

October 24, 2010

APPLICANTS: AREVA NP

PROJECT: U.S. EPR Design Certification Review

SUBJECT: SUMMARY OF JULY 21, 2010, PUBLIC MEETING WITH AREVA NP INC., TO DISCUSS CONTINUOUS CONNECTION OF THE SERVICE UNIT IN SAFETY SYSTEMS FOR DIGITAL INSTRUMENTATION AND CONTROLS SYSTEMS

On July 21, 2010, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of AREVA NP (AREVA). The meeting was held at the NRC headquarters facility at 11555 Rockville Pike, Rockville MD. The purpose of this meeting was to discuss the NRC concerns related to the continuous bi-directional communications connection between the Service Unit (SU) and Safety Systems for the U.S. EPR Instrumentation and Control (I&C) Systems design. The meeting notice with the agenda can be found in the Agencywide Documents Access and Management System (ADAMS) Accession No. ML101900340. The agenda included designated times for discussion of proprietary information related to the topics of discussions, and also for public interactions with the staff. The Enclosure lists the meeting attendees.

The meeting started at 9:05 a.m. (Eastern Time). After the opening remarks and introductions of the attendees, meeting ground rules and logistics were announced. The staff briefly reviewed the agenda items and emphasized that members of the public would be asked to leave immediately prior to discussion of proprietary information. The closed discussion of proprietary information was presented at the beginning of the AREVA presentation which started at approximately 10:15 a.m. and ended at approximately 11:00a.m.

The staff then described their current position related to the use of the SU within the Digital I&C architecture as previously discussed in the June 24, 2010, meeting (ADAMS Accession No. ML102250186). The use of the SU is identified in the U.S. EPR Final Safety Analysis Report (FSAR), Section 7.1.1.2.1 and the associated "TELEPERM XS: A Digital Reactor Protection System, EMF-2110NPA" (ADAMS Accession No. ML003732662). The SU is part of the TELEPERM XS architecture; however, the architecture approved in the TELEPERM XS topical report is not specifically applied to the U.S. EPR as part of the U.S. EPR design certification application FSAR.

The AREVA presentation described their rationale for the current approach (ADAMS Accession No. ML102080150), including the SU's intent in addressing engineering and maintenance activities related to fault diagnostics, parameterization, periodic surveillance capture and software loading evolutions. The access control aspects of the service units are specifically credited in the U.S. EPR FSAR and some specifics of that control was presented.

AREVA identified that Run Time Environment (RTE) modes were systematically tested and had revealed no issues. After additional discussion of the communications related to message handling, information requests, and service commands, AREVA described their perceived benefits derived from maintaining a continuously connected SU.

Augmenting the specific roles above is the ability to address cyber security requirements for operational management security and implementation of Title 10 of the Code of *Federal Regulations* (10 CFR) Part 50 Section 65, Maintenance Rule monitoring.

AREVA further identified during discussion that there was no specifically developed interface requirements specification for the SU, as it was developed as part of the safety system requirements themselves.

After inviting the public back into the meeting, the discussion continued until 12:05 p.m. including an opportunity for public interaction with the staff. A member of the public made several statements in support of AREVA arguments for the use of the SU as currently defined.

The meeting resumed at 1:05 p.m. AREVA then described their licensing approach using the Oconee review as a road map and addressed their compliance with Interim Staff Guidance, (ISG) -04, point-by-point.

The staff concluded the discussion on this topic by restating their position and identified that they would consider the AREVA proposal on this issue. The staff discussed concerns with the size and complexity of the licensing basis associated with justifying the permanent, bi-directional data communication link between SU and safety systems. Specifically, management of such a complex licensing bases for potentially 60 years and beyond could affect the configuration management of design changes and the staff's ability to provide oversight through inspections. Prior to adjournment, the public was given an opportunity to interact with the NRC staff. No additional discussion occurred. The meeting was adjourned at 4:30 p.m.

Questions regarding this meeting can be directed to Michael Canova at 301-415-0737 or at Michael.Canova@nrc.gov.

Sincerely,

/RA/

Michael A. Canova, Project Manager
EPR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

Docket No.: 52-020

Enclosures:

1. List of Attendees
2. Meeting Slides ADAMS Accession No. ML102080150

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ADAMS ACCESSION Number: ML102590166

NRC-002

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(Revised 06/23/2010)

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