

**From:** Mahmoud Jardaneh  
**Sent:** Thursday, June 15, 2023 1:31 PM  
**To:** Wadkins, George (GE Vernova); Diaz-Quiroz, Jesus G. (GE Vernova); GEH-BWRX-300DocsPEm Resource  
**Cc:** Jim Shea; Jordan Glisan; Michelle Hayes  
**Subject:** Pre-Submittal Readiness Assessment Engagement Plan for Draft Safety Strategy LTR (NEDC-33934P)  
**Attachments:** Pre-Submittal Readiness Assessment Engagement Plan for Draft LTR NDEC 33934P Safety Strategy.docx

Dear George and Jesus:


During the staff's pre-application discussions with GE-Hitachi Nuclear Energy Americas, LLC (GEH) on the proposed Licensing Topical Report (LTR) NEDC-33934P, "Safety Strategy," for the BWRX-300 small modular reactor (SMR), GEH requested that the NRC staff conduct a pre-application readiness assessment of the draft subject LTR prior to its planned submittal in August 2023. The proposed readiness assessment is scheduled between June 28, 2023, when GEH makes the draft LTR available for staff review in an electronic reading room, and July 26, 2023, when the staff plans to provide feedback to GEH in posted meeting that will be partially closed to the public.

The readiness assessment will help the NRC staff and GEH to identify information gaps between the draft LTR and the technical content that is expected to be submitted to the NRC and identify major technical or policy issues that may adversely impact the technical review of the LTR. It will also give the staff an opportunity to become familiar with the LTR, particularly in areas where GEH is proposing new concepts or novel design features.

The readiness assessment engagement plan (attached) provides the details and logistics of the readiness assessment activities. No regulatory decisions will be made during or following the staff's readiness assessment engagement with GEH. The observations from the readiness assessment engagement does not predetermine whether the LTR will be docketed.

Please do not hesitate to let me know if you have any questions.

Best Regards,  
MJ

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U.S. Nuclear Regulatory Commission

Production

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# **PRE-APPLICATION READINESS ASSESSMENT PLAN OF GE-HITACHI LICENSING TOPICAL REPORT NEDC-33934P, “BWRX-300 SAFETY STRATEGY**

**Docket No. 99900003**

## **LOCATION**

Virtual staff review of licensing topical report (LTR) through the GEH electronic reading room (eRR) including a virtual Readiness Assessment Meeting on July 26, 2023.

## **PURPOSE**

GE-Hitachi Nuclear Energy Americas, LLC (GEH) has requested to engage with the staff of the U.S. Nuclear Regulatory Commission (NRC) in a partially closed pre-application engagement “Readiness Assessment” activity for the draft GEH LTR NEDC-33934P, “Safety Strategy,” for the BWRX-300 small modular reactor (SMR) before the LTR is submitted for a formal NRC review.

The “Readiness Assessment” engagement will allow the NRC staff to:

- identify information gaps between the draft LTR and the technical content that is expected to be submitted to the NRC,
- identify major technical or policy issues that may adversely impact the technical review of the LTR, and
- become familiar with the LTR, particularly in areas where GEH is proposing new concepts or novel design features.

The observations from the “Readiness Assessment,” will inform GEH in finalizing the LTR and assist the NRC staff in planning resources in preparation for the submittal and formal acceptance review.

## **BACKGROUND**

The NRC staff is currently engaged in pre-application activities for the GEH BWRX-300 SMR, including the review of LTRs describing the design approaches and methodologies for the BWRX-300 SMR in advance of a license application in accordance with Title 10 of the *Code of Federal Regulations* (CFR) Part 50, “Domestic Licensing of Production and Utilization Facilities,” or Part 52, “Licenses, Certifications, and Approvals for Nuclear Power Plants.” The BWRX-300 is a 300 MWe water-cooled, natural circulation SMR with a passive safety system.

## **SCOPE OF THE PREAPPLICATION ENGAGEMENT**

The “Readiness Assessment” will cover only the draft GEH BWRX-300, “Safety Strategy,” LTR.

## **INFORMATION AND OTHER MATERIAL NECESSARY FOR THE PREAPPLICATION ENGAGEMENT**

The staff has discussed with GEH the logistics for the “Readiness Assessment” engagement, including the specific staff participation. GEH will provide the staff with the draft LTR in a GEH

electronic Reading Room (ERR) at least two weeks in advance of the Readiness Assessment meeting. In addition, the staff will conduct the “Readiness Assessment” based on the NRC-NRR Office Instruction LIC-116, Revision 0, “Preapplication Readiness Assessment,” (Agencywide Documents Access and Management System Accession No. ML20104B698) and as outlined in Appendix A - Pre-Application Engagement Guidance - to the NRC’s Draft Interim Staff Guidance, “Review of Risk-Informed, Technology-Inclusive Advanced Reactor Applications—Roadmap,” DANU-ISG-2022-01 (ML22048B546). Specifically, the staff will review the LTR for aspects of the proposed submittal that may be inconsistent with applicable review guidance and regulations (other than where the application indicates it is proposing an alternative to an approach contemplated by review guidance).

### **PRE-APPLICATION ENGAGEMENT TEAM**

The NRC staff “Readiness Assessment” engagement team will include technical staff from the Division of New and Renewed Licenses (DNRL) and the Division of Advanced Reactor and Non-Power Production and Utilization Facilities (DANU). In addition, the Canadian Nuclear Safety Commission (CNSC) will be participating in the partially closed “Readiness Assessment,” meeting as part of a 2019 memo of cooperation (MOC), and in a September 2022, “Collaborative Information Sharing Charter” on the review of the BWRX-300.

### **LOGISTICS**

The “Readiness Assessment” engagement will be conducted from June 28, 2023, until July 26, 2023, finalizing with a public/closed meeting in-person or virtually. The draft LTR will be provided for staff review in the GEH eRR from June 28, 2023, until the Readiness Assessment feedback meeting scheduled on July 26. The feedback meeting will include a public entrance discussion led by NRC staff followed by a closed portion of the meeting where NRC staff will provide its feedback on the readiness of the LTR. The staff will also schedule a partially closed familiarization meeting on July 12, extending an opportunity for Westinghouse to provide an overview about the draft topical report made available in the GEH eRR.

### **PRE-APPLICATION ENGAGEMENT OBSERVATIONS**

The staff will complete its engagement activities and will provide feedback to GEH in an email within two weeks of final meeting. The NRC staff will send the “Readiness Assessment” engagement’s observations, including any identified technical concerns or major information gaps, to GEH in publicly available assessment. The staff’s expectation is that GEH will consider the observations from the “Readiness Assessment” engagement activities while finalizing the application and may reevaluate the application submission date based on its evaluation of the time to address the staff’s observations.