



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

February 18, 2010

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

**SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 2 – REQUEST FOR ADDITIONAL
INFORMATION REGARDING PHYSICAL SECURITY PLAN (TAC NO. ME0853)**

Dear Mr. Bhatnagar:

By letter dated March 4, 2009 (Agencywide Document and Management System Accession No. ML090700378), the Tennessee Valley Authority submitted the operating license application update for Watts Bar Nuclear Plant (WBN), Unit 2. The letter stated that the Physical Security Plan and Safeguards Contingency Plan exist and do not require change for the completion and operation of WBN Unit 2.

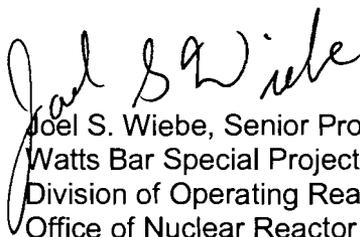
The NRC staff has reviewed Revision 9 of the Physical Security Plan, Safeguards Contingency Plan, and Training and Qualification Plan dated October 1, 2009, and has determined that additional information is required to complete its review. The specific questions are detailed in the enclosed request for additional information (RAI). Based on discussions with your staff, we understand that you plan to respond to the enclosed RAI by March 31, 2010.

A. Bhatnagar

- 2 -

If you should have any questions, please contact me at 301-415-1457.

Sincerely,

A handwritten signature in black ink that reads "Joel S. Wiebe". The signature is written in a cursive style with a large, looping initial "J".

Joel S. Wiebe, Senior Project Manager
Watts Bar Special Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-391

Enclosure: RAI

cc w/encl: Distribution via Listserv

Request for Additional Information (RAI):

Watts Bar Nuclear Plant (WBN) 2 – Operating License Application
Tennessee Valley Authority (TVA)
Docket No. 50-391

(U) Security Plan: The licensee (Revision 9) Physical Security Plan (PSP), Safeguards Contingency Plan (SCP), and Training and Qualification Plan (T&QP) dated October 1, 2009.

1. Watts Bar Physical Security Plan, Revision 9, Dated October 1, 2009. The licensee's Revision 9 does not address the revised requirements of Title 10, Code of Federal Regulations (10 CFR) Section 73.55 (a) through (r). What method or process for implementation of the revised requirements of 10 CFR 73.55 (a) through (r) will be used to update the security plan?

Regulatory Basis: Title 10 CFR 73.55 (a)(5)(March 27, 2009). Watts Bar Nuclear Plant, Unit 2, holding a current construction permit under the provisions of Part 50 of this chapter, shall meet the revised requirements in paragraphs (a) through (r) of this section as applicable to operating nuclear power reactor facilities.

2. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 1.1, page 7, does not provide a complete description of the physical structures and their location on site. Adding Unit 1 and Unit 2, explain current operational status for each reactor and identify Reactor Buildings. Add and highlight this detail to Protected Area Map (Figure 2).

Regulatory Basis: 10 CFR 73.55, Appendix C, Paragraph B(3)(b). Descriptions and maps must indicate main and alternate entry routes for law enforcement or other offsite response and support agencies and the location for marshalling and coordinating response activities

3. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 1.1, page 7. Provide a description for main and alternate entry routes for local law enforcement agencies. Particular emphasis should be placed on main and alternate entry routes. Add and highlight this detail to Site Map (Figure 1).

Regulatory Basis: 10 CFR 73.55, Appendix C, Paragraph B(3)(b). Descriptions and maps must indicate main and alternate entry routes for law enforcement or other offsite response and support agencies and the location for marshalling and coordinating response activities.

4. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 1.1, page 7, does not describe or confirm that consideration was given to railroad /spur, airports, pipelines, hazardous material facilities, and pertinent environmental features (i.e., flat or mountainous topography, wooded or grassland) that may have effect upon coordination of response activities. Describe how these features are considered. Add and highlight this detail information to Figures 1 and 2.

