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NUCLEAR REGULATORY COMMISSION

[NRC-2010-0030]

TENNESSEE VALLEY AUTHORITY

DOCKET NOS. 50-259, 50-260, AND 50-296

BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2, AND 3

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an Exemption, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 73.5, "Specific exemptions," from the implementation date for certain new requirements of 10 CFR Part 73, "Physical protection of plants and materials," for Facility Operating License Nos. DPR-33, DPR-52, and DPR-68, issued to Tennessee Valley Authority (TVA, the licensee), for operation of the Browns Ferry Nuclear Plant, Units 1, 2, and 3 (BFN), located in Limestone County, Alabama. In accordance with 10 CFR 51.21, the NRC prepared an environmental assessment documenting its finding. The NRC concluded that the proposed actions will have no significant environmental impact.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would exempt the TVA from the required implementation date of March 31, 2010, for several new requirements of 10 CFR Part 73. Specifically, BFN would be granted an exemption from being in full compliance with certain new requirements contained in 10 CFR 73.55 by the March 31, 2010, deadline. TVA has proposed an alternate full compliance implementation date of December 20, 2012, approximately two and three-quarter years beyond

the date required by 10 CFR Part 73. The proposed action, an extension of the schedule for completion of certain actions required by the revised 10 CFR Part 73, does not involve any physical changes to the reactor, fuel, plant structures, support structures, water, or land at the BFN site.

The proposed action is in accordance with the licensee's application dated November 6, 2009, as supplemented by letter dated January 11, 2010.

The Need for the Proposed Action:

The proposed action is needed to provide the licensee with additional time to perform the required upgrades to the BFN security system because they involve new components and engineering that cannot be obtained or completed by the March 31, 2010, implementation date.

Environmental Impacts of the Proposed Action:

The NRC has completed its environmental assessment of the proposed exemption. The staff has concluded that the proposed action to extend the implementation deadline would not significantly affect plant safety and would not have a significant adverse effect on the probability of an accident occurring.

The proposed action would not result in an increased radiological hazard beyond those previously analyzed in the environmental assessment and finding of no significant impact made by the Commission in promulgating its revisions to 10 CFR Part 73 as discussed in a *Federal Register* notice dated March 27, 2009 (74 FR 13967). There will be no change to radioactive effluents that affect radiation exposures to plant workers and members of the public. Therefore, no changes or different types of radiological impacts are expected as a result of the proposed exemption.

The proposed action does not result in changes to land use or water use, or result in changes to the quality or quantity of non-radiological effluents. No changes to the National Pollution Discharge Elimination System permit are needed. No effects on the aquatic or

terrestrial habitat in the vicinity of the plant, or to threatened, endangered, or protected species under the Endangered Species Act, or impacts to essential fish habitat covered by the Magnuson-Steven's Act are expected. There are no impacts to the air or ambient air quality.

There are no impacts to historical and cultural resources. There would be no impact to socioeconomic resources. Therefore, no changes to or different types of non-radiological environmental impacts are expected as a result of the proposed exemption.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action. In addition, in promulgating its revisions to 10 CFR Part 73, the Commission prepared an environmental assessment and published a finding of no significant impact [Part 73, Power Reactor Security Requirements, 74 FR 13926, 13967 (March 27, 2009)].

The licensee currently maintains a security system acceptable to the NRC and will continue to provide acceptable physical protection of the BFN as TVA implements certain new requirements in 10 CFR Part 73. Therefore, the extension of the implementation date of the new requirements of 10 CFR Part 73 to December 20, 2012, would not have any significant environmental impacts.

The NRC staff's safety evaluation will be provided in the exemption that will be issued as part of the letter to the licensee approving the exemption to the regulation, if granted.

Environmental Impacts of the Alternatives to the Proposed Action:

As an alternative to the proposed action, the NRC staff considered denial of the proposed action (i.e., the "no-action" alternative). Denial of the exemption request would result in no change in current environmental impacts. If the proposed action was denied, the licensee would have to comply with the March 31, 2010, implementation deadline. The environmental impacts of the proposed exemption and the "no action" alternative are similar.

Alternative Use of Resources:

The action does not involve the use of any different resources than those considered in the Final Environmental Statement for the BFN dated September 1, 1972.

Agencies and Persons Consulted:

In accordance with its stated policy, on December 24, 2009, the NRC staff consulted with the Alabama State official, Kirk Whatley of the Office of Radiological Control, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated November 6, 2009, as supplemented by letter dated January 11, 2010. Portions of the November 6, 2009, submittal contain safeguards and security sensitive information and, accordingly, are not available to the public. Other parts of these documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, Public File Area O-1F21, 11555 Rockville Pike (first floor), Rockville, Maryland 20852. Publicly available records will be accessible electronically from the Agencywide Document Access and Management System (ADAMS) Public Electronic Reading Room on the Internet at the NRC Website: http://www.nrc.gov/reading-rm/adams.html.

Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR Reference staff by telephone at 1-800-397-4209 or 301-415-4737, or send an e-mail to pdr.resource@nrc.gov.

Dated at Rockville, Maryland, this 26th day of January 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

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