Entergy

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February 14, 2007
JAFP-07-0022

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

REFERENCES: 1. Letter, Entergy to USNRC, "James A. FitzPatrick Nuclear Power Plant, Docket No. 50-333, License No. DPR-59, License Renewal Application," JAFP-06-0109, dated July 31, 2006

2. Letter, USNRC to Entergy, "Requests for Additional Information Regarding the Review of the License Renewal Application for James A. FitzPatrick Nuclear Power Plant (TAC No. MD2666)," dated January 19, 2007

SUBJECT: **Entergy Nuclear Operations, Inc.**
James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333, License No. DPR-59
License Renewal Application, Amendment 7

Dear Sir or Madam:

On July 31, 2006, Entergy Nuclear Operations, Inc. submitted the License Renewal Application (LRA) for the James A. FitzPatrick Nuclear Power Plant (JAFNPP) as indicated by Reference 1. Attachment 1 provides responses to the requests for additional information as detailed by the NRC in Reference 2.

Should you have any questions concerning this submittal, please contact Mr. Jim Costedio at (315) 349-6358.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 14TH day of February, 2007.

Sincerely,

PETE DIETRICH
SITE VICE PRESIDENT

PD/cf

Attachment

cc: (see list)

A124

cc:

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RESPONSE TO REQUESTS FOR ADDITIONAL INFORMATION (RAI)
JAMES A FITZPATRICK NUCLEAR POWER PLANT
LICENSE RENEWAL APPLICATION

RAI 2.3.3.2-1

License Renewal drawing LRA-FM-46A, at locations B6, B7, and B8, shows four isolation valves for the drain lines and four isolation valves on service water (SW) supply lines to the electrical bay cooling units. The License Renewal (LR) boundary for each section of piping ends at the Quality Assurance I (QA-I) boundary including the reducer, however, the isolation valves (isolation valve at each supply line and isolation at each drain line) upstream of the reducer and piping between the reducer and isolation valves labeled as SEISMIC I are not shown as within the scope for LR. Please provide additional information on why these piping and isolation valves are not within the scope for LR and justify the boundary locations with respect to the applicable requirements of Title 10 Code of Federal Regulations (CFR) Part 54.4(a).

RAI 2.3.3.2-1 Response

The seismic I boundaries are uniquely identified on the license renewal drawings. The portions of the system required to maintain pressure boundary for the system to perform its safety intended functions are identified by the site component database as QA category I and identified within the system intended function boundary flags. The seismic I boundary identifies those portions of systems that are seismically qualified category 1 but not necessarily safety-related or QA I. The portions of the system that were included in the aging management review as shown by the highlighting on the LRA drawing include the portions of the system required to maintain the pressure boundary and ensure that functions defined in 10CFR54.4(a)(1) or (a)(3) can be performed.

The portions of the system beyond the QA I boundary that are identified as Seismic I were included in scope as part of the 10 CFR 54.4(a)(2) review, but are not highlighted on individual LRA drawings. As stated in LRA Section 2.1.2.1.3,

> "The determination of whether a component meets the 10 CFR 54.4(a)(2) scoping criterion is based on where structural/seismic boundaries exist, or where the component is located in a building, whether it contains gas or liquid, and its proximity to safety-related equipment. At JAFNPP, a conservative spaces approach for scoping in accordance with 10 CFR 54.4(a)(2) included almost all mechanical systems within the scope of license renewal (see Table 2.3.3.14- A). Providing drawings highlighting in-scope (a)(2) components would not provide significant additional information since the drawings do not indicate proximity of components to safety-related equipment and do not identify structural/seismic boundaries."

RAI 2.3.3.9-1 Response

The seismic I boundaries are uniquely identified on the license renewal drawings. The portions of the system required to maintain pressure boundary for the system to perform its safety functions are identified in the site component database as QA category I and identified within the system intended function boundary flags. The seismic I boundary identifies those portions of systems that are seismically qualified category I but not necessarily safety-related or QA1. The portions of the system that were included in the aging management review as shown by the highlighting on the LRA drawing include the portions of the system required to maintain the pressure boundary and ensure that functions defined in 10CFR54.4(a)(1) or (a)(3) can be performed.

