Docket File

JUL 1 1 1973

Docket No. 50-302

POOR ORIGINAL

Florida Power Corporation
ATTN: Mr. J. T. Rodgers
Assistant Vice President &
Nuclear Project Manager
P. O. Box 14042
St. Petersburg, Florida 33733

Gentlemen:

On the basis of our continuing review of the Final Safety Analysis Report (FSAR) for Crystal River, Unit 3 Nuclear Generating Plant, we find that we need additional information to complete our evaluation. The specific information is listed in enclosure 1.

Because of the potentially significant effect of these items on our licensing review schedule, we will need a completely adequate response by August 15, 1973. Please inform us within seven days after receipt of this letter of your confirmation of the schedule or the date you will be able to meet. If you cannot meet our specified date or if your reply is not fully responsive it is highly likely that the overall schedule for completing the licensing review for this project will have to be extended. Since reassignment of the staff's efforts will require completion of the new assignment prior to returning to this project, the extent of extension will most likely be greater than the extent of delay in your response.

Sincerely,

Original Signed by
Albert Schwencer

A. Schwencer, Chief
Pressurized Water Reactors
Branch No. 4
Directorate of Licensing

8003160123 A

Enclosure:
Request for Additional Information

cc: See next page

cc: S. A. Brandimore
Vice President & General Counsel
P. O. Box 14042
St. Petersburg, Florida 33733

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Form AEC-318 (Rev. 9-53) AECM 0240

REQUEST FOR ADDITIONAL INFORMATION
FLORIDA POWER CORPORATION
CRYSTAL RIVER, UNIT 3
DOCKET NO. 50-302

1.0 INTRODUCTION AND SUMMARY

1.7 With respect to the Quality Assurance Program (FSAR Section 1.7) provide the following information:

1.7.1 Provide a clear identification and description of the authority and independence of those individuals or groups responsible for establishing and implementing QA policies, procedures and instructions within the areas of operation, maintenance, and modification and repair.

1.7.2 Provide an organizational structure showing the corporate "offsite" organization and the operating plant organization which includes the operating QA organization and the line authority from upper management.

1.7.3 Describe the organizational authority and independence of those individuals or groups responsible for performing quality assurance functions, particularly in the areas of inspection and auditing.

1.7.4 Describe the qualifications requirements for the person responsible for directing and managing the QA program.

1.7.5 Provide an identification and a description of the important aspects of the QA program procedures which apply to the facility operational phase activities of operating, maintaining, modifying, repairing, and refueling and which demonstrate compliance with each of the eighteen criteria of 10 CFR Part 50, Appendix B.

1.7.6 Provide a cross index table relating each QA program procedure to those criteria of 10 CFR Part 50, Appendix B which are addressed in the procedure.

1.7.7 Identify and discuss those provisions within the QA program which satisfy the guidelines set forth in Regulatory Guide No. 1.33, "Quality Assurance Program Requirements for Operations," dated November 3, 1972.

1.7.8 Identify those persons responsible for defining the QA program content and changes thereto; specify the management level responsible for the final review and approval of the QA program. Describe the provisions for communicating to all responsible organizations and individuals that the QA program is a mandatory requirement and must be enforced.

1.7.9 Provide a description of the controls which assure that the QA program policies, manuals, and revisions thereto are distributed to responsible parties.

1.7.10 Describe the formal indoctrination and training program to be established for personnel performing quality related activities to assure they become knowledgeable of the QA procedures and requirements and become proficient in implementing these procedures. In addition. describe the training and qualification requirements of the nondestructive testing personnel.

1.7.11 Discuss with respect to your audit system:

a. Those audits performed by corporate or top level management which provide independent verification and evaluations of the QA program, procedures, and activities to assure they are meaningful and in compliance with corporate policy and with 10 CFR Part 50, Appendix B. Indicate the frequency of these audits.

b. Those audits performed by the utility (usually the QA organization) which provide a comprehensive verification and evaluation of the QA program, procedures and activities to assure that they are meaningful and are complying with the program requirements. Indicate the frequency of these audits.

2.0 SITE AND ENVIRONMENT

2.34 Section 2.4.2.1 (page 2-16b) of the FSAR has listed access openings to the various plant structures (item a) and has stated that flood protection has been provided by concrete bulkheads or removable stoplogs. For each opening identified (15 total plus water-tight seal areas), provide the elevation, location of the opening, and the specific type of protection provided.

