demonstrate their qualification per Brunswick accident parameters, and three, items which have been reviewed and are considered qualified based on already existing documentation and/or analysis.

SECTION II Revised System Component Evaluation Work Sheets (SCEWS)

Due to the large number of planned replacement items as listed within Section III of this response, there is no intent to submit revised System Component Evaluation Work Sheets (SCEWS) concerning these items. Purchase specifications are currently being written for replacement items, which include the requirement for full environmental qualification documentation. When evaluated and accepted as replacements, new SCEWS will be generated and submitted to the NRC. Also, at this time, the deficiency listings of Appendix B associated with these items will not be addressed.

Review of initially submitted SCEWS for the 480V Splice/Termination indicated a need to submit a clarified copy. The enclosed SCEWS sheet should be utilized in lieu of our original submittal.

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REFERENCE | | QUALIFICATION METHOD | OUTSTANDING ITEMS |
|---|-----------------------|-----------------|--------------------|-------------------------|---------------|----------------------|-------------------|
| | PARAMETER | SPECIFICATION | QUALIFICATION | SPECIFICATION | QUALIFICATION | | |
| SYSTEM: Common Components PLANT ID. NO. 480 V Splice 480 V Term COMPONENT: Power Cable Splice Power Cable Termination MANUFACTURE: Burndy Okonite - T95 MODEL NO. Okonite No. 35 FUNCTION: Cable Connection ACCURACY: N/A SPEC: DEMON: SERVICE: MCC Feeders LOCATION: Outside Containment | OPERATING TIME | Long | 100 DAYS | | 83 | SIMUL. TEST | NONE |
| | TEMPERATURE (°F) | E | AN | 41 | 83 | SIMUL. TEST | NONE |
| | PRESSURE (PSIA) | F | AO | 41 | 83 | SIMUL. TEST | NONE |
| | RELATIVE HUMIDITY (%) | 100 | 100 | 41 | 83 | SIMUL. TEST | NONE |
| | CHEMICAL SPRAY | NO | BORIC ACID NaOH | - | 83 | SIMUL. TEST | NONE |
| | RADIATION (RADS) | 1×10^5 | 2×10^8 | 40 | 83 | SEQUEN. TEST | NONE |
| | AGING | | 40 Years | | 83 | SEQUEN. TEST | NONE |
| FLOOD LEVEL ELEV.: N/A ABOVE FLOOD LEVEL: YES NO | SUBMERG. | N/A | | N/A | | | NONE |

Safety Category: Essential Passive

SECTION III Proposed Corrective Actions for Outstanding Items

General

1. Continued search for, and review of, environmental qualification data available on 79-01B master list items has resulted in designating for replacement various hardware either in entirety or part. To minimize the listing within this Section, the item grouping found within the BSEP Final TER will be used to identify the proposed replacement items. A marked up Appendix B representing replacement items is included as part of Enclosure 3.
2. Over the past year, CP&L and United Engineers and Constructors (our A/E) have been developing equipment specifications (19) for replacement equipment. Most of these specifications are now in the review cycle and a few are out for inquiry. Initial deliveries are expected in 1st or 2nd quarter, 1982.

The equipment replacements discussed in this enclosure are targeted to begin in 2nd quarter 1982 as the parts become available. The refueling outages referred to for reload 4 for Unit 1 and reload 5 for Unit 2 are tentatively the completion dates for the extended period of replacement work and are tentatively scheduled for:

Unit 1 - 2/84 - 4/84*
Unit 2 - 8/83 - 12/83*

*Note: time periods subject to change based on unplanned events or requirements.

3. Additionally, items scheduled for evaluation testing are identified by TER item number and plans for accomplishment of test are stated to the extent known. A marked up Appendix B representing items to be tested is included as part of Enclosure 3.
4. This statement applies to all testing referred to in this section (except MCC testing).

CP&L is currently in consultation with our A/E, United Engineers & Constructors, and Franklin Institute Research Laboratories to develop test procedures and schedules to test this equipment. Final test results are tentatively expected in 3rd quarter, 1982. When a firm schedule is known, it will be forwarded per your letter of October 1, 1980.

5. Items which have been reviewed and are either sustained as qualified or have other dispensations are also identified by TER item number.

Listed below is equipment to be replaced at Units #1 & #2. Replacements to be completed by the end of refueling outages for reload no. 4 for Unit #1 and for reload no. 5 for Unit #2.

| <u>TER Item No.</u> | <u>Equipment Description</u> | <u>Remarks</u> |
|---------------------|--|-------------------------------|
| 2 | ASCO, Solenoid Valve HB-8302C25RV HT-8320A70 | Replace all of these types |

| TER Item No. | Equipment Description | Remarks |
|--------------|--|---|
| 5A | NUCLEAR MEASUREMENT Corp., H ₂ /O ₂ Analyzer | To be replaced as part of post-TMI modifications. To be Completed by end of 1982. |
| 5B | NUCLEAR MEASUREMENT Corp., Radiation Analyzer | Assessment required to determine actual installation cycle, NRC to be advised. |
| 7 | BAILEY, Level Transmitter BQ 15222 | |
| 9 | BAILEY, Pressure Transmitter KQ 123, KQ 12C | |
| 11 | ASCO, Solenoid Valve WPHT 8321 A1 HT 8321A6 HT 8342A4 HT 8262C71 HT 8321A6 8262D23 8302C26RU HT 8316B15 HB 8302C5U 8302C260 HT 8211 B33 vlv w/ 8302C26RV HT 80143 sol. HT 832322 HT 8316C37 HT 80033 HT 80034 | |
| 12 | PYCO, 100 ohm Platinum RTD | |
| 15 | GE, Radiation Detectors 194 X 927G | |
| 20C | GE, Relay CR 120A08002AA | |
| 26 | GE, Flow Transmitters 50-555111BDAA3PDH | |
| 27 | ROBERTSHAW, Level Switch SL-205-A2-R11-B11-1 | |
| 29 | FENWAL, Temperature Switch 17002/40 | |
| 33 | GE, Pressure Transmitter 5520 32HKZZ2 | |

| <u>TER Item No.</u> | <u>Equipment Description</u> | <u>Remarks</u> |
|---------------------|--|--|
| 40 | GE, Control Switch CR 2940 BM204A | |
| 42 | BAILEY, Flow Transmitter BQ 13221 | |
| 44 | AGASTAT, Timer Relay 7022AC | |
| 45 | JOHNSON SERVICES Solenoid Valve V-24-2 | |
| 46 | JOHNSON SERVICES Temperature Switch A 19AAC9 | |
| 47 | JOHNSON SERVICES Position Switch D-251-595 | |
| 49 | AMP Special Industries PIDG-Nylon & Plastigrip Terminal Lugs | Items 49 located inside the drywell and items 68 located in the drywell will be replaced as described under terminal block and terminal lugs (items 51, 53). |
| 68 | PENNWALT CORP. Heat Shrink Insulation | |
| 55 | PYLE-NATIONAL Connector NS2 | |

Listed below are items scheduled for evaluation testing. Final TER item number listing is used to identify these equipments. Testing performed to Reactor Building environment.

| <u>TER Item No.</u> | <u>Equipment Description</u> | <u>Remarks</u> |
|---------------------|--|---|
| 10A,B | HONEYWELL, Limit Switch, OP-AR, OPD-AR | No firm testing schedule is available at this time. NRC will be informed when schedule is available per your letter of 10-1-80. |
| 11 | ASCO, Solenoid Valve, HV180-414, JV 182-084 | Due to large number of these models installed at BSEP, testing will be performed for evaluation purposes rather than replacement. No firm testing schedule is available at this time. NRC will be informed when schedule is available per your letter of 10-1-81. |

| <u>TER Item No.</u> | <u>Equipment Description</u> | <u>Remarks</u> |
|---------------------|---|---|
| 19 | GE, Motor Control Center, IC7700 | CP&L is currently in consultation with our A/E, United Engineers & Constructors and Franklin Institute Research Laboratories to develop a test procedure and schedule to test this equipment. The test specification is in final A/E review and awaiting CP&L review. The tentative schedule indicates that final results will be available in 3rd quarter, 1982. When the test schedule is finalized, NRC will be informed per your letter of 10-1-80. |
| 51 | CURTIS, Terminal Block, Type L | |
| 53 | GE, Terminal Block, EB5, EB25 CR 151D30 | No firm testing schedule is available at this time. NRC will be informed when schedule is available per your letter of 10-1-80. To be tested for use outside drywell. |
| 49 | AMP SPECIAL INDUSTRIES PIDG-Nylon and Plastigrip Terminal Lugs. | To be tested for use outside drywell. |

Items reviewed and considered qualified based on documentation and/or analysis as submitted within CP&L prior IE Bulletin 79-01B responses. Final TER item number listing is used to identify the equipments.

| <u>TER Item No.</u> | <u>Equipment Description</u> | <u>Remarks</u> |
|---------------------|--|--|
| 1 | HONEYWELL, Selector Switch PTSHE 202C-B97 PTKBC 2221CCC PTKBC 221CCB99 PTKBC 22211CCF9 PTSHA 202F - B52 | Considered qualified per review of SCEWS referenced documentation and/or analysis. |

| TER Item No. | Equipment Description | Remarks |
|--------------|---|--|
| 3,24 | BARTON, Pressure Switch 288A, 289A, 288, 289 | Final TER §4.2.26 states that the type 288 and 288A switches are satisfactory. Our Nov. 1, 1980 submittal shows by test and analysis that type 288A and type 289A switches (and therefore 288 and 289) are qualified for the environment in which they must function with five exceptions. Those five items will be replaced by the end of the refueling outages for reload 4 for Unit 1 and reload 5 for Unit 2. |
| 13 | BETTIS, Limit Switch, RX-341, RX-41 | Considered qualified per review of SCEWS referenced documentation and/or analysis. |
| 20 A,B | GE, Relay CR2811A217Y, CR2810A14 (CR2810A14AT/AC/AK2, CR2811A217Y51) | Items CR2811A217Y and CR2810A14 are generic to items CR2811A217Y51 and CR2810A14AT/AC/AK2 which are acceptable per final TER §4.2.8, therefore, these items are all considered acceptable. |
| 38 | MAGNETROL, Level Switches 5.0-751 | As per CP&L's Nov. 1, 1980 submittal these switches are qualified by type test for all parameters except radiation and a pressure spike of 1 psig. It is CP&L's assessment that these units can withstand a 1 psig pressure spike. The radiation exposure during the test of this unit was 4.4×10^4 rads integrated dose, the required dosage is 1×10^5 rads. It is CP&L's assessment that the materials contained in these units can withstand 1×10^5 rads integrated dose. Therefore, CP&L considers the equipment to be qualified. |
| 39 | GE, Fuse Panel | Refer to CP&L BSEP 90-day response dated Nov. 1, 1980 for analysis. |
| 48 | RELIANCE, Motor, 256T | Considered qualified per review of SCEWS referenced documentation and/or analysis. |

| <u>TER Item No.</u> | <u>Equipment Description</u> | <u>Remarks</u> |
|---------------------|--|--|
| 62 | OKONITE, Power Cable 1000 - 5000 V 4/0 AWG, 2/C #8 4/C #10, 4/C #6 3/C 250, 7/C 250 3/C 500 | As per our Nov. 1, 1980 submittal and final TER 24.2.20. This item is qualified. |
| 67 | BURNDY, OKONITE Cable Splice & Termination | The System Component Evaluation Worksheet contained clerical errors in the qualification environment and documentation columns. A corrected sheet is included in Section II. |

Items remaining which are undergoing programs to establish qualification. Final TER item number listing is used to identify these equipments.

| <u>TER Item No.</u> | <u>Equipment Description</u> | <u>Remarks</u> |
|---------------------|-----------------------------------|--|
| 14 M,N,O | LIMITORQUE, Motor Operator SMB | CP&L is currently pursuing obtaining qualification information on certain of our Limitorque valves. We intend to continue in this effort, either through the UEQ-BWR Owners' Group or unilaterally to satisfy ourselves as to their adequacy. We will forward this information to NRC as it becomes available. |
| 18 A,B | | |
| 34 | AVCO, Solenoid Valve | Refer to the discussion in our November 1, 1980 submittal. The test report(s) for the equipment installed per corrective action of the referenced LER's (2-80-46, 2-80-47) have been forwarded to our A/E, United Engineers & Constructors, for technical review. Updated System Component Work Sheets that result will be submitted by June 30, 1982. |

| TER Item No. | Equipment Description | Remarks |
|--------------|--|--|
| 25 | TUTHILL, Motor CD 259AT (pump drive) | This item is an auxiliary oil pump motor manufactured by <u>Tuthill</u> as part of the HPCI pump drive. Concerning this item, we refer you to the discussion contained within our Nov. 1, 1980 submittal. |
| 51,53 | GE, Terminal Blocks EB5, EB25, CR 151D30 CURTIS Terminal Blocks L | The blocks that are located inside the primary containment (drywell) will have the safety-related circuits spliced or otherwise protected in a qualified manner. We are currently developing modification requirements to accomplish this. Due to manpower and scheduling constraints, it is estimated that 4 to 6 penetration boxes could be completed in a 10-week outage. This estimate is based on a detailed analysis of work/time requirements to splice safety circuits associated with a typical penetration, including time required to isolate, restore and test associated power supplies and equipment. The number of penetrations that can be done in parallel is limited by necessity to maintain availability of appropriate channels of control and instrumentation while working on electrically isolated circuits. Current estimates for the 18 penetration boxes per unit show approximately 35 weeks of outage time. This translates, given current outage schedules, to tentative completion during the refueling outages for reload 4 for Unit 1 (1984) and reload 5 for Unit 2 (1983). CP&L intends to run an environmental test for the outside drywell harsh environment blocks, when a schedule is firm NRC will be informed as per your letter of Oct. 1, 1980. |
| 54 | AMPHENOL, Connector 48003R18-31P&S | |

SECTION IV - Justification For Continued Operation

Based upon our review of the items listed within Appendix B of the NRC issued Environmental Qualification of Safety-Related Electrical Equipment - Safety Evaluation Report, as herein reported (Section I) and noting that no deficiency resolution alters the status of the equipment covered, the concluding statement within the SER should continue to be valid:

"The staff further concludes that there is reasonable assurance of continued safe operation of this facility pending completion of these corrective actions. This conclusion is based on the following:

- (1) That there are no outstanding items which would require immediate corrective action to assure safety of plant operation.
- (2) Some of the items found deficient have been or are being replaced or relocated, thus improving the facility's capability to function following a LOCA or HELB.
- (3) The harsh environmental conditions for which this equipment must be qualified result from low-probability events; events which might reasonably be anticipated during this very limited period would lead to less demanding service conditions for this equipment".

