Attachment A

Replace pages 3.14-2 through 3.14-6 of the Technical Specifications with proposed pages 3.14-2 through 3.14-10.

Replace pages 4.15-1, 4.15-1a, and 4.15-2 of the Technical Specifications with proposed pages 4.15-1, 4.15-1a, and 4.15-2.

These pages are to become effective at the completion of the installation but no later than June 30, 1981.

Specification 6.9.2 outlining the cause of inoperability and the plans for restoring the component to operable status.

3.14.2.2 With the fire suppression water system inoperable,

a. Establish within 24 hours a backup fire suppression water system and

b. Provide Prompt Notification With Written Followup in accordance with Specification 6.9.2 outlining the actions taken, the cause of the inoperability, and the plans for restoring the components to operable status.

c. If a. and b. above cannot be fulfilled, place the reactor in Hot Shutdown within the next six (6) hours and in Cold Shutdown within the following thirty (30) hours.

3.14.3 The spray and/or sprinkler systems located in the following areas shall be operable when equipment in the area is required to be operable:

a. "A" Diesel Generator Room

b. "B" Diesel Generator Room

c. Turbine Driven Auxiliary Feedwater Pump and its Oil Reservoir

d. Cable Tunnel

e. Air Handling Room Cable Spray System

f. Relay Room Spray System West

g. Relay Room Spray System Northeast

h. Relay Room Spray System Southeast

i. Turbine Bldg./Control Room Wall Spray System

j. Intermediate Bldg. Cable Trays Spray System

k. Auxiliary Bldg. at Cable Tunnel Spray System

l. Auxiliary Bldg. 253'-6" Cable Trays Spray System

m. Auxiliary Bldg. Basement Cable Trays Spray System

n. Screenhouse Basement Cable Trays Spray System

o. Screenhouse Sprinkler System.

3.14.3.1 With a spray/sprinkler system inoperable, except for testing, within an hour, establish a continuous fire watch with backup fire suppression equipment in the unprotected area(s) when equipment in the area is required to be operable, and

a. Restore the system to operable status within 14 days or prepare and submit a Thirty Day Written Report in accordance with Specification 6.9.2 outlining the cause of the inoperability and the plans for restoring the system to operable status.

3.14.4 The Halon systems located in the following areas shall be operable when equipment in the area is required to be operable and the storage tanks shall have at least 95% of the full charge weight and 90% of full charge pressure at 70°F:

a. Computer Room

b. Relay Room

3.14.4.1 With a Halon system inoperable, within one hour, establish a continuous fire watch with portable equipment in the unprotected area(s) when equipment in the area is required to be operable, and

a. Restore the system to operable status within 14 days or prepare and submit a Thirty Day Written Report in accordance with Specification 6.9.2 outlining the cause of inoperability and the plans for restoring the system to operable status.

3.14.5 The fire hose stations in Table 3.14-2 shall be operable.

3.14.5.1 With a hose station listed in Table 3.14-2 inoperable, except for hose station(s) within containment, route a hose to the unprotected area from an operable hose station within an hour.

3.14.5.2 If the fire water service to containment is inoperable, comply with the requirements of Specification 3.14.5 within 14 days or prepare and submit a Thirty Day Written Report in accordance with Specification 6.9.2 outlining the cause of the inoperability and the plans for restoring the system to operable status.

3.14.6 All fire barrier penetration fire seals protecting safety related areas shall be intact.

3.14.6.1 With a fire barrier penetration fire seal which protects a safety related area not intact, a continuous fire watch shall be established on one side of the penetration within one hour.

3.14.7 The yard hydrant on the south-east corner of the yard loop shall be operable.

3.14.7.1 With the yard hydrant on the south-east corner of the yard loop inoperable, within one hour have sufficient lengths of 2-1/2 inch diameter hose located in an adjacent operable hydrant hose house to provide fire protection to the transformers and the standby auxiliary feedwater building.

