

NUCLEAR REGULATORY COMMISSION

Office of New Reactors

Interim Staff Guidance

Limited Work Authorizations

Solicitation of Public Comment

AGENCY: Nuclear Regulatory Commission (NRC)

ACTION: Solicitation of public comment

SUMMARY: The NRC is soliciting public comment on its Proposed Interim Staff Guidance (ISG) COL/ESP-ISG-004. This ISG would replace the previous guidance issued in June 2007 in Regulatory Guide (RG) 1.206, "Combined License Applications for Nuclear Power Plants (LWR Edition)," concerning requests for limited work authorizations submitted as part of an early site permit or combined license application. Upon receiving public comments, the NRC staff will evaluate and disposition the comments, as appropriate. Once the NRC staff completes the COL/ESP-ISG, the staff will issue it for use. The NRC staff will also incorporate the approved COL/ESP-ISG-004 into the next revisions of the RG 1.206 and NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," and related guidance documents.

Several sections of NUREG-1555, "Environmental Standard Review Plan," (ESRP) are currently being revised; the public and industry have already commented on these revised sections. The NRC staff also plans to revise the rest of the ESRP sections over the next several months. The NRC staff plans to include any changes in the ESRP sections necessary for consistency with the revised LWA rule as part of that overall revision process. The NRC staff also plans to update Regulatory Guide 4.2, "Preparation of Environmental Reports for Nuclear Power

Stations,” over the next several months. This update will also include any revisions necessary for consistency with the revised LWA rule.

DATES: Comments must be filed no later than 30 days from the date of publication of this notice in the *Federal Register*. Comments received after this date will be considered, if it is practical to do so, but the NRC staff is able to ensure consideration only for comments received on or before this date.

ADDRESSES: Comments may be submitted to: Chief, Rules and Directives Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC, 20555-0001.

Comments should be delivered to: 11545 Rockville Pike, Rockville, Maryland, Room T-6D59, between 7:30 a.m. and 4:15 p.m. on Federal workdays. Persons may also provide comments via e-mail to nrcprep.resource@nrc.gov. The NRC maintains an Agencywide Documents Access and Management System (ADAMS), which provides text and image files of NRC’s public documents. These documents may be accessed through the NRC’s Public Electronic Reading Room on the Internet at <http://www.nrc.gov/reading-rm/adams.html>. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail at pdr@nrc.gov.

FOR FURTHER INFORMATION CONTACT: Ms. Nanette V. Gilles, Division of New Reactor Licensing, Office of the New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC, 20555-0001; telephone 301-415-1180 or e-mail at Nanette.Gilles@nrc.gov or Mr. Richard Emch, Division of Site and Environmental Reviews, Office of the New Reactors, U.S. Nuclear

Regulatory Commission, Washington, DC, 20555-0001; telephone 301-415-1590 or e-mail at Richard.Emch@nrc.gov.

SUPPLEMENTARY INFORMATION: The NRC posts its issued staff guidance on the NRC external web page (<http://www.nrc.gov/reading-rm/doc-collections/isg/>).

The NRC staff is issuing this notice to solicit public comments on the proposed COL/ESP-ISG-004. After the NRC staff considers any public comments, it will make a determination regarding the proposed COL/ESP-ISG-004.

Dated at Rockville, Maryland, this 31st day of March 2008.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

David B. Matthews, Director
Division of New Reactor Licensing
Office of New Reactors

of Site and Environmental Reviews, Office of the New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC, 20555-0001; telephone 301-415-1590 or e-mail at rl@nrc.gov.

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COL/ESP-ISG-004

Interim Staff Guidance on Limited Work Authorizations

Purpose:

The purpose of this interim staff guidance (ISG) is to provide guidance regarding the information to be submitted by an early site permit (ESP) or combined license (COL) applicant that is requesting a limited work authorization (LWA). This guidance replaces the previous guidance issued in June 2007 in Regulatory Guide (RG) 1.206, "Combined License Applications for Nuclear Power Plants (LWR Edition)."

