



Serial: RNP-RA/02-0123
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United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

ADDITIONAL INFORMATION RELATED TO
FIRE PROTECTION IN SUPPORT OF LICENSE RENEWAL APPLICATION

Ladies and Gentlemen:

Carolina Power & Light (CP&L) Company submitted an application for renewal of the Operating License for the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, dated June 14, 2002. During a July 30, 2002, conference call between CP&L and NRC, CP&L agreed to provide additional information to support the NRC's review of the application as follows: (1) fire protection system boundary drawings for the fire water system, (2) system description information for the gaseous fire protection systems, and (3) a fire protection systems component/commodities list. This information is provided in the enclosures to this letter.

If you have any questions regarding this matter, please contact Mr. C. T. Baucom.

Sincerely,

B. L. Fletcher III
Manager - Regulatory Affairs

JSK/jsk

Enclosures:

- I. Fire Water System Boundary Drawings
- II. System Description Information for the Gaseous Fire Protection Systems
- III. Fire Protection Systems Component/Commodities List

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United States Nuclear Regulatory Commission
Enclosure I to Serial: RNP-RA/02-0123
6 Pages (Excluding cover)

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

FIRE WATER SYSTEM BOUNDARY DRAWINGS

United States Nuclear Regulatory Commission
Enclosure II to Serial: RNP-RA/02-0123
4 Pages (Excluding Cover)

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

**SYSTEM DESCRIPTION INFORMATION FOR THE
GASEOUS FIRE PROTECTION SYSTEMS**

Halon Fire Suppression System Description

The Halon 1301 fire extinguishing suppression system is an integral part of the H.B. Robinson fire protection system. It is supervised by the Fire Detection and Actuation System (FDAS). The Normal (Automatic) method of actuation is provided by a signal from the FDAS. To ensure operation of the system and provide the required redundant actuation capabilities, the system may also be manually operated at the Fire Detection and Actuation Panels or it can be manually actuated at the cylinder bank.

The Halon 1301 fire extinguishing agent is stored in specially designed cylinder assemblies. Each cylinder contains approximately 167 pounds of Halon 1301 and is pressurized with dry nitrogen to 600 psig at 70 degrees F. Most of the Halon 1301 Fire Suppression System is located on the Turbine Building - mezzanine level.

The Halon Fire Protection System for the Unit-2 Cable Spreading Room (Fire Detection Zone 19) and the Emergency Switchgear Room (Fire Detection Zone 20) is operable when a complete bank (10 cylinders, 5 instantaneous and 5 extended discharge for Fire Detection Zone 20) (4 cylinders, 2 instantaneous and 2 extended discharge for Fire Detection Zone 19) of fully charged Halon cylinders are in service.

The cylinders are divided into two distinct banks; i.e., a Main bank of cylinders in slots numbered A-1 through A-10 and a Reserve bank of cylinders in slots numbered B-1 through B-10. Either bank is sufficient to provide the required Halon concentration to extinguish a fire in either Fire Detection Zone and the Halon system would still be operational with the remaining bank of cylinders. MAIN-RESERVE switches are provided to select the appropriate cylinders for both Main and Reserve banks to maintain continuous fire protection if trouble exists in any portion of a cylinder bank. The cylinders are further divided into two separate functional banks. Cylinders in slots A-1 through A-5 are utilized to provide the fast flooding function, while cylinders in slots A-6 through A-10 provide the extended flow mode of operation. The Reserve bank (cylinder slots B-1 through B-10) is functionally identical.

The difference in the fast flooding sub-system for Fire Detection Zone 19 and 20 is the physical size of the discharge manifold, the respective selector valves and piping to the appropriate room. Fire Detection Zone 20 is much larger than Fire Detection Zone 19, consequently Fire Detection Zone 20 uses five fast flooding cylinders, a three inch (3") selector valve, and two and one-half inch (2 1/2") piping into the Emergency Switchgear Room, while Fire Detection Zone 19 requires only two fast flooding cylinders, a one and one-half inch (1 1/2") selector valve and one inch (1") piping into the Cable Spreading Room. The only

difference in the extended flow sub-system is the number of cylinders required to maintain the 5% concentration for the 30 minute soak period.

