

50-267
P

PUBLIC SERVICE COMPANY OF COLORADO

P. O. BOX 840 - DENVER, COLORADO 80201

C. K. MILLEN
SENIOR VICE PRESIDENT

January 4, 1979
Fort St. Vrain
Unit No. 1
P-79002

Mr. Themis P. Speis
Advanced Reactors Branch
Division of Project Management
Nuclear Regulatory Commission
Washington, D.C. 20555

Docket No. 50-267

SUBJECT: Standard Technical Specifications

REF: Letter T. P. Speis to J. K. Fuller,
August 26, 1978

Dear Mr. Speis:

We have reviewed your invitation to participate in the Standard Technical Specification (STS) program as outlined in the referenced letter. Due to the unique features of Fort St. Vrain we are not prepared at this time to commit to participation in the Standard Technical Specification program. We believe that the format of our present Technical Specifications is adequate and in many respects meets the intent of the Standard Technical Specification.

In light of your comments in Enclosure 3 of the referenced letter, however, we have recognized some shortcomings of the existing Technical Specifications, and have noted some areas where the comments are in need of further clarification. The attached comments have been prepared in response to Enclosure 3. Based upon your review and/or acceptance of these comments, we will proceed to revise the Technical Specifications and submit them for your approval.

Very truly yours,

C. K. Millen

CKM/alk

D002
S/I
ADD
BRINKMAN
W/ENCL

7901110090

P

RESPONSE TO THE NUCLEAR REGULATORY COMMISSION
RECOMMENDATIONS AND COMMENTS ON THE
FORT ST. VRAIN TECHNICAL SPECIFICATIONS

1. Technical Specification 2 - Definitions

a. General Comment

Recommendation

Add a definition of instrument set points to the definition section of the Technical Specifications.

Response

A definition of instrument set points will be added to the definition section of the Technical Specifications.

Recommendation

Delete the definition of "Low Power Operation", Technical Specification 2.5, and in its place define "Startup". Startup may be defined as the mode switch in the run position and the Interlock Sequence switch in the startup position. Change the Technical Specification definition 2.10, "Power Operation" to relate to the mode selection switch in the run position and the ISS switch in the low power position.

Response

We do not intend to delete definition 2.5, Low Power Operation, nor change definition 2.10, Power Operation. Since protective actions are sequenced as a function of reactor plant power level, defining low power and power operation in terms of instrumentation readings is appropriate. We recognize as pointed out in Reference (1) that this is not consistent with light water reactor restrictions, however, we have documented in numerous safety evaluations our ability to safely shutdown from the 2% power level and have justified this power level within the design basis and characteristics of the HTGR. Arbitrary imposition of light water reactor restrictions is unacceptable.

2. Technical Specification 3.0 - Safety Limits and Limiting Safety System Settings

a. Specification 3.1 - Reactor Core Safety Limit

Comment/Recommendation

As presently written, the total effective integrated operating time for Figure 3.1-1 is applicable only for the transient resulting in a power to flow ratio above the curve of Figure 3.1-2. Figure 3.1-2 is applicable for power levels above 15%. Extend Figure 3.1-2 to 0% power, with a power to flow ratio of 1.0 required in all cases between 15% and 0% power level. It should be noted that it is possible

Comment/Recommendation (continued)

to operate the reactor with the circulator self-turbining at power levels in excess of 15% power and/or below with a no flow condition, since there is no power to flow scram and/or no low flow scrams for this plant.

Response

Apparently, the comment regarding extension of Figure 3.1-2 has not taken into consideration the limits imposed by Specification LCO 4.1.9. The latter LCO, Core Region Temperature Rise, Limiting Condition for Operation, is applicable for power levels from 0% to 1%. It should be noted that it is not possible to operate the reactor at power levels of 15% power and/or below with a no flow condition and still fulfill the requirements of LCO 4.1.9.