Background:

The issuance of LWAs for nuclear power plants is governed by Section 50.10, "License Required; LWA," of Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the *Code of Federal Regulations* (10 CFR 50.10). Section 50.10 specifies the information to be included in an application requesting an LWA. The Nuclear Regulatory Commission (NRC) amended the LWA process in 10 CFR 50.10 on October 9, 2007 (72 FR 57415). The LWA process allows applicants for and holders of ESPs and applicants for COLs to request approval to perform certain limited construction activities before the issuance of a COL. The major change in the revised LWA rule is a change to the definition of *construction*, as set forth in 10 CFR 50.10(a). The revised LWA rule was effective on November 8, 2008.

Issue:

At the time the NRC staff was preparing RG 1.206, the NRC was considering significant changes to the agency's regulations related to LWAs. Therefore, the NRC staff committed to prepare additional guidance related to LWAs and their relationship to COL applications and ESPs for inclusion in a future revision of RG 1.206 or another guidance document. This ISG provides that additional guidance.

Proposed Interim Staff Guidance:

RG 1.206 will be revised as follows, except portions of the guidance applicable to ESP applicants and holders that may be included in a separate guidance document.

The following material will be added to the Introduction of RG 1.206:

A. Introduction

As set forth in 10 CFR 50.10(c), 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 (CP), a COL, an ESP authorizing the activities under 10 CFR 50.10(d), or a LWA. As defined in 10 CFR 50.10(a), *construction* means the activities in paragraph (1) below, and does not mean the activities in paragraph (2) below.

Enclosure

- (1) Activities constituting construction are the driving of piles, subsurface preparation, placement of backfill, concrete, or permanent retaining walls within an excavation, installation of foundations, or in-place assembly, erection, fabrication, or testing, which are for:
 - (a) safety-related structures, systems, or components (SSCs) of a facility, as defined in 10 CFR 50.2, "Definitions;"
 - (b) SSCs relied upon to mitigate accidents or transients or used in plant emergency operating procedures;
 - (c) SSCs whose failure could prevent safety-related SSCs from fulfilling their safety-related function;
 - (d) SSCs whose failure could cause a reactor scram or actuation of a safety-related system;
 - (e) SSCs necessary to comply with 10 CFR Part 73, "Physical Protection of Plants and Materials;"
 - (f) SSCs necessary to comply with 10 CFR 50.48, "Fire protection," and Criterion 3, "Protection and Reactivity Control Systems," of 10 CFR Part 50, Appendix A, "General Design Criteria for Nuclear Power Plants;" and
 - (g) onsite emergency facilities, that is, technical support and operations support centers, necessary to comply with 10 CFR 50.47, "Emergency plans," and 10 CFR Part 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities."
- (2) Construction does not include:
 - (a) changes for temporary use of the land for public recreational purposes;
 - (b) site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values;
 - (c) preparation of a site for construction of a facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;
 - (d) erection of fences and other access control measures;
 - (e) excavation;
 - (f) erection of support buildings (such as, construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and

- unloading facilities, and office buildings) for use in connection with the construction of the facility;
- (g) building of service facilities, such as paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, and transmission lines;
 - (h) procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility; or
 - (i) manufacture of a nuclear power reactor under a manufacturing license under Subpart F, "Manufacturing Licenses," of 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants," to be installed at the proposed site and to be part of the proposed facility.

Construction includes installation of the foundation, including soil compaction; the installation of permanent drainage systems and geofabric; the placement of backfill, concrete (*e.g.*, "mudmats") or other materials which will not be removed before placement of the foundation of a structure; the placement and compaction of a subbase; the installation of reinforcing bars to be incorporated into the foundation of the structure; the erection of concrete forms for the foundations that will remain in-place permanently (even if nonstructural); and placement of concrete or other material constituting the foundation of any SSC within scope of the definition of construction. The term *permanent* in this context includes anything that will exist in its final, in-place plant location after fuel load.

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 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 located onsite. However, the installation or integration of that SSC into its final plant location would require a COL, LWA, or ESP authorizing LWA activities. Finally, construction does not include manufacturing of a nuclear power reactor under Subpart F of 10 CFR Part 52, even if the manufacturing is accomplished onsite, so long as the manufacturing is not done in-place, at the final (permanent) plant location on the site.

