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Subject: Follow up on POAHHI process
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Happy Friday! I'm following up on the issue you have raised in drop ins with both me and Andrea Veil on the POANHI process. Specifically you were looking for some guidance on when licensees would need to report to the NRC increased seismic hazards at their sites. As I understand it, EPRI has incorporated the new NGA-East Ground Motion Model with the existing CEUS seismic source models and the R2.1 site response results to develop updated hazard curves. EPRI combined these updated hazard curves with their estimates of plant seismic fragility curves to determine risk at CEUS plants. They have compared these risk estimates to the ones developed for NTTF R2.1. This information has not yet been sent to licensees.

Recently, the NRC staff has revised the NTTF R2.1 geologic profiles and site response results for a number of the CEUS plants based on its additional research. NRC staff will publish these updated geologic profiles and site response results in a NUREG-KM early next year. NRC staff has also recently completed an evaluation of site response analysis methodologies through a Level 2 SSHAC and these results will be published in a research information letter soon. NRC staff updated seismic hazard curves will use NGA-East GMM, CEUS seismic source models, with latest geologic site profiles and revised site response analysis approaches.

As far as what information is required to be reported to the NRC, information on updated site hazards may be required to be reported to the NRC under 10 CFR 50.9(b), which states that each applicant or licensee shall notify the Commission of information identified by the applicant or licensee as having for the regulated activity a significant implication for public health and safety or common defense and security. It is useful to note that, for a violation of 50.9 to occur the licensee must recognize the significance of the information and fail to report it to the NRC. The Commission has not defined what information is "significant". However, there are some resources that can be useful in making a determination about whether the information is significant including:

- NUREG BR 0058, which provides guidance on delta risk and how this information could be considered in decision making (ML17100A480)
- Regulatory Guide 1.174, " An Approach for Using Probabilistic Risk Assessment in Risk-informed decisions on plant specific changes to the licensing basis" (ML17317A256)
- NUREG 0800, "Standard Review plan for the Review of Safety Analysis Reports for Nuclear Power plants, Chapter 19 (ML 070810350)
- Any increased seismic hazard should be considered in making operability determinations
- There are requirements to report unanalyzed conditions under 10 CFR 50.72(b)(3)(ii)(B). The NRC uses the NUREG referenced above as guidance in determined which unanalyzed conditions are required to be reported.
- There is guidance in the NRC enforcement manual (Part II) Section 1.5.4, "Enforcement Process for Incomplete/Inaccurate Information" and Section

1.5.5, "Violations of Reporting Requirements") on how the NRC dispositions violations of 10 CFR 50.9 and 10 CFR 50.72.

Given that both EPRI and the NRC are updating the information we have on seismic hazards, the NRC staff believes it would be beneficial to engage with stakeholders on details of hazard characterization updates and work collaboratively to assess the new hazards through a series of public meetings. This will ensure that we are all making decisions on the same information and collectively understand which new information may be significant. Please let me know if you have any additional questions and contact Cliff Munson or Barbara Hayes of my staff at cliff.munson@nrc.gov or Barbara.Hayes@nrc.gov if you would like to pursue a more coordinated effort to evaluate the new information and the implications on plant safety. Please let me know if you have any additional questions or concerns.

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