Recommendation

Extend Figure 3.1-1 to provide applicable operating time for those power to flow ratios of 1.22 and below. Presently, an infinite time is used for these ratios. Moreover, the safety limit as written does not clearly indicate that the total damage factor to the fuel is the sum of those individually experienced at each power to flow ratio. Consideration may be given to establishing a safety limit based on temperature.

Response

Figure 3.1-1 is currently under evaluation and it is our intent to extend the curve to provide applicable operating time for those power to flow ratios of 1.22 and below and 2.5 and above.

It should be noted that the safety limit has been interpreted and is being implemented in a manner which considers the fuel damage factor as the sum of those individually experienced at each power to flow ratio. Specification SL 3.1 refers to the total effective integrated operating time and we have interpreted this as the sum at each power to flow ratio.

Comment

It is also noted that present in-plant instrumentation is limited with regard to resolution of the time period when the power to flow ratios exceed those of this Technical Specification. The power to flow recorder, which is the primary source of this information, is a one inch per hour chart. At present the plant relies on General Atomic Company test computer data. However, we understand that you will install brush recorders which would be triggered by power flows in excess of the allowable limits.

Response

The in-plant instrumentation for power to flow is presently under evaluation and various alternatives are being considered. Improved instrumentation will be provided as necessary to fulfill Technical Specification requirements for evaluating power to flow transient conditions.

3. Technical Specification 4.0 - Limiting Conditions for Operations

a. General Comment

Change the wording of the last sentence on page 4.0-1 which defines the time period in which corrective action must be taken as 24 hours, to be similar to that in BWR Standard Technical Specification 3.0.4.

Response

We believe the wording of the last sentence on page 4.0-1 establishes the 24 hour period referenced except for those LCO's in which specific time limits have been established by the LCO which are supported by the basis for the particular LCO.

b. LCO 4.1.2 - Operable Control Rod, Limiting Conditions for Operation

Comment

It should be noted that in accordance with this Technical Specification, the reactor may be operated without operable control rods or sufficient reactivity to ensure cold shutdown up to power levels of 2%. Consistent with other Technical Specifications, the reactor control rods should be operable for startup and power operations.

Response

We agree with the comment. The LCO will be changed to include requirements for control rod operability at any time when the reactor is not in a shutdown or refueling condition.

c. LCO 4.1.3 - Rod Sequence

Comment/Recommendation

In the basis section of this Technical Specification there are a number of peaking ratios given for different fuel regions. However, it does not appear that there are any surveillance requirements to determine these peaking ratios on any regular basis. Consideration should be given to requiring periodic determination of the peaking ratios as a surveillance requirement.

Response

No surveillance requirement is necessary to determine the peaking ratios contained in the basis of LCO 4.1.3. The peaking factors constitute one of the three bases used for establishing any control rod withdrawal sequencing which must be approved by the Nuclear Facility Safety Committee (NFSC). Therefore, adhering to the approved rod withdrawal sequence is sufficient to assure that peaking factors are in specified ranges.

d. LCO 4.1.6 - Reserve Shutdown System

Recommendation

This section should be reworded to require a minimum operability of the reserve shutdown system anytime the reactor is being started up, and for power or low power operation.

Response

No changes are required since LCO 4.1.6 already specifies low power ($10^{-3}\%$ to 2%) operation which limits reactor power to less than $10^{-3}\%$ unless the conditions of the LCO are met.

e. LCO 4.1.7 - Core Inlet Orifice Valves

Comment

At present there appears to be no corresponding surveillance requirement regarding the orifice valve position indications.

Response

There is no surveillance requirement regarding orifice valve position indication. The orifice valves are provided only to control region outlet temperatures specified in this LCO. The position of the orifice valve is therefore dictated by temperature and is irrelevant to compliance with the LCO or the safety limits addressed in the basis of the LCO.

f. LCO 4.2.1 - Number of Operable Circulators

Recommendation

This Technical Specification should be changed to require one operable circulator in each loop for any startup or critical operation. It should be noted that the Technical Specification is presently applicable only for power operation.