Under the current definition, excavation is excluded from construction. Excavation includes the removal of any soil, rock, gravel, or other material below the final ground elevation to the final parent material. Thus, all these excavation activities may be conducted without a COL, LWA, or ESP authorizing LWA activities. However, the placement of permanent, non-structural dewatering materials, mudmats and/or engineered backfill which are placed in advance of the placement of the foundation and associated permanent retaining walls for SSCs within the scope of the definition of construction are not excavation activities, and are considered to fall within the scope of construction. 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. The NRC staff may also discuss with applicants and prospective applicants the possibility of voluntarily allowing NRC access to the site during excavation activities for the purpose of assisting the NRC staff in its evaluation of the relevant portions of the application.

Construction includes the driving of piles for SSCs described in the definition. Hence, NRC permission must be obtained in the form of a CP, COL, LWA, or ESP authorizing LWA activities in order to conduct pile driving for such SSCs. However, the 'driving of piles' not related to ensuring the structural stability or integrity of any SSC within the scope of the definition of construction does not fall within the definition of construction and therefore may be accomplished without a CP, COL, LWA, or ESP authorizing LWA activities. For example, piles driven to support the erection of a bridge for a temporary or permanent access road would not be considered "construction" under this section and may be performed without a CP, COL, LWA, or ESP authorizing LWA activities.

The SSCs that are within the scope of the definition of construction are those which have a reasonable nexus to radiological health and safety or common defense and security. This definition was derived from the scope of SSCs that are included in the programs implemented under 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants," and supplemented with SSCs that are needed for fire protection, security, and onsite emergency facilities. There may be some SSCs of a facility which do not have a reasonable nexus to radiological health and safety or common defense and security. The determination of the SSCs that do not have a reasonable nexus to radiological health and safety or common defense and security will be dependent upon the design of the facility. An example SSC that would not be within the scope of construction is a cooling tower that is used to cool the turbine condenser. However, a cooling system that is used for both safety and non-safety functions would fall within the definition of construction.

The following changes will be made to RG 1.206, Section C.II.2, "Environmental Report":

The current paragraph under Section C.II.2 would become Section C.II.2.1, "General Guidance for Preparation of Environmental Reports." The following new section would be added.

C.II.2.2 Additional Guidance Based on Revised Limited Work Authorization Rule

C. II.2.2.1 Environmental Impacts of Construction and Preconstruction

The revised LWA rule (October 9, 2007; 72 FR 57415) included changes to 10 CFR 51.45(c) regarding environmental reports (ERs). Any ER prepared to support an application for new reactor licensing (CP, ESP, LWA¹, or COL) must include, among other things:

¹ The rule states that it applies to ERs for CPs, ESPs & COLs. NRC plans to issue an administrative correction to the rule to include LWA in the list. Language throughout the rest of 10 CFR 51.45(c) clearly demonstrates that the NRC intended to include LWA in the list.

- (1) a description of impacts of the preconstruction activities performed by the applicant at the proposed site (*i.e.*, those activities listed in (2)(i) through (2)(x)² in the definition of construction contained in 10 CFR 51.4) necessary to support construction and operation of the facility; and
- (2) an analysis of the cumulative impacts of the activities to be authorized by the LWA, CP, or COL in light of the preconstruction impacts.

Prior to implementation of the revised LWA rule, the environmental impacts of construction activities were evaluated together with what is now referred to as the preconstruction activities in the construction impacts section of an ER or an environmental impact statement (EIS).

Under the revised LWA rule, the impacts of construction activities need to be addressed because they are the activities being authorized. Therefore, the impacts of preconstruction and construction activities need to be separated so the impacts of the construction activities can be appropriately addressed. The impacts of the preconstruction activities also need to be described so they can be evaluated as part of the cumulative impacts related to the construction activities. NRC and Council on Environmental Quality (CEQ) regulations and guidance indicate that level of analysis of environmental impacts should be commensurate with the level of impact.³ If the level of impact of the construction activities in a given area, such as water quality, is small, detailed analysis of the impact of preconstruction activities in that area is not warranted unless it will significantly alter the assessment of cumulative effects in that area. The level of information regarding construction impacts that was presented by applicants under the previous definition of *construction*⁴ should be adequate to address the cumulative impacts of construction activities in light of the preconstruction impacts under the revised LWA rule.

