



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

June 11, 2012

10 CFR 50.54(f)

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Browns Ferry Nuclear Plant, Units 1, 2, and 3
Facility Operating License Nos. DPR-33, DPR-52, and DPR-68
NRC Docket Nos. 50-259, 50-260, and 50-296

Sequoyah Nuclear Plant, Units 1 and 2
Facility Operating License Nos. DPR-77 and DPR-79
NRC Docket Nos. 50-327 and 50-328

Watts Bar Nuclear Plant, Unit 1
Facility Operating License No. NPF-90
NRC Docket No. 50-390

Watts Bar Nuclear Plant, Unit 2
Construction Permit No. CPPR-92
NRC Docket No. 50-391

Subject: Tennessee Valley Authority (TVA) - 90-Day Response to NRC Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 9.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident

References:

1. NRC Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident; dated March 12, 2012
2. TVA Letter, 60-Day Response to NRC Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident; dated May 11, 2012

ADD
NRR

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On March 12, 2012, the NRC issued Reference 1 to all power reactor licensees and holders of construction permits in active or deferred status. Enclosure 5 of Reference 1 contains specific Requested Actions, Requested Information, and Required Responses associated with Recommendation 9.3 for Emergency Preparedness Programs.

On May 11, 2012, TVA provided a 60-day response in accordance with provisions in Reference 1. The response proposed an alternative course of action for providing NRC with the requested information. Enclosure 1 to TVA's response included proposed dates by which TVA committed to provide the requested information. Specifically, TVA committed to answer Requested Information Item 2 for the Communications Assessment (page 2 of the Communications section of Enclosure 5 of the RFI) and Requested Information Items 3, 4 and 5 of the Staffing Assessment (page 3 of the Staffing section of Enclosure 5 of the RFI) by June 11, 2012.

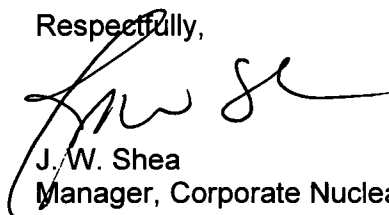
Enclosed is TVA's consolidated fleet response answering Requested Information Item 2 for the Communications Assessment and Requested Items 3, 4, and 5 of the Staffing Assessment for its licensed operating plants (Browns Ferry Units 1, 2 and 3; Sequoyah Units 1 and 2; and Watts Bar Unit 1) and for its plant under an active construction permit (Watts Bar 2). Note that TVA's Bellefonte station responded separately to Reference 1 by letter dated May 3, 2012; therefore this letter does not address the items for Bellefonte Units 1 and 2.

Enclosure 2 to this letter contains a list of regulatory commitments.

If you have questions regarding our comments, please contact Fredrick Mashburn at (423)751-8817.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on the 11th day of June 2012.

Respectfully,



J. W. Shea
Manager, Corporate Nuclear Licensing

cc: See Page 3

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Enclosure:

1. 90-Day Response to the NRC 50.54(f) Letter Requesting Information on Emergency Planning
2. List of Commitments

cc: w/Enclosure

NRC Regional Administrator - Region II
NRR Director - NRC Headquarters
NRC Senior Resident Inspector - Browns Ferry Nuclear Plant
NRC Senior Resident Inspector - Sequoyah Nuclear Plant
NRC Senior Resident Inspector - Watts Bar Nuclear Plant
NRR Project Manager - Browns Ferry Nuclear Plant
NRR Project Manager - Sequoyah Nuclear Plant
NRR Project Manager - Watts Bar Nuclear Plant

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Requesting Information on Emergency Planning

Communications

Request Number 2 - Addressees are requested to describe any interim actions that have been taken or are planned to be taken to enhance existing communications systems power supplies until the communications assessment and the resulting actions are complete.

Actions Taken

TVA deployed seventeen (17) satellite phones at each licensed operating TVA nuclear facility. These phones replaced and upgraded older phones that were previously located at each site. An additional seventeen (17) satellite phones were deployed at TVA Nuclear Power Group (NPG) offices in the TVA Corporate headquarters located in Chattanooga, Tennessee.

TVA also purchased twenty (20) portable generators. These 2000-Watt portable generators were obtained to keep the satellite phone batteries charged. Five (5) of these generators have been placed at each of the three TVA licensed operating nuclear facilities, and the remaining five (5) generators were sent to the Central Emergency Control Center (CECC), TVA's offsite emergency center, located in Chattanooga, Tennessee. These generators at each site are stored in a secured location on the site owner-controlled area.

Radios and sound-powered phone systems are also available at TVA licensed operating facilities for onsite communications with operators in the field and the control room for safe shutdown and recovery. Jacks for the installed sound-powered phone systems are located in areas needed to support monitoring and operation of essential equipment. TVA nuclear facilities were previously provided with radios dedicated for response to postulated large area fires within the plant. Upon a loss of radio towers these radios can still be used in the radio-to-radio mode within the facility. Batteries for these radios may also be charged using the portable generators previously mentioned.