Regulatory Basis: 10 CFR 73.55, Appendix C, Paragraph B(3)(b). Plans must also include a description and map of the site in relation to nearby town, transportation routes (e.g., rail, water, and roads) pipelines, airports, hazardous material facilities, and pertinent environmental features that may have an effect upon coordination of response activities.

Request for Additional Information (RAI):

5. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Protected Area Map (Figure 2). The description for the following areas is inconsistent between the Physical Security Plan and Figure 2. Example: Figure 2, references the North Security Portal, PSP; Section 6.2, bullets three and four reference North Access Control Portal; Figure 2 references the West Security Portal, PSP; Section 6.2, bullet six references the West Access Control Portal.

Regulatory Basis: 10 CFR 73.55, Appendix C, Paragraph B(3)(b). The safeguards contingency plan must include a site map depicting the physical structures located on the site, including onsite independent spent fuel storage installations, and a description of the structures depicted on the map.

6. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 6.1.2, page 14, and Section 9.6, page 25. Describe the process used to evaluate vital areas and equipment to support Unit 2 target sets. This description must also include analysis data for vehicle barrier system standoff distance against the vehicle bomb threat.

Regulatory Basis: 10 CFR 73.55(c)(8). Each licensee shall compare the vehicle control measures established in accordance with 10 CFR 73.55 (c)(7) to the Commission's design goals (i.e., to protect equipment, systems, devices, or material, the failure of which could directly or indirectly endanger public health and safety by exposure to radiation) and criteria for protection against a land vehicle bomb.

7. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 6.3, page 17. Provide additional details explaining how the exception referred to in paragraph 5 meets the vital area barrier requirements or describe the compensatory measures implemented.

Regulatory Basis: 10 CFR 73.55(c)(1). The licensee shall locate vital equipment only within a vital area, which in turn, shall be located within a protected area such that access to vital equipment requires passage through at least two physical barriers of sufficient strength to meet the performance requirements of paragraph (a) of this section. More than one vital area may be located within a single protected area.

8. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 9.6, page 25. The 10th bullet makes reference to a Reactor Building and containment. This reference should be plural to represent Unit 1 and Unit 2. Consider formatting Vital Areas listing as contained in the TVA Fleet Security Plans of Browns Ferry, Revision 6, October 1, 2009, and Sequoyah, Revision 7, July 10, 2009.

Regulatory Basis: 10 CFR 73.55(d)(7)(A). Establish a current authorization access list for all vital areas.

9. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 11.2, page 31, refers to the duty positions of Sergeants and Lieutenants. These positions are not identified in Section 4.1. Clarification is requested as to what position (Armed Responder, Armed Security Officer, or Response Team Leader) do Sergeants and Lieutenants fulfill.

Regulatory Basis: Title 10 CFR 73.55 (b)(4)(i). The licensee may not permit an individual to act as a guard, watchman armed response person, or other member of the security organization unless the individual has been trained, equipped, and qualified to perform each assigned security job duty in accordance with appendix B, "General

Request for Additional Information (RAI):

Criteria for Security Personnel," to this part. Upon the request of an authorized representative of the Commission, the licensee shall demonstrate the ability of the physical security personnel to carry out their assigned duties and responsibilities. Each guard, watchman, armed response person, and other member of the security organization shall re-qualify in accordance with appendix B to this part at least every 12 months. This requalification must be documented. The licensee shall retain the documentation of each requalification as a record for three years after the requalification.

10. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 13, page 33. Describe the methodology used in determining the staffing requirements for armed responders and armed security officers based on the development of Unit 2 Vital areas, target sets and timelines. Confirm/describe the types of armed personnel that will comprise the armed response force for the additional Unit 2 vital areas/equipment. The description should include how this process was used as a basis for establishing the Unit 2 target sets and calculating responders' timelines.

Regulatory Basis: Title 10 CFR 73.55 (h)(4)(A). Requiring responding guards or other armed response personnel to interpose themselves between vital areas and material access areas and any adversary attempting entry for the purpose of radiological sabotage or theft of special nuclear material and to intercept any person exiting with special nuclear material,

11. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 14.2, page 33, does not contain any information pertaining to the status of Unit 2. Provide an Implementation Schedule.