For some impact areas, this separation to address the impacts of construction activities should be relatively simple and require little additional effort over the methods used under the previous guidance. For example, in the impact areas of terrestrial ecology and historical and cultural resources, nearly all the impact will be from preconstruction activities - site grading, excavation,

² The rule uses the term *preconstruction*; 10 CFR 51.4 does not define *preconstruction*, but the parenthetical note indicates that the activities that are not part of construction are listed in paragraph (b)(1) through (b)(8) in 10 CFR 51.4. These are the preconstruction activities. NRC plans to issue an administrative correction to the rule to state that activities which are not part of construction are listed in paragraph (2)(i) through (2)(x). There is no paragraph (b)(1) through (b)(8) in the final 10 CFR 51.4. The term *preconstruction* as used in the rule is not limited to activities performed before construction; many preconstruction activities could and probably will be performed concurrently with construction.

³ NRC regulations at 10 CFR 51.29(a)(3) indicate that issues that are not significant should be identified and eliminated from detailed study during scoping; the NRC regulation reflects the words of 40 CFR 1501.7(a)3, "Identify and eliminate from detailed study the issues which are not significant..." In addition, the CEQ publication, "Considering Cumulative Effects Under the National Environmental Policy Act," states, "Cumulative effects analysis should "count what counts", not produce superficial analyses of a long laundry list of issues that have little relevance to the effects of the proposed action or the eventual decisions."

⁴ See Section A, "Introduction," for a discussion of the revised definition of *construction*.

and building roads, barge slips or rail lines, and transmission lines. Little, if any, of the impact in these areas is likely to be due to construction activities.

In other impact areas, such as the socioeconomic impacts of the construction work force, it may require somewhat more detailed analysis to separate the impacts of preconstruction and construction activities that will occur concurrently. The work force will be composed of workers involved in both preconstruction and construction. Almost all of the work done before the installation of the foundations of the safety-related structures begins will be preconstruction. After that safety-related foundation work begins, the work force will be doing both preconstruction and construction until the plant is complete. Therefore, the socioeconomic impacts of the work force conducting preconstruction are all of the impacts before the safety-related foundation work begins plus some percentage of the impacts throughout the rest of the project. The socioeconomic impacts of the work force conducting construction are some percentage of the impacts after the safety-grade foundation work begins throughout the rest of the project. The same analyses that applicants use to estimate the total work force should be detailed enough to provide separate estimates of the percentage of the work force engaged in preconstruction and construction throughout the project after the safety-related foundation work begins. Generally, the estimates of the impact breakdown between preconstruction and construction do not need to be detailed. For example, estimated breakdowns such as 70-30 percent or 60-40 percent or 50-50 percent should be sufficient to inform the NEPA decision-making process. The socioeconomic impacts of the construction activities can be apportioned simply based on these estimates.

In a few areas, the level of impact may be so small that anything other than a ballpark estimate of the separation would not be warranted to appropriately inform the NEPA decision-making process. Based on experience from other construction projects of similar size, the air quality impact will probably be assessed as small during scoping if the area is in attainment under Environment Protection Agency (EPA) regulations. Under these circumstances, any effort beyond a very simple estimate of the preconstruction-construction impact separation, such as 50-50 percent, would not be necessary to assess the impact of level of the construction activities.

C.IV.6 LWA and Site Redress Plan

C.IV.6.1 LWA

C.IV.6.1.1 *Request for an LWA*

In accordance with 10 CFR 50.10(c), for licensing under 10 CFR Part 52, no person may begin the construction of a nuclear power plant on a site on which the facility is to be operated until that person has been issued a CP, a COL, an ESP authorizing the activities under 10 CFR 50.10(d), or an LWA. A discussion of the definition of construction can be found in Section A, "Introduction," of this regulatory guide. An application for an LWA may be submitted by an applicant for a CP, a COL, or by an applicant for or holder of an ESP.

