



September 26, 2023

Subject: Limited Work Authorization Requirements Applicable to SMR, LLC

SMR is considering pursuing a Limited Work Authorization (LWA) as part of a Construction Permit (CP) application. Several portions of 10 CFR Chapter I are applicable to the submittal of LWA applications associated with CP applications. These include sections of 10 CFR 2, 10 CFR 50, and 10 CFR 51. Portions of the relevant regulations, as identified by SMR, are included below. A portion of Regulatory Guide 1.206 is also included. SMR is seeking clarity on some aspects of these regulations.

10 CFR 2.101(a)(9):

(9) An applicant for a construction permit for a utilization facility which is subject to § 51.20(b) of this chapter and is of the type specified in § 50.21(b)(2) or (b)(3) or § 50.22 of this chapter, an applicant for or holder of an early site permit under part 52 of this chapter, or an applicant for a combined license under part 52 of this chapter, who seeks to conduct the activities authorized under § 50.10(d) of this chapter may submit a complete application under paragraphs (a)(1) through (a)(4) of this section which includes the information required by § 50.10(d) of this chapter. Alternatively, the applicant (other than an applicant for or holder of an early site permit) may submit its application in two parts:

(i) Part one must include the information required by § 50.33(a) through (f) of this chapter, and the information required by § 50.10(d)(2) and (d)(3) of this chapter.

(ii) Part two must include the remaining information required by the Commission's regulations in this chapter which was not submitted in part one, *provided, however*, that this information may be submitted in accordance with the applicable provisions of paragraph (a)(5) of this section, or, for a construction permit applicant, paragraph (a)(1) of this section. Part two of the application must be submitted no later than 18 months after submission of part one.

10 CFR 50.10(c)-(e):

(c) *Requirement for construction permit, early site permit authorizing limited work authorization activities, combined license, or limited work authorization.* No person may begin the construction of a production or utilization facility on a site on which the facility is to be operated until that person has been issued either a construction permit under this part, a combined license under part 52 of this chapter, an early site permit authorizing the activities under paragraph (d) of this section, or a limited work authorization under paragraph (d) of this section.

(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.

(2) An application for a limited work authorization may be submitted as part of a complete application for a construction permit or combined license in accordance with 10 CFR 2.101(a)(1) through (a)(5), or as a partial application in accordance with 10 CFR 2.101(a)(9). An application for a limited work authorization must be submitted by an applicant for or holder of an early site permit as a complete application in accordance with 10 CFR 2.101(a)(1) through (a)(4).

(3) The application must include:

(i) A safety analysis report required by 10 CFR 50.34, 10 CFR 52.17 or 10 CFR 52.79 of this chapter, as applicable, a description of the activities requested to be performed, and the design and construction information otherwise required by the Commission's rules and regulations to be submitted for a construction permit or combined license, but limited to those portions of the facility that are within the scope of the limited work authorization. The safety analysis report must demonstrate that activities conducted under the limited work authorization will be conducted in compliance with the technically-relevant Commission requirements in 10 CFR Chapter I applicable to the design of those portions of the facility within the scope of the limited work authorization;

(ii) An environmental report in accordance with § 51.49 of this chapter; and

(iii) A plan for redress of activities performed under the limited work authorization, should limited work activities be terminated by the holder or the limited work authorization be revoked by the NRC, or upon effectiveness of the Commission's final decision denying the associated construction permit or combined license application, as applicable.

10 CFR 51.49(a)-(b):

(a) *Limited work authorization submitted as part of complete construction permit or combined license application.* Each applicant for a construction permit or combined license applying for a limited work authorization under § 50.10(d) of this chapter in a complete application under 10 CFR 2.101(a)(1) through (a)(4), shall submit with its application a separate document, entitled, "Applicant's Environmental Report—Limited Work Authorization Stage," which is in addition to the environmental report required by § 51.50 of this part. Each environmental report must also contain the following information:

(1) A description of the activities proposed to be conducted under the limited work authorization;



(2) A statement of the need for the activities; and

(3) A description of the environmental impacts that may reasonably be expected to result from the activities, the mitigation measures that the applicant proposes to implement to achieve the level of environmental impacts described, and a discussion of the reasons for rejecting mitigation measures that could be employed by the applicant to further reduce environmental impacts.

