U.S. NUCLEAR REGULATORY COMMISSION SUMMARY OF THE NOVEMBER 1, 2023, OBSERVATION PREAPPLICATION PUBLIC MEETING WITH SMR, LLC (A HOLTEC INTERNATIONAL COMPANY) TO DISCUSS QUESTIONS REGARDING LIMITED WORK AUTHORIZATION

Meeting Summary

The U.S. Nuclear Regulatory Commission (NRC) held an observation public meeting on November 1, 2023, with SMR, LLC (SMR), a Holtec International Company (Holtec), to discuss questions regarding the limited work authorization (LWA) process for a construction permit application submitted under 10 CFR Part 50.^{1, 2} SMR (Holtec) requested the meeting to discuss and receive NRC staff feedback on its questions related to this topic and to inform its decision on whether to pursue an LWA.^{3, 4} This meeting summary satisfies the SMR (Holtec) request for review and feedback on its preapplication meeting materials.

This virtual observation preapplication meeting had attendees from SMR, LLC, Holtec, NRC staff, and members of the public.

Preapplication engagements, including this meeting, provide an opportunity for the NRC staff to engage in early discussions with a prospective applicant to offer licensing guidance and to identify potential licensing issues early in the licensing process. No decisions or commitments were made during the preapplication meeting.

The following summarizes the discussion during the meeting:

- After opening remarks and introductions, SMR (Holtec) described the purpose of the
 meeting to discuss the two LWA pathways, the content for the LWA application, and
 limitations on LWA activities. SMR (Holtec) stated its desired outcomes are to gain
 clarity on the LWA process and on the NRC staff's expectations on the content in the
 LWA application, and limitations to the LWA process.
- SMR (Holtec) stated that it is considering an LWA application and plans to use the
 discussion during the meeting to inform its decision. In discussing its consideration of
 pursuing an LWA, SMR (Holtec) requested schedule considerations for an LWA
 application submitted with a complete construction permit (CP) application. In response,

SMR, LLC, "SMR, LLC, Limited Work Authorization Requirements Applicable," dated September 26, 2023, ML23269A171, part of ML23269A168.

Letter from A. Brenner, "SMR, LLC Preapplication Meeting Materials for November 1, 2023 (Project No. 99902049)," dated September 26, 2023, Agencywide Documents and Access Management System (ADAMS) Accession No. ML23269A169, part of ML23269A168.

Title 10 of the Code of Federal Regulations (10 CFR) Part 50.

SMR, LLC, "SMR, LLC, Limited Work Authorization," dated October 11, 2023, ML23269A170, part of ML23269A168.

the NRC staff confirmed that the public site states that an LWA application and a CP application review as each having a 36-month review schedule.⁵ The NRC staff noted that it is considering the lessons learned from the Kairos-Hermes CP review to gain efficiencies in a power reactor CP review. In addition, the NRC staff noted that the recently issued acceptance review and schedule letter for the Carbon Free Power Project LWA application was based on extensive preapplication engagements over several months prior to the submission of the LWA application.⁶ The NRC staff commented that the review schedule for any future LWA application, including one that SMR (Holtec) might submit, would consider the scope of the LWA activities requested informed by the discussions during preapplication engagements and available staff resources to support the review.

- With respect to a two-part submission of a CP application with an LWA application, the NRC staff noted that the review of the two-part application would not re-review the information in the first part or the LWA but consider the interfaces of the previously provided and reviewed information during its review of the remaining information.
- During the discussion of the required LWA application content, SMR (Holtec) posed several questions to the staff with respect to the scope of the LWA, the maturity of the design, and depth of the analysis to support the LWA application. The NRC staff referred to the *Federal Register* notice (FRN) for the final LWA rule.⁷ In particular, the NRC staff noted the following statements in the FRN, page 57433, starting at the bottom of the first column:

Paragraph (d)(3) establishes the requirements for the content of an LWA application. The application must include a safety analysis report, an environmental report, and a redress plan. The safety analysis report, which may be a stand-alone document or incorporated into the construction permit or combined license preliminary or FSAR, as applicable, must describe the LWA activities that the applicant seeks to perform, provide the final design for the structures to be constructed under the LWA and a safety analysis for those portions of the structure, and provide a safety analysis of the design demonstrating that the activities will be conducted in accordance with applicable Commission safety requirements.