CP&L is confident the listed and reviewed equipment will work in an accident environment; we have documented our opinion; and we intend to complete qualification, testing or equipment replacement as indicated in the preceding tabulation.

SAFETY-RELATED SYSTEMS LIST
(Revised)

Enclosure 1

| <u>System</u> | <u>System Description</u> |
|---------------|--|
| A71 | Nuclear Steam Supply Shutoff |
| BAT | Battery System |
| B21 | Nuclear Boiler |
| B32 | Reactor Coolant Recirculation |
| CAC/CAD | Containment Atmospheric Control |
| CB | Control Building (cabinets) |
| C11/C12 CRD | Control Rod Drive System |
| C41 | Standby Liquid Control System |
| C51 | Neutron Monitoring |
| C71/C72 | Reactor Protection System |
| DG | Diesel Generators |
| D12 | Process Radiation Monitoring |
| EB | Emergency Bus Control |
| E11 | Residual Heat Removal |
| E21 | Core Spray System |
| E41 | High Pressure Coolant Injection |
| E51 | Reactor Core Isolation Cooling |
| FW | Feedwater (Containment isolation valves only) |
| G31 | Reactor Water Cleanup (Containment isolation valves only) |
| G41 | Fuel Pool Cooling & Cleanup (RHR cross tie only) |
| IA | Instrument Air (portion to IAN & RNA only) |
| IAN | Non-Interruptible Instrument Air |
| MS | Main Steam (containment isolation valves) |
| NP | Nitrogen Piping (CAD & portion in RX Bldg.) |
| RIP | Reactor Instrument Penetrations |
| RNA | Reactor Non-Interruptible Air |
| RXS | Reactor Sampling (containment isolation valves only) |
| SGT | Standby Gas Treatment |

| <u>System</u> | <u>System Description</u> |
|---------------|--|
| SW | Service Water (except portion to Service Building) |
| TD | Torus Drain (containment isolation valves) |
| VA | Ventilation Air |
| ED | Electrical Distribution |

COMPARISON OF EQUIPMENT AND
MATERIALS IDENTIFIED IN
DOR GUIDELINES, APPENDIX C

Enclosure 2

| Material | Used In |
|--|------------------------|
| 1. Teflon | Solenoid Valves |
| 2. *Enamel (magnetic wire) | Solenoid Valves |
| 3. Silicone Rubber | Electrical Penetration |
| 4. *Bonding Cement | Electrical Connector |
| 5. *Scotchcast XR-5126 Epoxy | Electrical Penetration |
| 6. *Scotchcast XR-5237 Epoxy | Electrical Penetration |
| 7. *Sylguard 185 Epoxy | Electrical Penetration |
| 8. Polyplate (Polyester, Fiberglass filled) | Electrical Penetration |
| 9. *Polyform 105 | Electrical Penetration |
| 10. *Kovar | Electrical Penetration |
| 11. *Q Resin Potting Compound | Electrical Penetration |
| 12. *Ames Technical "G" Ceramic Cement | RTD |
| 13. Polyvinylidene Fluoride | Terminal Lugs |
| 14. Phenolic Glass Filled | Terminal Blocks |
| 15. Glass Reinforced Silicone Rubber | Cables, Cable Splices |
| 16. *Raychem Polyolefin | Cable Splices |
| 17. Formica | Limit Switch |
| 18. Melamine | Limit Switch |
| 19. Mineral Filled Alkyd | Limit Switch |
| 20. Polyvinyl Chloride | Limit Switch |
| 21. Phenolic Thermo-Set | Terminal Blocks |

* Denotes non-generic term

ITEMS DETERMINED FULLY QUALIFIED
PER REVISED TER -
EQUIPMENT ENVIRONMENTAL QUALIFICATION
CP&L COMPANY
BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2, UNIT 1
(PREPARED BY FRANKLIN RESEARCH CENTER)
FRC PROJECT C5417
FRC TASK 7 & 8
DATED JUNE 10, 1981

Enclosure 3

The following notes are utilized to identify the status of the SER Appendix B, Equipment Requiring Additional Information and/or Corrective Action (Category 4.2) based on this response. Items within Appendix B which were reclassified to Appendix C, Equipment Considered Acceptable or Conditionally Acceptable (Category 4.3) based on the Final TER are indicated as lined out items.

1. Items being replaced as identified within Section III.
2. Items to be tested or under qualification investigation as identified within Section III.
3. Items being upgraded to meet qualification parameters.
4. Items removed from plant.
5. Items considered qualified by re-evaluation of submitted documentation and/or analysis as identified within Section III.
6. Items handled by LER resolution.

APPENDIX B

Equipment Requiring Additional Information and/or Corrective Action (Category 4.2)

LEGEND:

Designation for Deficiency

R - Radiation
 T - Temperature
 QT - Qualification Time
 RT - Required Time
 P - Pressure
 H - Humidity
 CS - Chemical spray
 A - Material aging evaluation, replacement schedule, ongoing equipment surveillance
 S - Submergence
 M - Margin
 I - HELB evaluation outside containment not completed
 QM - Qualification method
 RPN - Equipment relocation or replacement, adequate schedule not provided
 EXN - Exempted equipment justification inadequate
 SEN - Separate effects qualification justification inadequate
 QI - Qualification information being developed
 RPS - Equipment relocation or replacement schedule provided

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|-----------------------|--------------------------|---------------|------------|
|-----------------------|--------------------------|---------------|------------|

System: Automatic Depressurization

| | | | | |
|---|-----------------|-----------------------------|-------------|------------|
| 5 | Selector Switch | Honeywell/PTSHE 202C-B97 | B21-CS-3327 | T,P,R,A,QM |
| 5 | Selector Switch | Honeywell/PTSHE 202C-B97 | B21-CS-3329 | T,P,R,A,QM |
| 5 | Selector Switch | Honeywell/PTSHE 202C-B97 | B21-CS-3412 | T,P,R,A,QM |
| 6 | Solenoid Valve | AVCO/5450-5 | B21-F013A* | A,QT |
| 6 | Solenoid Valve | AVCO/5450-5 | B21-F013B* | A,QT |

*Items have been discussed in LERs 2-80-46 and 47.

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|---|-------------------------|-----------------|
| ⑥ Solenoid Valve | AVCO/5450-5 | B21-F013C* | A,QT |
| ⑥ Solenoid Valve | AVCO/5450-5 | B21-F013D* | A,QT |
| ⑥ Solenoid Valve | AVCO/5450-5 | B21-F013E* | A,QT |
| ⑥ Solenoid Valve | AVCO/5450-5 | B21-F013F* | A,QT |
| ⑥ Solenoid Valve | AVCO/5450-5 | B21-F013G* | A,QT |
| ⑥ Solenoid Valve | AVCO/5450-5 | B21-F013H* | A,QT |
| ⑥ Solenoid Valve | AVCO/5450-5 | B21-F013J* | A,QT |
| ⑥ Solenoid Valve | AVCO/5450-5 | B21-F013K* | A,QT |
| ⑥ Solenoid Valve | AVCO/5450-5 | B21-F013L* | A,QT |
| Level Switch | Yarway/4418C | B21-LS-N031A | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N031B | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N031C | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N031D | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N042A | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N042B | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | E11-PS-N019A | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | E11-PS-N010B | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | E11-PS-N010C | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | E11-PS-N010D | A,QM |

*Items have been discussed in LERs 2-80-46 and 47.

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---|--------------------------------|---------------|------------|
| <u>System: Cont. Atmospheric Control</u> | | | |
| ① H ₂ /O ₂ Analyzer | Nuclear Measure- ment Corp. | CAC-AT-1259 | RPN |
| ① H ₂ /O ₂ Analyzer | Nuclear Measure- ment Corp. | CAC-AT-1263 | RPN |
| ① Radiation Analyzer | Nuclear Measure- ment Corp. | CAC-AT-1260 | RPN |
| ① Radiation Analyzer | Nuclear Measure- ment Corp. | CAC-AT-1262 | RPN |
| ① Radiation Analyzer | Nuclear Measure- ment Corp. | CAC-AT-1261 | RPN |
| ④ Level Indicator | EMICO/35W | CAC-LI-2601-2 | RPN |
| ④ Level Indicator | EMICO/35W | CAC-LI-2602-2 | RPN |
| ① Level Transmitter | Bailey/BQ15222 | CAC-LT-2601 | RPN |
| ① Level Transmitter | Bailey/BQ15222 | CAC-LT-2602 | RPN |
| ⑤ Pressure Switch | Barton/289A | CAC-PDS-4222 | A,P |
| ⑤ Pressure Switch | Barton/289A | CAC-PDS-4223 | A,P |
| ④ Pressure Indicator | EMICO/35W | CAC-PI-1257-1 | RPN |
| ④ Pressure Indicator | EMICO/35W | CAC-PI-2599-2 | RPN |
| ④ Pressure Indicator | EMICO/35W | CAC-PI-1257-2 | RPN |
| ① Pressure Transmitter | Bailey/KQ123 | CAC-PT-1257-1 | A,QM |
| ① Pressure Transmitter | Bailey/KQ123 | CAC-PT-2599 | A,QM |
| ① Pressure Transmitter | Bailey/KQ12C | CAC-PT-1257-1 | A,QM |
| ② Limit Switch | Honeywell Micro Sw/OP-AR | CAC-PV-1260 | T,P,A,QM |
| ② Limit Switch | Honeywell Micro Sw/OP-AR | CAC-PV-1261 | T,P,A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------------------|-----------------------------|----------------|------------|
| ② Limit Switch | Honeywell Micro Sw/OP-AR | CAC-PV-1262 | T,P,A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | CAC-PV-1260 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | CAC-PV-1261 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | CAC-PV-1262 | A,QM |
| ① Solenoid Valve | ASCO/8321A6 | CAC-SV-4222 | A,QM |
| ① Solenoid Valve | ASCO/8321A6 | CAC-SV-4223 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-1 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-2 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-3 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-4 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-5 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-6 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-7 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-8 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-9 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-10 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-11 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-12 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|-----------------------------------|-------------------------------------|----------------|------------|
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-13 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-22 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-23 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-24 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-14 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-17 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-18 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-19 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-20 | A,QM |
| ① Resistance Temperature Detector | Pyco/100-ohm Platinum | CAC-TE-1258-21 | A,QM |
| ① Solenoid Valve | ASCO/HT8321A6 | CAC-V4 | A,QM |
| ① Solenoid Valve | ASCO/HT8321A6 | CAC-V5 | A,QM |
| ① Solenoid Valve | ASCO/HT8211B33 Vlv, HT80143 Sol. | CAC-V5 | A,QM |
| ① Solenoid Valve | ASCO/HT8211B33 | CAC-V6 | A,QM |
| ① Solenoid Valve | ASCO/HB8342A4 | CAC-V6 | A,QM |
| ① Solenoid Valve | ASCO/HB8342A4 | CAC-V7 | A,QM |
| ① Solenoid Valve | ASCO/HT8321A6 | CAC-V8 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---------------------------|--------------------------------------|--------------------|---------------|
| ⑤ Limit Switch | Bettis/RX-341 | CAC-V9 | T,P,R,A,QM |
| ① Solenoid Valve | ASCO/HB8342A4 | CAC-V9 | A,QM |
| ⑤ Limit Switch | Bettis/RX-41 | CAC-V10 | T,P,R,A,QM |
| ① Solenoid Valve | ASCO/HT8321A6 | CAC-V10 | A,QM |
| ⑤ Limit Switch | Bettis/RX-341 | CAC-V15 | T,P,R,A,QM |
| ① Solenoid Valve | ASCO/HB8342A4 | CAC-V15 | A,QM |
| Motor Operator | Limiterque/ SMB-000-5 | CAC-V23 | QI |
| ② Limit Switch | Honeywell Micro Sw/OP-AR | CAC-V47 | T,P,R,A,QM |
| ① Solenoid Valve | ASCO/HB8302 C25 RU | CAC-V47 | A,QM |
| ① Solenoid Valve | ASCO/HT8262 C71 | CAC-V47 | A,QM |
| ② Limit Switch | Honeywell Micro Sw/OP-AR | CAC-V48 | T,P,R,A,QM |
| ① Solenoid Valve | ASCO/8262 D23 | CAC-V48 | A,QM |
| ① Solenoid Valve | ASCO/HB8302 C25 RU | CAC-V48 | A,QM |
| ⑤ Limit Switch | Bettis/RX-41 | CAC-V49 | T,P,R,A,QM |
| ① Solenoid Valve | ASCO/HT8316B15 | CAC-V49 | A,QM |
| ⑤ Limit Switch | Bettis/RX-41 | CAC-V50 | T,P,R,A,QM |
| ① Solenoid Valve | ASCO/HT8316B15 | CAC-V50 | A,QM |
| ② Limit Switch | Honeywell Micro Sw/OP-AR | CAC-V55 | T,P,R,A,QM |
| ① Solenoid Valve | ASCO/HB8302 C25 RU | CAC-V55 | A,QM |
| ② Limit Switch | Honeywell Micro Sw/OP-AR | CAC-V56 | T,P,R,A,QM |
| ① Solenoid Valve | ASCO/HB8302 C25 RU | CAC-V56 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|---|-------------------------|-----------------|
| ① Radiation Detector | GE/194X927G | D12-RE-N010A | RPN |
| ① Radiation Detector | GE/194X927G | D12-RE-N010B | RPN |
| <u>System: Core Spray</u> | | | |
| Level Switch | Yarway/4418C | B21-LS-N031A | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N031B | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N031C | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N031D | A,QM |
| ⑤ Pressure Switch | Barton/288 | B21-PS-N021B | P,A |
| ⑤ Pressure Switch | Barton/288 | B21-PS-N021D | P,A |
| Pressure Switch | Static O-Ring/ 12N-AA4-X10TT | E11-PS-N011A | A,QM |
| Pressure Switch | Static O-Ring/ 12N-AA4-X10TT | E11-PS-N011B | A,QM |
| Pressure Switch | Static O-Ring/ 12N-AA4-X10TT | E11-PS-N011C | A,QM |
| Pressure Switch | Static O-Ring/ 12N-AA4-X10TT | E11-PS-N011D | A,QM |
| Motor | GE/5K6346XC94A | E21-C001A | A,QM |
| Motor | GE/5K6346XC94A | E21-C001B | A,QM |
| ⑤ Flow Switch | Barton/289 | E21-FS-N006A | A,P |
| Motor Operator | Limitorque/SMB-00 | E21-F001A | QI,A |
| Motor Operator | Limitorque/SMB-00 | E21-F001B | QI,A |
| Motor Operator | Limitorque/SMB-2 | E21-F004A | QI,A |
| Motor Operator | Limitorque/SMB-2 | E21-F004B | QI,A |
| Motor Operator | Limitorque/SMB-2 | E21-F005A | QI,A |
| Motor Operator | Limitorque/SMB-2 | E21-F005B | QI,A |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|--|-------------------------|------------------|
| Motor Operator | Limiterque/SMB-1 | E21-F015A | QI |
| Motor Operator | Limiterque/SMB-1 | E21-F015B | QI |
| Motor Operator | Limiterque/SMB-000 | E21-F031A | QI |
| Motor Operator | Limiterque/SMB-000 | E21-F031B | QI |
| Motor Operator | Limiterque/ SMB-00-10 | E21-F037A | CS,QI |
| Motor Operator | Limiterque/ SMB-00-10 | E21-F037B | CS,QI |
| Pressure Switch | Static O-Ring/ 5N-AA3-X95TT | E21-PS-N008A | A,QM |
| Pressure Switch | Static O-Ring/ 5N-AA3-X95TT | E21-PS-N008B | A,QM |
| Pressure Switch | Static O-Ring/ 5N-AA3-X95TT | E21-PS-N009A | A,QM |
| Pressure Switch | Static O-Ring/ 5N-AA3-X95TT | E21-PS-N009B | A,QM |