(b) Phased application for limited work authorization and construction permit or combined license. If the construction permit or combined license application is filed in accordance with § 2.101(a)(9) of this chapter, then the environmental report for part one of the application may be limited to a discussion of the activities proposed to be conducted under the limited work authorization. If the scope of the environmental report for part one is so limited, then part two of the application must include the information required by § 51.50, as applicable.

Regulatory Guide 1.206 – Supplement to C.2.18

Construction also includes the “onsite, in-place” fabrication, erection, integration, or testing activities for any in-scope SSC. The terms “onsite, in place, fabrication, erection, integration, or testing” are 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 prevent persons from having to obtain a COL, LWA, or ESP authorizing LWA activities to fabricate, assemble, and test components and modules in a shop building, warehouse, or laydown area, even if located onsite. However, the installation or integration of that SSC into its final RG 1.206, Rev. 1, Page 114 plant location would require a COL, LWA, or ESP authorizing LWA activities.

Applicability to SMR; Requests for Clarification

SMR is considering submitting an LWA application. SMR understands the regulation to define two possible paths for submittal.

In the first, SMR submits an LWA and CP application together in a single complete application. Along with the standard environmental report, an additional environmental report, specific to the LWA, would be submitted. Review of the content relevant to the LWA activities would take priority over the content supporting other construction activities. A public hearing to support adjudication of the LWA application would precede the hearing for the CP application. The NRC website lists estimated durations for either an LWA or a CP application review as 36 months, but a submittal containing both an LWA and CP application is not addressed. *Will review and adjudication of the LWA portion take priority over review of the remaining content? Does the NRC have estimates of the duration of each review?*



In the second, SMR submits an LWA application as “part one” of the CP application. The environmental report for the LWA application would cover the portions of the site that will be affected by the LWA activities. “Part two” of the CP application and the associated environmental report would contain required content not contained in part one. Part two would be submitted within eighteen months of part one. A public hearing to support adjudication would be required for each part of the application. *What is the expected content and review process for part two? Should content from part one be included in part two? If so, will review of that material be repeated?*

SMR views the LWA application as similar to a CP application in terms of content; the same level of detail and design maturity is expected for the LWA and CP applications. *Is the expected level of detail and design maturity for the LWA and CP application content the same?*

The submitted design information should be sufficient to describe the portion of the facility covered by the LWA and to demonstrate that construction activities will be conducted in accordance with relevant NRC regulations. In the case of a containment foundation, this could be interpreted to include solely the design information for the foundation itself or could extend to the remainder of the containment and SSCs that reside within the containment. *Would an LWA application to construct the containment foundation need design information for the spent fuel pool located inside the containment? For the polar crane at the top of the containment? Would accident analyses demonstrating containment integrity need to be completed?*

The extent of activities that may be included in an LWA is discussed in 10 CFR 50.10(d)(1) and in RG 1.206 C.2.18. The regulation in 50.10(d) states that LWA efforts can proceed through installation of foundations for SSCs. RG 1.206 includes the statement that installation or integration of that SSC into its final location would require an LWA, indicating that installation of SSCs may also be an acceptable activity under an LWA. For construction sequencing purposes, it may be desirable to install some SSCs (e.g., supports that are embedded within the foundation, components for sumps) during construction of the foundation. *What is the extent of construction activities that may be contained in an LWA application?*

If the LWA application is submitted prior to the CP application, design changes may occur between the submittals. Changes between a CP application and operating license application may entail NRC engagement but do not require a formal submittal; it follows that changes between LWA and CP applications would be similar. *What is the process for managing design changes between the LWA and CP applications, both prior to and after adjudication of the LWA?*

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Document ID 160-USNRC-064

Non-Proprietary Enclosure #2



SMR appreciates the opportunity to engage with the NRC and the feedback provided by the staff.

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