

Response to Public Comments on COL/ESP-ISG-4, “Interim Staff Guidance on the Definition of Construction and on Limited Work Authorizations”

Comments from Adrian P. Heymer, Nuclear Energy Institute (NEI), May 8, 2008

Comment: Page 1, Purpose.

This is not an accurate statement of scope; the guidance also affects development of environmental reports (ERs) and environmental impact statements (EISs) for applicants not requesting a limited work authorization (LWA). Clarify scope of Interim Staff Guidance (ISG) to be applicable to all new plant ERs. (NEI-1-1)

Nuclear Regulatory Commission (NRC) Response: The NRC agrees that the draft ISG did not provide an accurate statement of the scope of applicants that the guidance was applicable to. This section has been revised in the final ISG to state that the ISG provides guidance regarding the definition of construction and the delineation of preconstruction activities and those activities requiring prior approval of NRC (applicable to all applicants) as well as guidance regarding the information to be submitted by any applicant for an LWA.

Comment: Page 1, Background.

Background section, last sentence appears to be a typo in the effective date of the revised rule. Current draft states: “The revised LWA rule was effective on November 8, 2008.” (NEI-1-2)

NRC Response: The NRC agrees and has revised the Background section of the ISG to reflect the correct effective date of November 8, 2008.

Comment: Clarify the difference between the list of activities on page 7 that may be authorized under an LWA versus the construction activities identified on page 2. (NEI-1-3)

NRC Response: The NRC staff agrees to clarify the list of activities on page 7 of the ISG that may be requested in an LWA application. The list of activities on page 7 were taken from 10 CFR 50.10(d)(1) and are a subset of the activities that constitute construction as defined in 10 CFR 50.10(a)(1).

Comment: It is not clear if the placement of other permanent (left-in-place) items within the excavation, which have no association with the scope of the definition, are considered as non-construction activities. ISG needs to clearly identify that these non-construction activities are excluded from the definition of construction. (NEI-1-4)

NRC Response: The NRC staff agrees with the request for clarification. The placement of permanent features within the necessary excavation for structures, systems and components (SSCs) that fall within the definition of construction are considered construction activities, e.g. permanent retaining walls, in accordance with 10 CFR 50.10(a)(1). This subject is clarified in the final ISG.

Comment: Additional examples in 10 CFR 50.10(a)(2)(g) would be helpful in understanding the overall scope. (NEI-1-5)

NRC Response: The NRC staff disagrees with the request to add additional examples to the final rule language. However, the suggested examples (bridges and substations) are consistent with the rule language as activities not constituting construction.

Comment: Descriptions such as “the erection of concrete forms for the foundations that will remain in-place permanently” do not provide sufficient clarification. (NEI-1-6)

NRC Response: The NRC staff agrees to provide clarification. The ISG descriptions of permanent installations (page 3) come from the definition of construction as set forth in the statements of consideration for the final rule. Additional discussion on permanent and temporary installations will be provided in the final ISG.

Comment: Clarify 2nd paragraph on page 3 where it says “laydown area located onsite” to state “even if located onsite.” (NEI-1-7)

NRC Response: The NRC staff agrees to make this clarification because it provides a more comprehensive description of this item.

Comment: Beginning of 3rd paragraph of page 3 where it says “Under the current definition,” delete “current” since this implies the definition is subject to further change. (NEI-1-8)

NRC Response: The NRC staff agrees to replace the word “current” with the word “above” because it is a clearer reference for the sentence.