Authorized Activities

An applicant for an LWA may request authorization to perform, for SSCs of a facility for which a CP or a COL is otherwise required:

- (1) the driving of piles;
- (2) subsurface preparation;
- (3) placement of backfill, concrete, or permanent retaining walls within an excavation; or
- (4) installation of the foundation, including placement of concrete.

Contents of Applications

An applicant for a COL may submit a request for an LWA either as part of a complete application under 10 CFR Part 2, "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," Section 2.101, "Filing of Application," paragraphs (a)(1) through (4), or in two parts under 10 CFR 2.101(a)(9) (*i.e.*, a "phased LWA application").

If the LWA application is submitted as part of a complete COL application, the application must include:

- (1) a safety analysis report required by 10 CFR 52.17, "Contents of applications; technical information," or 10 CFR 52.79, "Contents of applications; technical information," a final safety analysis report (FSAR), as applicable, which 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. For a COL applicant, the safety analysis report may be a stand-alone document or incorporated into the COL application's FSAR. For an ESP applicant or holder, the LWA safety analysis report should be included in the ESP's site safety analysis report (SSAR).
- (2) for the LWA activities that the applicant seeks to perform, the proposed inspections, tests, and analyses that the licensee will perform, and the acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, the portion of the facility covered by the LWA has been constructed and will be operated in conformity with the LWA, the provisions of the Atomic Energy Act, and the Commission's rules and regulations.
- (3) an environmental report. The environmental report must meet the requirements of 10 CFR 51.49. Guidance on the contents of the environmental report is contained in Section C.IV.6.1.2 of this regulatory guide.
- (4) a plan for redress of activities performed under the LWA, should one of the following situations arise:
 - (a) limited work activities are terminated by the holder of the LWA;

- (b) the LWA is revoked by the NRC; or
- (c) the Commission denies the associated COL application.

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.

If the application is a phased LWA application, the first part must contain the information identified above on the LWA, as well as the general information required of all COL applicants under 10 CFR 50.33(a) through (f), namely:

- (1) name of applicant (10 CFR 50.33(a))
- (2) address of applicant (10 CFR 50.33(b))
- (3) description of business or occupation of applicant (10 CFR 50.33(c))
- (4) if applicant is an individual, citizenship (10 CFR 50.33(d)(1))
- (5) if applicant is a partnership, the name, citizenship, and address of each partner and principal location of where the partnership does business (10 CFR 50.33(d)(2))
- (6) if applicant is a corporation or an unincorporated association (10 CFR 50.33(d)(3)):
 - (a) the state where it is incorporated or organized and the principal location where it does business
 - (b) the names, addresses, and citizenship of its directors and principal officers
 - (c) whether it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, and, if so, details are provided in the application
- (7) if the applicant is acting as agent or representative of another person in filing the application, identify the principal and furnish information required by 10 CFR 50.33(d) with respect to such principal (10 CFR 50.33d)(4))
- (8) the class of license applied for, the use to which the facility will be put, the period of time for which the license is sought, and a list of other licenses, except operator's licenses, issued or applied for in connection with the proposed facility (10 CFR 50.33 (e))
- (9) 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. (10 CFR 50.33(f)(3))

- (10) each application for a COL submitted by a newly-formed entity organized for the primary purpose of constructing and/or operating a facility must also include information showing (10 CFR 50.33(f)(4)):
 - (a) the legal and financial relationships it has or proposes to have with its stockholders or owners;
 - (b) the stockholders' or owners' financial ability to meet any contractual obligation to the entity which they have incurred or proposed to incur; and
 - (c) any other information considered necessary by the Commission to enable it to determine the applicant's financial qualification; and
- (11) The Commission may request an established entity or newly-formed entity to submit additional or more detailed information respecting its financial arrangements and status of funds if the Commission considers this information appropriate. This may include information regarding a licensee's ability to continue the conduct of the activities authorized by the license and to decommission the facility (10 CFR 50.33(f)(5)).