2.35 Section 2.4.2.1 of the FSAR also states that local protection of various plant components from flooding and/or from resultant wave action will be provided. For protection that depends upon concrete bulkheads, concrete water barriers, raised walls, or raised equipment (items a through e, page 2-16b) provide the following information:

a. The present design height of each protective means or device necessary to protect against the probable maximum hurricane.

b. The maximum projected design height of each protective means or device necessary to protect against the current model under discussion for the probable maximum hurricane.

2.36 Essential equipment, necessary for safe shutdown, located adjacent to or below the structure opening or penetrations have been provided with drains and diesel powered dewatering pumps. Provide the location and capacities of the equipment provided to handle the flood leakage.

4.0 REACTOR COOLANT SYSTEM

4.36 In addition to the specifications already listed in the FSAR for principal pressure retaining ferritic materials and austenitic stainless steel used for components that are part of the reactor coolant pressure boundary, provide RCPB specifications for the weld materials for fabrication and assembly of the components. With respect to ferritic materials (including welds) of the reactor pressure vessel beltline, provide information regarding the specifications for these materials showing additionally imposed limits or residual elements (reportable and nonreportable) by specification requirements which are intended to reduce sensitivity to irradiation embrittlement in service. Any additional or special requirements by the purchaser should also be indicated.

4.37 Provide a description of the compatibility of the reactor coolant pressure boundary materials of construction with the external insulation or the environmental atmosphere in the event of coolant leakage.

4.38 For all austenitic stainless steel used for components that are part of

(1) the reactor coolant pressure boundary,
(2) systems required for reactor shutdown,
(3) systems required for emergency core cooling,
(4) reactor vessel internals required for emergency core cooling, and
(5) reactor vessel internals relied on to permit adequate core cooling for any mode of normal operation or under postulated accident conditions,

the following information should be provided:

4.38.1 Describe the procedures that were used and will be used to ensure that the material was and will be suitably cleaned and protected against contaminants capable of causing stress corrosion cracking throughout the fabrication, shipment, storage, construction, testing, and operation of components and systems.

4.38.2 Provide a description of materials, processes, inspections, and tests that were used to ensure freedom from the increased susceptibility to intergranular stress corrosion caused by sensitization. This should include the following:

a. If special processing or fabrication methods were used that subjected the material to temperatures between 800 and 1500°F, or that involved slow cooling from temperatures over 1500°F, provide justification that such treatments did not cause increased susceptibility to intergranular stress corrosion.

b. Indicate special requirements on chemical analysis for any materials that during normal operation will be exposed to water environments containing over 0.10 ppm dissolved oxygen when at temperatures over 200°F.

c. If the presence of delta ferrite was relied on to prevent sensitization of welds or castings, describe the methods that were used to ensure the presence of at least 5% delta ferrite.

4.38.3 Describe the procedures and requirements that were employed to avoid hot cracking of austenitic stainless steel welds, especially pertaining to filler metal compositions, welding procedure qualifications, and methods for ensuring adequate delta ferrite content of production welds.

5.0 CONTAINMENT SYSTEM AND OTHER SPECIAL STRUCTURES

5.35 Provide the analysis of a split of a reactor coolant pipe equivalent in area to a single-ended pipe rupture inside the biological shielding. Include a discussion of the model and assumptions used and a flow diagram showing all flow interconnections, the free volume and vent areas considered. Compare the peak calculated pressure differential in the pipe annulus to the design pressure differential.

5.36 Section 5.2.1.2.6 of the FSAR provides a description of design bases tornado-borne missiles considered for this facility. Expand the spectrum of tornado missiles considered to include the following:

a. A 4" x 12" by 12 foot long wooden plank traveling end-on at 300 m.p.h.

b. A missile equivalent to a 3 inch diameter schedule 40 pipe, 10 feet long, traveling end-on at 100 m.p.h.

For each of the above, discuss the ability of Class I structures to withstand the effects of these tornado missiles.

5.37 For each of the tornado-borne missiles considered (total spectrum), describe the adequacy of the design of all Class I structures to preclude the generation of secondary missiles within these structures and the effects on safety related equipment and systems.

5.38 Seismic Class I structures are designed with personnel and/or equipment exterior access openings or penetrations. Discuss the ability of these openings or penetrations to withstand the effects of the design bases tornado missiles. Describe the missile protection provided safety related equipment and systems in the event that the openings or penetrations do not preclude missile entry.