Comment: Bottom of page 3 and top of page 4, Introduction

The NRC states: “Any person or entity that conducts excavation should be aware that the NRC expects any subsequent application requesting construction authorization to accurately document and address the conditions exposed by excavation, to ensure that the NRC will have an adequate basis for evaluating the relevant portions of the application.” It is assumed that the NRC is referring to the requirements of Regulatory Guides (RG) for mapping of geologic features during excavation. It would be helpful if NRC provided more specific references to clarify the intent of this sentence. (NEI-1-9)

NRC Response: The NRC staff does not agree that more specific references are necessary to clarify the intent of this sentence. The ISG merely reinforces what the NRC stated in the statement of considerations for the final LWA rule. In discussing the decision to exclude excavation from the definition of construction, the NRC stated that a construction permit or combined license applicant was responsible, even under the previous regulations, to demonstrate that the site conditions are acceptable for the proposed facility design. This responsibility exists regardless of whether or not the NRC reviews and approves the proposed excavation activities and inspects the excavation activities as they are accomplished. The NRC concluded that, inasmuch as NRC inspection and regulatory oversight of the excavation are not necessary for reasonable assurance of adequate protection to public health and safety or common defense and security, and because the applicant bears the burden for accurately characterizing the parent material, excavation could be excluded from the definition of construction. Nevertheless, it may prove more efficient from both the applicant’s and the NRC’s

standpoint to voluntarily allow NRC access to the site during excavation activities to assist NRC in its review of the underlying LWA or combined license (COL) application.

Comment: It would be useful if the NRC Response to NEI 1.5 (72 FR 57419, third column) could be incorporated more specifically into the LWA ISG. (NEI-1-10)

NRC Response: The NRC staff agrees to incorporate this response into the final ISG.

Comment: On page 3, clarify to indicate that "backfill in areas that impact SSCs that do not meet the seven criteria of 10 CFR 50.10(a)(1)" is not considered construction. (NEI-1-11)

NRC Response: The NRC staff disagrees that a clarification is necessary. The staff believes that the discussion, which was formerly in the first paragraph on page 3, is clear on this point.

Comment: The example in the first paragraph on page 4 is focused on "driving piles." It should not exclude the ability to construct the bridge as a non-construction activity. (NEI-1-12)

NRC Response: The discussion of the example "driving of piles" does not exclude other activities as non-construction, such as the erection of a bridge.

Comment: Additional simple examples would help better define what is intended as having a "reasonable" nexus to radiological health and safety, e.g., circulating water pipe. (NEI-1-13)

NRC Response: The NRC staff agrees to discuss additional examples in the final ISG. However, the criteria for activities within the scope of construction is 10 CFR 50.10(a)(1) and is not limited to a reasonable nexus to radiological health and safety.

Comment: Change "may be" to "are" in the third sentence of the third paragraph of page 4 since there will be many SSCs that will fall into the category of not having a reasonable nexus to radiological health and safety or common defense and security. (NEI-1-14)

NRC Response: The NRC staff agrees that there will be SSCs that are not within the scope of construction. However, the amount of SSCs that are not within the scope of construction will be dependent upon the design of the facility.

Comment: Provide a list of the issues that are required to be evaluated as part of the safety analysis for LWA activities. (NEI-1-15)

NRC Response: The NRC staff disagrees that a generic list of issues can be developed. The issues to be evaluated in an LWA safety analysis will depend on the requested LWA activities and the site characteristics.

Comment: Paragraph (2) under Contents of Applications on page 7 should be rewritten to clarify its meaning regarding formal inspections, tests, analyses and acceptance criteria (ITAAC). (NEI-1-16)

NRC Response: The NRC staff disagrees with this comment. Paragraph (2) is clear in stating that proposed ITAAC for LWA activities, e.g. engineered backfill, must be submitted with the LWA application. This guidance implements 10 CFR 50.10(d)(3)(i), which states that an application for an LWA must include the “design and construction” information otherwise required by the Commission’s rules and regulations to be submitted for a ...combined license, but limited to those portions of the facility that are within the scope of the LWA.