Diesel Generator CO₂ System Description

The Diesel Generator CO₂ system is located in the Auxiliary Building Hallway along the outer wall of the diesel generator rooms.

There are nineteen (19) seventy five (75) pound capacity high pressure CO₂ cylinders and two (2) fifty pound whistle alarm cylinders arranged into an "A" and "B" bank. This "A" and "B" bank configuration refers only to the diesel generator room nearest each bank of cylinders. Upon system actuation all nineteen (19) cylinders will discharge into the room containing the fire. All system controls are located adjacent to the "B" bank.

Pneumatic pressure controls operate the CO₂ system which is completely independent of all other Fire Suppression Systems, except for dampers and fans. Pneumatic pressure is used to open valves, sound a whistle alarm and to operate switches all of which in turn activate the system and related equipment.

The CO₂ system must be either automatically activated by Heat Actuated-Devices (H.A.D.) located in one of the diesel generator rooms or by manual actuation in the Auxiliary Building Hallway.

Manual actuation of the system can be either remote or direct although both occur within a few feet of each other. Remote manual actuation requires the operation of the Remote Manual Release cylinder. Direct manual actuation requires the operation of the discharge heads on cylinders B8 and B9 and the operation of either of the (Manual) Pilot Control Valves.

The Fire Detection and Actuation System (FDAS) will close the fire dampers and shutdown fans for Fire Detection Zone 1 ("B" EDG) or 2 ("A" EDG) automatically, by the activation of a single train fire detector (separate from H.A.D.'s), manual pull station, manually in the Fire Detection and Actuation Panels A-1 and B-1, or by a signal from a CO₂ system pressure switch. The FDAS cannot be used to actuate or inhibit the CO₂ system for the Diesel Generators.

Cable Vault CO₂ System Description

The CO₂ system is located in the Reactor Auxiliary Building pipe tunnel at elevation 262 feet. There are thirty six (36) seventy five (75) pound high pressure CO₂ cylinders arranged into a Main and Reserve Bank which are piped to a common manifold. There are eighteen (18) cylinders in each bank. The Main and Reserve Bank are redundant. Main and Reserve Bank cylinders one (1) through seven (7) are for the North Cable Vault. Main and Reserve Bank cylinders one (1) through eighteen (18) are for the South Cable Vault.

Therefore, discharge of CO₂ from either the Main or Reserve Bank for either the North or South Cable Vault will leave the opposite bank in a backup status once the actuation signal is reset and the "MAIN-RESERVE" selector switches are properly placed.

Electro-pneumatic controls operate the CO₂ system. The Fire Detection and Actuation System (FDAS) will automatically actuate the CO₂ system for the affected vault upon receipt of two separate fire alarm signals from the same Fire Detection Zone. Remote-Manual operation is accomplished at the Fire Detection and Actuation Panels A-1 or B-1 and the manual pull stations located outside the South Cable Vault. The system can be manually actuated at the cylinder storage area in pipe alley by operating the appropriate valves and cylinders for each vault. System (Auto, Remote Manual or Manual) actuation will cause all fire dampers in the HVAC ducting for the affected vault to close. This is to provide for the thirty (30) minute "soak" time for deep seated type fires.