Response

No change is required to LCO 4.2.1 since, as stated in the LCO, if only one circulator is operable at any time the reactor must be placed in a low power or shutdown condition. With those requirements, reactor power operation with only one operable circulator is not permitted.

g. LCO 4.2.2

Recommendation

A requirement for the operability of the backup bearing water system should be incorporated in LCO 4.2.2, in addition to the other conditions required for an operable circulator.

Response

As indicated in the Final Safety Analysis Report the backup bearing water system is non-Class I, and no credit is taken for this system in the accident analysis. The system is available strictly as a backup and therefore there is no basis for incorporating the system into the LCO.

Recommendation

Technical Specifications LCO 4.2.3, 4.2.4, 4.2.5, and 4.2.6 are all Technical Specifications which are required for power operation only. These Technical Specifications should be evaluated to determine if they should apply also to low power or startup conditions. Technical Specifications 4.2.12, 4.2.13, and 4.2.14 are again applicable only at power operation. These should be evaluated to determine if they should also be applicable any time the reactor is to be started up or at low power conditions.

Response - LCO's 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.3.1, 4.3.2, 4.3.4, 4.3.5, and 4.3.6

The objectives of Sections 4.2 and 4.3 of the Technical Specifications are to ensure the capability to cool the reactor core.

The requirements for operability of systems or components during power operation, where specified in individual LCO's is adequate to assure that the capability exists to fulfill the intent of the LCO for which the statement is applicable.

The configurations required by the LCO's listed^s above provide sufficient capability for a safe shutdown of the plant and for safe shutdown cooling as described in Section 10 of the Final Safety Analysis Report.

Based upon that capability, the LCO's listed above do not need to be changed to include startup or low power operation.

Response - LCO's 4.2.12 and 4.2.18

The provisions contained in the above listed LCO's are adequate to assure that the capabilities exist to fulfill the functional requirements stated in the bases of the LCO's and Section 9.6 of the Final Safety Analysis Report.

Based upon those capabilities, the above listed LCO's do not need to be changed to include startup or low power operation.

Response - LCO's 4.2.13 and 4.2.14

The provisions contained in the above listed LCO's are adequate to assure that the capabilities exist to fulfill the functional requirements stated in the bases of the LCO's and Section 5.4 of the Final Safety Analysis Report.

Based upon those capabilities, the above listed LCO's do not need to be changed to include startup or low power operation.

Recommendation

The requirements for "at power" operation is contained in the majority of the remaining Section 4, "Limiting Condition for Operation", Technical Specifications. Rather than identify each specific LCO with the requirements for "at power" conditions each Technical Specification should be evaluated to determine if it should be applicable for startup and low power conditions.

Response

The following Section 4 Limiting Conditions for Operation do not need to be changed to include either startup or low power conditions:

- 1) LCO 4.2.2, 4.2.7, 4.2.8, 4.2.9, 4.2.10, 4.2.11, and 4.2.15
- 2) LCO 4.3.8, 4.3.9, and 4.3.10
- 3) LCO 4.4.3 and 4.4.5
- 4) LCO 4.5.2
- 5) LCO 4.7.1, 4.7.2, 4.7.3, and 4.7.4
- 6) LCO 4.8.1, 4.8.2, and 4.8.3
- 7) LCO 4.9.1 and 4.9.2
- 8) LCO 4.10.3 and 4.10.4

Response (continued)

Since these LCO's either already include startup and low power or do not apply directly to reactor operation or are applicable regardless of reactor operational modes, no changes are required.

The startup or low power aspects of the following Section 4 Limiting Conditions for Operation are addressed elsewhere in this correspondence:

- 1) LCO 4.1.2 under item 3.b.
- 2) LCO 4.1.6 under item 3.d.
- 3) LCO 4.2.1 under item 3.f.

LCO's 4.2.16 and 4.2.17

The provisions contained in the above listed LCO's are adequate to assure that the capabilities exist to fulfill the functional requirements stated in the bases of the LCO's.