Comment: The ISG, at p. 9, should be clarified to state that issuance of an LWA has no bearing on the issuance of the underlying COL except as to the matters determined under amended 10 CFR 50.10(e)(1). See 72 Federal Register (FR) 57,416, 57,442. (NEI-1-17)

NRC Response: The NRC staff agrees with the commenter’s apparent assumption that matters which have been decided by a presiding officer, and otherwise determined by the NRC in order to issue an LWA, are resolved matters in the underlying combined license proceeding. However, the particular language proposed by the commenter simply implies that the determined LWA matters are relevant (have a “bearing”) to the issuance of the underlying COL, but does not actually state what is the legal effect of these matters. Therefore, the NRC staff will revise the final ISG guidance to reflect the NRC staff’s position that issuance of an LWA has no bearing on the issuance of the underlying combined license, except that matters determined in connection with, and which are necessary to support the issuance of, the LWA are resolved matters.

Comment: The ISG draft incorrectly states that the application may be submitted “in two parts under 10 CFR 2.101(a)(9),” inasmuch as the application may be submitted in more than two parts under that section. Therefore, the ISG should be corrected accordingly. (NEI-1-18)

NRC Response: The NRC staff agrees in part with the commenter, to the extent that the commenter understands that 10 CFR 2.101, considered *in toto*, provides the applicant with the alternative of submitting the application in more than two parts. However, the commenter incorrectly refers to § 2.101(a)(9), which by itself only authorizes a two part application. The authority for providing the information otherwise required by § 2.101(a)(9)(ii) to be submitted in the second of two parts, to be submitted in multiple subparts, is § 2.101(a)(5) and (a-1). This was explained in the section-by-section discussion of the amended § 2.101 in the statement of considerations for the final LWA rule, see 72 FR 57416, at 57430-31, October 9, 2007. The final ISG guidance will include an additional reference to these two sections, as well as a reference to the discussion in the final LWA rule’s statement of considerations.

Comment: Page 7, Contents of Applications

In the 2nd paragraph, the first line states: “If the LWA application is submitted as part of a complete COL application.” Paragraphs below apply to COL or early site permit (ESP) application; amend with “or ESP application.” (NEI-1-19)

NRC Response: The NRC generally agrees with the commenter and has amended the “Contents of Applications” section of the ISG to address not only ESP applications, but also ESP amendment applications.

Comment: Page 7, Contents of Applications

Item (1)-This paragraph should be replaced with a bulleted list for clarity. (NEI-1-20)

NRC Response: The NRC agrees with the commenter and has reformatted this section into a bulleted list.

Comment: Page 7, Contents of Applications

Items (1) through (4) pertain to both ESP and COL applications. (NEI-1-21)

NRC Response: The NRC generally agrees with the commenter and has amended the "Contents of Applications" section of the ISG to address not only ESP applications, but also ESP amendment applications.

Comment: Page 7, Contents of Applications

Item (1) 4th line, "..., 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"

Replace first "provide" with "a description of" for grammatical consistency. Delete second "provide" for grammatical consistency. (NEI-1-22)

NRC Response: The NRC has amended this portion of the "Contents of Applications" section of the ISG in response to other comments. The information regarding what must be included in the safety analysis report is now contained in a new Section C.IV.6.1.1.1 of the final ISG. The ISG now states that if the LWA application is submitted as part of a phased COL application, or as part of an ESP or ESP amendment application, "the SSAR or FSAR must include:

1. The final design for any structures affected by activities being requested under the LWA, and
2. A safety analysis for those activities being requested under the LWA and any relevant safety analysis for structures affecting those activities (e.g stability (static and dynamic) analyses)."

Comment: Page 8, Contents of Applications

Top of page, end of 1st full paragraph, "local zoning laws"

Why specific to "zoning"? Should be more generally "may conform to local requirements." (NEI-1-23)

NRC Response: The NRC has removed this paragraph from the ISG completely because this language was removed from NRC's regulations as a result of the 2007 LWA rulemaking. More detailed information on the reasons for this change are provided in the NRC's response to comment #25 below.

