2.2.4 Emergency Feedwater System

Design Description

1.0 System Description

The emergency feedwater system (EFWS) is a safety-related system. The EFWS has four divisions. The EFWS provides the following safety-related functions:

- Restoration and maintaining of the steam generator (SG) water inventory in the unaffected SGs.
- Manual EFW isolation.
- Automatic closure of the SG isolation valve and the SG level control valve.

2.0 Arrangement

2.1 The functional arrangement of the EFWS is as described in the Design Description of Section 2.2.4, Tables 2.2.4-1—EFWS Equipment Mechanical Design and 2.2.4-2—EFWS Equipment I&C and Electrical Design, and as shown on Figure 2.2.4-1—Emergency Feedwater System Functional Arrangement.

2.2 Deleted.

2.3 Physical separation exists between divisions of the EFWS located in the Safeguard Buildings as listed in Table 2.2.4-1 and as shown on Figure 2.2.4-1.

3.0 Mechanical Design Features

3.1 Pumps and valves listed in Table 2.2.4-1 will be functionally designed and qualified such that each pump and valve is capable of performing its intended function under the full range of fluid flow, differential pressure, electrical conditions, and temperature conditions up to and including design basis accident conditions.

3.2 Check valves listed in Table 2.2.4-1 will function to change position as listed in Table 2.2.4-1 under normal operating conditions.

3.3 Deleted.

3.4 Equipment identified as Seismic Category I in Table 2.2.4-1 can withstand seismic design basis loads without a loss of safety function(s).

3.5 Deleted.

3.6 Deleted.

3.7 Deleted.

3.8 Deleted.

3.9 Deleted.

3.10 Deleted.

3.11 Deleted.

3.12 Deleted.

3.13 ASME Code Class 2 and 3 piping systems are designed in accordance with ASME Code Section III requirements.

3.14 Deleted.

3.15 As-built ASME Code Class 2 and 3 components listed in Table 2.2.4-1 are reconciled with the design requirements.

3.16 Pressure-boundary welds in ASME Code Class 2 and 3 components listed in Table 2.2.4-1 meet ASME Code Section III non-destructive examination requirements.

3.17 ASME Code Class 2 and 3 components listed in Table 2.2.4-1 retain their pressure-boundary integrity at their design pressure.

3.18 ASME Code Class 2 and 3 components listed in Table 2.2.4-1 are fabricated, installed, and inspected in accordance with ASME Code Section III requirements.

4.0 I&C Design Features, Displays, and Controls

4.1 Displays listed in Table 2.2.4-2 are indicated on the PICS operator workstations in the main control room (MCR) and the remote shutdown station (RSS).

4.2 Controls on the PICS operator workstations in the MCR and the RSS perform the function listed in Table 2.2.4-2.

4.3 Equipment listed as being controlled by a priority and actuator control system (PACS) module in Table 2.2.4-2 responds to the state requested and provides drive monitoring signals back to the PACS module. The PACS module will protect the equipment by terminating the output command upon the equipment reaching the requested state.

5.0 Electrical Power Design Features

5.1 Equipment designated as Class 1E in Table 2.2.4-2 are powered from the Class 1E division as listed in Table 2.2.4-2 in a normal or alternate feed condition.

5.2 Deleted.

6.0 Environmental Qualifications

6.1 Equipment designated as harsh environment in Table 2.2.4-2 can perform the function listed in Table 2.2.4-1 under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions.

7.0 Equipment and System Performance

7.1 The pumps listed in Table 2.2.4-1 have net positive suction head available (NPSHA) that is greater than net positive suction head required (NPSHR) at system run-out flow.

7.2 The EFWS delivers water to the SG at the required flow rate to restore and maintain SG water level and remove decay heat following the loss of normal feedwater supply.

