



FEMA

August 19, 2010

Mr. Kevin Williams  
Chief, Licensing and Inspection Branch  
Division of Preparedness and Response  
Nuclear Security and Incident Response  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Ref: Watts Bar Nuclear (WBN) Unit 2 Qualifying Exercise

Dear Mr. Williams:

On December 1, 2008, the Nuclear Regulatory Commission (NRC) informed the Federal Emergency Management Agency (FEMA) that the Tennessee Valley Authority (TVA) reactivated construction activities at the WBN Unit 2 and seeks a review of the offsite emergency response plans to support the license process for WBN Unit 2.

TVA received a construction permit for WBN Units 1 and 2 in 1973. Construction proceeded until September 1985, when WBN Unit 2 construction was suspended with major structures in place. WBN Unit 1 was completed, and received a full power operating license in early 1996, and the Tennessee Multi-Jurisdictional Radiological Emergency Response Plan for WBN Unit 1 was formally submitted to FEMA by the State of Tennessee on April 12, 1996. 44 CFR Part 350 approval was granted by FEMA on July 3, 1997.

In support of the license process for WBN Unit 2, FEMA conducted an offsite plan review associated with the WBN site in accordance with FEMA Regulations, its applicable planning standards and the evaluation criteria established in NUREG-0654/FEMA REP-1, Rev.1, 1980, and submitted its findings to the NRC on March 24, 2010. The review of the then current WBN plans and procedures resulted in findings for all the sixteen Planning Standards. Fifteen of the Planning Standards were found to be Adequate. None of the Planning Standards were found to be Inadequate. One Planning Standard was found to be Not Applicable.

On October 13, 2009, a meeting was arranged to provide an opportunity for representatives from FEMA, and the NRC's Nuclear Reactor Regulation (NRR) and Nuclear Security and Incident Response (NSIR) offices, to understand each group's role in the review of emergency preparedness in support of the licensing of WBN Unit 2 under the provisions of 10 CFR Part 50 and the NRC/FEMA Memorandum of Understanding, and to establish working interfaces. During the meeting, the issue of the qualifying exercise was discussed. The NSIR staff noted that Part 50 regulations contain an exercise requirement for the first reactor on a site; there are no explicit requirements regarding a second unit. The NSIR staff is of the opinion that if TVA achieves its goal in developing a WBN REP plan that is essentially identical regardless of reactor unit, a regularly

scheduled WBN Unit 1 exercise could provide an adequate basis for the NRC staff to make an onsite finding relevant to the WBN Unit 2 Operating License. If not, TVA may need to schedule a WBN Unit 2 qualifying exercise within the required window.

NRC regulations in 10 CFR Part 50 Appendix E IV.F.2.a requires that:

(a) A full participation exercise which tests as much of the licensee, State, and local emergency plans as is reasonably achievable without mandatory public participation shall be conducted for each site at which a power reactor is located.

(i) For an operating license issued under 10 CFR Part 50, this exercise must be conducted within two years before the issuance of the first operating license for full power (one authorizing operation above 5 percent of rated power) of the first reactor and shall include participation by each State and local government within the plume exposure pathway EPZ and each state within the ingestion exposure pathway EPZ. If the full participation exercise is conducted more than 1 year prior to issuance of an operating license for full power, an exercise which tests the licensee's onsite emergency plans must be conducted within one year before issuance of an operating license for full power. This exercise need not have State or local government participation.

FEMA regulations in 44 CFR Part 353 Appendix A, Memorandum of Understanding between NRC and FEMA Relating to Radiological Emergency Planning and Preparedness states that FEMA will provide support to the NRC for licensing reviews related to reactors, fuel facilities, and materials licensees with regard to the assessment of the adequacy of offsite radiological emergency response plans and preparedness. This will include timely submittal of an evaluation suitable for inclusion in NRC safety evaluation reports. The FEMA reports will be a part of an interim finding on emergency preparedness; or will be the result of an exercise conducted pursuant to FEMA's review and approval procedures under 44 CFR Part 350 and NRC's requirement under 10 CFR Part 50, Appendix E, Section IV.F.

WBN Unit 2 was being licensed under 10 CFR Part 50 when the license application was suspended at the request of TVA. Had the license not been suspended, FEMA's findings under its 44 CFR part 350 process would have applied to both units. If TVA achieves its goal in developing a WBN Radiological Emergency Preparedness Program that is essentially identical regardless of reactor unit, a regularly scheduled WBN Unit 1 exercise that includes the participation of the State and local offsite authorities could provide an adequate basis of reasonable assurance that the public would be protected from an event at the WBN site.

Should you or members of your staff have any questions regarding this matter, please contact Mr. David Jeremy, Team Lead, New Reactors Unit, at 202-212-2316.

Sincerely,



Vanessa E. Quinn  
Chief

Radiological Emergency Preparedness Branch

cc: C. Burnside, FEMA Region IV  
D. Barss, NRC