System: Electric Distribution

| | | | | |
|---|----------------------|------------|-----------|------|
| ② | Motor Control Center | GE/IC 7700 | MCC-2XA | A,QI |
| ② | Motor Control Center | GE/IC 7700 | MCC-2XB | A,QI |
| ② | Motor Control Center | GE/IC 7700 | MCC-2XB-2 | A,QI |
| ② | Motor Control Center | GE/IC 7700 | MCC-2XC | A,QI |
| ② | Motor Control Center | GE/IC 7700 | MCC-2XD | A,QI |
| ② | Motor Control Center | GE/IC 7700 | MCC-2XDA | A,QI |
| ② | Motor Control Center | GE/IC 7700 | MCC-2XDB | A,QI |
| ② | Motor Control Center | GE/IC 7700 | MCC-2XE | A,QI |
| ② | Motor Control Center | GE/IC 7700 | MCC-2XF | A,QI |
| ② | Motor Control Center | GE/IC 7700 | MCC-2XH | A,QI |

APPENDIX B (Continued)

| | Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---|----------------------------------|------------------------------------|---------------------------|--------------------|
| ② | Motor Control Center | GE/IC 7700 | MCC-2XJ | A,QI |
| ② | Motor Control Center | GE/IC 7700 | MCC-2XK | A,QI |
| | <u>System: HPCI</u> | | | |
| ⑤ | Relay | GE/CR2811A217Y | B11-B09-RS | A,QM |
| ⑤ | Selector Switch | Honeywell Micro Sw/PTKBC2221 | B11-RS | T,P,A,R,QM |
| ⑤ | Control Switch | Honeywell Micro Sw/PTSHA201 | B11-RS1 | T,P,A,R,QM |
| ⑤ | Selector Switch | Honeywell Micro Sw/PTKBC2221CCC | B21-CS-3345 | T,P,A,R,QM |
| | Level Transmitter | Yarway/4418EC | B21-LITS-N026A | A,QM |
| | Level Transmitter | Yarway/4419EC | B21-LITS-N026B | A,QM |
| | Level Switch | Barton/288A | B21-LS-N017B | A,P |
| | Level Switch | Barton/288A | B21-LS-N017B | A,P |
| | Level Switch | Yarway/4418C | B21-LS-N031A | A,QM |
| | Level Switch | Yarway/4418C | B21-LS-N031B | A,QM |
| | Level Switch | Yarway/4418C | B21-LS-N031C | A,QM |
| | Level Switch | Yarway/4418C | B21-LS-N031D | A,QM |
| ⑥ | Steam Turbine and Auxiliaries | Terry Steam Turbine Co./CCS | E41-C002 | A,QI |
| ⑥ | Motor | Tuthill/CD259AT | E41-C002-AOP | A,QI |
| ⑤ | Flow Switch | Barton/289 | E41-FSL-N006 | A,R,P |
| ① | Flow Transmitter | GE/50-555111 BDAA3PDH | E41-FT-N008 | RPN |
| | Motor Operator | Limitorque/SMB-1 | E41-F001 | QI |
| | Motor Operator | Limitorque/SMB-1 | E41-F002 | T,CS,QI |

APPENDIX B (Continued)