7.3 The EFWS combined storage pool available volume supports cooldown.

7.4 The EFWS limits the maximum flow rate to a depressurized steam generator.

7.5 EFWS cross-connections allow alignment of EFWS pump suction on all EFWS storage pools and pump discharge alignment with any SG.

7.6 Deleted.

7.7 Class 1E valves listed in Table 2.2.4-2 will function to change position as listed in Table 2.2.4-1 under normal operating conditions.

7.8 The EFWS has provisions to allow flow testing of each EFW pump during plant operation.

Inspections, Tests, Analyses, and Acceptance Criteria

Table 2.2.4-3 lists the EFWS ITAAC.

Table 2.2.4-1—EFWS Equipment Mechanical Design
Sheet 1 of 2

Description	Tag Number(1)	Location	ASME Code Section III	Function	Seismic Category
EFW Storage Pool Division 1 (Division 2, Division 3, Division 4)	30LAR10BB001 (30LAR20BB001) (30LAR30BB001) (30LAR40BB001)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	N/A	Storage Volume	I
EFW Pump Division 1 (Division 2, Division 3, Division 4)	30LAS11AP001 (30LAS21AP001) (30LAS31AP001) (30LAS41AP001)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	Yes	Run	I
EFW Minimum Flow Check Valve Division 1 (Division 2, Division 3, Division 4)	30LAR11AA002 (30LAR21AA002) (30LAR31AA002) (30LAR41AA002)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	Yes	Open	I
EFW Flow Control Valve Division 1 (Division 2, Division 3, Division 4)	30LAR11AA103 (30LAR21AA103) (30LAR31AA103) (30LAR41AA103)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	Yes	Open	I
EFW Steam Generator Level Control Valve Division 1 (Division 2, Division 3, Division 4)	30LAR11AA105 (30LAR21AA105) (30LAR31AA105) (30LAR41AA105)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	Yes	Open-Close	I
EFW Steam Generator Isolation Valve Division 1 (Division 2, Division 3, Division 4)	30LAR11AA006 (30LAR21AA006) (30LAR31AA006) (30LAR41AA006)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	Yes	Open-Close	I

Table 2.2.4-1—EFWS Equipment Mechanical Design
Sheet 2 of 2

Description	Tag Number(1)	Location	ASME Code Section III	Function	Seismic Category
EFW Containment Isolation Check Valve Division 1 (Division 2, Division 3, Division 4)	30LAR11AA007 (30LAR21AA007) (30LAR31AA007) (30LAR41AA007)	Reactor Building	Yes	Open-Close	I
EFW Supply Header Isolation Valve Division 1 (Division 2, Division 3, Division 4)	30LAR13AA001 (30LAR23AA001) (30LAR33AA001) (30LAR43AA001)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	Yes	Open-Close	I
EFW Discharge Header Isolation Valve Division 1 (Division 2, Division 3, Division 4)	30LAR14AA001 (30LAR24AA001) (30LAR34AA001) (30LAR44AA001)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	Yes	Open-Close	I
EFW Pump Flow Division 1 (Division 2, Division 3, Division 4)	30LAR11CF801 (30LAR21CF801) (30LAR31CF801) (30LAR41CF801)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	Yes	Indication-Control	I
EFW Flow to SG Division 1 (Division 2, Division 3, Division 4)	30LAR11CF002 (30LAR21CF002) (30LAR31CF002) (30LAR41CF002)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	Yes	Indication	I
Demineralized Water Distribution System Isolation Valve	30LAR04AA001	Safeguard Building 4	Yes	Close	I
Fire Water Distribution System Isolation Check Valve	30LAR55AA001	Safeguard Building 1	Yes	Close	I
Fire Water Distribution System Isolation Valve	30LAR55AA002	Safeguard Building 1	Yes	Close	I

