



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

August 4, 2011

LICENSEE: Energy Northwest
FACILITY: Columbia Generating Station
SUBJECT: SUMMARY OF JULY 6, 2011, CATEGORY 1 MEETING WITH ENERGY NORTHWEST – PRE-LICENSING MEETING TO DISCUSS THE PROPOSED INSTALLATION OF A DIGITAL POWER RANGE NEUTRON MONITORING SYSTEM (PRNMS), AVERAGE POWER RANGE MONITOR/ROD BLOCK MONITOR/TECHNICAL SPECIFICATIONS (ARTS), AND MAXIMUM EXTENDED LOAD LINE LIMIT ANALYSIS (MELLLA) LICENSE AMENDMENT REQUEST (TAC NO. ME5129)

On July 6, 2011, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC), and representatives of Energy Northwest (the licensee), at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, MD. The purpose of the meeting was to discuss the forthcoming license amendment request (LAR) for installation of a digital Power Range Neutron Monitoring System (PRNMS), Average Power Range Monitor/Rod Block Monitor/Technical Specifications (ARTS), and Maximum Extended Load Line Limit Analysis (MELLLA) for Columbia Generating Station. The licensee originally submitted a similar LAR for this modification by letter dated May 11, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML101390368), which was non-accepted by the NRC as documented in its letter dated September 13, 2010 (ADAMS Accession No. ML102420659). The licensee plans to re-submit an updated LAR. A previous Phase 0 public meeting on this subject was held on January 18, 2011; that meeting summary is available at ADAMS Accession No. ML110210130.

The purpose of the July 6, 2011, meeting was to provide NRC staff with an overview of the proposed modification and receive early NRC staff feedback. A list of meeting attendees is enclosed. The meeting handouts are available in ADAMS (ADAMS Accession No. ML111870059).

Results of Discussion

The licensee informed the NRC staff that the PRNMS upgrade is built and has been delivered at the site.

During meeting held on January 18, 2011, the licensee had indicated that there may be some differences with NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition," Branch Technical Position (BTP) 7-14, "Guidance on Software Reviews for Digital Computer-Based Instrumentation and Control Systems" (ADAMS Accession No. ML070670183). The NRC staff stated that these differences must be evaluated fully and documented as equivalent alternatives for acceptance. Lack of fully independent verification and validation (IV&V) was cited as one of the key areas of difference. The NRC staff stated that the licensee's program must provide

adequate verification and validation (V&V). The use of a third-party independent reviewer was identified as a possible alternative approach.

The licensee advised that NRC that it had initiated an independent assessment which was conducted by ProDesCon as a critical review. This critical review identified gaps between the IV&V requirements of Institute of Electrical and Electronics Engineers (IEEE) Standard 1012-1998, "IEEE Standard for Software Verification and Validation," and the actual testing performed.

The NRC staff and the licensee discussed how the submittal would address variances from BTP 7-14 and IEEE 1012. Specifically, one major concern identified by the staff that did not appear to be adequately addressed in the licensee's previous submittal was the independence of the V&V process from the development process. At this meeting, the licensee did not identify explicitly all the gaps and the measures to be taken to compensate for those gaps. The licensee did mention creating a few additional documents and some additional testing to fill the gaps. The NRC staff suggested that Energy Northwest describe what additional testing will be conducted to supplement the earlier testing which was not done in accordance with IEEE 1012 and how this additional testing will justify meeting the guidance of IV&V contained in IEEE 1012. Non-testable features would need to be identified and justified for acceptance.

The licensee also agreed to provide a roadmap between ISG-06¹, Enclosure B, and the licensee documents for ease of the NRC staff's review. NRC expects all Phase I documents will be submitted along with the submittal.

The licensee states that it plans to submit four LARs (three of which may be under the same cover letter) in the place of the original LAR that was not accepted for review. The four LARs would concern PRNMS, ARTS/MELLLA, Standby Liquid Control, and Technical Specification Task Force (TSTF) Traveler 493, "Clarify Application of Setpoint Methodology for LSSS [Limiting Safety System Setting] Functions."

The licensee and the NRC discussed having a possibly closed meeting to discuss proprietary information just prior to the licensee's submittal in order to discuss how the content of the licensee's submittal matches Appendix B of ISG-06.

A member of the public attended the meeting. No Public Meeting Feedback Forms were received for this meeting.

¹ U.S. Nuclear Regulatory Commission, Digital Instrumentation and Controls, DI&C-ISG-06, "Task Working Group #6: Licensing Process," Interim Staff Guidance (ADAMS Accession No. ML110140103).

Please direct any inquiries to me at (301) 415-1476, or Mohan.Thadani@nrc.gov.

Sincerely,

Lauren Kate Gibson for

Mohan C. Thadani, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-397

Enclosure:
List of Attendees

cc w/encl: Distribution via Listserv

LIST OF ATTENDEES
July 6, 2011, PRE-LICENSING MEETING
DIGITAL PRNMS/ARTS/MELLA LICENSE AMENDMENT REQUEST
ENERGY NORTHWEST
COLUMBIA GENERATING STATION
DOCKET NO. 50-397

NAME	ORGANIZATION
Norbert Carte	NRC/NRR/DE/EICB
Bernard Dittman	NRC/NRR/DE/EICB
Lauren Gibson	NRC/NRR/DORL/LPL4
David Rahn	NRC/NRR/DE/EICB
Gursharan Singh	NRC/NRR/DE/EICB
Don Gregoire	EN
M. A. (Tony) Huiatt	EN
James Snyder	EN
Lauren Kazmierski	GEH
Ross Merante	GEH
Eric Mino	GEH
Sara Rudy	GEH
Larry Walton	GEH
Jana Bergman*	Scientech

* Member of the public

Abbreviations:

- NRC – U.S. Nuclear Regulatory Commission
- NRR – Nuclear Reactor Regulation
- EICB – Instrumentation and Controls Branch
- DE – Division of Engineering
- DORL – Division of Operating Reactor Licensing
- LPL4- Plant Licensing Branch IV
- EN – Energy Northwest
- GEH – General Electric Hitachi Nuclear Energy Americas LLC

Please direct any inquiries to me at (301) 415-1476, or Mohan.Thadani@nrc.gov.

Sincerely,

/ra/ (LGibson for)

Mohan C. Thadani, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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List of Attendees

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NCarte, NRR/DE/EICB

ADAMS Accession Nos.: Meeting Notice ML111730551 Summary ML111990074
Handouts ML111870059

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/DE/EICB/BC	NRR/LPL4/BC	NRR/LPL4/PM
NAME	MThadani (LKGibson for)	JBurkhardt	GWilson (w/comments)	MMarkley	MThadani (LKGibson for)
DATE	7/25/11	7/25/11	7/27/11	8/4/11	8/4/11

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