6.0 ENGINEERED SAFEGUARDS

6.14 Describe the protective sump screen assembly that will prevent debris capable of clogging the containment spray nozzles from entering the sump suction piping. Provide assurance that failure of a portion of the assembly will not negate the effectiveness of the entire assembly. Provide a drawing showing the physical arrangement of the assembly within the sump.

6.15 Discuss the design provisions which permit the spray water that may enter the refueling cavity and the reactor cavity following a loss-of-coolant accident to be drained to the containment sump.

6.16. Describe provisions made in the reactor building emergency cooling system fans and ductwork to assure that the system can withstand, without loss of function, the differential pressures imposed under the loss-of-coolant accident transient containment pressure conditions.

8.0 ELECTRICAL SYSTEMS

8.8 With respect to the emergency diesel generators, the following information is required:

a. Provide the results of a single failure mode and effects analysis for the diesel fuel transfer and storage system. Provide a piping and instrumentation diagram of the system in sufficient detail to enable us to review the systems' safety capability.

b. Information pertaining to the essential subsystems of the diesels has not been provided in sufficient detail to permit a determination that a single event will not disable all emergency onsite AC power systems. Provide a piping and instrumentation drawing and a single failure analysis for the following subsystems: (a) the air intake and its filtering system, (b) the lubrication and its filtering system, (c) diesel cooling water system, and (d) the air starting system.

c. Provide an integrated description of the protection provided and capabilities of the diesel generator rooms , diesel generators subsystems, and the fuel storage tanks and transfer system to preclude damage resulting from environmental effects such as tornado missiles, internally generated missiles, flooding by the PMH or fire protection system, and excessive room temperatures, so that their performance will not be unacceptable when called upon Include in the description the physical separation provided redundant components of the systems.

d. The underground diesel oil storage tanks have been designed to seismic Class I requirements. With the aid of a drawing, describe this underground storage facility in more detail and also the precaution taken to preclude the following: (a) long-term corrosion of the tanks, (b) failure that would permit oil to contaminate water supplies or safety related equipment, and (c) degradation of the fuel supply by water resulting from the effects of natural phenomena, condensation, and/or pool oil supply.

9.0 AUXILIARY AND EMERGENCY SYSTEMS

9.12 The high pressure injection emergency core cooling system is an integral part of the makeup and purification system and is designed accordingly (seismic Class I). With respect to this system, provide the following information: (a) Section 5.1.1.1 C of the FSAR states that the letdown coolers, letdown filters, and makeup tank are designed as seismic Class I components. Utilizing Figure 9.2 of the FSAR, identify the letdown filters and state whether all valves and piping between the letdown coolers and makeup tank are designed to seismic Class I requirements, and (b) provide the results of an analysis to demonstrate that the failures or malfunctions of seismic Class II equipment will not affect the seismic Class I portion of the system.

9.13 The FSAR states that process sampling lines that penetrate the reactor building have been provided with isolation capabilities. However, process sampling lines are connected to other seismic Class I systems for sampling purposes outside containment. Describe the isolation capabilities provided for the sampling system (including the seismic design classification) to assure that failure of the Class II sample line connections will not affect the integrity of the seismic Class I system.

9.14 The spent fuel cooling system has been designed to seismic Class I requirements (Section 5.1.1.f of the FSAR, Pumps, Heat Exchangers, Piping and Valves). With respect to Figure 9.5 of the FSAR, identify the Class II portions of the system and the valves utilized to isolate the seismic Class II portion from the seismic Class I designed system.

9.15 Section 9.3.2.8 of the FSAR has identified several sources of water capable of providing makeup to the spent fuel storage pool and cask area. These sources design classification range from seismic Class I to Class III, therefore, identify the sources that have been designed to seismic Class I requirements including their associated valves and piping.

9.16 AEC Request 9.7 requested arrangements that would be made for the emergency cooling of 1 1/3 cores of spent fuel if coolant was lost. With respect to your response, state why the decay heat removal system hookup was not included as part of your consideration for emergency cooling.

9.17 Section 9.5 of the FSAR, Cooling Water Systems, Figures 9.7 and 9.8, indicates that the nuclear service sea water system and the nuclear service closed cycle cooling water system are designed to withstand the effects of a single active failure but are not apparently capable of withstanding a single passive failure without loss of the complete system. In light of the essential functions these systems perform, review this design aspect for normal operating conditions and for emergency long-term post-accident cooling requirements and provide sufficient justification regarding the acceptability of the system design.