Comment: Item 9 of the ISG, requiring that “information that demonstrates that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction costs, related fuel cycle costs, and estimated operation costs for the period of the license,” should be deleted. Demonstrating this level of financial assurance is required for a complete combined license application, but is not necessary for an LWA application. (NEI-1-24)

NRC Response: The NRC staff disagrees with this comment. 10 CFR 2.101(a)(9)(i) specifically provides that the LWA portion of the application must contain the information required by 10 CFR 50.33(f), and therefore covers financial qualifications for the full scope of the NRC approval, i.e., construction and operation of the contemplated nuclear power plant. In preparing the proposed LWA rule, the NRC had considered whether to allow an applicant to separate the financial qualifications information for LWA activities (which would be submitted as part of the LWA application), and the comparable information for the balance of construction and operation. This alternative was rejected for two reasons. The NRC staff determined that the NRC’s financial qualifications review would be more efficient and timely if done as an integrated review, rather than two separate reviews (the NRC was mindful of the number of applications which were projected to be submitted to the NRC over the next 3-5 years). In addition, the NRC believed that the nuclear power industry’s procedures and the financial community’s practices and business approaches did not support the separation of financial qualifications into LWA activities and the balance of construction and operation. The industry did not provide any comments in the proposed rule on this matter, and therefore the NRC did not have an opportunity to reconsider this issue in developing the final rule. Inasmuch as the final LWA rule requires submission of all § 50.33(f) financial qualifications information, the NRC staff may not adopt guidance which is inconsistent with the rule’s language. No change was made to the ISG guidance as a result of this comment.

Comment: Pages 8, 12-13, Contents of Applications/Site Redress Plan

10 CFR 52.80(c) currently provides:

If the applicant wishes to be able to perform the activities at the site allowed by 10 CFR 50.10(e) before issuance of the combined license, the applicant must identify and describe the activities that are requested and propose a plan for redress of the site in the event that the activities are performed and either construction is abandoned or the combined license is revoked. The application must demonstrate that there is reasonable assurance that redress carried out under the plan will achieve an environmentally stable and aesthetically acceptable site suitable for whatever non-nuclear use may conform with local zoning laws.

See 72 FR 49,352, 49,534 (Aug. 28, 2007). This regulation applies to COL applicants. See also amended 10 CFR 50.10(g), which addresses LWA holders’ implementation of the site redress plan under certain conditions. The latter provision does not contain the detailed requirements of Section 52.80(c) concerning what is to be “demonstrated” in the site redress plan. 72 FR 57,416, 57,443 (Oct. 9, 2007). See also NRC Regulatory Guide 1.206, Combined License Applications for Nuclear Power Plants, Section C.IV.6.2, which contains similar, more detailed guidance.

The requirement for a site redress plan in connection with an LWA application is addressed at pp. 8 and 12-13 of the LWA ISG. While the concept is similar to that in Section 52.80, the language used at p. 8 of the ISG is more stringent. The LWA ISG text states: "The application must demonstrate that redress carried out under the site redress plan will achieve an environmentally stable and aesthetically acceptable site suitable for whatever non-nuclear uses may conform to local zoning laws." Contrast this to the regulatory language in amended 10 CFR 52.80, which requires a demonstration of "reasonable assurance" that redress carried out under the plan will meet that goal – a much less prescriptive standard.

The "guidance" that the ISG proposes on this point is particularly unworkable when one considers that all of this showing is to be made in the application itself -- presumably years in advance of the date when any site redress plan would have to be implemented. Accordingly, we ask that NRC modify the language of this sentence to make clear that this guidance is permissive, not mandatory, and also to make the text consistent with that in amended Section 52.80(c). (NEI-1-25)

NRC Response: The NRC agrees with the commenter that the language in the draft ISG is inconsistent with the current regulatory requirements that address redress plans, but not for the reasons stated by the commenter. The commenter quoted rule language for 10 CFR 52.80(c) from the August 2007 rulemaking on 10 CFR Part 52. However, that language was largely removed in the October 2007 LWA rulemaking. The revised language in 10 CFR 52.80(c) is as follows:

If the applicant wishes to request that a limited work authorization under 10 CFR 50.10 be issued before issuance of the combined license, the application must include the information otherwise required by 10 CFR 50.10, in accordance with either 10 CFR 2.101(a)(1) through (a)(4), or 10 CFR 2.101(a)(9).