| Equipment Description: | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|---|--------------------------|-------------------|
| Motor Operator | Limiterque/SMB-1 | E41-F003 | A,QI |
| Motor Operator | Limiterque/SMB-00 | E41-F004 | A,QI |
| Motor Operator | Limiterque/SMB-3 | E41-F006 | A,QI |
| Motor Operator | Limiterque/SMB-3 | E41-F007 | QI |
| Motor Operator | Limiterque/SMB-3 | E41-F008 | QI |
| Motor Operator | Limiterque/SMB-0 | E41-F012 | QI |
| Motor Operator | Limiterque/SMB-00 | E41-F041 | A,QI |
| Motor Operator | Limiterque/SMB-00 | E41-F042 | A,QI |
| Motor Operator | Limiterque/SMB-000 | E41-F059 | A,QI |
| ① Level Switch | Robertshaw/ SL-205-A2-R11-B11-1 | E41-LSH-N015A | RPN |
| ① Level Switch | Robertshaw/ SL-205-A2-R11-B11-1 | E41-LSH-N015B | RPN |
| ⑤ Pressure Switch | Barton/288 | E41-PDS-N004 | A,P |
| ⑤ Pressure Switch | Barton/288 | E41-PDS-N005 | A,P |
| ⑤ Pressure Switch | Barton/288A | E41-PS-N001A | A,P |
| ⑤ Pressure Switch | Barton/288A | E41-PS-N001B | A,P |
| ⑤ Pressure Switch | Barton/288A | E41-PS-N001C | A,P |
| ⑤ Pressure Switch | Barton/288A | E41-PS-N001D | A,P |
| Pressure Switch | Static O-Ring/ 6N-AA21-X9-SVTT | E41-PS-N010 | A,QM |
| Pressure Switch | Barksdale/ D2T-M1855 | E41-PSH-N012A | M,A,QM |
| Pressure Switch | Barksdale/ D2T-M1855 | E41-PSH-N012C | M,A,QM |
| Pressure Switch | Barksdale/ D2T-M1855 | E41-PSH-N012B | M,A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|--------------------------------------|--------------------------|--------------------|
| Pressure Switch | Barksdale/ D2T-M34055 | E41-PSH-N012D | M,A,QM |
| Pressure Switch | Barksdale/ PIH-M34055 | E41-PSH-N017A | A,QM |
| Pressure Switch | Barksdale/ PIH-M34055 | E41-PSH-N017B | A,QM |
| Pressure Switch | Barksdale/ PIH-M34055 | E41-PSH-N027 | A,QM |
| ① Temperature Switch | Fenwall/17002-40 | E41-TS-3314 | A,QM |
| ① Temperature Switch | Fenwall/17002-40 | E41-TS-3315 | A,QM |
| ① Temperature Switch | Fenwall/17002-40 | E41-TS-3316 | A,QM |
| ① Temperature Switch | Fenwall/17002-40 | E41-TS-3317 | A,QM |
| ① Temperature Switch | Fenwall/17002-40 | E41-TS-3318 | A,QM |
| ① Temperature Switch | Fenwall/17002-40 | E41-TS-3354 | A,QM |
| ① Temperature Switch | Fenwall/17002-40 | E41-TS-3448 | A,QM |
| ① Temperature Switch | Fenwall/17002-40 | E41-TS-3489 | A,QM |
| <u>System: NSSS</u> | | | |
| ① Solenoid Valve | ASCO/HB8302 C25 RU | B21-F003 | A,QM |
| ① Solenoid Valve | ASCO/HB8302 C25 RU | B21-F004 | A,QM |
| Motor Operator | Limitorque/SMB-00 | B21-F016 | T,QI |
| Motor Operator | Limitorque/SMB-00 | B21-F019 | A,QI |
| Limit Switch | NAMCO/EA740-80100 | B21-F022A | A,QM,CS |
| ① Solenoid Valve | ASCO/HT-X-8320A70 | B21-F022A | A,QM,CS |
| Limit Switch | NAMCO/EA 740-80100 | B21-F022B | A,QM,CS |
| Limit Switch | NAMCO/EA 740-80100 | B21-F022C | A,QM,CS |
| Limit Switch | NAMCO/EA 740-80100 | B21-F022D | A,QM,CS |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|-------------------------|-------------------------------|-------------------------|--------------------|
| Limit Switch | NAMCO/EA 740-80100 | B21-F028A | A,QM,CS |
| Limit Switch | NAMCO/EA 740-80100 | B21-F028B | A,QM,CS |
| Limit Switch | NAMCO/EA 740-80100 | B21-F028C | A,QM,CS |
| Limit Switch | NAMCO/EA 740-80100 | B21-F028D | A,QM,CS |
| ① Solenoid Valve | ASCO/HT-X-8320A70 | B21-F022B | A,QM,CS |
| ① Solenoid Valve | ASCO/HT-X-8320A70 | B21-F022C | A,QM,CS |
| ① Solenoid Valve | ASCO/HT-X-8320A70 | B21-F022D | A,QM,CS |
| ① Solenoid Valve | ASCO/HT-X-8320A70 | B21-F028A | A,QM,CS |
| ① Solenoid Valve | ASCO/HT-X-8320A70 | B21-F028B | A,QM,CS |
| ① Solenoid Valve | ASCO/HT-X-8320A70 | B21-F028C | A,QM,CS |
| ① Solenoid Valve | ASCO/HT-X-8320A70 | B21-F028D | A,QM,CS |
| Level Switch | Yarway/4418C | B21-LS-N024A | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N024B | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N025A | A,QM |
| Level Switch | Yarway/4418C | B21-LS-N025B | A,QM |
| ⑤ Pressure Switch | Barton/288A | B21-PDS-N006A | A,P |
| ⑤ Pressure Switch | Barton/288A | B21-PDS-N006B | A,P |
| ⑤ Pressure Switch | Barton/288A | B21-PDS-N006C | A,P |
| ⑤ Pressure Switch | Barton/288A | B21-PDS-N006D | A,P |
| ⑤ Pressure Switch | Barton/288A | B21-PDS-N007A | A,P |
| ⑤ Pressure Switch | Barton/288A | B21-PDS-N007B | A,P |
| ⑤ Pressure Switch | Barton/288A | B21-PDS-N007C | A,P |
| ⑤ Pressure Switch | Barton/288A | B21-PDS-N007D | A,P |
| ⑤ Pressure Switch | Barton/288A | B21-PDS-N008A | A,P |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|--------------------------------------|---------------------------|-----------------|
| (5) Pressure Switch | Barton/288A | B21-PDS-N008B | A,P |
| (5) Pressure Switch | Barton/288A | B21-PDS-N008C | A,P |
| (5) Pressure Switch | Barton/288A | B21-PDS-N008D | A,P |
| (5) Pressure Switch | Barton/288A | B21-PDS-N009A | A,P |
| (5) Pressure Switch | Barton/288A | B21-PDS-N009B | A,P |
| (5) Pressure Switch | Barton/288A | B21-PDS-N009C | A,P |
| (5) Pressure Switch | Barton/288A | B21-PDS-N009D | A,P |
| (1) Temperature Switch | Fenwall/17002-40 | B21-TS-N010A | A,QM |
| (1) Temperature Switch | Fenwall/17002-40 | B21-TS-N010B | A,QM |
| (1) Temperature Switch | Fenwall/17002-40 | B21-TS-N010C | A,QM |
| (1) Temperature Switch | Fenwall/17002-40 | B21-TS-N010D | A,QM |
| (2) Limit Switch | Honeywell Micro Sw/OP-AR | B32-F019 | T,P,A,QM,CS |
| (2) Limit Switch | Honeywell Micro Sw/OP-AR | B32-F020 | T,P,A,QM,CS |
| (1) Solenoid Valve | ASCO/HB8302 C25 RU | B32-F019 | A,QM,CS |
| (1) Solenoid Valve | ASCO/HB8302 C25 RU | B32-F020 | A,QM,CS |
| Pressure Switch | Barksdale/ PIH-M340SS | B32-PS-N018A-1 | A,QM |
| Pressure Switch | Barksdale/ TC9622-1 | B32-PS-N018B | A,QM |
| (5) Relay | GE/CR2811A217Y | B49-BN7-RS | A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC221CCB99 | B49-RS | T,P,A,R,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTSHA202F-B52 | B49-RS1 | T,P,A,R,QM |
| Relay | GE/CR2811A217Y51 | B50-B28-RS | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---------------------------|----------------------------------|---------------------|--------------------|
| ⑤ Relay | GE/CR2811A217Y | B50-B28-RX | A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC221CCB99 | B50-RS | P,T,A,R,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTSHA202F-B52 | B50-RS1 | P,T,A,R,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC221CC | DH2-RS | P,T,A,R,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTSHA202F-B52 | DH2-RS1 | P,T,A,R,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC221CC | DH3-RS | P,T,A,R,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTSHA202F-B52 | DH3-RS1 | P,T,A,R,QM |
| ⑤ Relay | GE/CR 2810A14 | D00-RS | A,QM |
| Relay | GE/HFA51A49H | D00-RX | A,QM |
| Motor Operator | Limitorque/SMB-3 | E11-F008 | A,QI |
| Motor Operator | Limitorque/SMB-3 | E11-F009 | CS,QI |
| Motor Operator | Limitorque/SMB-00 | E11-F022 | T,CS,QI |
| Motor Operator | Limitorque/SMB-00 | E11-F023 | A,QI |
| Motor Operator | Limitorque/SMB-000 | E11-F049 | T,QI |
| ① Solenoid Valve | ASCO/8302 C26D | G16-F003 | A,QM |
| ① Solenoid Valve | ASCO/8302 C26D | G16-F004 | A,QM |
| ① Solenoid Valve | ASCO/8302 C26 RU | G16-F019 | A,QM |
| ① Solenoid Valve | ASCO/8302 C26 RU | G16-F020 | A,QM |
| ② Motor Operator | Limitorque/SMB-00 | G31-F001 | T,CS,QI |
| ② Motor Operator | Limitorque/SMB-00 | G31-F004 | A,QI |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|-------------------------------------|-------------------------|----------------|
| <u>System: RCIC</u> | | | |
| Level Switch | Barton/288A | C21-LS-N017A | A,P |
| Level Switch | Barton/288A | B21-LS-N017C | A,P |
| (5) Relay | GE/CR2811A217Y | B41-B28-RS | A,QM |
| (5) Relay | GE/CR2811A217Y | B45-BN7-RS | A,QM |
| (5) Relay | GE/CR2811A217Y | B46-B28-RS | A,QM |
| (5) Relay | GE/CR2811A217Y | B47-B28-RS | A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC221 | B41-RS | P,R,T,A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC221 | B45-RS | P,R,T,A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC221 | B46-RS | P,R,T,A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC221 | B47-RS | P,R,T,A,QM |
| (5) Control Switch | Honeywell Micro Sw/PTSHA201 | B41-RS1 | P,R,T,A,QM |
| (5) Control Switch | Honeywell Micro Sw/PTSHA201 | B45-RS1 | P,R,T,A,QM |
| (5) Control Switch | Honeywell Micro Sw/PTSHA201 | B46-RS1 | P,R,T,A,QM |
| (5) Control Switch | Honeywell Micro Sw/PTSHA201 | B47-RS1 | P,R,T,A,QM |
| (5) Relay | GE/CR2811A217Y | B43-B28-RS | A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC221CCB99 | B43-RS | P,R,T,A,QM |
| (5) Control Switch | Honeywell Micro Sw/PTSHA202F-B52 | B43-RS1 | P,R,T,A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|---------------------------------------|--------------------------|--------------------|
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221 | DS4-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-B52 | DS4-RS1 | P,R,T,A,QM |
| Motor Operator | Limiterque/SMB-00 | E51-F007 | T,CS,QI |
| Motor Operator | Limiterque/SMB-00 | E51-F008 | A,QI |
| Motor Operator | Limiterque/SMB-00 | E51-F013 | A,QI |
| Motor Operator | Limiterque/ SMB-000-5 | E51-F019 | A,QI |
| Motor Operator | Limiterque/SMB-00 | E51-F029 | QI |
| Motor Operator | Limiterque/SMB-00 | E51-F031 | T,QI |
| ⑤ Pressure Switch | Barton/288 | E51-PDS-N017 | A,P |
| ⑤ Pressure Switch | Barton/288 | E51-PDS-N018 | A,P |
| Pressure Switch | Barksdale/ P1H-M0555-V | E51-PS-N019A | A,QM |
| Pressure Switch | Barksdale/ P1H-M0555-V | E51-PS-N019B | A,QM |
| Pressure Switch | Barksdale/ P1H-M0555-V | E51-PS-N019C | A,QM |
| Pressure Switch | Barksdale/ P1H-M0555-V | E51-PS-N019D | A,QM |
| Pressure Switch | Barksdale/ B2T-M1255 | E51-PS-N020 | M,A,QM |
| Pressure Switch | Barksdale/ B2H-M15055 | E51-PSH-N009A | A,M,QM |
| Pressure Switch | Barksdale/ B2H-M15055 | E51-PSH-N009B | A,M,QM |
| Pressure Switch | Barksdale/ B2H-M15055 | E51-PSH-N012A | A,M,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/Model # | Component No. | Deficiency |
|-----------------------|----------------------|---------------|------------|
|-----------------------|----------------------|---------------|------------|

| | | | |
|----------------------------|--------------------------------------|--------------------------|-------------------|
| Pressure Switch | Barksdale/ D2H-M150SS | E51-PSH-N012B | A,M,QM |
|----------------------------|--------------------------------------|--------------------------|-------------------|

| | | | |
|----------------------------|--------------------------------------|--------------------------|-------------------|
| Pressure Switch | Barksdale/ D2H-M150SS | E51-PSH-N012C | A,M,QM |
|----------------------------|--------------------------------------|--------------------------|-------------------|

| | | | |
|----------------------------|--------------------------------------|--------------------------|-------------------|
| Pressure Switch | Barksdale/ D2H-M150SS | E51-PSH-N012D | A,M,QM |
|----------------------------|--------------------------------------|--------------------------|-------------------|

| | | | |
|----------------------|------------------|-------------|--------|
| ① Temperature Switch | Fenwall/17002-40 | E51-TS-3319 | A,M,QM |
|----------------------|------------------|-------------|--------|

| | | | |
|----------------------|------------------|-------------|--------|
| ① Temperature Switch | Fenwall/17002-40 | E51-TS-3320 | A,M,QM |
|----------------------|------------------|-------------|--------|

| | | | |
|----------------------|------------------|-------------|--------|
| ① Temperature Switch | Fenwall/17002-40 | E51-TS-3321 | A,M,QM |
|----------------------|------------------|-------------|--------|

| | | | |
|----------------------|------------------|-------------|--------|
| ① Temperature Switch | Fenwall/17002-40 | E51-TS-3322 | A,M,QM |
|----------------------|------------------|-------------|--------|

| | | | |
|----------------------|------------------|-------------|--------|
| ① Temperature Switch | Fenwall/17002-40 | E51-TS-3323 | A,M,QM |
|----------------------|------------------|-------------|--------|

| | | | |
|----------------------|------------------|-------------|--------|
| ① Temperature Switch | Fenwall/17002-40 | E51-TS-3355 | A,M,QM |
|----------------------|------------------|-------------|--------|

| | | | |
|----------------------|------------------|-------------|--------|
| ① Temperature Switch | Fenwall/17002-40 | E51-TS-3487 | A,M,QM |
|----------------------|------------------|-------------|--------|

System: RHR

| | | | |
|-------------------------|--------------------------|--------------------------|-----------------|
| Level Switch | Yarway/44187C | B21-LITS-N036 | A,QM |
|-------------------------|--------------------------|--------------------------|-----------------|

| | | | |
|-------------------------|--------------------------|--------------------------|-----------------|
| Level Switch | Yarway/4418EC | B21-LITS-N037 | A,QM |
|-------------------------|--------------------------|--------------------------|-----------------|

| | | | |
|-------------------------|-------------------------|---------------------------|-----------------|
| Level Switch | Yarway/4418C | B21-LITS-N031B | A,QM |
|-------------------------|-------------------------|---------------------------|-----------------|

| | | | |
|-------------------------|-------------------------|---------------------------|-----------------|
| Level Switch | Yarway/4418C | B21-LITS-N031D | A,QM |
|-------------------------|-------------------------|---------------------------|-----------------|

| | | | |
|----------------------------|--------------------------------|-------------------------|-------------------|
| Pressure Switch | Barksdale/B2T-M1255 | B21-PS-N021A | A,M,QM |
|----------------------------|--------------------------------|-------------------------|-------------------|

| | | | |
|----------------------------|--------------------------------|-------------------------|-------------------|
| Pressure Switch | Barksdale/B2T-M1255 | B21-PS-N021C | A,M,QM |
|----------------------------|--------------------------------|-------------------------|-------------------|

| | | | |
|-------------------|---------------|--------------|-----|
| ⑤ Pressure Switch | Barksdale/288 | B21-PS-N021B | A,P |
|-------------------|---------------|--------------|-----|

| | | | |
|-------------------|---------------|--------------|-----|
| ⑤ Pressure Switch | Barksdale/288 | B21-PS-N021D | A,P |
|-------------------|---------------|--------------|-----|

| | | | |
|------------------|------------------|-----------|---------|
| ② Motor Operator | Limitorque/SMB-3 | B32-F031A | CS,A,QI |
|------------------|------------------|-----------|---------|

| | | | |
|------------------|------------------|-----------|---------|
| ② Motor Operator | Limitorque/SMB-3 | B32-F031B | CS,A,QI |
|------------------|------------------|-----------|---------|

| | | | |
|------------------|--------------------|-----------|---------|
| ② Motor Operator | Limitorque/SMB-000 | B32-F032A | CS,A,QI |
|------------------|--------------------|-----------|---------|

