

Exelon Pre-Submittal Meeting for LAR to adopt ANSI 3.1-2014

March 22, 2016



Exelon Generation®



Purpose for Discussion

- License Amendment Request (LAR) pre-submittal meeting
 - Discuss proposed Technical Specification wording
 - Identify issues prior to submittal
- Discuss two exceptions being taken to ANSI/ANS-3.1-2014
- Alignment for consistent wording / Delete STA Commission Policy Statement
- Discuss LAR with respect to proposed changes to RG 1.8, Rev. 4
- Discuss Instant SRO hiring impact
- Discuss logistics of timing of submittal and implementation period



Opening Remarks

- Executive Sponsor for LAR – Julie Sickle
- Chair of the ANS working level committee that developed ANSI/ANS-3.1-2014



License Amendment Request (LAR) Team

- Executive Sponsor - Julie Sickle
- Licensing Manager - Dave Helker
- Lead Licensing Engineer - Frank Mascitelli
- MW Licensing Engineer - Ken Nicely
- LAR Technical Lead - Heather Davis
- Site team consisting of Regulatory Assurance personnel and Training Managers



Overview

- ANSI/ANS-3.1-2014 is the standard for “Selection, Qualification, and Training of Personnel for Nuclear Power Plants.” This version was approved 11/20/14 by the American National Standards Institute.
- This standard is currently with the NRC for review, with NRC endorsement via Regulatory Guide 1.8, Rev. 4 by middle of 2016.
- Exelon will be submitting the license amendment for all sites (excluding Oyster Creek) in the July 2016 time frame following the issuance of the draft RG 1.8 Rev. 4 for public comments. Fort Calhoun Station will be submitting separately.
- The purpose of the 2014 revision was to update the standard in the following areas:
 - align the American Nuclear Society, the U.S. Nuclear Regulatory Commission, and the Institute of Nuclear Power Operations with industry training and standards
 - provide a common language across the industry
 - incorporate the past 20 years of learning and experience with nuclear power plant training program implementation and performance
 - better address supplemental training and qualification
 - update positions in light of new nuclear power plant construction, current position terminology, and evolving technology



Technical Specification Changes

- **Current Technical Specification Requirements:**
 - **ANS-3.1/N18.1-1971**
 - Braidwood, Byron, Calvert Cliffs, Dresden, Ginna, LaSalle, Peach Bottom, Nine Mile Point Unit 1, Quad Cities
 - **ANSI/ANS-3.1-1978**
 - Clinton, Limerick, Nine Mile Point Unit 2, Three Mile Island Unit 1
- **Proposed Technical Specification Requirements:**
 - **ANSI/ANS-3.1-2014 (with exceptions)**
 - **Alignment for consistent wording**
 - **Delete STA policy statement for Engineering Expertise on Shift**



Development of a Comparison Matrix

- As part of the Exelon internal review process, a Comparison Matrix was developed.
- The document compared the existing 1971 and 1978 Standards to the 2014 Standard.
- Gap analyses were performed.
- Process resulted in an interpretation document that ensured consistent application of the 2014 Standard for such items as education and experience.
- Comparison Matrix was shared with industry peers.



Tech Spec Changes-ANSI/ANS-3.1-2014 (with exceptions)

Proposed Typical Change to TS 5.3.1

- (For Braidwood, Byron, Calvert Cliffs, Clinton, Dresden, LaSalle, Nine Mile Point-2, Peach Bottom, Quad Cities, R.E. Ginna)

Proposed Typical Change to TS 6.3.1

- (For Limerick, Nine Mile Point -1, Three Mile Island)

Change from:

- Each member of the staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 (or ANSI/ANS 3.1-1978), with specified exceptions...

Change to:

- Each member of the unit/facility/plant staff shall meet or exceed the minimum qualifications of ANSI/ANS-3.1-2014, except:
 - those who were actively in role prior to implementation of this standard.
 - non-licensed operators, who shall meet or exceed the minimum qualifications of ANSI/ANS-3.1-1978 or ANSI-3.1/N18.1-1971.



ANSI/ANS-3.1-2014 (with exceptions)

- There is a need for a “grandfather” clause if no exception is taken in RG 1.8 Rev. 4 for individuals in their current job positions that were qualified to previous standards.
 - This is a verbatim Technical Specification compliance issue; thus, the need for exception. Exelon does not plan to requalify existing individuals in current roles to new standard. Exelon will qualify individuals to new positions, moving forward.
 - If RG 1.8 Rev. 4 addresses this issue, then no exception will be taken in the Technical Specification wording.
- Exception to the ANSI/ANS-3.1-2014 Non-Licensed Operator (NLO) Requirements for power plant experience.
 - Exelon will submit an exception to keep current standards for NLO position (1978/1971 as applicable).