These LCO's are applicable to a temporary system which would be utilized only if a permanent loss of forced circulation as a result of a major event renders normal plant electrical equipment inoperable.

Based upon the requirement for the system, the above listed LCO's do not need to be changed to include startup or low power operation.

LCO's 4.3.3, 4.3.7, 4.5.1, and 4.6.1

The provisions contained in each of the above listed LCO's are adequate to assure that the capabilities exist to fulfill the functional requirements stated in the basis of each LCO.

Based upon the requirements for the systems, the above listed LCO's do not need to be changed to include startup or low power operation.

LCO's 4.4.2 and 4.4.6

The provisions contained in the above listed LCO's are adequate to assure that the capabilities exist to fulfill the functional requirements stated in the bases of the LCO's as discussed in Final Safety Analysis Report Amendment No. 17, Question 7.5.

LCO 4.4.4

Based upon the evaluation for the LCO's 4.2.3 through 4.2.6, the provisions contained in LCO 4.4.4 do not need to be changed to include startup or low power operation.

Response (continued)

LCO's 4.10.1 and 4.10.2

The provisions contained in the above listed LCO's are adequate to assure that the capabilities exist to fulfill the functional requirements stated in the bases of the LCO's. With the operability of the Alternate Cooling Method System, the conditions for core heat removal under accident conditions can be fulfilled.

Based upon the requirements for the systems, and operability of the Alternate Cooling Method, the above listed LCO's do not need to be changed to include startup or low power operation.

h. Technical Specification 4.4 - Instrument and Control Systems - Limiting Condition for Operation

Comment/Recommendation

This portion of the Technical Specifications does not address the loop dump system. The loop dump and control systems should either be incorporated as a part of the existing tables and/or a new and separate table defined. On all Section 4.4 Technical Specifications it would appear to be legally permissible to bypass all operable channels for periods of up to 12 hours. Likewise, there is no minimum amount of instrumentation that must be available to the operator to support plant operations. Example: All control rod position indication may be inoperable and the reactor operated at power. These latter two comments would appear to be apparent problems from the standpoint of inspection and enforcement.

Response

Although not mentioned specifically as the loop dump system, the system is addressed in LCO 4.4.1, Table 4.4-1, Item Numbers 4 and 7, and Table 4.4-2, Item Numbers 5a and 5b. It should be noted that Specification LSSS 3.3, Table 3.3-1, Parameters 2(a) and 2(b) include Steam/Water Dump Functions. Therefore, no change is required.

It is not legally permissible to bypass all operable channels for periods of up to 12 hours. The Permissible Bypass Conditions, if any, are stated on Tables 4.4-1, 4.4-2, 4.4-3, and 4.4-4 for each Functional unit heading. Note (f) of Notes for Tables 4.4-1 through 4.4-4 states that "The inoperable channel must be in the tripped condition, unless the trip of the channel will cause the protective action to occur." Note (f) relates to the Minimum Operable Channels and Minimum Degree of Redundancy headings of Table 4.4-1 through 4.4-4.

Response (continued)

Both the Degree of Redundancy and an Operable Channel are defined in LCO 4.4-1. Degree of Redundancy is defined as the difference between the number of operable channels and the minimum number of operable channels which when tripped will cause an automatic system to trip. A typical two out of three logic scheme requires a minimum of two operable channels to achieve a minimum degree of redundancy of one. Further, since Note (f) requires that the inoperable channel be in the tripped condition, one of the channels is operated thereby requiring only one other of the two unaffected channels to operate and initiate a two out of three logic trip to provide protective actions.

i. LCO 4.5.1 - Reactor Building

Recommendation

For the establishment of reactor building integrity, a condition should be added which requires that other building penetrations be secured. In the past, it was found that piping penetrations into the reactor building were not sealed. A surveillance requirement for inspections of the Reactor Building penetrations at each refueling should also be considered.