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|--|-------------------------|-----------------|
| ② Motor Operator | Limitorque/SMB-000 | B32-F032B | CS,A,QI |
| ② Motor Operator | Limitorque/SMB-2 | B32-F043A | CS,A,QI |
| ② Motor Operator | Limitorque/SMB-2 | B32-F043B | CS,A,QI |
| ② Motor Operator | Limitorque/SMB-000 | B32-F044A | CS,A,QI |
| ② Motor Operator | Limitorque/SMB-000 | B32-F044B | CS,A,QI |
| Pressure Switch | Barksdale/ PIH-M340SS-V | B32-PS-N018A | A,QM |
| Pressure Switch | Barksdale/ TC-9622-1 | B32-PS-N018B | A,QM |
| Relay | GE/CR2810A14AG | DA6-3 | A,QM |
| Relay | GE/CR2810A14AG | DA6-3-1 | A,QI |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DK8-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-B52 | DK8-RS1 | P,R,T,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DK9-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-B52 | DK9-RS1 | P,R,T,A,QM |
| Relay | GE/HFA51A49H | DK9-RX | A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DL0-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-B52 | DL0-RS1 | P,R,T,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DL1-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSHA202F-B52 | DL1-RS1 | P,R,T,A,QM |
| Relay | GE/HFA51A49H | DL1-RX | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|-------------------------------------|-------------------|-----------------|
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC221CC | DL2-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSHA202F-B52 | DL2-RS1 | P,R,T,A,QM |
| Relay | GE/HFA51A49H | DL2-RX | A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DL7-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSHA202F-B52 | DL7-RS1 | P,R,T,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DL8-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-52 | DL8-RS1 | P,R,T,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DL9-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSHA202F-B52 | DL9-RS1 | P,R,T,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DM2-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-B52 | DM2-RS1 | P,R,T,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DM4-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-B52 | DM4-RS1 | P,R,T,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DM5-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-B52 | DM5-RS1 | P,R,T,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DM7-RS | P,R,T,A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---------------------------|-------------------------------------|----------------------|-----------------|
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-B52 | DM7-RS1 | P,R,T,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DM8-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-B52 | DM8-RS1 | P,R,T,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC2221CC | DN6-RS | P,R,T,A,QM |
| ⑤ Control Switch | Honeywell Micro Sw/PTSEA202F-B52 | DN6-RS1 | P,R,T,A,QM |
| ⑤ Relay | GE/CR2810A14AC2 | DP5-3 | A,QM |
| ⑤ Relay | GE/CR2810A14AC2 | DP5-3-1 | A,QM |
| Meter | GE/5K634XC95A | E11-C002A | A,QM |
| Meter | GE/5K634XC95A | E11-C002C | A,QM |
| Meter | GE/5K634XC95A | E11-C002B | A,QM |
| Meter | GE/5K634XC95A | E11-C002D | A,QM |
| Meter Operator | Limiterque/SMB-1 | E11-F003A | T,QI |
| Meter Operator | Limiterque/SMB-1 | E11-F003B | T,QI |
| Meter Operator | Limiterque/SMB-0 | E11-F004A | T,QI |
| Meter Operator | Limiterque/SMB-0 | E11-F004B | T,QI |
| Meter Operator | Limiterque/SMB-0 | E11-F004C | T,QI |
| Meter Operator | Limiterque/SMB-0 | E11-F004D | T,QI |
| Meter Operator | Limiterque/SMB-0 | E11-F006A | T,QI |
| Meter Operator | Limiterque/SMB-0 | E11-F006B | T,QI |
| Meter Operator | Limiterque/SMB-0 | E11-F006C | T,QI |
| Meter Operator | Limiterque/SMB-0 | E11-F006D | T,QI |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---------------------------|-------------------------------|----------------------|-----------------|
| Motor Operator | Limitorque/SMB-000 | E11-F007A | T,QI |
| Motor Operator | Limitorque/SMB-000 | E11-F007B | T,QI |
| Motor Operator | Limitorque/SMB-000 | E11-F011A | T,QI |
| Motor Operator | Limitorque/SMB-000 | E11-F011B | T,QI |
| Motor Operator | Limitorque/SMB-4 | E11-F015A | QI |
| Motor Operator | Limitorque/SMB-4 | E11-F015B | QI |
| Motor Operator | Limitorque/SMB-3 | E11-F016A | T,QI |
| Motor Operator | Limitorque/SMB-3 | E11-F016B | T,QI |
| Motor Operator | Limitorque/SMB-5T | E11-F017A | QI |
| Motor Operator | Limitorque/SMB-5T | E11-F017B | QI |
| Motor Operator | Limitorque/SMB-5T | E11-F020A | T,QI |
| Motor Operator | Limitorque/SMB-0 | E11-F020B | T,QI |
| Motor Operator | Limitorque/SMB-2 | E11-F021A | A,QI |
| Motor Operator | Limitorque/SMB-2 | E11-F021B | A,QI |
| Motor Operator | Limitorque/SMB-3 | E11-F024A | T,QI |
| Motor Operator | Limitorque/SMB-3 | E11-F024B | T,QI |
| Motor Operator | Limitorque/SMB-0 | E11-F027A | T,QI |
| Motor Operator | Limitorque/SMB-0 | E11-F027B | T,QI |
| Motor Operator | Limitorque/SMB-1 | E11-F028A | T,QI |
| Motor Operator | Limitorque/SMB-1 | E11-F028B | T,QI |
| Motor Operator | Limitorque/SMB-1 | E11-F047A | T,QI |
| Motor Operator | Limitorque/SMB-1 | E11-F047B | T,QI |
| Motor Operator | Limitorque/SMB-3 | E11-F048A | T,QI |
| Motor Operator | Limitorque/SMB-3 | E11-F048B | T,QI |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|---|-------------------------|-------------------|
| Motor Operator | Limiterque/SMB-00 | E11-F052A | QI |
| Motor Operator | Limiterque/SMB-00 | E11-F052B | QI |
| ① Solenoid Valve | ASCO/HB8302C5U | E11-F053A | A,QM |
| ① Solenoid Valve | ASCO/HB8302C5U | E11-F053B | A,QM |
| Motor Operator | Limiterque/ SMB-00-5 | E11-F103A | QI |
| Motor Operator | Limiterque/ SMB-00-5 | E11-F103B | QI |
| Motor Operator | Limiterque/ SMB-00-5 | E11-F104A | QI |
| Motor Operator | Limiterque/ SMB-00-5 | E11-F104B | QI |
| Motor Operator | Limiterque/ SMB-00-10 | E11-F121A | QI |
| Motor Operator | Limiterque/ SMB-00-10 | E11-F122B | QI |
| ⑤ Flow Switch | Barton/289 | E11-PDIS-N021A | R,A,P |
| ⑤ Flow Switch | Barton/289 | E11-PDIS-N021B | R,A,P |
| ① Pressure Transmitter | GE/552032HKZZ2 | E11-PDT-N002A | RPN |
| ① Pressure Transmitter | GE/552032HKZZ2 | E11-PDT-N002B | RPN |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | E11-PS-N011A | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | E11-PS-N011B | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | E11-PS-N011C | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | E11-PS-N011D | A,QM |
| Pressure Switch | Barksdale/ B2T-M1255 | E11-PS-N016A | A,M,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|---|-------------------------|-------------------|
| Pressure Switch | Barksdale/ B2T M1255 | E11-PS-N016B | A,M,QM |
| Pressure Switch | Barksdale/ B2T M1255 | E11-PS-N016C | A,M,QM |
| Pressure Switch | Barksdale/ B2T M1255 | E11-PS-N016D | A,M,QM |
| Pressure Switch | Static-O-Ring/ 12N AA4 X10TT | E11-PS-N019A | A,QM |
| Pressure Switch | Static-O-Ring/ 12N AA4 X10TT | E11-PS-N019B | A,QM |
| Pressure Switch | Static-O-Ring/ 12N AA4 X10TT | E11-PS-N019C | A,QM |
| Pressure Switch | Static-O-Ring/ 12N AA4 X10TT | E11-PS-N019D | A,QM |
| Pressure Switch | Barksdale/ PIH M34055 | E11-PS-N020A | A,M,QM |
| Pressure Switch | Barksdale/ PIH M34055 | E11-PS-N020B | A,M,QM |
| Pressure Switch | Barksdale/ PIH M34055 | E11-PS-N020C | A,M,QM |
| Pressure Switch | Barksdale/ PIH M34055 | E11-PS-N020D | A,M,QM |
| Motor Operator | Limiterque/ SMB 000 5 | E11-V35 | QI |
| Motor Operator | Limiterque/ SMB 000 5 | E11-V36 | QI |
| Motor Operator | Limiterque/ SMB 000 5 | E11-V37 | QI |
| Motor Operator | Limiterque/ SMB 000 5 | E11-V38 | QI |
| ① Pressure Transmitter | GE/551032GKZZ2 | C32-PT-N005A | RPN |
| ① Pressure Transmitter | GE/551032GKZZ2 | C32-PT-N005B | RPN |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---|--|---|------------------|
| <u>System: Reactor Instrument Penetration</u> | | | |
| Flow Switch | Magnetrol/F-521 | B21-FS-F015 A thru H, J thru N, P, R and S | A, QM |
| Flow Switch | Magnetrol/F-521 | B21-FS-F043A&B | A, QM |
| Flow Switch | Magnetrol/F-521 | B21-FS-F045A&B | A, QM |
| Flow Switch | Magnetrol/F-521 | B21-FS-F047A&B | A, QM |
| Flow Switch | Magnetrol/F-521 | B21-FS-F049A&B | A, QM |
| Flow Switch | Magnetrol/F-521 | B21-FS-F051A&B | A, QM |
| Flow Switch | Magnetrol/F-521 | B21-FS-F055 | A, QM |
| Flow Switch | Magnetrol/F-521 | B21-FS-F1227F | A, QM |
| Flow Switch | Magnetrol/F-521 | E41-FS-F024 A thru D | A, QM |
| Flow Switch | Magnetrol/F-521 | E51-FS-F044 A thru D | A, QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | B21-F014 A thru H, J thru N, P, R and S | A, QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | B21-F042A&B | A, QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | B21-F044A&B | A, QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | B21-F048A&B | A, QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | B21-F050A&B | A, QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | B21-F054 | A, QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|--|----------------------------------|-----------------|
| Position Switch | Cherry Elec Prod. Co./E23-60H | B21-PV-1227 | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | CAC-PV-1209D | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | CAC-PV-1225C | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | E11-F037 A thru D | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | E11-F043 A thru D | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | E41-F023 A thru D | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | E51-F043 A thru D | A,QM |
| ② Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1200 B | P,T,A,QM |
| ② Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1205 E | P,T,A,QM |
| ② Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1209 A&B | P,T,A,QM |
| ② Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1211F | P,T,A,QM |
| ② Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1227A | P,T,A,QM |
| ② Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1227B | P,T,A,QM |
| ② Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1227C | P,T,A,QM |
| ② Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1227E | P,T,A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | CAC-PV-1210C | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|--|-------------------------|-----------------|
| Position Switch | Cherry Elec Prod. Co./E23-60H | CAC-PV-1219B | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | CAC-PV-1219C | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | CAC-PV-1220D | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | CAC-PV-1221C | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | E41-PV-1218D | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | E41-PV-1219D | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | E41-PV-1220F | A,QM |
| Position Switch | Cherry Elec Prod. Co./E23-60H | E41-PV-1221D | A,QM |
| (2) Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1211E | T,P,A,QM |
| (2) Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1211B | T,P,A,QM |
| (2) Position Switch | Honeywell Micro Sw/OP-DAR | CAC-PV-1231B | T,P,A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC22211CCF9 | RIP-CS-1203C-2 | T,P,A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC22211CCF9 | RIP-CS-1203F-2 | T,P,A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC22211CCF9 | RIP-CS-1217A-2 | T,P,A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC22211CCF9 | RIP-CS-1217B-2 | T,P,A,QM |
| (5) Selector Switch | Honeywell Micro Sw/PTKBC22211CCF9 | RIP-CS-1217C-2 | T,P,A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|--------------------------------------|-------------------------|-----------------|
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC22211CCF9 | RIP-CS-1217D-2 | T,P,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC22211CCF9 | RIP-CS-1218C-2 | T,P,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC22211CCF9 | RIP-CS-1220C-2 | T,P,A,QM |
| ⑤ Selector Switch | Honeywell Micro Sw/PTKBC22211CCF9 | RIP-CS-1225C-2 | T,P,A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1200 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1201 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1206 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1209 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1210 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1211 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1212 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1217 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1222 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1223 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1225 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1227 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|--------------------------------------|-------------------------|-----------------|
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1228 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1229 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1218 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1219 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1220 | A,QM |
| Pressure Switch | Barksdale/ D2T-M150SS | RIP-PSL-1221 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1200A1 | A,QM |
| (1) Solenoid Valve | ASCO/WPHT8321A1 | RIP-SV-1200A2 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1201B1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1201D1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1203C1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1203F1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1205C1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1205D1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1206A1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1208B1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1208E1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1208F1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1209D1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1210A1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1210B1 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|---------------|------------|
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1210C1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1210D1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1211A1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1211B1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1211C1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1211D1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1211E1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1212A1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1212E1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1212C1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1212D1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1217A1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1217B1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1217C1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1217D1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1222A1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1222D1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1222E1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1222F1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1223A1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1225A1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1225B1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1225C1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1225D1 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|---------------|------------|
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1225E1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1225F1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1226E1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1226F1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1227F1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1228A1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1228B1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1229A1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1229B1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1229C1 | A,QM |
| (2) Solenoid Valve | ASCO/JV182-084 | RIP-SV-1229D1 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1201B2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1201D2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1203C2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1203F2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1205C2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1205D2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1205E2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1206A2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1208B2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1208E2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1208F2 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|---------------|------------|
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1209A2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1209B2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1209D2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1210A2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1210B2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1210C2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1210D2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1211A2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1211B2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1211C2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1211D2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1211E2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1211F2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1212A2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1212B2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1212C2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1212D2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1217A2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1217B2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1217C2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1217D2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1222A2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1222D2 | A,QM |
| (2) Solenoid Valve | ASCO/HV180-414 | RIP-SV-1222E2 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|---------------|------------|
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1222F2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1223A2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1225A2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1225B2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1225C2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1225D2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1225E2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1225F2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1226E2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1226F2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1227A2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1227B2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1227C2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1227E2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1227F2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1228A2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1228B2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1229A2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1229B2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1229C2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1229D2 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1205E1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1209A1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1209B1 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|---------------|------------|
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1227A1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1227B1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1227E1 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | RIP-SV-1211F1 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | RIP-SV-1227C1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1218C1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1218D1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1219B1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1219C1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1219D1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1220C1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1220D1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1221C1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1221D1 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1231B1 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1218C2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1218D2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1219C2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1219D2 | A,QM |
| ② Solenoid Valve | ASCO/HV180-414 | RIP-SV-1220C2 | A,QM |
| ② Solenoid Valve | ASCO/JV182-084 | RIP-SV-1219B2 | A,QM |

System: RPS

| | | | |
|-------------------------|------------------------------|----------------------|----------------------|
| Limit Switch | NAMCO/EA740-00100 | B21 F022A | CS, A, QM |
|-------------------------|------------------------------|----------------------|----------------------|