The portions of the system beyond the QA I boundary that are identified as Seismic I were included in scope as part of the 10 CFR 54.4(a)(2) review, but are not highlighted on individual LRA drawings, as described in LRA Section 2.1.2.1.3.

RAI 2.3.3.10-1

License Renewal Drawing LRA-FM-29A-0, at location G7, shows that the in-scope nitrogen supply for reactor coolant pressure boundary air operated valves (AOV) 02AOV-17 and 02AOV-18 does not extend to the actuator but terminates at the downstream side of solenoid operating valves (SOV) SOV-17 and SOV-18, respectively. Please provide additional information clarifying why the in scope boundaries for the nitrogen supply lines to 02AOV-17 and 02AOV-18 do not extend to the actuator and justify the boundary locations with respect to the applicable requirements of 10 CFR Part 54.4(a).

RAI 2.3.3.10-1 Response

The safety-related function of 02AOV-17 and 02AOV-18, to maintain Reactor Coolant Pressure Boundary integrity, is performed with the valves closed and does not require pneumatic pressure. Since these valves vent the reactor vessel head to the drywell equipment drain sump, the valves would only be opened with the reactor shutdown and depressurized. Thus the ability to open the valves is non-safety-related, and does not meet any scoping criteria for License Renewal. The safety-related function of the drywell pneumatic header is to supply pneumatic pressure to open the safety-relief valves (SRVs) when required. Normally closed 02SOV-17 and 02SOV-18 perform this safety-related function, and are therefore in scope for License Renewal under 10CFR54.4(a)(1) with the intended pressure boundary function. Nitrogen supply lines downstream of the SOVs are isolated from the SRV pneumatic supply, and have no intended function for License Renewal.

RAI 2.3.3.11-1

License Renewal drawing LRA-FM-15-B, at locations C4, C7, F4, and F7, shows four RBCLCW containment isolation valves on supply lines to the drywell. The LR boundary for each section of piping ends at the AOV, however, piping and components upstream of the boundary are labeled SEISMIC I. Please provide additional information on why the sections of pipe and components listed below are not within the scope for LR and justify the boundary locations with respect to the applicable requirements of 10 CFR Part 54.4(a):

- LR drawing LRA-FM-15-B, location C4, upstream of AOV 130B through valve 23B.
- LR drawing LRA-FM-15-B, location C7, upstream of AOV 130A through valve 23A.
- LR drawing LRA-FM-15-B, location F4, upstream of AOV 132A through valve 20A.
- LR drawing LRA-FM-15-B, location F7, upstream of AOV 132B through valve 20B.

RAI 2.3.3.11-1 Response

The seismic I boundaries are uniquely identified on the license renewal drawings. The portions of the penetrations required to maintain pressure boundary for containment are identified by FSAR Table 7.3-1 and identified within the system intended function boundary flags. The seismic I boundary identifies those portions of systems that are seismically qualified category I but not necessarily required for containment integrity. The portions of the system that were included in the aging management review as shown by the highlighting on the LRA drawing include the portions of the system required to maintain the pressure boundary and ensure containment integrity.

The portions of the system beyond the containment boundary that are identified as Seismic I were included in scope as part of the 10 CFR 54.4(a)(2) review, but are not highlighted on individual LRA drawings, as described in LRA Section 2.1.2.1.3.