Response

Specification LCO 4.5.1 defines the conditions required to maintain the reactor building integrity. Since the established criteria assure the integrity of the reactor building, no changes are required.

j. Technical Specification LCO XXXX - Control Room Ventilation

Recommendation

There is no apparent LCO or Surveillance Requirements for the control room ventilation system. This should include the filter system associated with the control room ventilation. The charcoal filters associated with the control room ventilation system have not been described in the Final Safety Analysis Report.

Response

Specification LCO 4.4.2 - Control Room Temperature, will be revised to include requirements for the control room ventilation system.
Specification SR 5.4.7 - Control Room Temperature, will be revised to include surveillance testing requirements for the control room ventilation system.

It appears that the charcoal filters associated with the control room ventilation system have not been described in the Final Safety Analysis Report. A description of this system can be included in the Final Safety Analysis Report at such time that the Nuclear Regulatory Commission provides guidance and/or regulation for updating the Final Safety Analysis Report.

4. No Number 4 - skips from 3 to 5.
5. Technical Specification 5.0 - Surveillance Requirements

- a. SR 5.2.2 - Tendon Corrosion Surveillance

Comment/Recommendation

This surveillance requirement provides no acceptance criteria for either corrosion of the wire samples or corrosion products as found in the atmosphere of the tendon tube. The findings from this inspection should be reported to the Nuclear Regulatory Commission.

Response

Although acceptance criteria are not listed in Specification SR 5.2.2, we have requested General Atomic Company to supply the necessary acceptance criteria which we will include in the SR 5.2.2 surveillance tests.

With approval of Amendment Number 16 to the Fort St. Vrain Technical Specifications, reporting results of Technical Specification surveillance tests is no longer required. Results of surveillance tests are available and are regularly reviewed by Nuclear Regulatory Commission Inspection and Enforcement.

- b. SR 5.2.3 - Tendon Load Cell Surveillance

Comment

This surveillance requirement provides no acceptance criteria for possible shifts and load cell reference points. If shifts do occur, a report of these findings should be provided to the Nuclear Regulatory Commission.

Response

Although acceptance criteria are not listed in Specification SR 5.2.3, the surveillance test SR 5.2.3-X does include acceptance criteria. With approval of Amendment Number 16 to the Fort St. Vrain Technical Specifications, reporting results of Technical Specification surveillance tests is no longer required. Results of surveillance tests are available and are regularly reviewed by Nuclear Regulatory Commission Inspection and Enforcement.

- c. SR 5.2.4 - PCRV Concrete Crack Surveillance

Comment

This surveillance requirement does not provide for reporting the findings of the concrete crack surveillance inspection to the Nuclear Regulatory Commission.

Response

With approval of Amendment Number 16 to the Fort St. Vrain Technical Specifications, reporting results of Technical Specification surveillance tests is no longer required. Results of surveillance tests are available and are regularly reviewed by Nuclear Regulatory Commission Inspection and Enforcement.

d. SR 5.2.5 - Liner Specimen Surveillance

Comment

This surveillance requirement provides no basis for acceptance criteria changes in notch toughness. It also does not provide for reporting the findings from this surveillance to the Nuclear Regulatory Commission.

Response

Although acceptance criteria are not listed in Specification SR 5.2.5, the surveillance test SR 5.2.5-X does include requirement for analysis per ASTM-E-185-70. With approval of Amendment Number 16 to the Fort St. Vrain Technical Specifications, reporting results of Technical Specification surveillance tests is no longer required. Results of surveillance tests are available and are regularly reviewed by Nuclear Regulatory Commission Inspection and Enforcement.

e. SR 5.2.6 - Plateout Probe Surveillance

Comment

This specification does not provide for reporting the findings from the plateout probe surveillance to the Nuclear Regulatory Commission.