United States Nuclear Regulatory Commission
Enclosure III to Serial: RNP-RA/02-0123
8 Pages (Excluding Cover)

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

FIRE PROTECTION SYSTEM COMPONENT/COMMODITIES
LIST

RNP Fire Protection Systems Component/Commodities List

System No 6185 Emergency Diesel Generator Car Dox System (CARDOX)

Commodity Type *ACM: ACCUMULATOR*

<i>Tag No</i>	<i>Description</i>
FPCD-74	DISCH DELAY DEVICE FOR DIESEL GEN A&B CARDOX

Commodity Type *COS: CONTROL SWITCH*

<i>Tag No</i>	<i>Description</i>
FPCD-77	CONROL ELEC ENABLE FOR PRESS SW FPCD-80

Commodity Type *CYL: CYLINDER*

<i>Tag No</i>	<i>Description</i>
FPCD-70	REMOTE MANUAL RELEASE FOR DIESEL GEN "B" CARDOX
FPCD-71	REMOTE MANUAL RELEASE FOR DIESEL GEN "A" CARDOX
N/A	CYLINDER

Commodity Type *FLEX-HOSE: FLEXIBLE HOSES*

<i>Tag No</i>	<i>Description</i>
N/A	FLEXIBLE HOSES

Commodity Type *HED: HEAD*

<i>Tag No</i>	<i>Description</i>
N/A	HEAD

Commodity Type *ISV: PROCESS ISOLATION/VENT/DRAIN/FILL VALVE*

<i>Tag No</i>	<i>Description</i>
FPCD-44	DIESEL GEN "B" CO2 SELECTOR VALVE
FPCD-45	DIESEL GEN "A" CO2 SELECTOR VALVE

Commodity Type *MFD: MANIFOLD*

<i>Tag No</i>	<i>Description</i>
EDG-CO2-MFD	EDG CARDOX SYSTEM CYLINDER MANIFOLD

Commodity Type *NOZ: NOZZLE*

<i>Tag No</i>	<i>Description</i>
N/A	NOZZLE

Commodity Type *ORF: ORIFICE*

<i>Tag No</i>	<i>Description</i>
N/A	ORIFICE

RNP Fire Protection Systems Component/Commodities List

System No 6185 Emergency Diesel Generator Car Dox System (CARDOX)

Commodity Type PCV: PRESSURE CONTROL VALVE

<i>Tag No</i>	<i>Description</i>
FPCD-66	DIESEL GEN "B" CARDOX PILOT CONTROL VALVE
FPCD-67	DIESEL GEN "A" CARDOX PILOT CONTROL VALVE
FPCD-72	DIESEL GEN "B" CARDOX PNEUMATIC RELEASE VALVE
FPCD-73	DIESEL GEN "A" CARDOX PNEUMATIC RELEASE VALVE
FPCD-78	DISCH HEAD FOR CYL FPCD-B8
FPCD-79	DISCH HEAD FOR CYL FPCD-B9

Commodity Type PIN: PRESSURE INSTRUMENTATION

<i>Tag No</i>	<i>Description</i>
FPCD-68A	DG ROOM "B" ZONE 1 TRAIN "A" PRESSURE SWITCH
FPCD-68B	DG ROOM "B" ZONE 1 TRAIN "B" PRESSURE SWITCH
FPCD-69A	DG ROOM "A" ZONE 2 TRAIN "A" PRESSURE SWITCH
FPCD-69B	DG ROOM "A" ZONE 2 TRAIN "B" PRESSURE SWITCH
FPCD-80	LOW CARDOX PRESS ALARM SWITCH

Commodity Type PIP-MISC: MISCELLANEOUS PIPING

<i>Tag No</i>	<i>Description</i>
N/A	MISCELLANEOUS PIPING

Commodity Type REG: REGULATOR (AIR, WATER ETC.)