9.18 Identify the cooling water system that provides cooling services to the emergency diesel generators. With respect to this system, discuss its capabilities to withstand the effect of a single active or passive failure to assure that safe shutdown can be achieved during the loss of offsite power and the loss of offsite power coincident with the accident condition.

9.19 Discuss the precautions taken to prevent and detect the presence of salt water inleakage to the nuclear service closed cycle cooling water and decay heat cooling water systems from their respective sea water service systems.

9.20 With respect to the new and spent fuel storage facilities, provide the following information:

a. State the degree of subcriticality provided by the fully loaded new fuel storage rack in the dry and flooded condition.

b. State the degree of subcriticality provided by the fully loaded spent fuel storage rack when stored in borated water and unborated water.

c. Describe the ability of the new and spent fuel storage rack to withstand the uplift forces due to the fuel handling crane.

d. Describe the means provided to detect and control leakage from the spent fuel pool and cask area.

e. Describe the means provided to detect and prevent the loss of spent fuel pool water through inlet and exit lines.

f. Describe the spent fuel cask area in more detail and discuss its ability to withstand the cask drop accident. Include in the discussion the associated effects on the cask area and spent fuel pool.

g. Discuss the potential damage to the spent fuel pool and consequences resulting from a dropped cask striking the edge of the cask storage pool area in such a manner so that the cask will hit the opposite wall of the storage area and tumble or roll into the fuel pool area.

h. Describe the means provided (interlocks or mechanical stops) to assure that the shipping cask cannot be inadvertently transported over the spent fuel pool.

i. Describe the spent fuel pool missile shielding, including material of construction, size, weight, shape and properties that prevent missile penetration and permit the shielding to float.

j. Describe in detail the applicable codes and standards used in the design, fabrication, installation and testing of the facility cranes, trolleys, hoists, and associated equipment.

k. Provide a li t of major refueling equipment that is designed to seismic Class I requirements and discuss the associated safety aspects of major refueling equipment not designed to seismic Class I requirements considering their failure.

9.21 Figure 9.10 of the FSAR indicated that the Reactor Building Cavity Cooling units are provided by cooling water from the industrial cooler or the nuclear service closed cycle cooling water system. Provide a description of the normal operations, and emergency operations (if required) and also provide the seismic design classification of the system.

9.22 Describe the auxiliary building spent fuel pit ventilation subsystem with respect to its functional operational requirements during normal and emergency operating conditions.

9.23 The exhaust system for the fuel handling area and other areas will operate continuously in the event of a fuel handling accident. Therefore, provide the results of an analysis that demonstrates that the exhaust system is capable of withstanding the effects of a safe shutdown earthquake (seismic) event.

9.24 The FSAR, Section 9.7.20, states that the exhaust system for the various areas contains four 50% capacity fans and four 25% capacity filter assemblies. With respect to this equipment and the fuel handling accident potential, the following information is required:

a. Provide the functional performance requirements for the exhaust fans during normal and emergency operating conditions.

b. Describe the means provided for the starting of the redundant fans in the exhaust system in the event of a failure in the operating unit.

c. Describe the type of exhaust fans utilized in the system.

d. Provide the functional performance requirements for the filter assemblies during normal and emergency operating conditions and state the basis for the 25% capacity sizing of the filter assemblies.

e. For both the normal and emergency operating conditions, describe the effects on the system's capabilities to perform its intended function considering the following: (1) one filter assembly is out of service for repairs or replacement, and (2) the above filter is out of service along with a single failure in another unit.

f. Provide the results of an analysis that demonstrates that isolation of the exhaust system from other areas such as auxiliary building areas, controlled access areas, spent fuel pit, and penetration cooling areas is not required to maintain a sufficient negative pressure or ventilation capability in the fuel handling area during a refueling accident.

9.25 Figure 9.11 of the FSAR indicates that an auxiliary building recirculation fan has been provided to circulate system air. Describe this fan system in more detail and provide its functional performance requirements during normal and emergency operations including the starting and stopping signals.

9.26 Section 9.7.2.1g of the FSAR states that automatic smoke and temperature detection devices isolate the switchgear, relay, cable, inverter, or battery rooms from the control room. Other areas are also capable of introducing air-borne contaminants (smoke) to the control room; therefore, describe the location of smoke detection devices that will preclude smoke laden air from all areas from being recirculated to the control room. Describe the automatic isolation signals required to actuate the emergency recirculation system to isolate the control room from the rest of the station complex.