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|-------------------------------------|---------------------------|--------------------|
| Limit Switch | NAMCO/EA740-00100 | B21-F022B | C5,A,QM |
| Limit Switch | NAMCO/EA740-00100 | B21-F022C | C5,A,QM |
| Limit Switch | NAMCO/EA740-00100 | B21-F022D | C5,A,QM |
| Limit Switch | NAMCO/EA740-00100 | B21-F028A | A,QM |
| Limit Switch | NAMCO/EA740-00100 | B21-F028B | A,QM |
| Limit Switch | NAMCO/EA740-00100 | B21-F028C | A,QM |
| Limit Switch | NAMCO/EA740-00100 | B21-F028D | A,QM |
| Level Switch | Barton/288A | B21-25-N017A | A,P |
| Level Switch | Barton/288A | B21-25-N017B | A,P |
| Level Switch | Barton/288A | B21-25-N017C | A,P |
| Level Switch | Barton/288A | B21-25-N017D | A,P |
| Pressure Switch | Barksdale/ B2T-M1255 | B21-25-N023A | A,QM |
| Pressure Switch | Barksdale/ B2T-M1255 | B21-25-N023B | A,QM |
| Pressure Switch | Barksdale/ B2T-M1255 | B21-25-N023C | A,QM |
| Pressure Switch | Barksdale/ B2T-M1255 | B21-25-N023D | A,QM |
| ① Solenoid Valve | ASCO/HT832322 | C12-F009A | A,QM |
| ① Solenoid Valve | ASCO/HT832322 | C12-F009B | A,QM |
| ① Solenoid Valve | ASCO/HT8316C37 | C12-F110A | A,QM |
| ① Solenoid Valve | ASCO/HT8316C37 | C12-F110B | A,QM |
| ⑤ Level Switch | Magnetrol/ 5.0-751 | C12-LSH-N013A A thru D | R,A,QM |
| ⑤ Level Switch | Magnetrol/ 5.0-751 | C12-LSH-N013B | R,A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ⑤ Level Switch | Magnetrol/ 5.0-751 | C12-LSH-N013C | R,A,QM |
| ⑤ Level Switch | Magnetrol/ 5.0-751 | C12-LSH-N013D | R,A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0219 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0223 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0227 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0231 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0235 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0611 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0615 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0619 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0623 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0627 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0631 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0635 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0639 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-0643 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1007 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1011 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1015 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1019 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1023 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1027 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1031 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1035 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1039 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1043 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1047 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1407 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1411 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1415 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1419 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1423 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1427 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1431 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1435 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1439 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1443 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1447 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1803 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1807 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1811 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1815 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1819 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1823 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1827 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1831 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1835 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1839 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1843 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1847 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-1851 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2203 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2207 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2211 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2215 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2219 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2223 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2227 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2231 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2235 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2239 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2243 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2247 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2251 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2603 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2607 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2611 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2615 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2619 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2623 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2627 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2631 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2635 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2639 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2643 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2647 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-2651 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3003 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3007 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3011 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3015 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3019 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3023 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3027 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3031 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3035 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3039 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3043 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3047 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3051 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3403 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3407 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3411 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3415 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3419 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3423 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3427 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3431 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3435 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3439 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3443 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3447 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3451 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3807 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3811 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3815 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3819 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3823 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3827 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3831 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3835 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3839 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3843 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-3847 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4207 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4211 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4215 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4219 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4223 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4227 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4231 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4235 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4239 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4243 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4247 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4611 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4615 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4619 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4623 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4627 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4631 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4635 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4639 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-4643 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-5019 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-5023 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-5027 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-5031 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-117-5035 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0219 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0223 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0227 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0231 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0235 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0611 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0615 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0619 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0623 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0627 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0631 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0635 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0639 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-0643 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1007 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1011 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1015 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1019 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1023 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1027 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1031 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1035 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1039 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1043 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1047 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1407 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1411 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1415 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1419 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1423 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1427 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1431 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1435 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1439 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1443 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1447 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1803 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1807 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1811 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1815 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1819 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1823 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1827 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1831 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1835 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1839 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1843 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1847 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-1851 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2203 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2207 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2211 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2215 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2219 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2223 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2227 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2231 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2235 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2239 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2243 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2247 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2251 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2603 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2607 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2611 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2615 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2619 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2623 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2627 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2631 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2635 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2639 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2643 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2647 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-2651 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3003 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3007 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3011 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3015 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3019 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3023 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3027 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3031 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3035 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3039 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3043 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3047 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3051 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3403 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3407 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3411 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3415 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3419 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3423 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3427 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3431 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3435 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3439 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3443 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3447 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3451 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3807 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3811 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3815 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3819 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3823 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3827 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3831 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3835 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3839 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3843 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-3847 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4207 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4211 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4215 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4219 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4223 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|-----------------|------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4227 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4231 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4235 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4239 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4243 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4247 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4611 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4615 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4619 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4623 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4627 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4631 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4635 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4639 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-4643 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-5019 | A,QM |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|---|-------------------------|-----------------|
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-5023 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-5027 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-5031 | A,QM |
| ③ Solenoid Valve | ASCO/ HVA-90-405-2A | C12-SV-118-5035 | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | C72-P5-N002A | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | C72-P5-N002B | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | C72-P5-N002C | A,QM |
| Pressure Switch | Static-O-Ring/ 12N-AA4-X10TT | C72-P5-N002D | A,QM |
| ⑤ Fuse Panel | GE/None Applicable | C72-P002A | A,QM |
| ⑤ Fuse Panel | GE/None Applicable | C72-P002B | A,QM |
| ⑤ Fuse Panel | GE/None Applicable | C72-P002C | A,QM |
| ⑤ Fuse Panel | GE/None Applicable | C72-P002D | A,QM |
| ⑤ Fuse Panel | GE/None Applicable | C72-P002E | A,QM |
| ⑤ Fuse Panel | GE/None Applicable | C72-P002F | A,QM |
| ⑤ Fuse Panel | GE/None Applicable | C72-P002G | A,QM |
| ⑤ Fuse Panel | GE/None Applicable | C72-P002H | A,QM |
| <u>System: SBT</u> | | | |
| ① Relay | GE/CR120A08002AA | NG7-CR9A | RPN |
| ① Relay | GE/CR120A08002AA | NG7-CR9XA | RPN |
| ① Relay | GE/CR120A08002AA | NG8-CR9B | RPN |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|---------------------------|--------------------------|-----------------|
| ① Relay | GE/CR120A08002AA | NG8-CR9XB | RPN |
| ① Control Switch | GE/CR2940BM204A | SBGT A Cont Sta | RPN |
| ① Control Switch | GE/CR2940BM204A | SBGT B Cont Sta | RPN |
| Motor/Control | FARR Co/D51423 | SGT-FILT-2ARB | RPN |
| Motor/Control | FARR Co/D51423 | SGT-FILT-2BRB | RPN |
| Limit Switch | NAMCO/D2400X-R | 2A-BFIV-RB | A,QM |
| Limit Switch | NAMCO/D2400X-R | 2B-BFIV-RB | A,QM |
| ① Solenoid Valve | ASCO/HT80033 | 2A-BFIV-RB | A,QM |
| ① Solenoid Valve | ASCO/HT8003 | 2B-BFIV-RB | A,QM |
| ② Motor Operator | Limatorque/ SMB-000-5 | 2A-BFV-RB | QI |
| ② Motor Operator | Limatorque/ SMB-000-5 | 2B-BFV-RB | QI |
| Limit Switch | NAMCO/D2400X-R | 2C-BFIV-RB | A,QM |
| Limit Switch | NAMCO/D2400X-R | 2D-BFIV-RB | A,QM |
| ① Solenoid Valves | ASCO/HT80033 | 2C-BFIV-RB | A,QM |
| ① Solenoid Valves | ASCO/HT80033 | 2D-BFIV-RB | A,QM |
| ② Motor Operator | Limatorque/ SMB-000-5 | 2C-BFV-RB | QI |
| ② Motor Operator | Limatorque/ SMB-000-5 | 2D-BFV-RB | QI |
| ② Motor Operator | Limatorque/ SMB-000-5 | 2E-BFV-RB | QI |
| ② Motor Operator | Limatorque/ SMB-000-5 | 2F-BFV-RB | QI |
| ② Motor Operator | Limatorque/ SMB-000-5 | 2G-BFV-RB | QI |

APPENDIX B (Continued)

| Equipment : Description | Manufacturer/ Model # | Component No. | Deficiency |
|----------------------------|--------------------------|---------------|------------|
| ② Motor Operator | Limitorque/ SMB-000-5 | 2H-BFV-RB | QI |
| ② Motor Operator | Limitorque/ SMB-000-5 | 2I-BFV-RB | QI |
| ② Motor Operator | Limitorque/ SMB-000-5 | 2N-BFV-RB | QI |
| ④ Flow Indicator | EMICO/35W | VA-FI-2577 | RPN |
| ① Flow Transmitter | Bailey/BQ13221 | VA-FT-2577 | RPN |

System: SVC Water

| | | | |
|-------------------------------|--|------------------------|-----------------|
| Motor | GE/5K821161C11 | E11-C001A | A,QM |
| Motor | GE/5K821161C11 | E11-C001B | A,QM |
| Motor | GE/5K821161C11 | E11-C001C | A,QM |
| Motor | GE/5K821161C11 | E11-C001D | A,QM |
| Motor Operator | Limitorque/SMB-00 | E11-F002A | QI |
| Motor Operator | Limitorque/SMB-00 | E11-F002B | QI |
| Motor Operator | Limitorque/SMB-00 | E11-F068A | QI |
| Motor Operator | Limitorque/SMB-00 | E11-F068B | QI |
| Motor Operator | Limitorque/SMB-0 | E11-F075 | QI |
| Temperature Switch | Barksdale/ T2H-M2515-12 | SW-TSH-1109 | A,QM |
| Temperature Switch | Barksdale/ T2H-M2515-12 | SW-TSH-1110 | A,QM |
| Temperature Switch | Barksdale/ T2H-M2515-12 | SW-TSH-1111 | A,QM |
| Temperature Switch | Barksdale/ T2H-M2515-12 | SW-TSH-1112 | A,QM |
| ② Motor Operator | Limitorque/ SMB-000-5 | SW-V101 | QI |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------------|----------------------------|------------------------|-----------------|
| ② Motor Operator | Limitorque/ SMB-000-15 | SW-V102 | QI |
| ② Motor Operator | Limitorque/ SMB-000-15 | SW-V105 | QI |
| ② Motor Operator | Limitorque/ SMB-000-5 | SW-V106 | QI |
| ② Motor Operator | Limitorque/ SMB-000-5 | SW-V111 | QI |
| ② Motor Operator | Limitorque/ SMB-000-5 | SW-V117 | QI |
| ② Motor Operator | Limitorque/ SMB-000-5 | SW-V118 | QI |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V123 | A,QM |
| ① Solenoid Valve | ASCO/80034 | SW-V124 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V125 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V126 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V128 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V129 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V130 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V131 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V136 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V137 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V138 | A,QM |
| ① Solenoid Valve | ASCO/WPHT8321A1 | SW-V139 | A,QM |
| <u>System: Ventilation Air</u> | | | |
| Relay | GE/CR2810A14AK2 | DBO TS 936X | A,QM |
| ① Time Relay | Agastat/7022AC | DBO-74-17 | RPN |

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|--------------------------|--------------------------|---------------|------------|
|--------------------------|--------------------------|---------------|------------|

| | | | |
|------------------|---------------------------|---------------------|-----------------|
| Relay | GE/CR2810A14AT | DP5-936X | A,QM |
|------------------|---------------------------|---------------------|-----------------|

| | | | |
|------------|-----------------------------|------------|-----|
| ① Solenoid | Johnson Services/ V-24-2 | VA-SV-936A | RPN |
|------------|-----------------------------|------------|-----|

| | | | |
|------------|-----------------------------|------------|-----|
| ① Solenoid | Johnson Services/ V-24-2 | VA-SV-936B | RPN |
|------------|-----------------------------|------------|-----|

| | | | |
|----------------------|------------------------------|------------|-----|
| ① Temperature Switch | Johnson Services/ A19AAC9 | VA-TS-936A | RPN |
|----------------------|------------------------------|------------|-----|

| | | | |
|----------------------|------------------------------|------------|-----|
| ① Temperature Switch | Johnson Services/ A19AAC9 | VA-TS-936B | RPN |
|----------------------|------------------------------|------------|-----|

| | | | |
|----------------------|------------------------------|------------|-----|
| ① Temperature Switch | Johnson Services/ A19AAC9 | VA-TS-936C | RPN |
|----------------------|------------------------------|------------|-----|

| | | | |
|----------------------|------------------------------|------------|-----|
| ① Temperature Switch | Johnson Services/ A19AAC9 | VA-TS-936D | RPN |
|----------------------|------------------------------|------------|-----|

| | | | |
|----------------------|------------------------------|------------|-----|
| ① Temperature Switch | Johnson Services/ A19AAC9 | VA-TS-936E | RPN |
|----------------------|------------------------------|------------|-----|

| | | | |
|----------------------|------------------------------|------------|-----|
| ① Temperature Switch | Johnson Services/ A19AAC9 | VA-TS-936F | RPN |
|----------------------|------------------------------|------------|-----|

| | | | |
|-------------------|--------------------------------|------------|-----|
| ① Position Switch | Johnson Services/ D-251-595 | VA-ZS-936A | RPN |
|-------------------|--------------------------------|------------|-----|

| | | | |
|-------------------|--------------------------------|------------|-----|
| ① Position Switch | Johnson Services/ D-251-595 | VA-ZS-936B | RPN |
|-------------------|--------------------------------|------------|-----|

| | | | |
|---------|---------------|-----------|-----|
| ⑤ Motor | Reliance/256T | 2A-FCU-RB | A,P |
|---------|---------------|-----------|-----|

| | | | |
|---------|---------------|-----------|-----|
| ⑤ Motor | Reliance/256T | 2B-FCU-RB | A,P |
|---------|---------------|-----------|-----|

| | | | |
|---------|---------------|-----------|-----|
| ⑤ Motor | Reliance/256T | 2C-FCU-RB | A,P |
|---------|---------------|-----------|-----|

| | | | |
|---------|---------------|-----------|-----|
| ⑤ Motor | Reliance/256T | 2D-FCU-RB | A,P |
|---------|---------------|-----------|-----|