<i>Tag No</i>	<i>Description</i>
FPCD-76	REGULATOR FOR PNEUMATIC RELEASE VLV

Commodity Type SRV: SAFETY/RELIEF VALVE

<i>Tag No</i>	<i>Description</i>
FPCD-75	DIESEL GEN "A" & "B" CO2 SYSTEM RELIEF

Commodity Type VNT: VENT

<i>Tag No</i>	<i>Description</i>
N/A	VENT

RNP Fire Protection Systems Component/Commodities List

System No 6195 Fire Protection CO2 System (CO2)

Commodity Type CHV: CHECK VALVE

<i>Tag No</i>	<i>Description</i>
FPCD-33	MAIN BANK Z-10 ACTUATION PREVENT CHECK
FPCD-36	RESERVE BANK Z-10 ACTUATION PREVENT CHECK
FPCD-37	CHECK VLV FOR RESERVE BANK CYL TO CABLE VAULTS
FPCD-38	CHECK VLV FOR MAIN BANK CYL TO CABLE VAULTS
FPCD-81	MAIN BANK Z-10 ACTUATION PREVENT CHECK
FPCD-82	RESERVE BANK Z-10 ACTUATION PREVENT CHECK

Commodity Type COS: CONTROL SWITCH

<i>Tag No</i>	<i>Description</i>
FPCS-1	MAIN-RESERVE SELECTOR SWITCH
FPCS-2	MAIN-RESERVE SELECTOR SWITCH

Commodity Type CYL: CYLINDER

<i>Tag No</i>	<i>Description</i>
N/A	CYLINDER

Commodity Type FLEX-HOSE: FLEXIBLE HOSES

<i>Tag No</i>	<i>Description</i>
N/A	FLEXIBLE HOSES

Commodity Type HED: HEAD

<i>Tag No</i>	<i>Description</i>
FPCD-14	PILOT OPERATED DISCH HEAD FOR FP-MCD-2 CYLINDER
FPCD-16	PILOT OPERATED DISCH HEAD FOR FP-MCD-1 CYLINDER
FPCD-18	PILOT OPERATED DISCH HEAD FOR FP-MCD-8 CYLINDER
FPCD-20	PILOT OPERATED DISCH HEAD FOR FP-MCD-9 CYLINDER
FPCD-22	PILOT OPERATED DISCH HEAD FOR FP-RCD-2 CYLINDER
FPCD-24	PILOT OPERATED DISCH HEAD FOR FP-RCD-1 CYLINDER
FPCD-26	PILOT OPERATED DISCH HEAD FOR FP-RCD-9 CYLINDER
FPCD-28	PILOT OPERATED DISCH HEAD FOR FP-RCD-8 CYLINDER
N/A	HEAD

Commodity Type ISV: PROCESS ISOLATION/VENT/DRAIN/FILL VALVE

<i>Tag No</i>	<i>Description</i>
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RNP Fire Protection Systems Component/Commodities List

System No 6195 Fire Protection CO2 System (CO2)

Commodity Type *ISV: PROCESS ISOLATION/VENT/DRAIN/FILL VALVE*

<i>Tag No</i>	<i>Description</i>
FPCD-1	CO2 TO NORTH CABLE VAULT
FPCD-10	CO2 TO SOUTH CABLE VAULT
FPCD-34	MAIN CO2 CYLINDERS BLEEDER VALVE
FPCD-35	RESERVE CO2 CYLINDERS BLEEDER VALVE
FPCD-39	CO2 TO NORTH CABLE VAULT SELECTOR VALVE
FPCD-4	CO2 TO NORTH CABLE VAULT
FPCD-40	CO2 TO NORTH CABLE VAULT SELECTOR VALVE
FPCD-41	CO2 TO SOUTH CABLE VAULT SELECTOR VALVE
FPCD-42	CO2 TO SOUTH CABLE VAULT SELECTOR VALVE
FPCD-46	RESERVE CO2 CYLINDERS BLEEDER VALVE
FPCD-47	MAIN CO2 CYLINDERS BLEEDER VALVE
FPCD-7	CO2 TO SOUTH CABLE VAULT

Commodity Type *MFD: MANIFOLD*

<i>Tag No</i>	<i>Description</i>
CABLE-VAULT-CO2-MAIN	CABLE VAULT CO2 CYLINDER MANIFOLD (MAIN)
CABLE-VAULT-CO2-RESERVE	CABLE VAULT CO2 CYLINDER MANIFOLD (RESERVE)