Basis:

The fire protection system has the capability to extinguish any probable fire which might occur at the station. The system is designed in accordance with the standards of the National Fire Protection Association.

Procedures have been developed for fighting fires in all the plant areas and are contained in the plant's emergency procedures. Fire prevention is controlled by administrative methods to prevent accumulations of combustible materials and to practice good safety methods. Periodic practice exercises will be employed to insure plant personnel are familiar with the proper corrective procedures.

Detection is located in all areas of the plant containing safety related equipment and in areas containing large amounts of combustible or flammable materials. Actuation of fixed suppression systems and early warning alarms are provided by these detectors.

Fire barriers are located throughout the plant to separate major areas from each other and also to separate certain safety related areas from the remainder of the plant. These are designed to stop a fire from propagating from one area to another. All penetrations in these barriers are sealed with appropriate materials to match the requirements of the barrier.

Normal fire protection is provided by a fixed fire-fog system, fixed Halon 1301 system, sprinklers, hose lines, and portable and wheeled extinguishers suitably located in the required areas.

Readily accessible 1-1/2 inch rubber covered hose lines and continuous flow type hose reels are distributed throughout the station so that all areas in the station are within 20 feet of a fog nozzle when attached to not more than 125 foot lengths of hose. All nozzles are 1-1/2 inch variable fog-off nozzles.

Water to the fire system is supplied via the header by two vertical, centrifugal fire pumps of 2000 gpm capacity each. One of these pumps is driven by an electric motor and the other by a combustion engine. Both are automatic starting through fire pump controllers with indication, alarm and manual starting from the central control room fire panel. The combustion engine local fuel supply capacity is designed for 8 hours of operation.

A fire header is installed of sufficient size to deliver an adequate quantity of water throughout the plant at a pressure of no less than 75 psi at the highest nozzle.

The header system is normally pressurized through the use of a hydro-pneumatic tank using house service air and having an active water capacity of 10,000 gallons. Loss of header pressure and/or opening of any deluge system activates the fire pumps and the alarm system.

A backup fire suppression water system would be used to provide protection in the event the fire suppression water system were inoperable. A backup system could, for example, be comprised of a backup pump, the yard hydrant system supplying water to wall hydrants, or other equipment or measures.

The yard hydrant on the south-east corner of the yard loop provides the secondary fire suppression capability for the transformers and the primary fire suppression capability for the standby auxiliary feedwater building.

TABLE 3.14-1

FIRE DETECTION INSTRUMENTS

| INSTRUMENT LOCATION | MINIMUM INSTRUMENTS OPERABLE | |
|---|---|---|
| | HEAT | SMOKE |
| 1. Containment | | |
| "A" Post-Accident Charcoal Bank | 3* | N/A |
| "B" Post-Accident Charcoal Bank | 3* | N/A |
| "A" Aux. Filter Charcoal Bank | 1* | N/A |
| "B" Aux. Filter Charcoal Bank | 1* | N/A |
| Cable Trays Basement Elev. | 1** | N/A |
| Cable Trays Intermed. Elev. | 2** | N/A |
| Cable Trays Operating Floor | 1** | N/A |
| "A" RCP Intermediate Floor | 1** | N/A |
| "B" RCP Intermediate Floor | 1** | N/A |
| Area Detection Operating Floor | N/A | 7 |
| 2. Control Room | | |
| Area and Cabinet | N/A | 19 |
| Control Room/Turb. Bldg. Wall | 4 | N/A |
| 3. Relay Room | 3 | 16 |
| 4. Computer Room | | |
| Under Floor | N/A | 3 |
| Ceiling | N/A | 3 |
| 5. Battery Rooms | | |
| "A" Battery Room | N/A | 1 |
| "B" Battery Room | N/A | 1 |
| 6. Control Building | | |
| Air Handling Room | N/A | 3 |
| 7. Diesel Generator | | |
| "A" Generator Room | 2 | N/A |
| "A" Generator Vault | N/A | 1 |
| "B" Generator Room | 2 | N/A |
| "B" Generator Vault | N/A | 1 |
| 8. Intermediate Building | | |
| Motor Driven Aux. Fd. Pump Area | N/A | 9 |
| Turb. Driven Aux. Fd. Pump & Res. | 1 | N/A |
| Cable Trays Basement North | N/A | 14 |
| "A" Purge Filter Elev. 315'-4" | N/A | 1 |
| "B" Purge Filter Elev. 315'-4" | N/A | 1 |

