

ATTACHMENT 1

Zion Station Units 1 and 2

NRC Docket Nos. 50-295 and 50-304

Proposed Technical Specification Changes

The following pages have been revised:

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G. Quadrant Power Tilt

The quadrant power tilt per unit is defined as the ratio of the maximum upper excore detector current to the average of the upper excore detector currents or the ratio of the maximum lower excore detector current to the average of the lower excore detector currents whichever is greater. If one excore detector is out of service, the three in-service units are used in computing the average.

H. Rated Thermal Power

A steady-state reactor core output of 3250 MWt per unit.

I. Reactor Pressure

The pressure in the steam space of a pressurizer.

J. Refueling Outage

When Refueling Outage is used to designate a surveillance interval per unit the surveillance will be performed during the refueling outage or up to six months before the refueling outage. When a refueling outage occurs within 8 months of the previous refueling outage for a unit, the surveillance testing need not be performed. The maximum interval between surveillance tests is 20 months per unit.

K. Operable

A system, subsystem, train, component or device shall be operable when it is capable of performing its specific function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal (Normal AC Off-site or Reserve AC Off-site) and emergency (Standby AC Off-site) AC electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related function(s). The operability requirement for both normal and emergency AC power supplies does not apply to AC instrument buses and associated instruments. Operability as it pertains to the Auxiliary Electrical Power System requires Normal AC Off-site, Reserve AC Off-site and Standby AC On-site power.

L. Operating

Performing the intended functions in the intended manner.

M. Operating Cycle

The interval between the end of one major refueling outage and the end of the next subsequent major refueling outage per unit.

N. Surveillance Interval

Surveillance intervals, with the exception of shift and daily periods, are defined as the specified period plus or minus 25% of the specified period.

LIMITING CONDITION FOR OPERATION

3.0 GENERAL

Applicability:

Applies to all Limiting Conditions for Operation unless specifically stated otherwise.

Objective:

To establish general requirements for all Limiting Conditions for Operation.

1. In the event a Limiting Condition for Operation and/or associated requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in at least hot shutdown within 4 hours and cold shutdown within the following 48 hours unless corrective measures are completed that permit operation under the associated specification requirements within the specified time interval as measured from initial discovery or the unit is placed in a mode in which the specification is not applicable. Exceptions to these requirements are stated in the individual specifications.

SURVEILLANCE REQUIREMENT

4.0 GENERAL

Applicability:

Applies to all Surveillance Requirements unless specifically stated otherwise.

Objective:

To establish general requirements for all Surveillance Requirements.

1. Performance of a Surveillance Requirement within the specified time interval shall constitute compliance with Operability requirements for a Limiting Condition for Operation unless otherwise stated in the specification. Surveillance Requirements do not have to be performed on inoperable equipment.

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

3.0

2. When a system, subsystem, train, component or device (with the exception of AC instrument buses and associated instruments) is determined to be inoperable solely because its emergency AC power source is inoperable, or solely because its normal AC power source is inoperable, it may be considered operable for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided:

- a. Its corresponding normal or emergency power source is operable, and
- b. All of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are operable, or likewise satisfy the requirements of this specification.

Unless both (a) and (b) are satisfied, the unit shall be placed in at least hot shutdown within 4 hours and in cold shutdown within the following 48 hours.

4.0

2. Not Applicable.

Bases:

- 3.0 This specification delineates the actions to be taken for circumstances not directly provided in associated specifications and whose occurrence would violate the intent of the specification.

With regard to inoperable power sources this specification delineates what additional conditions must be satisfied to permit operation to continue, consistent with the specification for power sources, when a normal or emergency AC power source is inoperable. It specifically prohibits operation when a system, subsystem, train, component or device is inoperable because its normal or emergency power source is inoperable and its required redundant system, subsystem, train, component or device is inoperable for another reason.

The AC instrument buses and DC power supply buses are specifically excluded from this specification. Availability requirements for this equipment are adequately addressed in Specification 3.15 and elsewhere in these Technical Specifications.

The provisions of this specification permit the requirements associated with individual systems, subsystems, trains, components, or devices to be consistent with the requirements for the associated electrical power source. It allows operation to be governed by the time limits of the specification associated with the Limiting Condition for Operation for the normal or emergency power source, not the individual specification requirements for each system, subsystem, train, component or device that is determined to be inoperable solely because of the inoperability of its normal or emergency power source.