Response

With approval of Amendment Number 16 to the Fort St. Vrain Technical Specifications, reporting results of Technical Specification surveillance tests is no longer required. Results of surveillance tests are available and are regularly reviewed by Nuclear Regulatory Commission Inspection and Enforcement.

f. SR 5.2.7 - Water Turbine Drive Surveillance

Recommendation

Acceptance criteria should be established in this specification for operation on water turbine drive using feedwater or condensate at reduced pressure to simulate fire discharge pressure as motive power. The circulator should be capable of the helium flow requirements established in the Accident Analysis Chapter of the Final Safety Analysis Report.

Response

Although acceptance criteria are not listed in Specification SR 5.2.7, the surveillance test SR 5.2.7-A includes curves which specify minimum acceptable speeds for operation on water turbine drive using feedwater, condensate, or condensate at reduced pressure to simulate fire water conditions. The curves cover the range of helium densities and utilize requirements established in Final Safety Analysis Report Section XIV, Part 14.4 to specify the acceptable speeds for each condition.

g. SR 5.2.8 - Bearing Water Makeup Pump Surveillance

Recommendation

Acceptance criteria should be established for normal makeup flow and emergency makeup pump flow. Flow rates should be verified during the surveillance test.

Response

Although acceptance criteria are not listed in Specification SR 5.2.8, surveillance test SR 5.2.8a-Q, utilizes the pump curve for the normal bearing water makeup pump (P-2105) to establish the minimum operability of the pump. Surveillance test SR 5.2.8abc-Q includes relief valve operation to verify operability of the positive displacement emergency bearing water makeup pump (P-2108).

h. SR 5.2.10 - Engine-Driven Fire Pump Surveillance

Recommendation

This surveillance section should be expanded to include the following: minimum fuel inventory; minimum acceptable pump discharge and flow rate; requirements to perform an annual inspection of the pump and diesel engines; and an annual test under full load conditions.

Response

Specification LCO 4.2.6 - Firewater Pumps, requires that at least 325 gallons of fuel be in storage. Verification of this requirement is performed and recorded once per shift with 600 gallons specified as the reorder point.

The weekly surveillance test is adequate to ensure proper operation of the pump and associated control.

Preventive Maintenance Inspection Procedures, PM 45.5 and PM 45.6, provide inspections of the pump and diesel engine in accordance with the manufacturer's suggested schedules.

i. SR 5.2.13 - PCRV Concrete Helium Permeability Surveillance

Comment

This specification does not provide any acceptance criteria or reporting requirements of the results to the Nuclear Regulatory Commission.

Response

Although acceptance criteria are not listed in Specification SR 5.2.13, surveillance test SR 5.2.13-X does include expected test results.

With approval of Amendment Number 16 to the Fort St. Vrain Technical Specifications, reporting results of Technical Specification surveillance tests is no longer required. Results of surveillance tests are available and are regularly reviewed by Nuclear Regulatory Commission Inspection and Enforcement.

j. SR 5.2.14 - PCRV Liner Corrosion Surveillance Requirement

Comment

This specification does not provide any acceptance criteria for liner thinning or reporting of the results to the Nuclear Regulatory Commission.

Response

Although acceptance criteria are not listed in Specification SR 5.2.14, surveillance test SR 5.2.14-X does include provisions for evaluating data and determining the success or failure of the test.

With approval of Amendment Number 16 to the Fort St. Vrain Technical Specifications, reporting results of Technical Specification surveillance tests is no longer required. Results of surveillance tests are available and are regularly reviewed by Nuclear Regulatory Commission Inspection and Enforcement.

k. SR 5.2.17 - Helium Circulator Pelton Wheels

Comment

This specification does not provide for reporting the findings of the inspection of the Pelton wheels to the Nuclear Regulatory Commission.

Response

Specification SR 5.2.17 does not provide for reporting the findings of the inspection of the Pelton wheels to the Nuclear Regulatory Commission. However, Specification 5.2.18 which is performed at the same time as SR 5.2.17 does specify submitting results of examinations to the Nuclear Regulatory Commission. Although not specifically mentioned in SR 5.2.17 it is our intent to include the results of the examination of the Pelton wheel in the helium circulator examination report under SR 5.2.18. If necessary, a change to SR 5.2.17 to this effect could be made.