The second part of the application must contain the remaining information otherwise required to be filed in a complete application under 10 CFR 2.101(a)(1) through (a)(4). However, the applicant has the further option of submitting part two in additional subparts in accordance with 10 CFR 2.101(a-1). The second part (or the first subpart of multiple subparts under 10 CFR 2.101(a-1)) must be filed no later than 18 months after the filing of part one. Part two of the application (or the first subpart of any additional subparts submitted in accordance with 10 CFR 2.101(a-1)) must be submitted no later than 18 months after submission of part one of the application.

An applicant for an ESP may not submit its LWA application in advance of the underlying ESP application, and therefore is not permitted to use the phased application procedures outlined above for a COL applicant. Similarly, the holder of an ESP is not permitted to use these phased application procedures in submittal of its ESP amendment application for LWA authority.

Finally, a phased LWA application must be accompanied by the applicable filing fees in 10 CFR 50.30, "Applications for licenses, certifications, and regulatory approvals; form; contents; ineligibility of certain applicants," paragraph (e), "Filing fees," and 10 CFR Part 170, "Fees for Facilities, Materials, Import and Export Licenses, and Other Regulatory Services Under the Atomic Energy Act of 1954, as Amended."

Effect of an LWA

As set forth in 10 CFR 50.10(f), any activities undertaken under an LWA are entirely at the risk of the applicant and the issuance of the LWA has no bearing on the issuance of the underlying COL.

Implementation of Redress Plan

As set forth in 10 CFR 50.10(g), if limited work activities are terminated by the holder of the LWA, the LWA is revoked by the NRC, or the Commission denies the associated COL

application, the LWA holder must begin implementation of the redress plan in a reasonable time and complete the redress of the site no later than 18 months after termination of construction, revocation of the LWA, or the effective date of the Commission's final decision denying the COL application, as applicable. Further guidance on site redress can be found in section C.IV.6.2 of this regulatory guide.

LWA Requests and COL Schedules

Regarding NRC's scheduling of the review of LWA and COL applications, the following guidance is provided. Applicants who notify the NRC that they will be requesting an LWA at the same time that they notify the NRC that they will be submitting a COL application will get their LWA request scheduled in concert with their COL request and resources will be allocated to both reviews. Applicants who notify the NRC that they will be requesting an LWA after they have submitted their COL application do so at the risk of impacting their COL review schedule. In years when the NRC is not resource constrained, the staff will evaluate whether there is a need to divert resources from the applicant's COL review to the LWA review and will notify the applicant of how their COL schedule will be impacted, if necessary. The staff will not divert resources from other applicants' reviews in order to accommodate the LWA request. In years when the NRC is resource constrained, the NRC staff will need to consult with the Commission as to how to handle late notification of an LWA request (*i.e.*, after an applicant's COL submittal) and what affect it will have on both the applicant's COL schedule and, possibly, on the schedules for other COL applicants. In these circumstances, the staff expects that the Commission will consider the guidance that it provided to the staff in its staff requirements memorandum (SRM) on SECY-06-0187, "Semiannual Update of the Status of New Reactor Licensing Activities and Future Planning for New Reactors." In that SRM, the Commission stated that the NRC staff should consider the following set of factors when making resource allocations and schedule decisions if and when actual licensing work exceeds the new reactor budget.

- (1) for any one of multiple COL applications referencing the same design certification, the extent of the applicant's commitment to the design-centered review approach described in Regulatory Issue Summary 2006-06, "NRC Regulatory Issue Summary 2006-06, "New Reactor Standardization Needed to Support the Design-Centered Licensing Review Approach," and any subsequent related guidance documents (this factor should not, however, disadvantage a COL applicant referencing a design that is not referenced in other COL applications);
- (2) the extent to which an application references a completed ESP and a certified design;
- (3) for applications referencing designs not yet certified or for which significant changes in the current certification are being sought by the vendor, the degree to which the staff's design review is in advanced stages and the vendor is providing the necessary support for timely completion;
- (4) the quality and the completeness of the application itself;