1. Equipment tag numbers are provided for information only and are not part of the certified design.

Table 2.2.4-2—EFWS Equipment I&C and Electrical Design
Sheet 1 of 3

Description	Tag Number(1)	Location	IEEE Class 1E(2)	EQ – Harsh Env.	PACS	MCR/RSS Displays	MCR/RSS Controls
EFW Pump Division 1 (Division 2, Division 3, Division 4)	30LAS11AP001 (30LAS21AP001) (30LAS31AP001) (30LAS41AP001)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	1 2 3 4	Yes	Yes	On-Off / On-Off	Start-Stop / Start-Stop
EFW Flow Control Valve Division 1 (Division 2, Division 3, Division 4)	30LAR11AA103 (30LAR21AA103) (30LAR31AA103) (30LAR41AA103)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	1^N 2^A (2^N) (1^A) (3^N) (4^A) (4^N) (3^A)	Yes	Yes	Position/ Position	Open-Close / Open-Close
EFW Steam Generator Level Control Valve Division 1 (Division 2, Division 3, Division 4)	30LAR11AA105 (30LAR21AA105) (30LAR31AA105) (30LAR41AA105)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	1^N 2^A (2^N) (1^A) (3^N) (4^A) (4^N) (3^A)	Yes	Yes	Position / Position	Open-Close/ Open-Close

Table 2.2.4-2—EFWS Equipment I&C and Electrical Design
Sheet 2 of 3

Description	Tag Number(1)	Location	IEEE Class 1E(2)	EQ – Harsh Env.	PACS	MCR/RSS Displays	MCR/RSS Controls
EFW Steam Generator Isolation Valve Division 1 (Division 2, Division 3, Division 4)	30LAR11AA006 (30LAR21AA006) (30LAR31AA006) (30LAR41AA006)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	1^N 2^A (2^N) (1^A) (3^N) (4^A) (4^N) (3^A)	Yes	Yes	Position / Position	Open-Close / Open-Close
EFW Discharge Header Isolation Valve Division 1 (Division 2, Division 3, Division 4)	30LAR14AA001 (30LAR24AA001) (30LAR34AA001) (30LAR44AA001)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	1^N 2^A (2^N) (1^A) (3^N) (4^A) (4^N) (3^A)	Yes	Yes	Position / Position	Open-Close/ Open-Close

Table 2.2.4-2—EFWS Equipment I&C and Electrical Design
Sheet 3 of 3

Description	Tag Number(1)	Location	IEEE Class 1E(2)	EQ – Harsh Env.	PACS	MCR/RSS Displays	MCR/RSS Controls
EFW Pump Flow Division 1 (Division 2, Division 3, Division 4)	30LAR11CF801 (30LAR21CF801) (30LAR31CF801) (30LAR41CF801)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	1^N 2^A (2^N) (1^A) (3^N) (4^A) (4^N) (3^A)	Yes	N/A	Flow / Flow	NA / NA
EFW Flow to SG Division 1 (Division 2, Division 3, Division 4)	30LAR11CF002 (30LAR21CF002) (30LAR31CF002) (30LAR41CF002)	Safeguard Building 1 (Safeguard Building 2) (Safeguard Building 3) (Safeguard Building 4)	1^N 2^A (2^N) (1^A) (3^N) (4^A) (4^N) (3^A)	Yes	N/A	Flow / Flow	NA / NA
Demineralized Water Distribution System Isolation Valve	30LAR04AA001	Safeguard Building 4	N/A	N/A	N/A	Position / N/A	Open-Close/ N/A
Fire Water Distribution System Isolation Valve	30LAR55AA002	Safeguard Building 1	1^N 2^A	Yes	Yes	Position / Position	Open-Close / Open-Close

1. Equipment tag numbers are provided for information only and are not part of the certified design.

2. [N] denotes the division the equipment is normally powered from; [A] denotes the division the equipment is powered from when alternate feed is implemented.