Commodity Type *NOZ: NOZZLE*

<i>Tag No</i>	<i>Description</i>
N/A	NOZZLE

Commodity Type *PCV: PRESSURE CONTROL VALVE*

<i>Tag No</i>	<i>Description</i>
FPCD-11	FPCD-7 PILOT CONTROL VALVE
FPCD-2	FPCD-1 PILOT CONTROL VALVE
FPCD-5	FPCD-4 PILOT CONTROL VALVE
FPCD-8	FPCD-10 PILOT CONTROL VALVE

Commodity Type *PIN: PRESSURE INSTRUMENTATION*

<i>Tag No</i>	<i>Description</i>
FPCD-A1	PRESS SW FOR CO2 TO ZONE 9
FPCD-A2	PRESS SW FOR CO2 TO ZONE 10
FPCD-B1	PRESS SW FOR CO2 TO ZONE 9

RNP Fire Protection Systems Component/Commodities List

System No 6195 Fire Protection CO2 System (CO2)

Commodity Type PIN: PRESSURE INSTRUMENTATION

<i>Tag No</i>	<i>Description</i>
FPCD-B2	PRESS SW FOR CO2 TO ZONE 10

Commodity Type PIP: PIPING

<i>Tag No</i>	<i>Description</i>
CD-MISC-PIP	MISC PIPING FOR FIRE PROTECTION CO2 SYS

Commodity Type PIP-MISC: MISCELLANEOUS PIPING

<i>Tag No</i>	<i>Description</i>
N/A	MISCELLANEOUS PIPING

Commodity Type SOV: SOLENOID VALVE

<i>Tag No</i>	<i>Description</i>
FPCD-12	SOLENOID VALVE FOR PILOT CONTROL FPCD-11
FPCD-13	SOLENOID FOR PILOT OPERATED DISCH HEAD FPCD-16
FPCD-15	SOLENOID FOR PILOT OPERATED DISCH HEAD FPCD-14
FPCD-17	SOLENOID FOR PILOT OPERATED DISCH HEAD FPCD-18
FPCD-19	SOLENOID FOR PILOT OPERATED DISCH HEAD FPCD-20
FPCD-21	SOLENOID FOR PILOT OPERATED DISCH HEAD FPCD-22
FPCD-23	SOLENOID FOR PILOT OPERATED DISCH HEAD FPCD-24
FPCD-25	SOLENOID FOR PILOT OPERATED DISCH HEAD FPCD-26
FPCD-27	SOLENOID FOR PILOT OPERATED DISCH HEAD FPCD-28
FPCD-3	SOLENOID VALVE FOR PILOT CONTROL FPCD-2
FPCD-6	SOLENOID VALVE FOR PILOT CONTROL FPCD-5
FPCD-9	SOLENOID VALVE FOR PILOT CONTROL FPCD-8

Commodity Type SRV: SAFETY/RELIEF VALVE

<i>Tag No</i>	<i>Description</i>
FPCD-29	CO2 CYL TO SOUTH CABLE VAULT RELIEF
FPCD-30	CO2 CYL TO SOUTH CABLE VAULT RELIEF
FPCD-31	CO2 CYL TO NORTH CABLE VAULT RELIEF
FPCD-32	CO2 CYL TO NORTH CABLE VAULT RELIEF

RNP Fire Protection Systems Component/Commodities List

System No 6205 Halon Supply System (HALON)

Commodity Type CHV: CHECK VALVE

<i>Tag No</i>	<i>Description</i>
FPHS-42	FAST FLOW DISCH MANIFOLD CHECK VLV
FPHS-43	FAST FLOW DISCH MANIFOLD CHECK VLV
FPHS-44	PILOT MANIFOLD CHECK VLV
FPHS-45	PILOT MANIFOLD CHECK VLV
FPHS-46	EXTENDED FLOW DISCH MANIFOLD CHECK VLV
FPHS-57	RESERVE BANK EXTEND FLOW DISCH MANIFOLD CHECK VLV