System: Common Components

| | | | |
|------------------|--|--------------|-----|
| ②① Terminal Lugs | AMP Spec Ind/ PIDG-Nylon & Plastic | Amp Spec Ind | RPN |
|------------------|--|--------------|-----|

| | | | |
|--------------|-----------------------------|---------|---------|
| ① Connectors | Amphenol/ 48-03R18-31P&S | General | CS,A,QM |
|--------------|-----------------------------|---------|---------|

APPENDIX B (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---|--|---------------------------------------|-----------------|
| Inst Cable | BIW/- | MA16, MC16 and TG16 | A,QM |
| Thermocouple Cable | BIW/- | XA16 & XZ16 | A,QM |
| (2) Terminal Block | Curtis/Type "L" | Curtis Type "L" | RPN |
| (2) Terminal Block | GE/CR151D30 | GE-CR151D30 | RPN |
| (2) Terminal Block | GE/EB-5 | GE/EB-5 | RPN |
| (2) Terminal Block | GE/EB-25 | GE/EB-25 | RPN |
| 4/0 AWG Cable | Okonite Co/ Okoguard-Okolon- Okoprene | AC41 and JA41 | A,QM |
| (5) Power Cable | Okonite Co/ Okonite-Okoprene | BB08,BD10,BD06, HC25,JC25,JC50 | A,QM |
| 5KV Terminations | Burndy, Okonite | 5KV Term | A,QM |
| (5) 480V Splices & Term | Burndy, Okonite | 480V Splice/Term | A,QM |
| (1)(2) Heat Shrink Insulation | Pennwalt Corp/- | KYNAR | A,QM |
| (1) Connectors | Pyle-National/NS2 | NS2 | RPN |
| Control Cable 2/C#12, 4/C#12/ 1/C#12, 1/C#14 | Rockbestos | FD12, FD12, Panel wire | A,QM |

APPENDIX C

Equipment Considered Acceptable or
Conditionally Acceptable
(Category 4.3)

LEGEND

Designation for Deficiency

- R - Radiation
- T - Temperature
- QT - Qualification Time
- RT - Required Time
- P - Pressure
- H - Humidity
- CS - Chemical spray
- A - Material aging evaluation, replacement schedule, ongoing equipment surveillance
- S - Submergence
- M - Margin
- I - HELB evaluation outside containment not completed
- QM - Qualification method
- RPN - Equipment relocation or replacement, adequate schedule not provided
- EXN - Exempted equipment justification inadequate
- SEN - Separate effects qualification justification inadequate
- QI - Qualification information being developed
- RPS - Equipment relocation or replacement schedule provided

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---------------------------|-------------------------|---------------|------------|
| <u>System: Core Spray</u> | | | |
| Pressure Switch | Barksdale/ B2T-M12SS | B21-PS-N021A | A |
| Pressure Switch | Barksdale/ B2T-M12SS | B21-PS-N021C | A |
| <u>System: HPCI</u> | | | |
| Thermocouple | Pyco/ N145C3224-P1 | E41-TE-N030A | A |
| Thermocouple | Pyco/ N145C3224-P1 | E41-TE-N030B | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N025C | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N025D | A |

APPENDIX C (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|-----------------------|--------------------------|----------------------------|------------|
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N026C | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N026D | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N027C | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N027D | A |
| <u>System: NSSS</u> | | | |
| Thermocouple | Pyco/ N145C3224-P1 | G31-TE-N016 A,B,C,D,E,F | A |
| Thermocouple | Pyco/ N145C3224-P1 | G31-TE-N022 A,B,C,D,E,F | A |
| Thermocouple | Pyco/ N145C3224-P1 | G31-TE-N023 A,B,C,D,E,F | A |
| <u>System: RCIC</u> | | | |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N021A | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N021B | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N023A | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N023B | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N025A | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N027A | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N022A | A |

APPENDIX C (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---|---|---|------------|
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N022B | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N025B | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N026A | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N026B | A |
| Thermocouple | Pyco/ N145C3224-P1 | E51-TE-N027B | A |
| <u>System: Common Components</u> | | | |
| Terminal Lugs | AMP Special Ind/ PIDG-KYNAR | AMP Special Ins | A |
| Power & Inst Cable | Cerro Wire & Cable Co./- | BD10,BD06,VD16 JG16,Panel Wire | A |
| Control Cable | Kerite Co./ 55MILS HTK(N-98), 65MILS FR(HC711) | FB12, FD12 | A |
| #8, 9, 10 & 12 AWG Cable | Raychem/Flamtrol | Various - See Licensee's Report | A |
| 1PR#16, 1TR #16 | Raychem/Flamtrol | NA16, RC16, FA26, A GA22, IA22 | A |
| Thermocouple Splices | AMP, Scotch, Raychem/ 320557, No. 70, WCSF-N | Splices | A |
| Thermocouple Cable 1PR #16 & 5PR #16 | Samuel More & Co./Dekoron E CI Wire | YA16, YC16, YE16, A XA16, XC16, XE16 | A |
| Terminal Lug | T&B/T&B Sta-Kon Lug #C10-10 | T&B Sta-Kon #C10-10 | A |

APPENDIX C (Continued)

| Equipment Description | Manufacturer/ Model # | Component No. | Deficiency |
|---------------------------------|---------------------------------|---------------------------------------|------------|
| Terminal Lug | T&B/T&B Ring Tongue #G971 | T&B#G971 | A |
| Terminal Lug | T&B/T&B Ring Tongue #54108 | T&B#54108 | A |
| Elec Pnt Assemblies | Westinghouse/ Class B, C & F | Various - See Licensee's Report | A |
| <u>System: SBT</u> | | | |
| Motor Operator | Limiterque/ SMB-000-2 | SGT-V8 | A |
| Motor Operator | Limiterque/ SMB-000-2 | SGT-V9 | A |
| <u>System: Cont Atm Control</u> | | | |
| Motor Operator | Limiterque/ SMB-000-5 | CAC-V22 | A |

AUTOMATIC DEPRESSURIZATION

| | | |
|-----------------|-----------------------------|--------------|
| Level Switch | Yarway/4418C | B21-LS-N031A |
| Level Switch | Yarway/4418C | B21-LS-N031B |
| Level Switch | Yarway/4418C | B21-LS-N031C |
| Level Switch | Yarway/4418C | B21-LS-N031D |
| Level Switch | Yarway/4418C | B21-LS-N042A |
| Level Switch | Yarway/4418C | B21-LS-N042B |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | E11-PS-N010A |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | E11-PS-N010B |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | E11-PS-N010C |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | E11-PS-N010D |

CONTAINMENT ATMOSPHERIC CONTROL

| | | |
|----------------|----------------------|---------|
| Motor Operator | Limitorque/SMB-000-5 | CAC-V23 |
|----------------|----------------------|---------|

CORE SPRAY

| | | |
|-----------------|-----------------------------|--------------|
| Level Switch | Yarway/4418C | B21-LS-N031A |
| Level Switch | Yarway/4418C | B21-LS-N031B |
| Level Switch | Yarway/4418C | B21-LS-N031C |
| Level Switch | Yarway/4418C | B21-LS-N031D |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | E11-PS-N011A |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | E11-PS-N011B |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | E11-PS-N011C |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | E11-PS-N011D |
| Motor | GE/5K6346XC94A | E21-C001A |
| Motor | GE/5K6346XC94A | E21-C001B |
| Motor Operator | Limitorque/SMB-00 | E21-F001A |
| Motor Operator | Limitorque/SMB-00 | E21-F001B |
| Motor Operator | Limitorque/SMB-2 | E21-F004A |
| Motor Operator | Limitorque/SMB-2 | E21-F004B |
| Motor Operator | Limitorque/SMB-2 | E21-F005A |
| Motor Operator | Limitorque/SMB-2 | E21-F005B |
| Motor Operator | Limitorque/SMB-1 | E21-F015A |
| Motor Operator | Limitorque/SMB-1 | E21-F015B |

CORE SPRAY (CONT'D)

| | | |
|-----------------|----------------------------|--------------|
| Motor Operator | Limitorque/SMB-000 | E21-F031A |
| Motor Operator | Limitorque/SMB-000 | E21-F031B |
| Motor Operator | Limitorque/SMB-00-10 | E21-F037A |
| Motor Operator | Limitorque/SMB-00-10 | E21-F037B |
| Pressure Switch | Static-O-Ring/5N-AA3-X9STT | E21-PS-N008A |
| Pressure Switch | Static-O-Ring/5N-AA3-X9STT | E21-PS-N008B |
| Pressure Switch | Static-O-Ring/5N-AA3-X9STT | E21-PS-N009A |
| Pressure Switch | Static-O-Ring/5N-AA3-X9STT | E21-PS-N009B |

HPCI

| | | |
|-----------------|-------------------------------|---------------|
| Level Switch | Barton/288A | B21-LS-N017B |
| Level Switch | Barton/288A | B21-LS-N017D |
| Level Switch | Yarway/4418C | B21-LS-N031A |
| Level Switch | Yarway/4418C | B21-LS-N031B |
| Level Switch | Yarway/4418C | B21-LS-N031C |
| Level Switch | Yarway/4418C | B21-LS-N031D |
| Motor Operator | Limitorque/SMB-1 | E41-F001 |
| Motor Operator | Limitorque/SMB-1 | E41-F002 |
| Motor Operator | Limitorque/SMB-1 | E41-F003 |
| Motor Operator | Limitorque/SMB-00 | E41-F004 |
| Motor Operator | Limitorque/SMB-3 | E41-F006 |
| Motor Operator | Limitorque/SMB-3 | E41-F007 |
| Motor Operator | Limitorque/SMB-3 | E41-F008 |
| Motor Operator | Limitorque/SMB-0 | E41-F012 |
| Motor Operator | Limitorque/SMB-00 | E41-F041 |
| Motor Operator | Limitorque/SMB-00 | E41-F042 |
| Motor Operator | Limitorque/SMB-000 | E41-F059 |
| Pressure Switch | Static-O-Ring/6N-AA21-X9-SVTT | E41-PS-N010 |
| Pressure Switch | Barksdale/D2T-M18SS | E41-PSH-N012A |
| Pressure Switch | Barksdale/D2T-M18SS | E41-PSH-N012C |
| Pressure Switch | Barksdale/D2T-M18SS | E41-PSH-N012B |
| Pressure Switch | Barksdale/D2T-M18SS | E41-PSH-N012D |
| Pressure Switch | Barksdale/PIH-M340SS | E41-PSH-N017A |
| Pressure Switch | Barksdale/PIH-M340SS | E41-PSH-N017B |
| Pressure Switch | Barksdale/PIH-M340SS | E41-PSH-N027 |

NSSS

| | | |
|-----------------|----------------------|----------------|
| Motor Operator | Limitorque/SMB-00 | B21-F016 |
| Motor Operator | Limitorque/SMB-00 | B21-F017 |
| Limit Switch | NAMCO/EA740-80100 | B21-F022A |
| Limit Switch | NAMCO/EA740-80100 | B21-F022B |
| Limit Switch | NAMCO/EA740-80100 | B21-F022C |
| Limit Switch | NAMCO/EA740-80100 | B21-F022D |
| Limit Switch | NAMCO/EA740-80100 | B21-F028A |
| Limit Switch | NAMCO/EA740-80100 | B21-F028B |
| Limit Switch | NAMCO/EA740-80100 | B21-F028C |
| Limit Switch | NAMCO/EA740-80100 | B21-F028D |
| Level Switch | Yarway/4418C | B21-LS-N024A |
| Level Switch | Yarway/4418C | B21-LS-N024B |
| Level Switch | Yarway/4418C | B21-LS-N025A |
| Level Switch | Yarway/4418C | B21-LS-N025B |
| Pressure Switch | Barksdale/PIH-M340SS | B32-PS-N018A-1 |
| Pressure Switch | Barksdale/TC9622-1 | B32-PS-N018B |
| Relay | GE/CR2811A217YSJ | B50-B28-RS |
| Relay | GE/HFA51A49H | DOO-RX |
| Motor Operator | Limitorque/SMB-3 | E11-F008 |
| Motor Operator | Limitorque/SMB-3 | E11-F009 |
| Motor Operator | Limitorque/SMB-00 | E11-F022 |
| Motor Operator | Limitorque/SMB-00 | E11-F023 |
| Motor Operator | Limitorque/SMB-000 | E11-F049 |

RCIC

| | | |
|----------------|----------------------|--------------|
| Level Switch | Barton/288A | B21-LS-N017A |
| Level Switch | Barton/288A | B21-LS-N017C |
| Motor Operator | Limitorque/SMB-00 | E51-F007 |
| Motor Operator | Limitorque/SMB-00 | E51-F008 |
| Motor Operator | Limitorque/SMB-00 | E51-F013 |
| Motor Operator | Limitorque/SMB-000-5 | E51-F019 |
| Motor Operator | Limitorque/SMB-00 | E51-F029 |
| Motor Operator | Limitorque/SMB-00 | E51-F031 |