- (5) the extent to which an application references an ESP application submitted well in advance of the COL and which demonstrates the likelihood that environmental and emergency planning issues will be resolved prior to the COL hearing;
- (6) the extent to which an applicant has coordinated with applicable state permitting authorities;
- (7) the extent to which an applicant has coordinated toward meeting other applicable federal requirements;
- (8) the schedule of the Department of Homeland Security (DHS) review of an applicant's emergency plan, and the schedule for the DHS security consultation consistent with Section 657 of the Energy Policy Act of 2005;
- (9) evidence of the applicant's financial commitment to build a reactor in the near term, such as the extent of procurement and orders for long lead time reactor components that can facilitate the NRC scheduling of vendor and construction inspections and other related financial information;
- (10) the degree of an applicant's adherence to schedules and meeting of milestones that could impact the staff's review; and
- (11) the extent to which prioritization of the application could enhance efficiencies in the conduct of the adjudicatory process.

The environmental review process and the number and scope of EISs prepared by the NRC staff will depend on the LWA application approach chosen by the applicant and what the application requests. The basic environmental review process will remain the same. The review process for an LWA application will include all of the same steps used in the COL application review process, namely, acceptance review, scoping, public scoping meeting, draft EIS, public meeting on draft EIS, resolution of comments on the draft EIS, and final EIS. The environmental review process for a "stand-alone" LWA application should be shorter than the process for a COL application. In addition, the NRC staff will use tiering⁵ to the extent it is practical in the EISs for LWAs, which may also shorten the review process.

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 NEPA or state environmental statutes. The exact needs will be dependent on several factors such as water sources and State permitting requirements which can vary. For example, any applicant that needs to dredge or build a water intake structure or barge slip on the "navigable waters of the United States"⁶ may need a permit from the U.S. Army Corp of Engineers (USACE). Also, any

⁵ Tiering is a method that can be used in the NEPA process to simplify or streamline an environmental assessment or impact statement by relying on data, analyses, and conclusions presented in another related environmental assessment or impact statement.

⁶ "Navigable waters of the United States" generally refers to navigable waters in and around the United States; it has been interpreted broadly in the U.S. courts.

applicant that needs to build roads or transmission lines (or anything else) on wetlands or across the “navigable waters of the United States” may need a permit from the USACE. Additionally, any applicant that needs to extract or discharge water from and to any water body or groundwater source will probably need a permit from the state. These examples are meant to be illustrative, not all-inclusive. An applicant needs to understand the permitting requirements, processes, and schedules of such agencies when planning for licensing and construction of a nuclear power plant.

C.IV.6.1.2 *Environmental Report*

The requirements in 10 CFR 51.49, “Environmental Report – Limited Work Authorization,” provide a number of ways to submit an application for an LWA:

- (1) as part of a complete CP or COL application;
- (2) as the first part of a phased CP or COL application;
- (3) as part of an ESP application;
- (4) as an additional application by an ESP holder; or
- (5) for a site where an EIS was prepared, but the facility construction was not completed.

As discussed in Section C.IV.6.1.1 of this RG, 10 CFR 50.10 requires an LWA application to include an ER and a site redress plan for activities proposed to be performed under the LWA. The requirements in 10 CFR 51.49 require an ER for an LWA to include:

- (1) a description of the activities proposed to be conducted under the LWA;
- (2) a statement of the need for the activities;
- (3) a description of the environmental impacts that may reasonably be expected to result from the activities;
- (4) a description of the mitigation measures the applicant proposes to implement;
- (5) a discussion of the reasons for rejecting additional mitigation measures that were considered; and
- (6) a description of the process used to identify new and significant information for an ESP holder or where authorized construction was not completed.

The ER should be organized consistent with and provide the information discussed in RG 4.2, “Preparation of Environmental Reports for Nuclear Power Stations,” and NUREG-1555, “Environmental Standard Review Plan.” The ER can incorporate information from related ERs and EISs by reference.