Regulatory Basis: Title 10 CFR 50.54(p)(1) The licensee shall prepare and maintain safeguards contingency plan procedures in accordance with appendix C of part 73 of this chapter for affecting the actions and decisions contained in the Responsibility Matrix of the safeguards contingency plan. The licensee may not make a change which would decrease the effectiveness of a physical security plan, or guard training and qualification plan, or cyber security plan prepared under § 50.34(c) or § 52.79(a), or part 73 of this chapter, or of the first four categories of information (Background, Generic Planning Base, Licensee Planning Base, Responsibility Matrix) contained in a licensee safeguards contingency plan prepared under § 50.34(d) or § 52.79(a), or part 73 of this chapter, as applicable, without prior approval of the Commission. A licensee desiring to make such a change shall submit an application for amendment to the licensee's license under § 50.90.

12. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 15.2.1, page 34. Clarify how the current tamper and line supervision alarm testing requirements meet the acceptance criteria of Regulatory Guide 5.44.

Regulatory Basis: Title 10 CFR 73.55 (g) Testing and maintenance. Each licensee shall test and maintain intrusion alarms, emergency alarms, communications equipment, physical barriers, and other security related devices or equipment utilized pursuant to this section as follows: (1) All alarms, communication equipment, physical barriers, and other security related devices or equipment shall be maintained in operable condition. The licensee shall develop and employ compensatory measures including equipment, additional security personnel and specific procedures to assure that the effectiveness of

Request for Additional Information (RAI):

the security system is not reduced by failure or other contingencies affecting the operation of the security related equipment or structures.

13. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, appendix B, page B14, Table 1 task 15 is identified as being performed by watchpersons. Clarify how this requirement meets the intent of appendix C, Section 7, page C-43.

Regulatory Basis: Title 10 CFR 73.55 (h) Response requirement. (1) The licensee shall establish, maintain, and follow an NRC-approved safeguards contingency plan for responding to threats, thefts, and radiological sabotage related to the nuclear facilities subject to the provisions of this section. Safeguards contingency plans must be in accordance with the criteria in appendix C "Licensee Safeguards Contingency Plans."

14. Watts Bar Physical Security Plan, Revision 9, dated October 1, 2009, Section 5.4 indicates security officer contingency requirement. Explain why Page B15, appendix. B, Table 1 task 26, Critical Task Area remains a brackets TEXT item.

Regulatory Basis: 10 CFR 73.55(a)(2). The security plans must identify, describe, and account for site-specific conditions that affect the licensee's capability to satisfy the requirements of this section.

15. Watts Bar Physical Security Plan, revision 9, Dated October 1, 2009, appendix C, page C-37, contains no comment for armed responders being assigned other duties that would impede effective response as described in the Physical Security Plan Template, NEI [Nuclear Energy Institute] 03-12, Revision 5 or 6.

Regulatory Basis: 10 CFR 73.55(a)(2) (March 27, 2009). The security plans must identify, describe, and account for site-specific conditions that affect the license's capability to satisfy the requirements of this section.

A. Bhatnagar

- 2 -

If you should have any questions, please contact me at 301-415-1457.

Sincerely,

/RA/

Joel S. Wiebe, Senior Project Manager
Watts Bar Special Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-391

Enclosure: RAI

cc w/encl: Distribution via Listserv

DISTRIBUTION:

PUBLIC

RidsOgcRp Resource

RidsNrrDirRerb Resource

LPWB Reading File

RidsAcrcsAcnw_MailCTR Resource

RidsRgn2MailCenter Resources

RidsNrrDorLPwb Resource

RidsNrrLABClayton Resources

RidsNrrPMWattsBar2 Resource

ADAMS Accession: ML100270351

OFFICE	LPWB/PM	LPWB/LA	OGC NOL w/ comment	LPWB/BC(A)
NAME	JWiebe	BClayton	A. Jones	RRaghavan for PMilano
DATE	01/28/10	01/28/10	02/18/10	02/18/10

OFFICIAL AGENCY RECORD