NRR-PMDAPEm Resource

From: Kuntz, Robert
Sent: Wednesday, August 23, 2017 9:54 AM
To: 'Gunderson, Lynne'
Subject: Request for Additional Information RE: Monticello EAL scheme change amendment request

Ms. Gunderson,

By letter dated March 31, 2017, Northern States Power Company - Minnesota, doing business as Xcel Energy (the licensee or Xcel), requested approval for an emergency action level (EAL) scheme change for Monticello Nuclear Generating Plant (MNGP) (Agencywide Documents Access and Management System (ADAMS) Accession Number ML17095A107).

The Nuclear Regulatory Commission (NRC) staff has determined that additional information is required to complete its review. The following is the NRC staff's request for additional information (RAI). The NRC staff expects a response to this RAI by September 28, 2017.

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REQUESTS FOR ADDITIONAL INFORMATION

LICENSE AMENDMENT REQUEST

EMERGENCY ACTION LEVELS SCHEME CHANGE

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NOS. 50-263 AND 72-0058 (CAC MF9560)

The requirements of Section 50.47(b)(4) to Title 10 of the *Code of Federal Regulations* (10 CFR) state, in part, that:

> A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee...

The most recent industry emergency action levels (EAL) scheme development guidance is provided in the Nuclear Energy Institute (NEI) document NEI 99-01, "Development of Emergency Action Levels for Non-Passive Reactors" (ADAMS Accession Number ML12326A805). By letter dated March 28, 2013, the NRC endorsed NEI 99-01, Revision 6, as acceptable generic (i.e., non-plant-specific) EAL scheme development guidance. Xcel Energy proposes to revise their current EAL scheme for Monticello Nuclear Generating Plant (MNGP) to one based upon NEI 99-01, Revision 6 (hereafter referred to as "endorsed guidance").

MNGP RAI-1

Section 5.8, "Classification of Transient Conditions," contains an example of a condition corrected prior to declaration that is not in accordance with the endorsed guidance. The provided example implies that for **any** anticipated transient without scram (ATWS) condition, the ATWS EALs will be used vice any applicable fission product barrier EALs.

Provide justification for the example which is not consistent with the endorsed guidance.

MNGP RAI-2

Proposed EAL RA1.1 contains values for effluent monitors that are approximately 2 times the values in proposed EAL RU1.1. Typically, the values for EAL RA1.1 are several times higher than the values for EAL RU1.1

Verify the values to be used in EALs RU1.1 and RA1.1 are correct.

MNGP RAI-3

The areas listed in Table H1, in the proposed MNGP EALs RA3 and HA5 appear vague and too all-encompassing. Typically, the Secondary Alarm Station (SAS) and all the rooms listed for all operating modes are not included in this table. The endorsed guidance states: "the 'site-specific' list of plant rooms should specify the rooms or areas that contain equipment which require a manual or local action in procedures for normal operation, shutdown and cooldown."

Verify that all the listed rooms or areas are restricted to only the areas that contain equipment needed for safe operation, safe shutdown and safe cool-down.

MNGP RAI-4

Containment Challenge Table C1, in proposed EAL CG1, includes an entry of an unplanned rise in containment pressure of greater than 1.84 pounds per square inch gauge (psig).

a. Provide the basis for the value of 1.84 psig for the containment pressure rise.

b. Verify that a rise of 1.84 can be determined using available containment pressure instrumentation.

c. Provide an explanation of how an operator would know that containment pressure has changed by 1.84 psig (e.g., log reading, alarm).

MNGP RAI-5

Proposed EALs CA6 and SA9 list a river level of greater than 919 foot elevation. Revision 48 of A.2-101, "Classification of Emergencies," provides in HA1.6 a river level of greater than 920 feet, which is identified in the EAL as the top of retention basins and corresponds to the 1,000 year flood elevation.

Provide a basis for the high level river level of 919 feet.

MNGP RAI-6

Proposed EAL HS6 includes a 10 minute time requirement to establish control of certain plant parameters.

Explain if there is a definitive starting point for the 10 minute clock, and how the Emergency Director knows the clock has started (i.e., procedure direction, training).

MNGP RAI-7

The proposed anticipated transient without a scram (ATWS) EALs SU5, SA5, and SS5 include a power level of less than 4%, and appear to rely solely on a reactor power of 4% as indication of a reactor trip. The intent of the endorsed guidance is to align the classification for the EALs listed above with site-specific emergency operating procedure (EOP) criteria for a successful reactor shutdown, thus benefitting decision makers by

providing consistent criteria. The power level provided in the Developer Notes in the endorsed guidance is an example that represents one typical EOP indication for a generic power plant and was not intended to be a complete list of EOP indications for any specific power plant.

Clarify EALs SU5.1, SA5.1, and SS5.1 to reflect the EOP reactor shutdown criteria in the EOPs, or show how wording similar to the endorsed guidance will be used to support timely and accurate assessment.

MNGP RAI-8

Proposed EAL SS5 includes “Heat Capacity Limit (HCL) Exceeded.” Provide evidence that decision makers can determine when the HCL has been exceeded in a reasonable amount of time to make an emergency event classification. Consider adding any curves, parameters or calculations to the EAL Matrix, Hot Conditions.

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