Commodity Type CYL: CYLINDER

<i>Tag No</i>	<i>Description</i>
N/A	CYLINDER

Commodity Type FLEX-HOSE: FLEXIBLE HOSES

<i>Tag No</i>	<i>Description</i>
N/A	FLEXIBLE HOSES

Commodity Type HED: HEAD

<i>Tag No</i>	<i>Description</i>
N/A	HEAD

Commodity Type ISV: PROCESS ISOLATION/VENT/DRAIN/FILL VALVE

<i>Tag No</i>	<i>Description</i>
FPHS-1	EXTENDED FLOW ISOL TO PILOT CONTROL VALVE FPHS-2
FPHS-10	FAST FLOW PILOT CONTROL VALVE FPHS-11 ISOL
FPHS-14	MANUAL PNEUMATIC ACTUATOR ON HALON CYL A-1
FPHS-16	MANUAL PNEUMATIC ACTUATOR ON HALON CYL A-2
FPHS-18	MANUAL PNEUMATIC ACTUATOR ON HALON CYL A-4
FPHS-20	MANUAL PNEUMATIC ACTUATOR ON HALON CYL A-5
FPHS-22	MANUAL PNEUMATIC ACTUATOR ON HALON CYL B-1
FPHS-24	MANUAL PNEUMATIC ACTUATOR ON HALON CYL B-2
FPHS-26	MANUAL PNEUMATIC ACTUATOR ON HALON CYL B-4
FPHS-28	MANUAL PNEUMATIC ACTUATOR ON HALON CYL B-5
FPHS-4	FAST FLOW TO PILOT CONTROL VALVE FPHS-5
FPHS-47	EXTENDED FLOW DISCH MANIFOLD BLEEDER VALVE
FPHS-48	EXTENDED FLOW DISCH MANIFOLD BLEEDER VALVE

RNP Fire Protection Systems Component/Commodities List

System No 6205 Halon Supply System (HALON)

Commodity Type ISV: PROCESS ISOLATION/VENT/DRAIN/FILL VALVE

<i>Tag No</i>	<i>Description</i>
FPHS-49	EXTENDED FLOW SELECTOR FOR ZONE 20
FPHS-50	EXTENDED FLOW SELECTOR FOR ZONE 20
FPHS-51	EXTENDED FLOW SELECTOR FOR ZONE 19
FPHS-52	EXTENDED FLOW SELECTOR FOR ZONE 19
FPHS-53	FAST FLOW SELECTOR FOR ZONE 19
FPHS-54	FAST FLOW SELECTOR FOR ZONE 19
FPHS-55	FAST FLOW SELECTOR FOR ZONE 20
FPHS-56	FAST FLOW SELECTOR FOR ZONE 20
FPHS-59	RESERVE BANK EXTENDED DISCH MANIFOLD BLEEDER VALVE
FPHS-60	RESERVE BANK EXTENDED DISCH MANIFOLD BLEEDER VALVE
FPHS-7	EXTENDED FLOW TO PILOT CONTROL VALVE FPHS-8

Commodity Type MFD: MANIFOLD

<i>Tag No</i>	<i>Description</i>
HALON-MAIN-MFD	HALON SYSTEM CYLINDER MANIFOLD (MAIN)
HALON-RESERVE-MFD	HALON SYSTEM CYLINDER MANIFOLD (RESERVE)

Commodity Type NOZ: NOZZLE

<i>Tag No</i>	<i>Description</i>
N/A	NOZZLE

Commodity Type PCV: PRESSURE CONTROL VALVE

<i>Tag No</i>	<i>Description</i>
FPHS-11	ZONE 19 FAST FLOW PILOT CONTROL VALVE
FPHS-2	ZONE 20 EXTENDED FLOW PILOT CONTROL VALVE
FPHS-5	ZONE 20 FAST FLOW PILOT CONTROL
FPHS-8	ZONE 19 EXTENDED FLOW PILOT CONTROL VALVE