Bases:

4.0 The provisions of this specification set forth the criteria for determination of compliance with the operability requirements of the Limiting Conditions for Operation. Under this criteria, equipment, systems or components are assumed to be operable if the associated surveillance activities have been satisfactorily performed within the specified time interval. Nothing in this provision is to be construed as defining equipment, systems or components operable, when such items are found or known to be inoperable although still meeting the Surveillance Requirements.

| LIMITING CONDITION FOR OPERATION | SURVEILLANCE REQUIREMENT |
|--|--|
| <p>3.10.4</p> <p>5. If the containment internal pressure exceeds 1.0 psig or the internal vacuum exceeds 1.5 psig, the condition shall be corrected immediately or the reactor shall be brought to the hot shutdown condition within 4 hours.</p> <p>6. If the containment ambient temperature exceeds 120°F or is less than 65°F the condition shall be corrected immediately or the reactor shall be brought to the hot shutdown condition within 4 hours.</p> <p>7. The provisions of Specification 3.0.1 are not applicable to Specification 3.10.</p> | <p>4.10.4</p> <p>If changes in the inward deformation greater than 0.25 inches occur, an investigation will be made to determine the cause and corrective action. If no corrective action is necessary during the duration of the program described, the program shall be discontinued.</p> <p>5. The containment pressure shall be verified once a shift.</p> <p>6. The containment temperature shall be verified once a shift.</p> <p>7. Not Applicable.</p> |

| LIMITING CONDITION FOR OPERATION | SURVEILLANCE REQUIREMENT |
|--|---|
| <p>3.11</p> <p>8. When the release rate of radioactive materials, excluding tritium and dissolved gases, exceed 2.5 curies/unit during any calendar quarter, the licensee shall notify the Director, Directorate of Licensing, within 30 days, identifying the causes and describing the proposed program of action to reduce such release rates.</p> <p>9. The provisions of Specification 3.0. are not applicable to Specification 3.11.</p> | <p>4.11</p> <p>8. Not Applicable.</p> <p>9. Not Applicable.</p> |

| LIMITING CONDITION FOR OPERATION | SURVEILLANCE REQUIREMENT |
|---|---|
| <p>3.12. 4. The maximum activity to be contained in one gas decay tank shall not exceed 22,000 curies. (Equivalent to Xe-133).</p> <p>5. When the annual projected release rate of radioactive materials in gaseous wastes, averaged over a calendar quarter exceeds twice the annual objectives, the licensee shall notify the Director, Directorate of Licensing within 30 days, identifying the causes and describing the proposed program of action to reduce such release rates.</p> <p>6. The provisions of Specification 3.0.1 are not applicable to Specification 3.12.</p> | <p>4.12. 4. Prior to isolating a tank for decay the tank will be sampled per Table 4.12-2 and total activity determined.</p> <p>5. Records</p> <p>A. Facility records of iodine and particulate releases with half-lives greater than eight days shall be maintained on the basis of all the iodine sampling devices and particulate filter analyses.</p> <p>B. Records shall be maintained and reports of the sampling and analysis results shall be submitted in accordance with Section (Plant Reporting Requirements) <u>6</u> of these Specifications.</p> <p>6. Not Applicable.</p> |

| LIMITING CONDITION FOR OPERATION | SURVEILLANCE REQUIREMENT |
|---|---|
| <p>3.13.8 A fuel inspection program shall be established to provide such information as can be determined from inspections performed on the discharged fuel. This program shall include the removal and examination of any special test assemblies.</p> <p>9. The provisions of Specification 3.0.1 are not applicable to Specification 3.13.</p> | <p>4.13.8 Inspection of the fuel will include the following items:</p> <ul style="list-style-type: none"> A. Results of tests for failed fuel. B. Results of on-site visual examinations on lead burnup, special test assemblies and those typical of various discharge exposures. C. Results of off-site examinations, if performed, including extent of fuel densification, fission gas generation, clad creepdown characteristics, etc. <p>9. Not Applicable.</p> |

| LIMITING CONDITION FOR OPERATION | SURVEILLANCE REQUIREMENT |
|---|---|
| <p>3.14.1</p> <p>B. Instrumentation may be taken out of service for short periods of time for testing; however, the requirements of 3.14.1.C will apply.</p> <p>C. When any of the instrumentation listed in table 4.14-1 is out of service, manual surveys or "grab" sampling shall be done once each shift.</p> <p>D. Radiation sensitive instrumentation and laboratory equipment not listed in Table 4.14-1 or elsewhere in the Technical Specifications shall be operable on an "as needed basis."</p> <p>2. The provisions of Specification 3.0.1 are not applicable to Specification 3.14.</p> | <p>4.14.1</p> <p>The monitor shall be recalibrated if the results are outside this span.</p> <p>B. The instrumentation of Table 4.12-2 shall be calibrated every six months. This calibration procedure shall consist of an initial electronic calibration and then a verification of the calibration, using two known sources of radiation fields.</p> <p>C. Not Applicable.</p> <p>D. Other radiation instrumentation and laboratory equipment shall be calibrated at regular intervals. The Radiation Protection Department supervisor shall determine these intervals based on operating requirements and experience.</p> <p>2. Not Applicable.</p> |