ANSI/ANS-3.1-2014 (with exceptions)

- **ANSI/ANS-3.1-2014 Non-Licensed Operator (NLO) Requirements**
 - **Minimum experience for the position: ***
 - Power plant experience which shall include: 2 years
 - Nuclear power plant experience: 1 year
 - On-site experience: 0.50 year
 - ANSI/ANS-3.12014 Standard does not count classroom training towards nuclear power plant experience, although On-the-Job-Training / Task Performance Evaluation (OJT/TPE) can be counted. Exelon current NLO program is set up to count all time in initial training towards nuclear power plant experience:
 - Classroom Training – 22 weeks
 - OJT/TPE – 30 weeks



Alignment for consistent wording

- STS 5.2.2.d (Facility Staff)
 - The operations manager or assistant operations manager shall hold an SRO license.
- ANSI/ANS-3.1-2014, 4.2.2
 - If the operations manager does not hold a senior operator's license, then the operations middle manager shall hold a senior operator's license.
- Exelon proposed wording:
 - The operations manager or *one of the operations middle managers* shall hold an SRO license.
- For Exelon:
 - Operations Manager = Operations Director
 - Assistant Operations Manager = Shift Operations Supervisor (SOS)
 - One of the Operations Middle Managers =
 - SOS or
 - Senior Manager Operations Support & Services or
 - Operations Support Manager or
 - Operations Services Manager



Alignment for consistent wording / Delete STA Commission policy

- STS 5.2.2.e (Facility Staff)
 - An individual shall provide advisory technical support to the unit operations shift crew in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. This individual shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.
- Exelon Proposed wording:
 - The Shift Technical Advisor (STA) shall provide advisory technical support to the unit operations shift crew in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the facility.
- Delete policy statement since the qualification requirements are redundant to the qualification requirements provided in ANSI/ANS-3.1-2014.



Training Impact Review Concerns / Resolutions

Instant SRO hiring impact

- Section 4.4.1 Senior Operator
 - One of the requirements in this section is for “Responsible nuclear power plant experience of 1.5 years.” Per 2014 ANSI standard, “Responsible” experience only acknowledges commercial power plant experience and not military; additionally, classroom training cannot count toward the 1.5 years.
 - If the word *commercial* was not specified in the definition, then military experience could be counted using the nuclear power plant experience definition, provided they met specific criteria.
 - The requirement for commercial experience in Section 4.4.1 is in conflict with Section 4.1.2.3 #5 under senior reactor operator candidates, which states: "2 years in a position equivalent to reactor operator position at a military power reactor (qualified to manipulate or direct the manipulation of control rods)," which establishes nuclear power plant experience.
- The purpose of the ANSI 3.1-2014 revision, as stated in the forward of the document, was to update the standard in the following areas: align the American Nuclear Society, the U.S. Nuclear Regulatory Commission, and the Institute of Nuclear Power Operations with industry training and standards.



Training Impact Review Concerns / Resolutions

- Responsible nuclear power plant experience is also defined in ACAD 10-001 Rev. 0 for Direct SROs:
 - When a candidate does not have commercial power experience at a reactor facility, >2years or more in a position equivalent to reactor operator position at a military reactor can be substituted for responsible nuclear experience.
 - Military positions that can be applied are:
 - Reactor Operator
 - Engineering Officer of the Watch
 - Propulsion Plant Watch Officer
 - Engineering Watch Supervisor
 - Propulsion Plant Watch Supervisor
 - Exelon will continue to use the screening criteria for Instant SROs as outlined in ACAD 10-001 Rev 0 (Figure 2-2.).



LAR Logistics / Implementation

Submit LAR after draft RG 1.8 Rev. 4 issued for public comments and prior to final issuance of RG 1.8 Rev. 4 (July 2016).

- Plan to supplement, as applicable, for any significant changes that evolve from public review / comment cycle.
- All required activities for the TS amendment implementation period can be accomplished within 180 days from the date of NRC issuing the approved license amendments.
- Updates for implementation:
 - Quality Assurance Topical Report
 - Updated Final Safety Analysis Report (UFSAR) Chapter 13 training discussions
 - Training Program Procedures/Documents/Lessons
 - Human Resources Documents