| INSTRUMENT LOCATION | MINIMUM INSTRUMENTS OPERABLE | |
|---|---|---|
| | HEAT | SMOKE |
| 9. Screen House | | |
| Area Detection Serv. Water Pump and Bus Area | N/A | 11 |
| Cable Trays Basement | N/A | 4 |
| 10. Standby Auxiliary Feedwater Bldg. | N/A | 8 |
| 11. Cable Tunnel | 10 | 8 |
| 12. Auxiliary Building | | |
| General Area | N/A | 8 |
| Area Basement East | N/A | 5 |
| Area Basement West and RHR Pit | N/A | 9 |
| Cable Trays/SI Pumps Basement | N/A | 5 |
| Penetration Area Cable Trays Mezz. | N/A | 2 |
| Cable Trays, Elec. Cab. Mezz. Center | N/A | 4 |
| Cable Trays Mezz. East | N/A | 4 |
| Area Operating Floor | N/A | 13 |

* Resistance Temperature Detectors (RTD) Only
** Line Type Detectors

TABLE 3.14-2

FIRE SERVICE WATER HOSE REEL LOCATION

| BUILDING | FLOOR | LOCATION |
|---|---|---|
| Turbine | Basement | Battery Room |
| Turbine | Basement | D/G Rooms |
| Turbine | Intermediate | 4160 Bus |
| Turbine | Operating | Control Room |
| Intermediate | Level Four | West |
| Intermediate | Level Four | East |
| Intermediate | Level Three | East |
| Intermediate | Level Three | West |
| Intermediate | Level Two | West |
| Intermediate | Level Two | East |
| Intermediate | Level One | East |
| Intermediate | Level One | West |
| Intermediate | Level One | South |
| Intermediate | Level Two | Nuclear Sample Room |
| Auxiliary | Operating | West |
| Auxiliary | Operating | Center |
| Auxiliary | Operating | East |
| Auxiliary | Intermediate | East |
| Auxiliary | Intermediate | Center |
| Auxiliary | Intermediate | West |
| Auxiliary | Basement | West |
| Auxiliary | Basement | Center |
| Auxiliary | Basement | East |
| Screen House | Main | Fire Pumps |

| BUILDING | FLOOR | LOCATION |
|---|---|---|
| Containment | Basement | East |
| Containment | Basement | West |
| Containment | Intermediate | East |
| Containment | Intermediate | West |
| Containment | Operating | East |
| Containment | Operating | West |

4.15 Fire Suppression System Test

Applicability:

Applies to periodic testing and surveillance requirements of the Fire Suppression System.

Objective:

To verify that the Fire Suppression System will respond properly, if required.

Specification:

4.15.1 The fire detection instruments listed in Table 3.14-1 shall be demonstrated operable by performance of tests at least once every six months. The functional test for RTD detectors inside containment will be performed by verifying detector circuit continuity and detector temperature indication in the control room.

4.15.1.1 The supervised circuits supervision associated with the detector alarms of each of the detection instruments listed in Table 3.14.1 shall be demonstrated OPERABLE at least once per 6 months. The non-supervised circuits between the local alarm panels and the control room shall be demonstrated OPERABLE at least once per 31 days.

