

Toshiba's U.S. ABWR Design Certification Rule Renewal Application



Physical Security Meeting

October 6, 2011

Agenda

- Introductions
- Background
- Tier 2 Section 13.6 Changes
- NUREG-0800 13.6.2 Rev. 1 Table 1
- Vital Areas Document Content
- Summary



Introductions

Applicant

- Kenji Arai, Toshiba
- Robert Schrauder, TANE
- Robert Quinn, Westinghouse
- Caroline Schlaseman, MPR

• NRC

Background

- Toshiba submitted its application for renewal of the Design Certification Rule for the U.S. Advanced Boiling Water Reactor (10 CFR 52 Appendix A) on November 2, 2010
- January 26, 2011Teleconference, Subject: Inclusion of Physical Security Information in DCDRA
- NUREG-1503, "FSAR Related to the Certification of the ABWR Design Main Report," Section 13.6 Physical Security, July 1994
- NUREG-0800 13.6.2 "Physical Security Design Certification," March 2007

Tier 2 Section 13.6 Changes

- Provide physical security elements information with the Revision 1 version of the DC Application
- Rewrite Subsection 13.6.2 Security Plan

"The Security Plan (consisting of the physical security plan, the safeguards contingency plan, and the guard training and qualification plan) and the Cyber Security Plan shall be submitted to the NRC by the COL applicant as separate licensing documents in order to fulfill the requirements of 10 CFR 52.79(a)(35) and 10 CFR 52.79(a)(36) (see Subsection 13.6.3.1 for COL license information).

A portion of the physical security plan is in the ABWR Standard Plant scope. This portion of the physical security plan is safeguards information and is not included in the DCD. Refer to Reference 13.6-1 for physical security elements information."

Tier 2 Section 13.6 Changes (continued)

- Edit Subsection 13.6.3.1 correct capitalization errors and change "security safeguards information" to "safeguards information"
- Add a new Subsection 13.6.4 References to provide reference 13.6-1 for a new Vital Areas Document
- Change Tier 2 Subsection 1.1.2 (8) to note a portion of the physical security plan is in the ABWR Standard Plant Scope
- Add a citation to Tier 2 Table 1.6-1 for the new Vital Areas Document

NUREG 0800 13.6.2 Rev. 1 Table 1

- Table 1 Physical Security Elements Required within the Review of a DC Application:
 - 1. Identify vital areas within the physical design and provide a list of vital equipment, by component and location, in vital areas.
 - 2. Identify that the control room and spent fuel pool are within a vital area.
 - Provide a design description that confirms the bullet-resistant design of the control room.
 - 4. Provide a design description of the physical barriers that protect vital areas (e.g., walls, ceilings, floors, doors, and gratings that comply with the definition of physical barrier provided in 10 CFR 73.2, "Definitions"), and describe how these barriers meet the applicable requirements of 10 CFR 73.55(e).
 - 5. Provide a design description (consistent with the stated function of the barrier) that confirms that openings in any barrier or barrier system established to meet the requirements of 10 CFR 73.55, "Requirements for Physical Protection of Licensed Activities in Nuclear Power Reactors against Radiological Sabotage," are secured and monitored to prevent the exploitation of the opening.

NUREG 0800 13.6.2 Rev. 1 Table 1 (continued)

- 6. Provide a design description that confirms that all vital area portals and emergency exits are equipped with intrusion detection equipment and locking devices that allow for rapid egress during an emergency and that satisfy the vital area access requirements of 10 CFR 73.55
- Provide a design description that confirms that all unoccupied vital areas are locked and alarmed
- 8. Include provisions for addressing the inspections, tests, analyses, and acceptance criteria (ITAAC) for those features within the scope of the design. Requirement: The physical security elements, required by regulations or portions of those elements or both, that the DC applicant has not resolved must be identified as COL action items

Vital Areas Document Content

- List of Vital Areas
- List of Vital Equipment by component and location
- Drawings showing the locations of the vital areas
- Design descriptions
- Make our submittal consistent with the acceptable content reviewed by the NRC during the safety evaluation of U.S. ABWR DCD Rev. 4 design

Summary

• Conclusions

Action Items

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