Table 2.2.4-3—Emergency Feedwater System ITAAC
Sheet 1 of 7

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
2.1	The functional arrangement of the EFWS is as described in the Design Description of Section 2.2.4, Tables 2.2.4-1 and 2.2.4-2, and as shown on Figure 2.2.4-1.	An inspection of the as-built EFWS functional arrangement will be performed.	The EFWS conforms to the functional arrangement as described in the Design Description of Section 2.2.4, Tables 2.2.4-1 and 2.2.4-2, and as shown on Figure 2.2.4-1.
2.2	Deleted.	Deleted.	Deleted.
2.3	Physical separation exists between divisions of the EFWS located in the Safeguard Buildings as listed in Table 2.2.4-1 and as shown on Figure 2.2.4-1.	An inspection will be performed to verify that the as-built divisions of the EFWS are located in separate Safeguard Buildings.	The divisions of the EFWS are located in separate Safeguard Buildings as listed in Table 2.2.4-1 and as shown on Figure 2.2.4-1.
3.1	Pumps and valves listed in Table 2.2.4-1 will be functionally designed and qualified such that each pump and valve is capable of performing its intended function under the full range of fluid flow, differential pressure, electrical conditions, and temperature conditions up to and including design basis accident conditions.	Tests or type tests of pumps and valves will be performed to demonstrate that the pumps and valves function under the full range of fluid flow, differential pressure, electrical conditions, and temperature conditions up to and including design basis accident conditions.	A report concludes that the pumps and valves listed in Table 2.2.4-1 are capable of performing their intended function under the full range of fluid flow, differential pressure, electrical conditions, and temperature conditions up to and including design basis accident conditions.
3.2	Check valves listed in Table 2.2.4-1 will function to change position as listed in Table 2.2.4-1 under normal operating conditions.	Tests will be performed to verify the ability of check valves to change position under normal operating conditions.	The check valves change position as listed in Table 2.2.4-1 under normal operating conditions.
3.3	Deleted.	Deleted.	Deleted.

Table 2.2.4-3—Emergency Feedwater System ITAAC
Sheet 2 of 7

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.4	Equipment identified as Seismic Category I in Table 2.2.4-1 can withstand seismic design basis loads without a loss of safety function(s).	a. Type tests, analyses, or a combination of type tests and analyses will be performed on the equipment identified as Seismic Category I in Table 2.2.4-1 using analytical assumptions, or under conditions, which bound the Seismic Category I design requirements.	a. Test/analysis reports conclude that the equipment identified as Seismic Category I in Table 2.2.4-1 can withstand seismic design basis loads without a loss of safety function(s).
		b. An inspection will be performed of the as-built equipment identified as Seismic Category I in Table 2.2.4-1 to verify that the equipment, including anchorage, are installed in a condition bounded by the tested or analyzed condition.	b. Inspection reports conclude that the equipment identified as Seismic Category I in Table 2.2.4-1, including anchorage, are installed in a condition bounded by the tested or analyzed condition.
3.5	Deleted.	Deleted.	Deleted.
3.6	Deleted.	Deleted.	Deleted.
3.7	Deleted.	Deleted.	Deleted.
3.8	Deleted.	Deleted.	Deleted.
3.9	Deleted.	Deleted.	Deleted.
3.10	Deleted.	Deleted.	Deleted.
3.11	Deleted.	Deleted.	Deleted.
3.12	Deleted.	Deleted.	Deleted.
3.13	ASME Code Class 2 and 3 piping systems are designed in accordance with ASME Code Section III requirements.	An inspection of piping design and analysis documentation required by ASME Code Section III will be performed. {{DAC}}	ASME Code Section III Design Report(s) exist that meet the requirements of NCA-3550 and conclude that the design of ASME Code Class 2 and 3 piping systems complies with the requirements of ASME Code Section III. {{DAC}}
3.14	Deleted.	Deleted.	Deleted.

