May 22, 2008

LICENSEE: Tennessee Valley Authority (TVA)

FACILITIES: Browns Ferry Nuclear Plant (BFN) Units 1, 2, and 3

SUBJECT: SUMMARY OF APRIL 17, 2008, MEETING WITH TVA REGARDING THE STEAM DRYER PORTION OF THE EXTENDED POWER UPRATE REVIEW (TAC NOS. MD5262, MD5263, AND MD5264)

On April 17, 2008, the U.S. Nuclear Regulatory Commission (NRC) staff conducted a Category 1 public meeting with TVA (the licensee) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was for TVA to provide an overview of the proposed modifications and analyses needed to meet the steam dryer stress ratio acceptance criteria. Due to the proprietary nature of the information being discussed, only small portions of the meeting were open to the public. The enclosure contains a list of attendees. The licensee presented slides regarding the steam dryer portion of the extended power uprate (EPU). A non-proprietary version of the slides may be accessed from the NRC Agencywide Documents Access and Management System, No. ML081130231.

DISCUSSION

On March 20, 2008, the NRC staff met with TVA to discuss the results of the BFN steam dryer analysis. Based on the stress analysis provided in a March 6, 2008, letter, the meeting focused on the results, which indicated that the minimum alternating stress ratio for the Unit 1 dryer is 1.56 at current licensed thermal power, which, is ~1.18 at EPU conditions. The NRC staff discussed that the stress margin needed for reasonable assurance should be around 2.0 at EPU conditions, which is in line with the margins obtained by previous boiling-water reactor licensees requesting similar power uprates.

The April 17, 2008, meeting focused on the licensee's modifications and analyses proposed to achieve an acceptable stress ratio margin. The licensee went through a summary of the limiting locations identified for the Unit 1 dryer. The listing was done by stress ranking and was grouped into a "family" according to the location on the dryer. This grouping was useful in that certain solutions addressed any concerns in the affected family. The licensee intends to address the issue with some of the families by modifications along the lines of those installed on another plant. The acoustic vibration suppressor modification was already planned and has been installed in Unit 3. It was confirmed that the results of this modification should be provided to the NRC staff by June 16, 2008. Another modification is planned to further alter the acoustic signature of the main steam system. The licensee stated that, if needed, this modification may be installed during the fall 2008 Unit 1 refueling outage.

The licensee proposed to address the issues with other families with a refining of the information associated with the geometry of certain welds that may allow for the removal of certain conservatisms. The NRC staff indicated concerns with the fidelity of the models proposed being used with the actual condition of the dryer welds. TVA discussed that the refinement of the analysis and acknowledged the need to validate the approach if the refinement results in deviation from empirically derived-factors.

Additional discussions were held regarding the dampening credit associated with a certain phenomenon. A discussion was held regarding additional testing proposed to validate certain assumptions that should better support the crediting of this phenomenon. The licensee also discussed the methodology used to remove noise from the models. The NRC staff continued questioning from the March 20 meeting regarding whether the approach proposed yields realistic results. It was proposed that the licensee take a look at the noise present at different power levels during the Unit 3 power ascension. This approach would be used to validate the baseline selected for subtracting out actual noise.

No members of the public were in attendance and no feedback forms were received. No commitments or regulatory decisions were made by the NRC staff during the meeting.

/RA/
Eva A. Brown, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-259, 50-260, and 50-296

Enclosure: List of Attendees

cc w/enclosure: See next page

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ADAMS Accession Nos: Meeting Summary ML081360291 Pkg.: ML081420138 Public Slides ML081130231
Non-Public Slides ML081120503 CDI Letter ML081120502 NRC-001

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DATE	5/22/08	5-21-08	5/22/08

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Public Meeting with Tennessee Valley Authority
Steam Dryer Portion of the Browns Ferry Power Uprate
April 17, 2008

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