The language that the commenter asked be revised was removed completely from 10 CFR 52.80(c) and from other locations in 10 CFR Part 52 due to the changed nature of the redress requirements under the revised LWA rule. Under the revised rule, the primary purpose of the redress plan is to address the placement of piles and ensure removal of the foundation, which are the only activities which may be accomplished under an LWA. Redress of site impacts resulting from preconstruction activities will not be required under the redress plan. Therefore, the language requiring the applicant to demonstrate that there is reasonable assurance that redress carried out under the plan will achieve an environmentally stable and aesthetically acceptable site was removed from the regulations. The NRC has also removed this language from the ISG.

Comment: Page 9, Contents of Applications

Item (10) "each application for a COL"

This is not applicable to the LWA portion of the "two-part" application - it is specific to a COL application. Clarify applicability. (NEI-1-26)

NRC Response: The NRC does not agree that any change is needed to item (10) on page 9 of the draft ISG. The items listed in (1) through (11) on pages 8-9 of the draft ISG must be

submitted in part one of a two-part combined license application, in addition to the LWA information required by 10 CFR 50.10(d) (see 10 CFR 2.101(a)(9)).

Comment: Page 10, LWA Requests and COL Schedules

In the paragraph under the heading LWA Requests and COL Schedules, the 13th line has an error. Recommend changing “affect” to “effect.” (NEI-1-27)

NRC Response: The NRC has deleted the text related to this comment in the final ISG, therefore, the requested change isn't necessary. See the NRC response to comment NEI-1-28 for explanation of why the text was deleted.

Comment: Page 10, LWA Requests and COL Schedules

The guidance does not provide an estimate of the impacts of an LWA request on a COL schedule. For planning purposes, estimates would be beneficial to applicants. Further, policy regarding how resources will be applied to reviews is included and may not be appropriate for a Regulatory Guide since this could be subject to change in the future. Provide additional guidance regarding estimated schedule impact on a COL associated with an LWA request and remove policy discussions regarding resource allocation. (NEI-1-28)

NRC Response: The NRC agrees with this comment, in part. The NRC staff agrees that a discussion of how resources will be applied to reviews is not appropriate for a Regulatory Guide. However, the NRC staff disagrees with the commenter's request to provide additional guidance regarding the estimated schedule impact on a COL associated with an LWA request. An estimated schedule impact cannot be determined until the staff performs an acceptance review of the COL and LWA applications and assesses the scope of the LWA request and the related site issues. Therefore, the NRC staff has decided to delete this entire paragraph from the final ISG.

Comment: Page 11 LWA Requests and COL Schedules

Next to last paragraph states: “In addition, the NRC staff will use tiering to the extent it is practical in the EISs for LWAs, which may also shorten the review process.” This is not clear. How is tiering of any more intrinsic value for an LWA EIS than it is for a COLA EIS? Was this intended to mean that a COLA EIS will tier off of an LWA EIS, which will make the COLA EIS shorter for the affected areas of evaluation? (NEI-1-29)

NRC Response: Tiering is not of more intrinsic value for development of a LWA EIS than for development of a COL EIS. The statements addressed by the comment were in a section of the ISG intended to address the how the staff would conduct the environmental review of an LWA; that is why the paragraph discussed the use of tiering in the LWA review. The staff will use tiering to the extent it is practicable in the EISs for LWAs and COLs and any other application. The COL EIS will not tier off the LWA EIS; the revised LWA rule (2007) indicates that the COL EIS will be a supplement to the LWA EIS. Tiering, the use of current information from other EISs regarding the proposed site such as a license renewal or power uprate for an existing nuclear power plant located adjacent to the proposed site, could reduce the level of resources

needed to complete the staff's environmental review and shorten the review schedule. However, any possible impacts on resource savings or the length of the LWA review schedule would be determined on a case-by-case basis. Therefore, the statements addressed by the comment have been deleted in the revised ISG.