Table 2.2.4-3—Emergency Feedwater System ITAAC
Sheet 3 of 7

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.15	As-built ASME Code Class 2 and 3 components listed in Table 2.2.4-1 are reconciled with the design requirements.	A reconciliation analysis of ASME Code Class 2 and 3 components will be performed.	ASME Code Design Report(s) exist that meet the requirements of NCA-3550, conclude that the design reconciliation has been completed for as-built ASME Code Class 2 and 3 components listed in Table 2.2.4-1, and document that the results of the reconciliation analysis comply with the requirements of ASME Code Section III.
3.16	Pressure-boundary welds in ASME Code Class 2 and 3 components listed in Table 2.2.4-1 meet ASME Code Section III non-destructive examination requirements.	An inspection of the as-built pressure-boundary welds in ASME Code Class 2 and 3 components will be performed.	ASME Code reports(s) exist that conclude that ASME Code Section III requirements are met for non-destructive examination of pressure-boundary welds in ASME Code Class 2 and 3 components listed in Table 2.2.4-1.
3.17	ASME Code Class 2 and 3 components listed in Table 2.2.4-1 retain their pressure-boundary integrity at their design pressure.	A hydrostatic test will be conducted on ASME Code Class 2 and 3 components that are required to be hydrostatically tested by ASME Code Section III.	ASME Code Data Report(s) exist and conclude that the results of the hydrostatic test of ASME Code Class 2 and 3 components listed in Table 2.2.4-1 comply with the requirements of ASME Code Section III.
3.18	ASME Code Class 2 and 3 components listed in Table 2.2.4-1 are fabricated, installed, and inspected in accordance with ASME Code Section III requirements.	An inspection of the as-built construction activities and documentation for ASME Code Class 2 and 3 components will be conducted.	ASME Code Data Report(s) exist that conclude that ASME Code Class 2 and 3 components listed in Table 2.2.4-1 are fabricated, installed, and inspected in accordance with ASME Code Section III requirements.

Table 2.2.4-3—Emergency Feedwater System ITAAC
Sheet 4 of 7

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
4.1	Displays listed in Table 2.2.4-2 are indicated on the PICS operator workstations in the MCR and the RSS.	a. Tests will be performed to verify that the displays listed in Table 2.2.4-2 are indicated on the PICS operator workstations in the MCR. b. Tests will be performed to verify that the displays listed in Table 2.2.4-2 are indicated on the PICS operator workstations in the RSS.	a. Displays listed in Table 2.2.4-2 are indicated on the PICS operator workstations in the MCR. b. Displays listed in Table 2.2.4-2 are indicated on the PICS operator workstations in the RSS.
4.2	Controls on the PICS operator workstations in the MCR and the RSS perform the function listed in Table 2.2.4-2.	a. Tests will be performed using controls on the PICS operator workstations in the MCR. b. Tests will be performed using controls on the PICS operator workstations in the RSS.	a. Controls on the PICS operator workstations in the MCR perform the function listed in Table 2.2.4-2. b. Controls on the PICS operator workstations in the RSS perform the function listed in Table 2.2.4-2.
4.3	Equipment listed as being controlled by a PACS module in Table 2.2.4-2 responds to the state requested and provides drive monitoring signals back to the PACS module. The PACS module will protect the equipment by terminating the output command upon the equipment reaching the requested state.	A test will be performed using test input signals to verify equipment controlled by a PACS module responds to the state requested and provides drive monitoring signals back to the PACS module.	Equipment listed as being controlled by a PACS module in Table 2.2.4-2 responds to the state requested and provides drive monitoring signals back to the PACS module. The PACS module will protect the equipment by terminating the output command upon the equipment reaching the requested state.

