

**From:** [Marshall, Michael](#)  
**To:** [\[Licensee\] Ron Reynolds \(Exelon\)](#)  
**Cc:** [James Danna \(James.Danna@nrc.gov\)](mailto:James.Danna@nrc.gov)  
**Subject:** NINE MILE POINT, UNIT 2 – REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST TO INCREASE ALLOWABLE MSIV LEAKAGE RATES (L-2019-LLA-0115)  
**Date:** Wednesday, October 23, 2019 8:33:00 AM

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Hello Ron,

By letter dated May 31, 2019 (Agencywide Documents Access and Management System Accession No. ML19151A537), Exelon Generation Company, LLC (Exelon) requested that the U.S. Nuclear Regulatory Commission (NRC) amend Renewed Facility Operating License No. NPF-69 for Nine Mile Point Nuclear Station, Unit 2. Exelon's proposed license amendment request would change Technical Specification Surveillance Requirement 3.6.1.3.12 for the main steam isolation valve (MSIV) leakage rate.

The NRC staff has reviewed the information provided in the license amendment request and has determined that additional information is needed to complete its review. Below is the NRC staff's request for additional information. The request for additional information was discussed with you on October 22, 2019, and it was agreed that Exelon's response would be provided within 30 days from the date of this email.

The request for additional information listed below are not a complete listing of the additional information needed to complete the NRC staff's review. Additional requests for additional information will be provided in separate correspondence.

#### REQUEST FOR ADDITIONAL INFORMATION

##### Regulatory Criteria:

Section 50.49(e)(1) of Title 10 of the *Code of Federal Regulations* (10 CFR) requires that the time-dependent temperature and pressure at the location of the electric equipment important to safety must be established for the most severe design basis accident during and following which this equipment is required to remain functional.

Section 50.49(e)(2) of 10 CFR requires that humidity during design basis accidents must be considered.

Section 50.49(e)(4) of 10 CFR requires that the radiation environment must be based on the type of radiation, the total dose expected during normal operation over the installed life of the equipment, and the radiation environment associated with the most severe design basis accident during or following which the equipment is required to remain functional.

Section 50.49(b)(2) of 10 CFR requires qualification of nonsafety-related electric equipment whose failure under postulated environmental conditions could prevent satisfactory accomplishment of safety functions specified in subparagraphs (b)(1) (i) (A) through (C) of paragraph (b)(1) of 10 CFR 50.49 by the safety-related equipment.

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Issue:

Exelon provided an evaluation on the radiological impact on the environmental qualification

of electrical equipment due to the proposed increased leakage rate of MSIVs. However, it did not provide an evaluation of the impact of the MSIV increased leakage rate on temperature, pressure, or humidity of electrical equipment in those zones of impact. Exelon did not address whether, considering the total dose expected (total integrated dose (TID) analysis of record), the change could result in electrical equipment currently classified as non-environmentally qualified now being subject to the requirements of 10 CFR 50.49 (i.e., transition from a Mild area to Harsh). It is also unclear as to whether the licensee considered the impact of the proposed change on non-safety related equipment whose failure under postulated environmental conditions could prevent satisfactory accomplishments of safety functions by the safety-related equipment.

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Request:

1. Provide a description of the evaluation that shows that the revised temperatures, pressures, and humidity remain bounded by the existing environmental qualification for equipment in zones impacted by the proposed change.
2. Provide information that shows that the proposed TID bounds the current TID for each environmental qualification (EQ) zone outside the secondary containment. This information is needed to confirm Exelon's conclusion that no EQ zones transition from Mild to Mild Except for Electronics (ME), and that no zones transition from ME to Harsh.
3. Explain how the impact of the proposed change was assessed on non-safety related equipment whose failure under postulated environmental conditions could prevent satisfactory accomplishments of safety functions by the safety-related equipment.

Best Regards,  
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Senior Project Manager

Plant Licensing Branch I  
Division of Operating Reactor Licensing  
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301-415-2871

Docket No. 50-410