 SMR (Holtec) noted that providing a final design for structures within the scope of the LWA application appears inconsistent with the preliminary design information provided in a construction permit. The NRC staff noted that there are internal discussions on the expectation of final design information for the LWA application while a construction permit may be issued with preliminary design information, and that a response cannot be provided at this time.

U.S. Nuclear Regulatory Commission Public Website, Generic Milestones of Requested Activities of the Commission: https://www.nrc.gov/about-nrc/generic-schedules.html

Letter to M. Baker, Carbon Free Power Project, LLC, "Acceptance for Docketing of the Carbon Free Power Project Limited Work Authorization Application (Docket No. 99902052)." https://www.nrc.gov/docs/ML2323/ML23236A263.pdf

U.S. Nuclear Regulatory Commission, "Final Rule – Limited Work Authorizations for Nuclear Power Plants (RIN 3150-Al05)," 72 Federal Register 57416, October 9, 2007. https://www.govinfo.gov/content/pkg/FR-2007-10-09/pdf/E7-19312.pdf

- The NRC staff recommended that once the SMR (Holtec) design has progressed further
 and that construction goals and schedules have been developed, a white paper
 discussing the construction plans, the regulatory gap analysis, and a proposal to
 address the regulatory gaps may be submitted for NRC staff review and assessment, in
 additional to future preapplication discussions.
- SMR (Holtec) discussed its understanding of the extent of work allowed under an LWA and requested clarification from the NRC staff regarding the scope of work described in 10 CFR 50.10(d)(1) and Revision 1 to Regulatory Guide (RG) 1.206.^{8, 9} To clarify the scope of work allowed under an LWA, the NRC staff referenced the regulation in 10 CFR 50.10(d)(1) for providing the scope of work under an LWA:
 - (d) Request for limited work authorization. (1) Any person to whom the Commission may otherwise issue either a license or permit under Sections 103, 104.b, or 185 of the Act for a facility of the type specified in §§ 50.21(b)(2), (b)(3), or 50.22 of this chapter, or a testing facility, may request a limited work authorization allowing that person to perform the driving of piles, subsurface preparation, placement of backfill, concrete, or permanent retaining walls within an excavation, installation of the foundation, including placement of concrete, any of which are for an SSC of the facility for which either a construction permit or combined license is otherwise required under paragraph (c) of this section.
- The NRC staff also referenced the following considerations for the promulgation of the LWA final rule found in the FRN starting on page 57342, 3rd column, last paragraph, as to clarify what would be required to install or integrate a structure, system or component (SSC) into its final plant location:⁶

Construction also includes the "onsite, in-place," fabrication, erection, integration, or testing activities for any in-scope SSC. The term, "onsite, in-place, fabrication, erection, integration or testing" is intended to describe the historical process of constructing a nuclear power plant in its final, onsite plant location, where components or modules are integrated into the final, in plant location. The definition is intended to exclude persons from having to obtain an LWA, construction permit, or combined license, to fabricate, assemble, and test components and modules in a shop building, warehouse, or laydown area located onsite. However, the installation or integration of that SSC into its final plant location would require either a construction permit or combined license.

 The NRC staff noted that the RG 1.206, Revision 1, is guidance and applicable to licensing processes under 10 CFR Part 52 for which an applicant submits final design information for a combined construction and operating license (combined license). In addition, the NRC staff acknowledged that it would need additional time to research any differences between the considerations for the final LWA rule and LWA guidance in RG 1.206, Revision 1.