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

3.16

2. Within a 5-mile radius, enumeration by using referenced information from county agricultural agents or other reliable sources.

If it is learned from this census that animals are present at a location which yields a calculated thyroid dose greater than from previously sampled animals, the new location shall be added to the surveillance program as soon as practicable. The sampling location having the lowest calculated dose may then be dropped from the surveillance program at the end of the grazing season during which the census was conducted. Also, any location from which milk can no longer be obtained may be dropped from the surveillance program after notifying the NRC in writing that milk-producing animals are no longer present at that location.

3. The provisions of Specification 3.0.1 are not applicable to Specification 3.16.

3.16

2. Not Applicable.

3. Not Applicable.

LIMITING CONDITION FOR OPERATION

3.17.2 Aircraft Fire Detection

Applicability

Applies to the testing of the aircraft fire detectors installed on diesel generator and switchgear intakes, Aux. Bldg. intakes and cribhouse.

Objective

To verify that the control circuit will trip the corresponding fan and close the corresponding damper.

Specification

1. The aircraft fire detection system shall be operational, or the failed components shall be placed in the accident mode.

2. The provisions of Specification 3.0.1 are not applicable to Specification 3.17.2.

SURVEILLANCE REQUIREMENT

4.17.2 Aircraft Fire Detection

Applicability

Applies to the testing of the aircraft fire detectors installed on diesel generator and switchgear intakes, Aux. Bldg. intakes and cribhouse.

Objective

To verify that the control circuit will trip the corresponding fan and close the corresponding damper.

Specification

1. Surveillance on the Aircraft Fire Detection system shall be as follows:
 - a. Each air compressor shall be verified operational once a month.
 - b. Each fire detection circuit shall be tested every six months by simulating a signal equivalent to a fire condition and fan trip and associated damper closure verified to occur within 2 seconds.

2. Not Applicable.

| LIMITING CONDITION FOR OPERATION | SURVEILLANCE REQUIREMENT |
|---|--|
| <p>3.19</p> <p>2. Instrumentation may be taken out of service for short periods of time for testing; however, the requirements of 3.19.3 will apply.</p> <p>3. When the instruments in Table 4.19-1 are out of service, a radioactive iodine analysis of the reactor coolant system shall be done on the unit whose detectors are inoperable.</p> <p>4. The provisions of Specification 3.0.1 are not applicable to Specification 3.19.</p> | <p>4.19</p> <p>2. The instrumentation in Table 4.19-1 shall be calibrated initially electronically. The calibration shall be verified during refueling operations using the following methods.</p> <p>A. For RTPR18, at least two different levels of radiation shall be used.</p> <p>B. For RTPR21 at least two known concentrations of radioactive materials shall be used.</p> <p>3. An iodine analysis of the reactor coolant system shall be done once per shift on a unit whose failed fuel instrumentation is inoperable.</p> <p>4. Not Applicable.</p> |

| LIMITING CONDITION FOR OPERATION | SURVEILLANCE REQUIREMENT |
|--|--|
| <p>3.21</p> <p>6. Penetration Fire Barriers</p> <p>A. All penetration fire barriers protecting safety related areas shall be functional at all times.</p> <p>B. With one or more of the above required penetration fire barriers not intact a continuous fire watch shall be established on at least one side of the affected penetration within 1 hour. If an operable fire detector is located in the area, an hourly inspection of the penetration fire barrier may be performed rather than establishing a continuous fire watch.</p> <p>7. The provisions of Specifications 3.0.1 are not applicable to Specification 3.21.</p> | <p>4.21</p> <p>6. Penetration Fire Barriers</p> <p>A. Each of the safety related penetration fire barriers shall be verified to be functional by a visual inspection.</p> <ol style="list-style-type: none"> 1. At least once per 18 months, and 2. Prior to declaring a penetration fire barrier functional following repairs or maintenance. <p>7. Not Applicable.</p> |