C.IV.6.2 Site Redress Plan

If limited work activities are terminated by the holder of the LWA, the LWA is revoked by the NRC, or the Commission denies the associated COL application, the LWA holder must begin implementation of the redress plan in a reasonable time and complete the redress of the site no later than 18 months after termination of construction, revocation of the LWA, or the effective date of the Commission's final decision denying the COL application, as applicable.

The primary purpose of the redress plan is to address activities that were authorized under the LWA, such as the placement of piles and installation of foundations. Redress of site impacts resulting from preconstruction activities will not be required under the redress plan. In addition, while redress of LWA impacts may have the practical effect of mitigating some environmental impacts, the redress plan is not a substitute for a thorough evaluation of environmental impacts, or development of mitigation measures that may be necessary to provide relief from environmental impacts associated with the proposed LWA activities.

The NRC recommends that applicants model their site redress plans on the Midland site stabilization report submitted to the NRC on October 2, 1986, ADAMS accession number (ML061710504). In general, the site redress plan should describe the scope of actions to be taken following the suspension of construction. It should include a description and status of the site and general site stabilization activities currently in progress (e.g., site drainage, excavation, grading, seeding), as well as a description and status of the major facilities of the site (e.g., power block area, access roads, laydown areas, cooling ponds, transmission corridor). The site redress plan should also discuss the final condition of each part of the major facilities (e.g., abandonment of buildings, removal of utilities, and removal of debris). Finally, the plan should provide a justification as to why the activities outlined in the site stabilization report will achieve an environmentally stable and aesthetically acceptable condition. 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.

Short Term Implementation Issues:

The LWA rule became effective on November 8, 2007. All of the COL applications that have been submitted to the NRC have addressed the impacts of preconstruction and construction activities together using the previous regulations and guidance. During pre-application discussions, prospective COL applicants have informed the NRC staff that additional COL applications will be submitted in the next several months using the previous regulations and guidance. In addition, the NRC staff issued several EISs for ESP applications prior to the effective date of the revised LWA rule.

For all the applications that are not associated with an ESP, the NRC staff intends to use requests for additional information (RAIs) to get sufficient data to allow the NRC staff to address the separation of impacts of preconstruction and construction activities in the EISs consistent with the revised LWA rule. The level of information regarding construction impacts that was presented by applicants under the previous definition of *construction* should be adequate to address the cumulative impacts of construction in light of the preconstruction impacts under the revised LWA rule. The NRC staff does not intend to reject COL applications submitted in the next several months solely because they do not address the separation of preconstruction and construction impacts. As prospective COL applicants have the opportunity to become familiar with the kinds of information requested by the NRC staff in RAIs, those applicants will be better informed about how to prepare their COL applications.

The environmental impacts of preconstruction and construction activities have already been evaluated together in the final EISs for three ESPs and in the draft EIS for one ESP application currently under review. In addition, two COL applications have been submitted by ESP holders.

The Commission's guidance to the NRC staff indicates that issues that have already been evaluated and resolved in an ESP review should not be re-examined in the COL review unless new and significant information is found. In addition, those EISs adequately address cumulative impacts because they address preconstruction and construction impacts together. Therefore, the NRC staff will maintain the same organization in the EISs for the ESP application under review and for the COL applications submitted by current ESP holders, namely, addressing the impacts of preconstruction and construction activities together in the construction impacts section of the COL EISs. The NRC staff intends to maintain the same EIS organization even though there were some unresolved issues regarding construction impacts in the ESP EISs and the ESP holders are providing new information regarding construction impacts in their COL applications. This approach is being taken to maintain consistency within the EIS and because the final impacts are not expected to increase over what was presented in the ESP EIS.

Final Resolution:

The issue will be resolved in the next update/revision to the RG 1.206 and related guidance documents.

Applicability:

This ISG is applicable to all ESP and COL applicants requesting authorization to perform limited work activities.

References:

- (1) "Limited Work Authorizations for Nuclear Power Plants; Final Rule," Volume 72, p. 57415, of the *Federal Register*, October 9, 2007.
- (2) Regulatory Guide (RG) 1.206, "Combined License Applications for Nuclear Power Plants (LWR Edition), June 2007."
- (3) Midland Site Stabilization Report, October 2, 1986.