4.15.2 The fire suppression water system shall be demonstrated operable:

a. At least once per 31 days by starting each pump and operating it for at least 15 minutes on recirculation flow.

b. At least once per 31 days by verifying that each valve (manual, power operated, or automatic) in the flow paths is in its correct position.

c. At least once per 31 days by verifying the level of the diesel driven fire pump fuel tank.

d. At least once per 31 days by inspecting and testing the diesel fire pump starting batteries to determine the condition of the battery cells.

e. At least once per 92 days by verifying that a sample of diesel fuel from the diesel fire pump fuel oil day tank is within the ASTM D975 recommended limits for number 2 diesel fuel oil when checked for viscosity, water and sediment.

f. At least once per year by cycling each testable valve in the flow path (except for hydrant isolation valves) through at least one complete cycle of full travel. A further exception is the containment isolation valve which shall be done at a minimum of at least once per 18 months.

g. At least once per 18 months by performing a system functional test which includes simulated actuation of the system, throughout its operating sequence, and:

(i) verifying that each automatic valve in the flow path actuates to its correct position on a test signal;

(ii) verifying that each fire pump develops at least 2000 gpm at 210 Ft. Hd.;

(iii) cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel;

(iv) verifying that each high pressure pump starts (sequentially) to maintain the fire suppression water system pressure at or above 210 Ft. Hd.

h. At least once per 18 months by subjecting the diesel engine to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for the class of service.

i. At least once every 3 years a flow test of the fire suppression water system shall be performed. With one fire pump running the static pressure will be recorded at the test connection for the fire suppression water system. The four exterior wall hydrants will be flowed individually with the residual pressure at the test connection and the flow from each hydrant recorded.

4.15.3a The spray systems shall be demonstrated to be operable:

a. At least once per 12 months by verifying the loss of locking pressure·manual operation.

b. At least once per 18 months:

(i) By performing a system functional test which includes simulating actuation of the system and verifying that the valves in the flow path are capable of going to their correct positions.

(ii) By visual external inspection of spray headers to verify their integrity,

(iii) By visual external inspection of each nozzle to verify no blockage.

c. At least once per 3 years by performing an air flow test through each spray header and verifying each spray nozzle is unobstructed.

4.15.3b The sprinkler systems shall be demonstrated to be operable at least once per 12 months by opening the inspectors test valve and verifying water flow and system alarm.

4.15.4 The Halon System shall be demonstrated to be operable:

a. At least once per 6 months by verifying each Halon storage tank pressure.

b. At least once per 6 months by verifying each Halon storage tank weight.

c. At least once per 18 months by verifying the system including associated ventilation dampers actuate in response to a simulated actuation signal. A flow test with gas through headers and nozzles shall be performed to assure no blockage. The operability of the manual initiating system will also be verified.

4.15.5 Each fire hose station listed in Table 3.14-2 shall be verified to be operable:

a. At least once per month by visual inspection of the station to assure all equipment is available and the fire water header system pressure is recorded. The fire hose stations in containment are an exception and shall be inspected once per month during the refueling shutdown.

b. At least once per 18 months by unrolling the hose for inspection and re-racking and replacing gaskets in the couplings, as required.

c. At least once per 18 months, partially open hose station valves to verify valve operability and no blockage.

d. At least every 3 years by pressure testing each hose to 50 psi greater than the Maximum Working Pressure.

4.15.6 Penetration seals in fire barriers shall be verified to be intact by visual inspection:

a. At least once per 18 months, and

b. Prior to declaring a penetration seal in a fire barrier intact following repairs or maintenance.

Attachment B

In response to the NRC's Fire Protection Safety Evaluation, dated February 24, 1979, and its supplements, a number of modifications and additions have been provided for the fire protection systems at Ginna. The proposed amemdment adds Technical Specifications for these fire protection system modifications. The proposed changes are consistent with Standard Technical Specifications. The changes do not affect plant effluents nor do they affect the authorized power level of Ginna.

Attachment C

The proposed changes do not require a fee. The changes are the result of modifications previously reviewed and approved by the NRC under its review of fire protection systems. Thus, this change is the concluding portion of a previous review by the NRC and not a new request for review. Further, since the requirements for these systems have already been established, no new technical or safety issues are raised by this submittal.