9.27 The FSAR states that a high radiation signal will automatically trip the normal control room fans and the emergency fans are manually started. Justify this design aspect or describe the modifications necessary to automatically start the emergency fans upon receipt of a radiation signal.

9.28 The normal and emergency control recirculation fan-filter assemblies have been provided with 100% redundant equipment. Describe the means for activating (starting) the redundant equipment in the system in the event of failure of the operating unit.

9.29 Miscellaneous air conditioning and ventilation systems provide ventilated air to areas such as (a) penetration rooms, (b) diesel generator rooms, (c) intermediate building, (d) turbine building, and (e) turbine building switchgear area. Describe these ventilation systems in more detail including their functional performance requirements, the seismic design classifications, isolation capabilities, single failure requirements, air flow requirements and instrumentation necessary for operation of the systems.

9.30 Section 9.7 of the FSAR, Ventilation System, made no reference to emergency equipment being operated from the emergency buses during the loss of all offsite power. Provide a listing of all ventilation systems that will be provided with emergency power from the diesel generators.

9.31 Provide a process and instrumentation diagram for the fire protection system (FPS) and a drawing that details the main loop and branch piping, valving, pumps, tanks and hydrant locations.

9.32 Provide an analysis to demonstrate that the design of the FPS will assure that failure of any part of the system not seismic Class I will not preclude fire protection to Class I structures, systems, or components necessary for safe shutdown and that the FPS will not as a result of inadvertent operation, normal operation, or failure (rupture of piping) prevent essential systems or components from performing their intended function.

9.33 Provide a listing, in tabular form, of all safety related systems, or components necessary for safe shutdown and indicate the type of fire protection provided. Include also, the following: (a) whether the system is manual or automatically activated, (b) associated detection equipment and alarms, (c) for hand operated fire protection devices, the location of the fire protection devices with respect to equipment being protected, and (d) the distance and type of the nearest secondary or backup fire fighting equipment.

9.34 The compressed air system has not been designed to seismic Class I requirements. Provide a listing of all safety related equipment or components (including valves) necessary for safe shutdown that the compressed air system supplies and provide the results of an analysis that demonstrates that in the event of a system failure each component will be in the fail-safe mode.

9.35 The communication system is designed to provide effective communication between vital plant areas. From the information provided, it is not clear that effective communications can be provided during accident or incident conditions when maximum potential noise levels (blowdown) are obtained. Provide a discussion of the communication system's capability to provide effective communication between all vital plant areas in the presence of high potential background noise levels.

9.36 For all tanks that contain gas under pressure (such as nitrogen, hydrogen, oxygen, air, and CO_2 tanks) provide the following: (a) the design and operating pressure, (b) the maximum pressure of gas supply, (c) the location of the tank, (d) the maximum total stored energy, (e) the possibility of the tank to act as a missile, (f) the protective measures taken to prevent a tank from becoming a missile due to a connecting pipe failure, (g) the protective measures taken to prevent the loss of function of adjacent equipment essential for a safe shutdown condition, and (h) for each vessel identify, discuss and supply the basis for any exceptions or deviations that will be taken to the positions set forth in the Occupational Safety and Health Administration, OSHA 29 CFR 1910.

10.0 STEAM AND POWER CONVERSION SYSTEM

10.11 Provide a piping and instrumentation diagram for the circulating water system and describe the precautions taken to prevent and detect direct inleakage of the salt water circulating water into the condenser. Also, provide a discussion of the detection system's capabilities with respect to sensitivity, redundancy, and action required when maximum tolerable leakage occurs.

10.12 In response to our request dated September 26, 1972, failure of any non-Category I (seismic) equipment, your letter dated December 19, 1972 states that a failure of an expansion joint in the circulatory water system and the resultant flooding of the turbine room basement would be avoided by tripping the circulating water pumps. Expand your response to include the following information:

a. The time required to stop circulating water flow (time zero being the instant of failure) including all inherent delays such as detection times, operator verification and reaction times, drop out times of the control circuiting, and flow coastdown times.

b. State whether the control circuiting for tripping the circulating water pumps meets the requirements set forth in IEEE-279.

c. Assuming that turbine building flooding will result, with the aid of a drawing if necessary, identify all essential systems or components necessary for safe reactor shutdown that could become inoperable as a result of this flooding. Include in your consideration potential flood paths such as passageways, pipe chases and/or the cableways joining the flooded space to other spaces containing essential equipment.

d. The effects of the failure of the condensate system should also be evaluated with respect to the information requested above and similar type of evaluation provided for the circulating water system.

