

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before the Licensing Board:

G. Paul Bollwerk, III, Chairman
Dr. Anthony J. Baratta
Dr. William W. Sager

In the Matter of

TENNESSEE VALLEY AUTHORITY

(Bellefonte Nuclear Power Plant Units 3 and 4)

Docket Nos. 52-014-COL and 52-015-COL

May 6, 2011

**TVA’S RESPONSE TO APRIL 21, 2011 ATOMIC SAFETY AND LICENSING BOARD
ORDER REQUESTING TVA STATUS REPORT**

In an April 21, 2011 Order, the Atomic Safety and Licensing Board (ASLB) requested that “TVA provide the Licensing Board with a status report that describes in as much detail as practicable TVA’s plans for reaching a decision regarding how TVA wishes to proceed with the licensing of [Bellefonte Nuclear Plant (BLN)] Units 1, 3, and 4.” *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant Units 3 & 4), Memorandum and Order (Requesting

TVA Status Report) (Apr. 21, 2011) (unpublished) at 2. The ASLB further requested that “the status report incorporate a discussion of the format and schedule associated with the TVA process for arriving at a ‘clear understanding’ of the Fukushima I situation, including conducting any studies/analyses/investigation, issuing any reports, and/or providing any TVA Board briefings.” *Id.* at 2-3. TVA provides the requested status report herein.

As the ASLB stated in its October 13, 2010 Order, TVA submitted a letter to the Nuclear Regulatory Commission (NRC) staff on September 29, 2010, regarding review of the Bellefonte Combined License (COL) application. In that letter, TVA stated that it had completed a Final Supplemental Environmental Impact Statement for the Bellefonte site, which confirmed that completion of the partially-constructed BLN Unit 1 is the preferred alternative for near-term additional generating capacity at the Bellefonte site, stating further that a decision to complete BLN Unit 1 would necessitate significant revisions to the COL application for BLN Units 3 and 4. Based on this determination, the letter described TVA staff’s plan to request that the TVA Board of Directors (TVA Board) consider final approval of BLN Unit 1 following completion of the Integrated Resource Plan (IRP), “TVA’s Environmental and Energy Future,” in spring 2011.

As the ASLB noted in its April 21, 2011 Order, the TVA Board held a meeting on April 14, 2011. At the meeting, the TVA Board accepted the recently completed IRP. However, the recent earthquake- and tsunami-related events affecting several of Japan’s reactors, including the Fukushima-Daiichi plant, delayed the TVA Board’s consideration of

whether to proceed with final project authorization for BLN 1 pending completion of an evaluation of the impacts of these events.

TVA is assessing the impact of the March 11, 2011 Japan earthquake, subsequent tsunami, and resulting events at the Fukushima-Daiichi plant on its nuclear operations, construction, and generation studies and plans. Specifically:

- Immediately following notification of the events at the Fukushima-Daiichi plant, TVA established a Central Response Center in Chattanooga with satellite offices at each of TVA's nuclear plant sites.
- TVA is collecting and assessing data on the status of the nuclear units at the Fukushima-Daiichi plant as it becomes available, although many details regarding the evolution of the events and extent of damage are still unknown.
- TVA is evaluating its readiness to deal with nuclear plant emergencies, including an assessment of TVA's procedures, training, facilities, and equipment. Included in this evaluation is TVA's ability to respond to events that are beyond those anticipated in the plants' design, as well as "combined events," such as a combination of earthquake and flood.
- TVA is also assessing certain characteristics of the Bellefonte site in order to determine if features exist or could be installed that would mitigate an event similar to what occurred at the Fukushima-Daiichi plant. In general, this assessment is focused on preventing flooding, coping with extended station blackouts, and maintaining cooling within the spent fuel pool during a station blackout. Although

this assessment is focused on the site characteristics and existing infrastructure, it is not focused on a specific reactor design; most of the mitigating measures could be applied to either BLN Unit 1 or BLN Units 3 and 4. TVA plans to complete this internal assessment of the Bellefonte site prior to August 2011.

In addition to these assessments, TVA is also closely following the assessments being conducted by the NRC, the Institute of Nuclear Power Operations, and other nuclear industry groups. Based upon the totality of these assessments, TVA will determine whether any design changes should be made.

Included in these assessments is TVA's continued participation in the AP-1000 Design Centered Working Group (DCWG). The DCWG and Westinghouse Electric Company, LLC (Westinghouse) will assess any findings made by the NRC, which the NRC has committed to release in 30-day intervals. Following the 90-day report by the NRC, the DCWG and Westinghouse will assess whether there are any potential impacts to the AP-1000 design. Should any impacts be identified from this assessment, TVA will work with the DCWG to appropriately incorporate any changes into the Bellefonte Units 3 and 4 COL application.

Because the extent of information regarding the Japan event and the physical conditions at the Fukushima-Daiichi plant continues to evolve, delaying a complete understanding of post-incident conditions, TVA staff cannot predict with certainty at this time when it will request the TVA Board to make a final decision regarding any future nuclear generation expansion at the Bellefonte site. Because TVA does not know the outcome of these ongoing assessments, it also cannot predict how these assessments may impact this decision.

As TVA staff continues to perform these assessments and participate in the industry-wide assessments mentioned above, it will brief the TVA Board, as well as the proper TVA Board committees, as appropriate. The next scheduled meeting of the TVA Board is August 2011.

At present, TVA intends to continue the ongoing licensing efforts for BLN 1 and BLN 3&4, understanding that a decision regarding completion of the partially-completed unit (BLN 1) or construction of new units (BLN 3&4) will impact the other project. TVA will inform the ASLB of any decision regarding TVA's completion of any nuclear units at the Bellefonte site as soon as practicable after a decision is made.

Respectfully submitted,

Executed in Accord with 10 CFR 2.304(d)

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Dated in Knoxville, TN
this 6th day of May, 2011

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CERTIFICATE OF SERVICE

I hereby certify that copies of "TVA's Response to April 21, 2011 Atomic Safety and Licensing Board Order Requesting Status Report" in the above-captioned proceeding have been served on the following persons by the Electronic Information Exchange.

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Dated in Knoxville, TN
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