Comment: Page 11 LWA Requests and COL Schedules

Last paragraph, "It is important to note that applicants will need permits and approvals from other Federal and state agencies, each of which may have an independent duty to comply with National Environmental Policy Act (NEPA) or state environmental statutes." This admonition is out of place. It really is more suitable in discussion of preconstruction activities, particularly given the example. (NEI-1-30)

NRC Response: NRC agrees with the comment that the last paragraph in C.IV.6.1.2 is more suitable under the discussion of preconstruction activities. Therefore, the ISG has been revised to make that paragraph a new section, C.II.2.2.2. Permitting by Other Federal and State Agencies.

Comment: Page 12, Item (6)

It is not clear what "or where authorized construction was not completed" means or requires and what information the applicant should include in the ER. Please clarify what is meant by this statement. (NEI-1-31)

NRC Response: In the first paragraph of the section C.IV.6.1.2 entitled, "Environmental Report," item (5) in the list indicates that an LWA application could be made for a site where an EIS was prepared, but the facility construction was not completed. Item (6) in the next paragraph was intended to address information that would need to be included in the ER for an LWA application from an ESP holder or for a site where an EIS was prepared, but the facility construction was not completed. However, the words "or where authorized construction was not completed," were used. The commenter questioned what those words meant. This section has been renumbered as C.IV.6.1.1.2, and item (5) in the first paragraph has been removed. Instead, a new second paragraph has been added stating, "Section 51.49 also addresses submittal of an LWA application for a site where an EIS was prepared, but the facility construction was not completed." In addition, item (6) of what is now the third paragraph has been revised to read, "a description of the process used to identify new and significant information for an ESP holder or for a site where an EIS was prepared, but the facility construction was not completed."

Comment: Page 13, Section C.IV.6.2, Site Redress Plan

The third paragraph on Page 13 recommends that applicants model their site redress plans on the Midland site stabilization report submitted in 1986, and goes on to indicate the scope of actions to be taken following the suspension of construction and "include a description and status of the site and general site stabilization activities currently in progress (emphasis added)..." The paragraph goes on to indicate what should be discussed and justified, and includes activities that are outside the scope of the LWA rule definition of construction. The recommendations in this paragraph appear to be outdated, and are not reflective of the site

condition at the time of submittal of a request for LWA authorization (e.g., nothing has been done so there is nothing to stabilize) or current regulatory requirements (e.g., redress of only those activities authorized under a LWA as construction activities). Eliminate this paragraph and provide applicable guidance. (NEI-1-32)

NRC Response: The NRC staff agrees that the quoted guidance provided in the draft ISG is out of date and is not consistent with the revised LWA rule. The NRC staff has removed this text from the final ISG.

Comment: Page 13, Section C.IV.6.2, Site Redress Plan

In the 2nd paragraph, last sentence, "The COL applicant should consider the requirements of 10 CFR 52.91(c) which afford the applicant the ability to redress the site for alternative uses that were not considered at the time it prepared the original site redress plan." There is no 52.91(c). This should be covered under 10 CFR 52.25. Again, the scope of redress would be limited to "construction" impacts authorized under LWA. (NEI-1-33)

NRC Response: The NRC staff agrees and has changed the citation from 10 CFR 52.91(c) to 10 CFR 52.25.

Comment: Page 12, C.IV.6.1.2, first Item 2

The guidance here refers to a phased construction permit (CP) or COL application. On pages 7, 8, and 9, the guidance refers to a phased LWA application. Make this item consistent with the terminology used elsewhere in the document. (NEI-1-34)

NRC Response: The NRC staff has removed all references to a "phased LWA application" in the final ISG and replaced them with references to a "phased COL application." The phased application provisions in 10 CFR 2.101(a)(9) refer to a phased COL application which includes an LWA request. Part one of such a phased COL application includes the LWA information required by 10 CFR 50.10(d) as well as the information required by 10 CFR 50.33(a) through (f).