Actions Planned

TVA will develop documented guidance for deploying the portable generators described above during and after a Beyond Design Basis External Event by March 29, 2013.

Staffing

Request Number 3 - Identify how the augmented staff would be notified given degraded communications capabilities.

TVA is implementing a new, hosted notification process known as TEENS (TVA Enterprise Emergency Notification System). The TEENS process allows notification of Emergency Response Organization (ERO) participants through simultaneous multiple electronic notification processes (e.g., pager, telephone, text message, email message, etc.). Fleet implementation is expected to be completed by end of this summer.

Under the TEENS process, once notified by the Control Room of an emergency requiring response, the on-duty Operations Duty Specialist (located at the Corporate Headquarters) will activate TEENS. TEENS has the capability to simultaneously notify the members of the onsite

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and offsite ERO (i.e., an "All Call"), including off-duty responders as well as the ERO team on duty at the time of the notification. TVA is maintaining the current Emergency Pager System (EPS). In the unlikely event of failure of both TEENS and EPS, procedures call for initiation of a manual notification (e.g., telephone calling, etc.) of ERO participants.

As noted before, TEENS is activated by the TVA Operations Duty Specialist (ODS). The ODS is located remotely from the operating sites in the TVA Corporate Office building located in Chattanooga, Tennessee. The TVA Corporate Office building is equipped with a Diesel Generator for backup power to maintain communication capability. TEENS is a hosted off-site system that is located in a remote data center.

Request Number 4 - Identify the methods of access (e.g., roadways, navigable bodies of water and dockage, airlift, etc.) to the site that are expected to be available after a widespread large scale natural event.

TVA anticipates that after a large-scale external event, limited access to the affected site(s) would be possible via motor vehicles or, if necessary, by pedestrian traffic. TVA's licensed operating sites are located on the Tennessee River, which is a commercial navigation waterway. Access to the sites via appropriate watercraft may be feasible depending on the nature of the event. The specific time frame for access by any of these means will be dependent on the event.

Depending on the nature and severity of the event, the TEENS system has the flexibility to customize the message sent to the ERO participants to provide instructions to the participants to report to a different facility than their normal reporting station based on the specific challenges posed by the event.

To further ensure the ability to access an affected site after a large scale natural event, TVA will evaluate the need to identify potential additional transportation resources and access methods. Resources and methods may vary depending upon the location of the site. If identified, a listing of resource providers will be made available to ERO personnel for reference during emergency response. TVA will complete this evaluation by January 31, 2013.

Request Number 5 - Identify any interim actions that have been taken or are planned prior to the completion of the staffing assessment.

Actions Taken

TVA has upgraded ERO reporting expectations from the previous expectation that only individuals that were on duty-rotation were expected to respond to emergency notifications. The new expectation is that ERO personnel that receive an emergency notification and are available to respond (fit for duty and within the response area) should answer the page indicating their availability to respond even if they are not on duty-rotation status. TVA procedure, TVA-SPP-18.3, Emergency Preparedness, has been revised to include the following statement under ERO Expectations:

During events that would impact the safe operation of a NPG site (BFN, SQN, or WBN) or large scale disasters (earthquakes, tornados, or regional blackout), when the ERO

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has not been activated and area communications (pagers, cell towers, internet, land line phone systems) are being challenged or are not working, NPG ERO personnel are expected to report to their Emergency Response Facility if they cannot contact the plant for additional guidance.

Initial notification of the revised expectations has been started by issuance of emergency preparedness information bulletin (EPIB) to ERO response personnel in Corporate headquarters. A similar EPIB will be distributed to ERO personnel at the sites by June 30, 2012. TVA will take advantage of the numerous EP activities throughout the remainder of the year (e.g., team meetings, training sessions, crew briefings, drill and exercise preparations) to continue to emphasize the new expectations so that by the beginning of next year, all ERO personnel will be fully familiar with the revised expectations.

TVA is currently assessing initial on-shift ERO staffing at the three licensed NPG sites for design-basis event conditions in response to the requirements of changes to 10CFR Parts 50, Appendix E, Section 4(a)(i), by December 24, 2012. Although limited to the time following a design-basis event initiation until the on-shift ERO is augmented, this assessment is expected to provide an initial indication of the adequacy of staffing to respond to beyond design-basis events.

Purchase orders have been developed for supplies, including food and water, to support extended presence of emergency workers at the three NPG sites.

Actions Planned

By December 31, 2012, EP will complete notification and follow-up emphasis of the new ERO reporting expectations in TVA-SPP-18.3 (described above) to ensure thorough understanding by ERO responders.

Enclosure 2
List of Commitments

1. TVA will develop documented guidance for deploying the portable generators procured for charging satellite phone batteries during and after a Beyond Design Basis External Event by March 29, 2013.
2. TVA will complete an evaluation of the need for additional transportation resources and access methods by January 31, 2013.
3. TVA will complete familiarization and emphasis of the revised ERO reporting expectations in case of large scale events when communications systems are challenged or are not working with ERO personnel by December 31, 2012.