



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

November 18, 2019

LICENSEE: Talen Energy

FACILITY: Susquehanna Steam Electric Station, Units 1 and 2

SUBJECT: SUMMARY OF THE OCTOBER 29, 2019, MEETING WITH TALEN ENERGY REGARDING A FUTURE LICENSE AMENDMENT REQUEST RELATED TO REVISING THE DOSE CONSEQUENCE ANALYSIS FOR A LOSS-OF-COOLANT ACCIDENT AT SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 (EPID L-2019-LRM-0069)

On October 29, 2019, a Category 1 public teleconference meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and the representatives of Talen Energy (the licensee) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to discuss a future license amendment request to revise the dose consequence analysis for a loss-of-coolant accident for Susquehanna Steam Electric Station (Susquehanna), Units 1 and 2. The meeting notice and agenda, dated October 7, 2019, are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML19282A701. A list of attendees is provided as an enclosure.

The licensee's presentation materials can be found at ADAMS Accession No. ML19298A955.

The licensee's staff expects to submit the proposed license amendment request (LAR) for Susquehanna, Units 1 and 2 by the end of December 2019.

The licensee discussed a number of planned changes to the dose consequence analysis for a loss-of-coolant accident (LOCA). The changes being considered include:

- Upgrade to ORIGEN-ARP for source term.
- Reduce assumed engineered safety feature leakage to align with Regulatory Guide 1.183.
- Increase assumed Secondary Containment inleakage.
- Increase assumed Control Room Habitability Envelope inleakage.
- Eliminate Control Room Habitability Envelope continuous occupancy areas to align with Regulatory Guide 1.183.
- Upgrade to RADTRAD Version 3.10.

The NRC staff's discussion included:

- The future LAR will not be related to the Atrium 11 LAR that the licensee has already submitted to the NRC staff. The licensee clarified that the planned LAR and Atrium 11 LAR are two separate licensing actions and each is independent of the other.
- The licensee plans to submit the LAR by the end of December 2019 and would need this amendment prior to the next outage in 2021.
- The LAR will not include modification to primary system piping.
- The LAR does not involve an update to the neutron fluence calculation method or the neutron fluence estimates.
- The licensee was advised by the NRC staff that it should address how Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36 is still being met for the proposed changes to its technical specifications (TSs). If the licensee is proposing a change to the administrative controls section of its TSs, then the licensee should explain how the proposed change continues to assure operation of the facility in a safe manner in accordance with 10 CFR 50.36(c)(5).
- The licensee is updating its current licensing basis accident source term to reflect the conversion from ATRIUM 10 to ATRIUM 11 fuel. The current licensing basis accident source term utilized the computer code SAS2H/ORIGEN-S to compute the reactor core isotopic inventory. With the conversion to ATRIUM 11, the licensee has chosen to compute the reactor core isotopic inventory utilizing the OrigenArp computer code and considers this a method change.
- With respect to analyses which assume continuous occupancy in rooms not required by Regulatory Guide 1.183, the NRC staff indicated a need for the licensee to describe why continuous occupancy has been assumed for these rooms and to provide a justification as to why continuous occupancy no longer applies. The NRC staff indicated that a justification for the change simply based on Regulatory Guide 1.183 not requiring continuous occupancy assumption is not acceptable. The staff also requested that a clear and detailed basis be included for the proposed increase in secondary containment and control room envelope inleakage values.
- In order to improve the efficiency of the NRC staff's review, it is important for licensees to explicitly identify the areas that are - and are not - affected by the license amendment request with respect to the design-basis accident loss-of-coolant accident dose analysis. The licensee should consider providing a matrix that includes information for each input parameter; the current licensing basis value, the proposed value, justification for the proposed value, and reference to the applicable updated final safety analysis report section and/or TS.
- In order to accommodate the NRC staff's review, the various RadTrad 3.10 input files would be preferred to improve the efficiency to confirm the licensee's analysis. Otherwise, the RadTrad output file would be sufficient for confirmatory

analyses.

Members of the public were not in attendance. Public meeting feedback forms were not received.

Please direct any inquiries to me at 301-415-8004 or Sujata.Goetz@nrc.gov.

/RA/

Sujata Goetz, Project Manager
Plant Licensing Branch I
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-387 and 50-388

Enclosure:
List of Attendees

cc: Listserv

LIST OF ATTENDEES

MEETING WITH TALEN ENERGY REGARDING A FUTURE LICENSE AMENDMENT
REQUEST RELATED TO DOSE CONSEQUENCE ANALYSIS FOR A LOSS-OF-COOLANT
ACCIDENT AT SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2
OCTOBER 29, 2019

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*Participated via teleconference

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DATE	11/6/2019	11/5/2019	11/15/2019	11/18/2019

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