U.S. NRC, Regulatory Guide 1.206, "Applications for Nuclear Power Plants," Revision 1, October 2018. https://www.nrc.gov/docs/ML1813/ML18131A181.pdf

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⁸ 10 CFR 50.10(d)(1), "License required; limited work authorization." https://www.nrc.gov/reading-rm/doc-collections/cfr/part050/part050-0010.html

- SMR (Holtec) discussed its consideration of the LWA application as a partial CP and therefore changes during the conduct of the LWA activities would be considered changes during construction. The NRC staff noted that changes from the construction of the facility would be reviewed in the operating license application that includes the final safety analysis of the as-built facility. In addition, the NRC staff mentioned that significant design changes after issuance of the CP may need an amendment if the changes alter the evaluation and recommendation to issue the CP. Similarly, changes to the scope of activities authorized by an LWA would require an amendment. An example of this amendment is associated with an early site permit (ESP).¹⁰
- During the meeting, the NRC staff provided environmental considerations associated with an LWA application. Similar to the NRC safety review, the timelines for a National Environmental Policy Act (NEPA) review would depend on the scope of the LWA application. An environmental impact statement (EIS) prepared for an LWA application can be up to 24 months consistent with NEPA as amended by the Fiscal Responsibility Act of 2023. In addition, the NRC staff noted that both the LWA and the CP will require a NEPA process and consultation.
- With respect to schedule considerations for the NEPA process, the NRC staff noted that
 the draft EIS for an LWA application must be issued before the Notice of Intent for a CP
 can be issued in the *Federal Register*, or an applicant may request that one EIS be
 issued for both applications.
- Several members of the public were present during the meeting and provided the following comments and questions to the staff:
 - A member of the public requested that the NRC freeze the funds set aside for the decommissioning of the Palisades site since the intended use of these funds were for decommissioning the plant. The NRC staff responded that the comment was out of scope for the meeting, and it did not have a representative from the decommissioning branch to address this comment and would include it in the meeting summary. After the meeting, the commenter emailed the meeting project manager with the detailed comment which was then forwarded to the NRC project manager for the decommissioning activities of the Palisades site.¹¹
 - A member of the public made statements against any shortcuts to the safety and environmental review through the issuance of an LWA or ESP. The NRC staff noted that this comment would be included in the meeting summary.
 - A member of the public asked where in the process would the effects of climate change be addressed. The NRC staff responded that the effects of climate change such as increased flooding events would be part of the safety review of Chapter 2 of the safety analysis report accompanying an application. The NRC staff noted that it has not received an application for review and that the comment would be included in the meeting summary.

Email from K. Schultz to C. Lauron, "Re: Request to Attend Public Portion of Meeting on November 1 Holtec and NRC," dated November 2, 2023, ML23339A021.

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U.S. NRC, "Vogtle Electric Generating Plant ESP Site - Issuance of Exigent Amendment RE: Request for Changes to the Site Safety Analysis Report," dated May 21, 2010, ML101400509.

- A member of the public questioned the feasibility of holding today's meeting because nuclear power plants will not solve the climate change crisis, similar to the comment previously provided. The commenter noted that the money and time spent should be on solving climate change because a solution to it does not involve radiation. The NRC staff responded that the comment would be added to the meeting summary.
- A member of the public made the following comments:
 - The meeting link should be listed on the meeting notice because it takes additional time for a member of the public to request the information 3 days in advance of the meeting.
 - A list of all LWAs that have been issued, in a table that is available to the public because the discussion today was ambiguous.

The NRC staff responded that the comments would be added to the meeting summary. It should be noted that in response to the commenter's request for the meeting link, the meeting project manager requested the information not be posted or forwarded, and other interested members of the public should contact the meeting contacts on the meeting notice. In addition, the meeting project manager noted that the request helps in preparing for the meeting, understanding public interest in the meeting, and confirming additional support to manage the meeting, if needed. After the meeting, the NRC staff plans to consider the comments further, communicate the consideration of the comments, and provide available information to the commenter.

• SMR (Holtec) confirmed that it did not need a closed session to discuss proprietary information.

The meeting adjourned at 3:00 PM.