RAI 2.3.4.1-1

Two condensate storage tanks provide the preferred source of water to high-pressure coolant injection (HPCI) and reactor core isolation cooling (RCIC) during postulated small pipe breaks. Each tank must contain a reserve storage capacity of 100,000 gallons and have the capability of being isolated from serving other systems. The tanks are designed to provide the required flow even if the above ground portions of the tanks are destroyed by tornado or earthquake. LR drawing LRA-FM-33-D indicates the LR boundary for system piping other than HPCI and RCIC is the nozzle penetration at the storage tanks, creating the possibility of a non-isolable leak from the tank. Please provide additional information on why the following sections of pipe and components are not within the scope for LR and justify the boundary locations with respect to the applicable requirements of 10 CFR Part 54.4(a):

- LR drawing LRA-FM-33-D, location G7, piping from N-2 to and including valve 37A.
- LR drawing LRA-FM-33-D, location G7, piping from N-3 to and including valve 38A.
- LR drawing LRA-FM-33-D, location G6, piping from N-11 to and including valve WTR-117A.
- LR drawing LRA-FM-33-D, location G6, piping from N-7 to and including valve FPC-724A.
- LR drawing LRA-FM-33-D, location G6, piping from N-9 to and including valve CSP-01A.
- LR drawing LRA-FM-33-D, location G6, piping from N-8 to and including valve CRD-01A.
- LR drawing LRA-FM-33-D, location G6, piping from C-3 to and including valve CRD-02A.
- LR drawing LRA-FM-33-D, location H6, piping from N-5 to and including valve 100A.
- LR drawing LRA-FM-33-D, location H6, piping from N-10 to and including valve 01A.
- LR drawing LRA-FM-33-D, location H6, piping from C-2 to and including valve 101A.
- LR drawing LRA-FM-33-D, location G3, piping from N-2 to and including valve 37B.
- LR drawing LRA-FM-33-D, location G3, piping from N-3 to and including valve 38B.
- LR drawing LRA-FM-33-D, location G4, piping from N-11 to and including valve WTR-117B.
- LR drawing LRA-FM-33-D, location G4, piping from N-7 to and including valve FPC-724B.
- LR drawing LRA-FM-33-D, location G4, piping from N-9 to and including valve CSP-01B.
- LR drawing LRA-FM-33-D, location G4, piping from N-8 to and including valve CRD-01B.
- LR drawing LRA-FM-33-D, location G4, piping from C-3 to and including valve CRD-02.
- LR drawing LRA-FM-33-D, location H4, piping from N-5 to and including valve 100B.

- LR drawing LRA-FM-33-D, location H4, piping from N-10 to and including valve 01B.
- LR drawing LRA-FM-33-D, location H4, piping from C-2 to and including valve 101B.

RAI 2.3.4.1-1 Response

Although drawing FM-33-D is a schematic drawing that does not show actual nozzle locations, the tank nozzles in question (N-2, N-3, N-11, N-7, N-9, N-8, C-3, N-5, N-10 and C-2 on tank TK-12A and N-2, N-3, N-11, N-7, N-9, N-8, C-3, N-5, N-10 and C-2 on tank TK-12B) are physically located in the upper half of the tank (above the required reserve supply) such that their failure would not impact the ability of the condensate storage tanks to perform their intended function. Therefore, the nozzles in question and associated valves and piping are not subject to aging management review.

RAI 2.3.4.1-2

Two condensate storage tanks provide the preferred source of water to HPCI and RCIC during postulated small pipe breaks. The tanks are designed to provide the required flow even if the above ground portions of the tanks are destroyed by tornado or earthquake. LR drawing LRA-FM-25-A indicates the LR boundaries on the crosstie line for the two tanks are the nozzle penetrations at the storage tanks, creating the possibility of a non-isolable leak from the tanks. Please provide additional information on why the following sections of pipe and components are not within the scope for LR and justify the boundary locations with respect to the applicable requirements of 10 CFR Part 54.4(a):

- LR drawing LRA-FM-25-A, location H5, piping from N-1 on CST A to and including valve 02A
- LR drawing LRA-FM-25-A, location H5, piping from N-1 on CST B to and including valve 02B

RAI 2.3.4.1-2 Response

These nozzles (nozzle N-1 on CST A and CST B) are physically located well above the portion of the tank required to maintain the minimum volume for the supply to the HPCI and RCIC pumps. Therefore, pressure boundary integrity of these lines is not required and these lines are not subject to aging management review.