1. SR 5.3.1 - Steam/Water Dump System Valves Surveillance Requirements

Comment

This specification does not establish any acceptance criteria for the opening time of the steam/water dump valves.

Response

Although acceptance criteria are not listed in Specification SR 5.3.1, the surveillance test SR 5.3.1-Q specifies an opening time for the steam/water dump valves, the results of which are available for Nuclear Regulatory Commission Inspection and Enforcement review.

m. SR 5.3.2 - Main and Hot Reheat Steam Stop Check Valves, Surveillance Requirements

Comment

This specification does not establish any acceptance criteria for the stroking time of the main steam and hot reheat steam stop check valves.

Response

The testing specified in Specification SR 5.3.2 is adequate to assure the functional reliability of the main and hot reheat steam stop check valves as stated in the basis of SR 5.3.2 and Section X, Part 10.5 of the Final Safety Analysis Report. It is not possible to check the stroking time of these valves during normal operation; therefore functional tests are performed. Acceptance criteria for the stroking time will be specified in surveillance test SR 5.3.2-A.

n. SR 5.3.3 - Bypass and Safety Valves, Surveillance Requirements

Recommendation

Surveillance requirements should be established for the calibration of the instrument and controls systems associated with the bypass and safety valves.

Response

Instrumentation associated with the bypass and safety valves is calibrated on an annual basis. This frequency is adequate to ensure operability of the equipment.

o. SR 5.3.4 - Safe Shutdown Cooling Valves, Surveillance

Recommendation

A table should be established in this section for those valves necessary for actuation of the safe shutdown cooling mode. Where appropriate, limiting conditions for operation should be established requiring operability of these valves.

Response

Surveillance test SR 5.3.4-SA contains a list of valves necessary for safe shutdown cooling.

Where appropriate, limiting conditions for operation will be established requiring operability of safe shutdown cooling valves.

p. SR 5.6.1 - Standby Diesel Generator Surveillance

Recommendation

The diesel should be loaded to 100% instead of the 50% presently in the Technical Specifications. The interval for performance of the load capacity test should be changed to monthly. A surveillance requirement should be added for the inspection of the diesel, either annually or at the refueling interval.

Response

Specification SR 5.6.1 will be revised to a monthly 100% load test.

Inspection and Preventive Maintenance Procedure, PM 92.10, specifies the quarterly, semi-annual, and annual inspections of the standby diesel units in accordance with the manufacturer's recommendations.

q. LCO 4.2.10 - Loop Impurity Levels, High Temperatures

Recommendation

Some discrepancy exists between this LCO and the Final Safety Analysis Report (page 4.2-2). Revise the LCO and discuss the merits if any of an integrated equivalent impurity level and a maximum number of cycles that the amounts may be exceeded for 10 days. From the LCO it would appear to be possible to operate for 10 days with oxidant impurity levels exceeded by a factor of 10, then decrease the temperature to below 1,200°F for one day and repeat the cycle indefinitely. The staff finds this unacceptable.

Response

The LCO will be changed to clarify the time and number of cycles as a function of integrated equivalent impurity levels, if applicable. We are pursuing this matter with General Atomic Company, and will reconcile the apparent differences between the LCO and the Final Safety Analysis Report.

- r. LCO 4.6.1 - Auxiliary Electric System, Limiting Conditions for Operation

Comment

Part d4 requires that the reactor shall not be operated at power unless 500 gallons of fuel exists in each day tank of the diesel generators. Since these tanks have a 500 gallon capacity, it would be extremely difficult to maintain the set level after even a short interval of running the diesels.

Response

A change to Specification LCO 4.6.1 has been submitted to the Nuclear Regulatory Commission which requested a reduction in the fuel required to 325 gallons.