Commodity Type PIN: PRESSURE INSTRUMENTATION

<i>Tag No</i>	<i>Description</i>
FPHS-A1	PRESS SW FOR ZONE 20 HALON
FPHS-A2	PRESS SW FOR ZONE 19 HALON
FPHS-B1	PRESS SW FOR ZONE 20 HALON
FPHS-B2	PRESS SW FOR ZONE 19 HALON

RNP Fire Protection Systems Component/Commodities List

System No 6205 Halon Supply System (HALON)

Commodity Type PIP: PIPING

<i>Tag No</i>	<i>Description</i>
FPHS-58	FLOW DISCH MANIFOLD

Commodity Type PIP-MISC: MISCELLANEOUS PIPING

<i>Tag No</i>	<i>Description</i>
N/A	MISCELLANEOUS PIPING

Commodity Type SOV: SOLENOID VALVE

<i>Tag No</i>	<i>Description</i>
FPHS-13	SOLENOID PILOT VLV FOR HALON CYL A-1
FPHS-15	SOLENOID PILOT VLV FOR HALON CYL A-2
FPHS-17	SOLENOID PILOT VLV FOR HALON CYL A-4
FPHS-19	SOLENOID PILOT VLV FOR HALON CYL A-5
FPHS-21	SOLENOID PILOT VLV FOR HALON CYL B-1
FPHS-23	SOLENOID PILOT VLV FOR HALON CYL B-2
FPHS-25	SOLENOID PILOT VLV FPR HALON CYL B-4
FPHS-27	SOLENOID PILOT VLV FOR HALON CYL B-5
FPHS-30	SOLENOID ACTUATOR FOR PILOT CONTROL VALVE HS-2
FPHS-31	SOLENOID ACTUATOR FOR PILOT CONTROL VALVE HS-2
FPHS-32	SOLENOID ACTUATOR FOR PILOT CONTROL VALVE HS-5
FPHS-33	SOLENOID ACTUATOR FOR PILOT CONTROL VALVE HS-5
FPHS-34	SOLENOID ACTUATOR FOR PILOT CONTROL VALVE HS-8
FPHS-35	SOLENOID ACTUATOR FOR PILOT CONTROL VALVE HS-8
FPHS-36	SOLENOID ACTUATOR FOR PILOT CONTROL VALVE HS-11
FPHS-37	SOLENOID ACTUATOR FOR PILOT CONTROL VALVE HS-11

Commodity Type SRV: SAFETY/RELIEF VALVE

<i>Tag No</i>	<i>Description</i>
FPHS-38	FPHS-1 RELIEF
FPHS-39	FPHS-4 RELIEF
FPHS-40	FPHS-7 RELIEF
FPHS-41	FPHS-10 RELIEF

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SHEET 1 OF 6
"FIRE PROTECTION SYSTEM
INTAKE STRUCTURE FLOW
DIAGRAM"**

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"FIRE PROTECTION SYSTEM
FLOW DIAGRAM"**

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"FIRE PROTECTION SYSTEM
CONTAINMENT FLOW DIAG."**

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"FIRE PROTECTION SYSTEM
DELUGE & PRE-ACTION
CONTR. VALVE FLOW DIAG.**

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SHEET 5 OF 6
"FIRE PROTECTION SYSTEM
DELUGE & PRE-ACTION
CONTR. VALVE FLOW DIAG.**

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SHEET 6 OF 6
"FIRE PROTECTION SYSTEM
FLOW DIAGRAM"**

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NOTE: Because of this page's large file size, it may be more convenient to copy the file to a local drive and use the Imaging (Wang) viewer, which can be accessed from the Programs/Accessories menu.