10.13 Section 10.2.2 of the FSAR indicated that the main steam line isolation valves (MSLIV) utilized for this facility are the same as those that have been or are being installed in a number of other nuclear facilities. The majority of these facilities that utilize the MSLIV also utilize dried steam (little or no water carryover with the steam because of the steam driers located in the steam system) which acts in conjunction with the instrumentation to isolate the main steam lines. Therefore, provide the results of an analysis to demonstrate that the effects of low quality steam (water droplets being carried over during steam generator blowdown) acting on the MSLIV will not affect the performance characteristics of the valve so that isolation can be achieved.

11.0 RADIOACTIVE WASTE AND RADIATION PROTECTION

11.20 Section 11.5 of the FSAR does not provide radiation zones that will be used to control in-plant personnel exposures, i.e., uncontrolled access, unlimited controlled access, limited controlled access. Section 11.5 also does not discuss the design features that will be used to reduce in-plant personnel exposures during operation and maintenance of equipment; e.g., cubicles, location of equipment, valves and pipes, remote operation, angled shielding, labyrinths, etc. We need these two items of information to complete our review of the health physics program.

12.0 CONDUCT OF OPERATIONS

12.9 Your Emergency Plan as described in Appendix 12B of the FSAR does not comply with 10 CFR 50, Appendix E. In regard to this plan explicitly describe:

a. The authority and responsibilities of local support agencies that may be called on in the event of an emergency.

b. Other employees (home office) in your organization, such as health physicists and radiochemists, with special qualifications who may be used for coping with emergency conditions that may arise.

c. The arrangements for the services of a physician for emergency treatment of the individuals at the plant site.

d. The provisions for training non-company support groups or agencies that may be called upon in the event of an emergency.

e. The means for determining the magnitude of the release of radioactive materials.

12.10 In regard to augmentation of the plant staff during initial startup and operation of the plant, identify the individual and his qualifications (if not submitted to date) of each person specifically designated to augment the plant staff for each of the following positions; Plant Superintendent, Operation Engineer, Technical Support Engineer, Chemistry and Radiation Protection Engineer and each Shift Supervisor.

13.0 INITIAL TESTS AND OPERATION

13.4 The startup program, as described in Section 13 of the FSAR, does not satisfy the requirements of the AEC "Guide for Planning of Initial Startup Programs." Describe how you will perform the following tests, described in the subject guide, during the initial startup: H.1.j - Chemical and Radiochemical Tests, H.1.k - Pseudo Rod Ejection Test, J.1.3 - Chemical and Radiochemical Analysis, J.1.f - Effluent and Effluent Monitoring Systems, J.1.g - Evaluation of Core Performance and Margins from DNB, J.1.h - Loss-of-Flow, J.1.k - Shutdown from Outside the Control Room, J.1.1 - Loss of Offsite Power, J.1.n - Part-length Rod Insertion/Removal, and J.1.q - Pseudo Rod Ejection Test. In addition, the test program should specify the power level at which all power ascension tests will be performed.

It is requested that you modify the FSAR to include the above requirements.

14.0 SAFETY ANALYSIS

14.38 Discuss the potential additional increase in containment pressure following a steam line failure resulting from an increase in the feedwater flow to the affected steam generators (see Table 14-19 of the FSAR). Provide a single active failure analysis of both the feedwater and the emergency feedwater systems which would result in additional flow to the affected steam generator.

14.39 Provide a description of the calculations utilized to determine the reactor building pressure response from the data supplied in Table 14-19 of the FSAR for a steam line rupture.

14.40 Provide a description of how segment number 2 in the heat sink, Table 14.41 of the FSAR, was modeled for the reactor building pressure analysis. Provide a simplified diagram showing the relationship of the materials including overlap and surface areas.

14.41 Justify the thermal conductivity of 26 Btu/hr ft^2 °F/ft utilized for stainless steel (see Table 14-41 of the FSAR, Thermal Properties). A thermal conductivity for stainless steel less than half this value is usually the accepted value.

14.42 Resolve the following table and figure inconsistencies. Table 14-46 of the FSAR incorrectly references Figure 14-64. Figure 14-20 of the FSAR contains a mixup in points A and B. The mass rates in Figure 14-64 of the FSAR are in error by a factor of 10.