Comment: It would be helpful if NRC would clarify the final ISG to state that investigations required for 10 CFR 100.23(c) are not considered "construction" within the meaning of 10 CFR 50.10(a). (NEI-1-35)

NRC Response: The NRC staff agrees to implement this request. Site investigations have always been considered "preconstruction" and the amended LWA rule did not change that designation. The final ISG has been revised to state that site investigations are not considered to be construction.

Comments from Jon Cudworth, NUS TETRATECH, May 8, 2008

Comment: C.II.2.2.1 Environmental Impacts of Construction and Preconstruction

The draft text indicates that preconstruction and construction activities could occur concurrently and that preconstruction impacts would be evaluated as cumulative impacts. This raises the following two issues:

- a. *First, by indicating that preconstruction activities could occur concurrently with construction activities, the draft ISG language goes beyond the regulation. The regulation and the supplemental information from the publication of the final rule¹ use the term “preconstruction” only in discussing activities that would take place prior to construction. NRC refers variously to SSCs (systems, structures, and components) installed before receipt of an LWA, construction permit, of combined license; site preparation activities; and activities necessary to support construction and operation. In the supplemental information, in response to a comment, NRC did seem to acknowledge that non-jurisdictional construction could take place concurrent with jurisdictional construction activities.² However, neither the commenter nor NRC used preconstruction in their discussion. Thus, one cannot say that the regulatory language requires that impacts from concurrent preconstruction and construction activities must be addressed as cumulative impacts.*

- b. *Second, this is an incorrect usage of “cumulative impacts” as the phrase is defined by Council on Environmental Quality (CEQ) regulation 40 CFR 1508.7. That definition indicates that a cumulative impact is the addition of an impact from the proposed action to an impact from another action. This would not be the case if preconstruction and construction activities occur concurrently. In such a case, both sets of impacts would be the result of the same action, namely, NRC issuance of a construction permit,³ and the preconstruction impacts would be indirect effects as that phrase is defined at 40 CFR 1508.8.⁴ Put another way, if NRC denied the construction permit, preconstruction activities would halt. The continuation of preconstruction activities after NRC issuance of a construction permit, therefore, would be the result of the NRC action.*

It may seem inconsistent that impacts from preconstruction activities conducted before permit issuance are cumulative impacts but impacts from the same kind of activities conducted after permit issuance are indirect impacts. However, this is the result of the definitions of cumulative impacts and indirect impacts. Indirect impacts are defined as impacts that occur later in time or farther removed in distance from the agency action. Impacts that occur before the agency action cannot be indirect impacts. Cumulative impacts, however, are defined to include the results of past actions.

A corollary of the correct application of the CEQ definitions is that there is no reason to segregate construction impacts from post-construction-permit non-jurisdictional impacts. They would all be impacts of the NRC action, and CEQ and NRC regulations do not require segregating indirect impacts. The only value of segregating pre-permit cumulative impacts from post-permit impacts is to allow evaluation of the no-action alternative (pre-permit impacts are included as impacts of no action). NRC made this clear in the LWA rulemaking by indicating that the effects of pre-construction non-jurisdictional activities will be considered in order to

¹ Limited Work Authorizations for Nuclear Power Plants, Nuclear Regulatory Commission, Federal Register Vol. 72, No. 194, October 9, 2007, pages 57415-57447.

² Ibid., page 57421.

³ “Construction permit” could be a construction permit or a limited work authorization under 10 CFR 50 or a combined license under 10 CFR 52.