RCIC (CONT'D)

| | | |
|-----------------|-----------------------|---------------|
| Pressure Switch | Barksdale/PIH-M85SS-V | E51-PS-N019A |
| Pressure Switch | Barksdale/PIH-M85SS-V | E51-PS-N019B |
| Pressure Switch | Barksdale/PIH-M85SS-V | E51-PS-N019C |
| Pressure Switch | Barksdale/PIH-M85SS-V | E51-PS-N019D |
| Pressure Switch | Barksdale/B2T-M12SS | E51-PS-N020 |
| Pressure Switch | Barksdale/D2H-M150SS | E51-PSH-N009A |
| Pressure Switch | Barksdale/D2H-M150SS | E51-PSH-N009B |
| Pressure Switch | Barksdale/D2H-M150SS | E51-PSH-N012A |
| Pressure Switch | Barksdale/D2H-M150SS | E51-PSH-N012B |
| Pressure Switch | Barksdale/D2H-M150SS | E51-PSH-N012C |
| Pressure Switch | Barksdale/D2H-M150SS | E51-PSH-N012D |

RHR

| | | |
|-----------------|---------------------|----------------|
| Level Switch | Yarway/4418EC | B21-LITS-N036 |
| Level Switch | Yarway/4418EC | B21-LITS-N037 |
| Level Switch | Yarway/4418C | B21-LITS-N031B |
| Level Switch | Yarway/4418C | B21-LITS-N031D |
| Pressure Switch | Barksdale/B2T-M12SS | B21-PS-N021A |
| Pressure Switch | Barksdale/B2T-M12SS | B21-PS-N021C |
| Relay | GE/CR2810A14AC | DA6-3 |
| Relay | GE/CR2810A14AC | DA6-3-1 |
| Relay | GE/HFA51A49H | DK9-RX |
| Relay | GE/HFA51A49H | DL1-RX |
| Relay | GE/HFA51A49H | DL2-RX |
| Motor | GE/5K634XC95A | E11-C002A |
| Motor | GE/5K634XC95A | E11-C002C |
| Motor | GE/5K634XC95A | E11-C002B |
| Motor | GE/5K634XC95A | E11-C002D |
| Motor Operator | Limitorque/SMB-1 | E11-F003A |
| Motor Operator | Limitorque/SMB-1 | E11-F003B |
| Motor Operator | Limitorque/SMB-0 | E11-F004A |
| Motor Operator | Limitorque/SMB-0 | E11-F004B |
| Motor Operator | Limitorque/SMB-0 | E11-F004C |
| Motor Operator | Limitorque/SMB-0 | E11-F004D |

RHR (CONT'D)

| | | |
|----------------|----------------------|-----------|
| Motor Operator | Límitorque/SMB-0 | E11-F006A |
| Motor Operator | Límitorque/SMB-0 | E11-F006B |
| Motor Operator | Límitorque/SMB-0 | E11-F006C |
| Motor Operator | Límitorque/SMB-0 | E11-F006D |
| Motor Operator | Límitorque/SMB-000 | E11-F007A |
| Motor Operator | Límitorque/SMB-000 | E11-F007B |
| Motor Operator | Límitorque/SMB-000 | E11-F011A |
| Motor Operator | Límitorque/SMB-000 | E11-F011B |
| Motor Operator | Límitorque/SMB-4 | E11-F015A |
| Motor Operator | Límitorque/SMB-4 | E11-F015B |
| Motor Operator | Límitorque/SMB-3 | E11-F016A |
| Motor Operator | Límitorque/SMB-3 | E11-F016B |
| Motor Operator | Límitorque/SMB-5T | E11-F017A |
| Motor Operator | Límitorque/SMB-5T | E11-F017B |
| Motor Operator | Límitorque/SMB-5T | E11-F020A |
| Motor Operator | Límitorque/SMB-0 | E11-F020B |
| Motor Operator | Límitorque/SMB-2 | E11-F021A |
| Motor Operator | Límitorque/SMB-2 | E11-F021B |
| Motor Operator | Límitorque/SMB-3 | E11-F024A |
| Motor Operator | Límitorque/SMB-3 | E11-F024B |
| Motor Operator | Límitorque/SMB-0 | E11-F027A |
| Motor Operator | Límitorque/SMB-0 | E11-F027B |
| Motor Operator | Límitorque/SMB-1 | E11-F028A |
| Motor Operator | Límitorque/SMB-1 | E11-F028B |
| Motor Operator | Límitorque/SMB-1 | E11-F047A |
| Motor Operator | Límitorque/SMB-1 | E11-F047B |
| Motor Operator | Límitorque/SMB-3 | E11-F048A |
| Motor Operator | Límitorque/SMB-3 | E11-F048B |
| Motor Operator | Límitorque/SMB-00 | E11-F052A |
| Motor Operator | Límitorque/SMB-00 | E11-F052B |
| Motor Operator | Límitorque/SMB-00-5 | E11-F103A |
| Motor Operator | Límitorque/SMB-00-5 | E11-F103B |
| Motor Operator | Límitorque/SMB-00-5 | E11-F104A |
| Motor Operator | Límitorque/SMB-00-5 | E11-F104B |
| Motor Operator | Límitorque/SMB-00-10 | E11-F122A |
| Motor Operator | Límitorque/SMB-00-10 | E11-F122B |

RHR (CONT'D)

| | | |
|-----------------|-----------------------------|---------------|
| Pressure Switch | Static-O-Ring-12N-AA4-X10TT | E11-PS-N011A |
| Pressure Switch | Static-O-Ring/12N-AA4-X10TT | E11-PS-N011B |
| Pressure Switch | Static-O-Ring/12N-AA4-X10TT | E11-PS-N011C |
| Pressure Switch | Static-O-Ring/12N-AA4-X10TT | E11-PS-N011D |
| Pressure Switch | Barksdale/B2T-M12SS | E11-PS-N016A |
| Pressure Switch | Barksdale/B2T-M12SS | E11-PS-N016B |
| Pressure Switch | Barksdale/B2T-M12SS | E11-PS-N016C |
| Pressure Switch | Barksdale/B2T-M12SS | E11-PS-N016D |
| Pressure Switch | Static-O-Ring/12N-AA4-X10TT | E11-PS-N019A |
| Pressure Switch | Static-O-Ring/12N-AA4-X10TT | E11-PS-N019B |
| Pressure Switch | Static-O-Ring/12N-AA4-X10TT | E11-PS-N019C |
| Pressure Switch | Static-O-Ring/12N-AA4-X10TT | E11-PS-N019D |
| Pressure Switch | Barksdale/PIH-M340SS | E11-PS-N020A |
| Pressure Switch | Barksdale/PIH-M340SS | E11-PS-N020B |
| Pressure Switch | Barksdale/PIH-M340SS | E11-PS-N020C |
| Pressure Switch | Barksdale/PIH-M340SS | E11-PS-N020D |
| Motor Operator | Limitorque/SMB-000-5 | E11-V35 |
| Motor Operator | Limitorque/SMB-000-5 | E11-V36 |
| Motor Operator | Limitorque/SMB-000-5 | E11-V37 |
| Motor Operator | Limitorque/SMB-000-5 | E11-V38 |
| Pressure Switch | Barksdale/PIH-M340SS-V | B-32-PS-N018A |
| Pressure Switch | Barksdale/TC-9622-1 | B-32-PS-N018B |

REACTOR INSTRUMENT PENETRATION

| | | |
|-------------|-----------------|---|
| Flow Switch | Magnetrol/F-521 | B21-FS-F015 A thru N, J thru N,P,R,S |
| Flow Switch | Magnetrol/F-521 | B21-FS-F043 A & B |
| Flow Switch | Magnetrol/F-521 | B21-FS-F045 A & B |
| Flow Switch | Magnetrol/F-521 | B21-FS-F047 A & B |
| Flow Switch | Magnetrol/F-521 | B21-FS-F049 A & B |
| Flow Switch | Magnetrol/F-521 | B21-FS-F051 A & B |
| Flow Switch | Magnetrol/F-521 | B21-FS-F055 |
| Flow Switch | Magnetrol/F-521 | B21-FS-F1227F |
| Flow Switch | Magnetrol/F-521 | E41-FS-F024 A thru D |
| Flow Switch | Magnetrol/F-521 | E51-FS-F044 A thru D |
| | | B21-F014 A thru H |

REACTOR INSTRUMENT PENETRATION (CONT'D)

| | | |
|-----------------|---------------------------------|--------------------|
| Position Switch | Cherry Elect. Prod. Co./E23-60H | J thru N, P, R & S |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | B21-F042 A & B |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | B21-F044 A & B |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | B21-F048 A & B |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | B21-F050 A & B |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | B21-F054 |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | B21-PV-1227 |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | CAC-PV-1209D |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | CAC-PV-1225C |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | E11-F037 A thru D |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | E11-F043 A thru D |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | E41-F023 A thru D |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | E51-F043 A thru D |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | CAC-PV-1218C |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | CAC-PV-1219B |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | CAC-PV-1219C |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | CAC-PV-1220D |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | CAC-PV-1221C |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | E41-PV-1218D |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | E41-PV-1219D |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | E41-PV-1220D |
| Position Switch | Cherry Elect. Prod. Co./E23-60H | E41-PV-1221D |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1200 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1201 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1206 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1209 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1210 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1211 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1212 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1217 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1222 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1223 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1225 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1227 |

REACTOR INSTRUMENT PENETRATION (CONT'D)

| | | |
|-----------------|----------------------|--------------|
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1228 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1229 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1218 |
| Pressure Switch | Barksdale/D2T M150SS | RIP-PSL-1219 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1220 |
| Pressure Switch | Barksdale/D2T-M150SS | RIP-PSL-1221 |

RPS

| | | |
|-----------------|-----------------------------|--------------|
| Limit Switch | NAMCO/EA740-80100 | B21-F022A |
| Limit Switch | NAMCO/EA740-80100 | B21-F022B |
| Limit Switch | NAMCO/EA740-80100 | B21-F022C |
| Limit Switch | NAMCO/EA740-80100 | B21-F022D |
| Limit Switch | NAMCO/EA740-80100 | B21-F028A |
| Limit Switch | NAMCO/EA740-80100 | B21-F028B |
| Limit Switch | NAMCO/EA740-80100 | B21-F028C |
| Limit Switch | NAMCO/EA740-80100 | B21-F028D |
| Level Switch | Barton/288A | B21-25-N017A |
| Level Switch | Barton/288A | B21-25-N017B |
| Level Switch | Barton/288A | B21-25-N017C |
| Level Switch | Barton/288A | B21-25-N017D |
| Pressure Switch | Barksdale/B2T-M12SS | B21-25-N023A |
| Pressure Switch | Barksdale/B2T-M12SS | B21-25-N023B |
| Pressure Switch | Barksdale/B2T-M12SS | B21-25-N023C |
| Pressure Switch | Barksdale/B2T-M12SS | B21-25-N023D |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | C72-PS-N002A |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | C72-PS-N002B |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | C72-PS-N002C |
| Pressure Switch | Static-0-Ring/12N-AA4-X10TT | C72-PS-N002D |

SGBT

| | | |
|---------------|----------------|---------------|
| Motor/Control | FARR CO/D51423 | SGT-FILT-2ARB |
| Motor/Control | FARR CO/D51423 | SGT-FILT-2BRB |
| Limit Switch | NAMCO/D2400X-R | 2A-BFIV-RB |
| Limit Switch | NAMCO/D2400X-R | 2B-BFIV-RB |
| Limit Switch | NAMCO/D2400X-R | 2C-BFIV-RB |
| Limit Switch | NAMCO/D2400X-R | 2D-BFIV-RB |

SVC WATER

| | | |
|--------------------|-------------------------------------|-------------|
| Motor | GE/5K821161C11 | E11-C001A |
| Motor | GE/5K821161C11 | E11-C001B |
| Motor | GE/5K821161C11 | E11-C001C |
| Motor | GE/5K821161C11 | E11-C001D |
| Motor Operator | Limitorque/SMB-00 | E11-F002A |
| Motor Operator | Limitorque/SMB-00 | E11-F002B |
| Motor Operator | Limitorque/SMB-00 | E11-F068A |
| Motor Operator | Limitorque/SMB-00 | E11-F068B |
| Motor Operator | Limitorque/SMB-0 | E11-F075 |
| Temperature Switch | Barksdale/T2H-M251 S -12 | SW-TSH-1109 |
| Temperature Switch | Barksdale/T2H-M251 S -12 | SW-TSH-1110 |
| Temperature Switch | Barksdale/T2H-M251 S -12 | SW-TSH-1111 |
| Temperature Switch | Barksdale/T2H-M251 S -12 | SW-TSH-1112 |

VENTILATION AIR

| | | |
|-------|-----------------|-------------|
| Relay | GE/CR2810A14AK2 | DBO-TS-936X |
| Relay | GE/CR2810A14AT | DP5-936X |

COMMON COMPONENTS

| | | |
|-----------------------|---------------------|------------------------|
| Inst. Cable | BIW/ | MA16, MC16, and TC16 |
| Thermocouple Cable | BIW/ | XA16, XE16 |
| 4/0 AWG Cable | Okonite C/Okoguard- | |
| | Okolon-Ckoprene | AC41 and IA41 |
| 5 KV Terminations | Burndy, Okonite | 5KV Term |
| Control Cable 2/C #12 | Rockbestos | FB12, FD12, Panel Wire |