

December 19, 2005

Mr. Karl W. Singer  
Chief Nuclear Officer and  
Executive Vice President  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, Tennessee 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 1 — ENVIRONMENTAL ASSESSMENT  
AND FINDING OF NO SIGNIFICANT IMPACT FOR A ONE-TIME EXEMPTION  
FROM THE REQUIREMENTS OF 10 CFR PART 50, APPENDIX E,  
SECTIONS IV.F.2.b AND c (TAC NO. MC8592)

Dear Mr. Singer:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to Tennessee Valley Authority's (TVA's) application, dated October 5, 2005, for a one-time exemption for the Watts Bar Nuclear Plant from the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix E, Sections IV.F.2.b and c, and TVA's Radiological Emergency Plan Sections 14.2.1.1 and 14.2.1.3.

The proposed exemption would postpone a scheduled plume exposure pathway exercise from November 2, 2005, until June 7, 2006. The exercise is in support of the requirement for a biennial, full-participation, emergency exercise found in 10 CFR Part 50, Appendix E. Postponement is requested due to the State of Tennessee's response to Hurricane Katrina and the associated resources involved. Following the completion of the exercise on June 7, 2006, TVA will resume the normal biennial exercise cycle as if last completed during 2005.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

*/RA/*

Douglas V. Pickett, Senior Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure: Environmental Assessment

cc w/enclosure: See next page

Mr. Karl W. Singer  
 Chief Nuclear Officer and  
 Executive Vice President  
 Tennessee Valley Authority  
 6A Lookout Place  
 1101 Market Street  
 Chattanooga, Tennessee 37402-2801

December 19, 2005

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 1 — ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR A ONE-TIME EXEMPTION FROM THE REQUIREMENTS OF 10 CFR PART 50, APPENDIX E, SECTIONS IV.F.2.b AND c (TAC NO. MC8592)

Dear Mr. Singer:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to Tennessee Valley Authority's (TVA's) application, dated October 5, 2005, for a one-time exemption for the Watts Bar Nuclear Plant from the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix E, Sections IV.F.2.b and c, and TVA's Radiological Emergency Plan Sections 14.2.1.1 and 14.2.1.3.

The proposed exemption would postpone a scheduled plume exposure pathway exercise from November 2, 2005, until June 7, 2006. The exercise is in support of the requirement for a biennial, full-participation, emergency exercise found in 10 CFR Part 50, Appendix E. Postponement is requested due to the State of Tennessee's response to Hurricane Katrina and the associated resources involved. Following the completion of the exercise on June 7, 2006, TVA will resume the normal biennial exercise cycle as if last completed during 2005.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

*/RA/*

Douglas V. Pickett, Senior Project Manager  
 Plant Licensing Branch II-2  
 Division of Operating Reactor Licensing  
 Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure: Environmental Assessment

cc w/enclosure: See next page

DISTRIBUTION:

PUBLIC LPLII-2 r/f RidsOgcRp RFranovich RidsNrrDorl  
 RidsAcrsAcnwMailCenter RidsNrrDorlLpd MVaaler  
 RidsNrrLARSola RidsNrrPMDPickett RidsRgn2MailCenter (SCahill)

ADAMS Accession No.: ML053180351

\*No Legal Objection

NRR-042

OFFICE	LPL2-2/PE	LPL2-2/PM	LPL2-2/LA	REBB/BC	OGC	LPL2-2/BC
NAME	MVaaler	DPickett	BClayton for RSola	RFranovich	JBonano*	MMarshall
DATE	11/29/05	11/30/05	11/29/05	11/28/05	12/06/05	12/19/05

OFFICIAL RECORD COPY

Mr. Karl W. Singer  
Tennessee Valley Authority

cc:

Mr. Ashok S. Bhatnagar, Senior Vice President  
Nuclear Operations  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Mr. Larry S. Bryant, General Manager  
Nuclear Engineering  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Mr. Robert J. Beecken, Vice President  
Nuclear Support  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Mr. Michael D. Skaggs  
Site Vice President  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Spring City, TN 37381

General Counsel  
Tennessee Valley Authority  
ET 11A  
400 West Summit Hill Drive  
Knoxville, TN 37902

Mr. John C. Fornicola, Manager  
Nuclear Assurance and Licensing  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