⁴ Council on Environmental Quality regulations use “impact” and “effect” interchangeably.

establish a baseline against which the incremental effect of the NRC action would be measured. This factor would not be present after permit issuance. (Cudworth-1a & -1b)

NRC Response – The definition of “construction” uses criteria that address the reasonable nexus of activities to radiological health and safety or common defense and security. Even though the term, “preconstruction” might suggest activities that occur before construction, the definition of “construction” does not discuss timing. It is likely that installation of non-safety related facilities (preconstruction) will be happening concurrent with construction of safety-related facilities. The environmental impacts of preconstruction activities, which NRC does not regulate, are part of the cumulative impacts of constructing a nuclear power plant. Moreover, the NRC staff, NEI, and the COL applicants have converged on an approach for addressing the combined environmental impacts of construction and preconstruction in ERs and EISs that is simple to implement and consistent with NRC regulations and NEPA guidance. Therefore, no changes were made in the ISG as result of this comment.

Comment: In C.IV.6.1.2 Environmental Report, the text indicates that the environmental report should be organized consistent with and provide the information discussed in NUREG-1555. Because NUREG-1555 is written to be applicable to staff preparing an environmental impact statement, the draft ISG language should be revised to indicate, consistent with RG 1.206 Section C.II.2, that NUREG-1555 exists and may provide useful guidance. (Cudworth-2)

NRC Response – NRC agrees with the comment. The last paragraph of section C.IV.6.1.2 has been revised to indicate that Regulatory Guide 4.2 and NUREG-1555 are guidance.

Comment: The draft guidance uses the term “preconstruction” to include activities that are outside the NRC jurisdiction to approve or disapprove but that occur concurrent with activities that are within the NRC jurisdiction. This leads to a communications nightmare trying to explain how preconstruction activities can take place after start of construction. NRC should consider using the phrase “non-jurisdictional” as the umbrella phrase that includes activities that occur prior to start of nuclear-safety-related construction (i.e., preconstruction) and activities that occur concurrent with construction activities but that have no nexus to nuclear safety or security. (Cudworth-3)

NRC Response: The NRC agrees that the use of the term, “preconstruction,” did lead to some confusion initially. However, it is the term that is used in the rule, and it appears that most external stakeholders have adjusted to the term. The NRC staff disagrees with the commenter’s request to use “non-jurisdictional,” rather than “preconstruction,” as the umbrella phrase that includes activities that occur prior to and concurrent with construction activities. The term, “non-jurisdictional,” is not an accurate characterization of all of the preconstruction activities (see final LWA rule, 72 FR 57416, 57426-27). Because preconstruction activities fall outside of NRC’s “permitting/licensing authority,” the staff has not changed the ISG in response to this comment.

Comment: It is unclear why the draft ISG is entitled “Limited Work Authorizations.” The treatment of preconstruction and construction impacts is equally applicable to early site permits (ESPs) and combined licenses (COLs), and the draft ISG uses all these terms. The draft should

be revised to indicate the ISG's applicability to ESPs and COLs or to indicate that additional guidance is forthcoming for those applications. (Cudworth 4)

NRC Response: The NRC staff agrees with the commenter and has revised the introductory text of the ISG. This section indicates that the guidance regarding the definition of construction and the delineation between preconstruction activities and those that require prior NRC approval applies to all ESP and COL applicants, regardless of whether or not they are requesting authority to perform limited work activities under an LWA.

Comments from Adrian P. Heymer, NEI, September 26, 2008

Comment: For clarity, we recommend replacing the discussion on necessary excavations, which is located under the section on Construction Crane Foundations and Support Pads in the Supplement to the ISG, with a new paragraph. (NEI-2-1)

NRC Response: The NRC staff agrees in part with the request to clarify the discussion on necessary excavations in the final ISG. The discussion has been revised.

Comment: Where the supplemental ISG states that applicants may "make the case" that a particular activity is preconstruction, we suggest modified wording that applicants may "justify that the activity is preconstruction and thus not within the scope of construction." (NEI-2-2)

NRC Response: The NRC staff agrees with this request and has modified the wording.