Table 2.2.4-3—Emergency Feedwater System ITAAC
Sheet 5 of 7

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
5.1	Equipment designated as Class 1E in Table 2.2.4-2 are powered from the Class 1E division as listed in Table 2.2.4-2 in a normal or alternate feed condition.	a. Testing will be performed by providing a test input signal in each normally aligned division.	a. The test input signal provided in the normally aligned division is present at the respective Class 1E equipment identified in Table 2.2.4-2.
		b. Testing will be performed by providing a test input signal in each division with the alternate feed aligned to the divisional pair.	b. The test input signal provided in each division with the alternate feed aligned to the divisional pair is present at the respective Class 1E equipment identified in Table 2.2.4-2.
5.2	Deleted.	Deleted.	Deleted.

Table 2.2.4-3—Emergency Feedwater System ITAAC
Sheet 6 of 7

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
6.1	Equipment designated as harsh environment in Table 2.2.4-2 can perform the function listed in Table 2.2.4-1 under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions.	a. Type tests or type tests and analysis will be performed to demonstrate the ability of the equipment designated as harsh environment in Table 2.2.4-2 to perform the function listed in Table 2.2.4-1 under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions.	a. EQDPs conclude that the equipment designated as harsh environment in Table 2.2.4-2 can perform the function listed in Table 2.2.4-1 under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions, including the time required to perform the listed function.
		b. An inspection will be performed of the as-built equipment designated as harsh environment in Table 2.2.4-2 to verify that the equipment, including the associated cables, wiring, and terminations located in a harsh environment, are bounded by the type test or combination of type tests and analyses.	b. A report exists and concludes that the equipment designated as harsh environment in Table 2.2.4-2, including the associated cables, wiring, and terminations located in a harsh environment, are bounded by the type test or combination of type tests and analyses.
7.1	The pumps listed in Table 2.2.4-1 have NPSHA that is greater than NPSHR at system run-out flow.	Tests and analyses will be performed to verify pump NPSHA is greater than NPSHR at system run-out flow.	The pumps listed in Table 2.2.4-1 have NPSHA that is greater than NPSHR at system run-out flow.
7.2	The EFWS delivers water to the steam generators at the required flowrate to restore and maintain SG water level and remove decay heat following the loss of normal feedwater supply.	Tests will be performed to verify the EFWS required flowrate to the steam generators to restore and maintain SG water level and remove decay heat following the loss of normal feedwater supply.	The EFWS delivers a minimum flow of 400 gpm.

Table 2.2.4-3—Emergency Feedwater System ITAAC
Sheet 7 of 7

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
7.3	The EFWS combined storage pool available volume supports cooldown.	An inspection and analysis will be performed to verify the as-built EFWS combined storage pool volume.	The EFWS combined storage pool minimum volume is 365,000 gallons (total for 4 pools).
7.4	The EFWS limits the maximum flow rate to a depressurized steam generator.	Tests will be performed to verify the maximum EFWS flowrate to a depressurized steam generator.	The EFWS delivers a maximum flow of 490 gpm to a depressurized steam generator.
7.5	EFWS cross-connections allow alignment of EFWS pump suction on all EFWS storage pools and pump discharge alignment with any SG.	An inspection will be performed to verify the as-built EFWS cross-connections allow alignment of each EFWS pump suction on all EFWS storage pools and each EFWS pump discharge alignment with any SG.	The EFWS cross-connections allow the following system alignments: 1. Each EFWS pump suction to all EFWS storage pools. 2. Each EFWS pump discharge with any SG.
7.6	Deleted.	Deleted.	Deleted.
7.7	Class 1E valves listed in Table 2.2.4-2 will function to change position as listed in Table 2.2.4-1 under normal operating conditions.	Tests will be performed to verify the ability of Class 1E valves to change position under normal operating conditions.	Class 1E valves listed in Table 2.2.4-2 change position as listed in Table 2.2.4-1 under normal operating conditions.
7.8	The EFWS has provisions to allow flow testing of each EFW pump during plant operation.	Tests will be performed to verify the EFWS has provisions to allow flow testing of each EFWS pump during plant operation.	The EFW pump flow test line recirculates a minimum of 360 gpm back to the EFW storage pool.

Next File