## **WATTS BAR NUCLEAR PLANT**

Mr. Glenn W. Morris, Manager  
Corporate Nuclear Licensing  
and Industry Affairs  
Tennessee Valley Authority  
4X Blue Ridge  
1101 Market Street  
Chattanooga, TN 37402-2801

Mr. Paul L. Pace, Manager  
Licensing and Industry Affairs  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Spring City, TN 37381

Mr. Jay Laughlin, Plant Manager  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Spring City, TN 37381

Senior Resident Inspector  
Watts Bar Nuclear Plant  
U.S. Nuclear Regulatory Commission  
1260 Nuclear Plant Road  
Spring City, TN 37381

County Executive  
375 Church Street  
Suite 215  
Dayton, TN 37321

County Mayor  
P. O. Box 156  
Decatur, TN 37322

Mr. Lawrence E. Nanney, Director  
Division of Radiological Health  
Dept. of Environment & Conservation  
Third Floor, L and C Annex  
401 Church Street  
Nashville, TN 37243-1532

Ms. Ann P. Harris  
341 Swing Loop Road  
Rockwood, Tennessee 37854

UNITED STATES NUCLEAR REGULATORY COMMISSIONTENNESSEE VALLEY AUTHORITYDOCKET NO. 50-390WATTS BAR NUCLEAR PLANT, UNIT 1ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption from Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix E, Sections IV.F.2.b and c for Facility Operating License No. NPF-90, issued to Tennessee Valley Authority (TVA or the licensee), for operation of the Watts Bar Nuclear Power Plant (WBN), Unit 1, located in Rhea County, Tennessee. Therefore, as required by 10 CFR 51.21, the NRC is issuing this environmental assessment and finding of no significant impact.

ENVIRONMENTAL ASSESSMENTIdentification of the Proposed Action:

The proposed action, as described in the licensee's application for a one-time exemption to the requirements of 10 CFR Part 50, Appendix E, dated October 5, 2005, would allow the licensee to postpone the biennial, full-participation emergency exercise from November 2, 2005, to June 7, 2006. The licensee's letter requested an exemption from Sections IV.F.2.b and c of Appendix E to 10 CFR Part 50 regarding exercises involving the onsite and offsite emergency plans, as well as TVA's Radiological Emergency Plan Sections 14.2.1.1 and 14.2.1.3. The NRC staff has determined that the requirements of Appendix E to 10 CFR Part 50, Sections IV.F.2.b and 2.c are applicable to the circumstances of the licensee's request and that an exemption from those requirements is appropriate. The

licensee also stated in its October 5, 2005, letter that WBN will resume its normal biennial exercise cycle in 2007.

The Need for the Proposed Action:

The proposed exemption from 10 CFR Part 50, Appendix E, Sections IV.F.2.b and c is needed because the planned full-participation exercise originally scheduled for November 2, 2005, was not performed. The Federal Emergency Management Agency, which normally participates in the evaluated, full-participation exercise, and the Tennessee Emergency Management Agency were unable to provide the necessary resources for the exercise due to the impact of Hurricane Katrina.

Environmental Impacts of the Proposed Action:

The NRC has completed its safety evaluation of the proposed action and concludes that the proposed exemption would not present an undue risk to the public health and safety. The details of 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. The proposed action relates to the exercising of the emergency response plan, which has no effect on the operation of the facility.

The proposed action will not significantly increase the probability or consequences of accidents. No changes are being made in the types of effluents that may be released offsite. There is no significant increase in the amount of any effluent released offsite. There is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential non-radiological impacts, the proposed action does not have a potential to affect any historic sites. It does not affect non-radiological plant effluents and has no other environmental impact. Therefore, there are no significant non-radiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

Environmental Impacts of the Alternative to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the "no-action" alternative). Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

The action does not involve the use of any different resources than those previously considered in the Final Environmental Statement Related to the Operation of Watts Bar Nuclear Plant, Units 1 and 2, NUREG 0498, dated December 1978, and a supplement to the Final Environmental Statement (NUREG 0498 Supplement No. 1), dated April 1995.

Agencies and Persons Consulted:

In accordance with its stated policy, on November 9, 2005, the staff consulted with the Tennessee State official, Elizabeth Flanagan of the Tennessee Bureau of Radiological Health, 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 October 5, 2005. 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. Publicly available records will be accessible electronically from the Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, <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 by e-mail to [pdr@nrc.gov](mailto:pdr@nrc.gov).

Dated at Rockville, Maryland, this 19th day of December 2005.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Douglas V. Pickett, Senior Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation