## UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR REACTOR REGULATION WASHINGTON, DC 20555-0001

April 16, 2007

# NRC REGULATORY ISSUE SUMMARY 2007-08 UPDATED LICENSING SUBMITTAL INFORMATION TO SUPPORT THE DESIGN-CENTERED LICENSING REVIEW APPROACH

# ADDRESSEES

All current and potential applicants for an early site permit (ESP), combined license (COL), or standard design certification (DC) for a nuclear power plant under the provisions of the Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52.

# INTENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to obtain updated information regarding the scheduling of ESP, COL, and DC application submissions, and the extent to which they will support the NRC's design-centered review approach (DCRA). This RIS is intended to promote standardization of COL applications and to facilitate the establishment of a predictable and consistent method for reviewing applications. To this end, the NRC also seeks updated information regarding addressee activities related to safety and quality assurance requirements, environmental reviews, construction plans and preparation, and other pre-application activities. The concepts described in this RIS are consistent with NRC policy on standardization described in the Statement of Considerations for the original proposed rule 10 CFR Part 52 (53 FR 32060) and apply to DCs and ESPs associated with the COLs. This RIS does not transmit or imply any new or changed requirements or staff positions. Submission of advance notice of addressee plans or comments in response to this RIS is strictly voluntary. Although no specific action or written response is required, this information will enable the NRC to effectively plan for anticipated review work and inspection activities.

# **BACKGROUND INFORMATION**

The DCRA is the NRC's strategy to manage the licensing review work load, and the updated information solicited in this RIS will aid in the agency's schedule and resource planning efforts. The NRC outlined the DCRA in RIS 2006-06. In summary, the DCRA is a review strategy for COL applications that reference a particular design. This approach will use, to the maximum extent practicable, a "one issue, one review, one position" strategy in order to optimize the review effort, the resources needed to perform these reviews, and the review schedules. Specifically, the staff will, conduct one review for each issue associated with a particular design, reach a decision on each issue, and if possible rely on that decision in reviewing a subsequent application. In order for the DCRA to be fully effective, it is paramount that applicants achieve a consistent level of standardization.

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#### SUMMARY OF ISSUE

The NRC anticipates around 20 COL applications to be submitted starting in late 2007 through 2008. Therefore, the NRC will be challenged with an unprecedented review effort. This situation requires an innovative approach to assure that technically sound COL reviews can be completed on schedule.

To this end, the NRC intends to implement the DCRA, which is based on COL applications referencing a particular design. The NRC staff believes that consistent submissions of standardized COL applications are key to the success of the DCRA. As such, the standardization of an application is best achieved by incorporating a referenced COL application (R-COL) into a subsequent COL application (S-COL). Unique site-specific conditions that cannot be standardized should be clearly identified in the application, and the wording of the standardized portion of applications should be the same as in the R-COL to avoid confusion.

In order to implement the DCRA model and prepare for its review of COLs, the staff needs to be updated on the identification of the R-COL application for each design, the anticipated schedule for pre-application activities, and the submittal schedule of each R-COL and S-COL application. Furthermore, the staff is seeking information regarding the topics or issues in these submittals that will be standardized and those that are likely to be addressed in site-specific submittals.

The NRC expects that the staff will need to issue requests for additional information (RAIs) in order to complete its reviews. The staff seeks standardized responses to RAIs associated with COL applications to the extent consistent with the DCRA. To maintain the anticipated review schedules, applicants will need to adhere to a specified RAI response period.

In RIS 2006-06, the NRC suggested that the COL applicants and DC applicants form Design-Centered Working Groups (DCWGs). Such groups have been created to facilitate the standardization of COL applications. The NRC staff seeks updated status on the DCWGs for each of the designs.

The NRC encourages potential applicants to provide the NRC construction plans and pre-application activities that will be used to demonstrate compliance with NRC safety and environmental requirements, such as quality assurance (QA) requirements. This information will facilitate the staff's familiarization with the associated sites, or alternative sites, and the eventual evaluation of QA implementation. In addition, information received from potential applicants will allow the NRC to conduct vendor audits prior to submission of the applications.

In addition, onsite observation of vendor activities by the NRC staff will require preparation and travel. Since safety-related equipment may be manufactured overseas, conducting audits and inspections of these vendors and components will likely require international travel. Therefore, the staff is seeking information on these activities to provide sufficient time to plan and implement these visits. Furthermore, information on vendors and consultants that are assisting in the preparation of the application will facilitate a more efficient licensing review of the applications. For more information regarding pre-application activities, see Section IV.7 of Draft

Regulatory Guide 1145, "Combined License Applications for Nuclear Power Plants (LWR Edition)," at http://ruleforum.llnl.gov/cgi-bin/downloader/rg\_lib/123-0197.htm.

# **VOLUNTARY RESPONSE**

The NRC is developing pre-application, licensing, and project plans consistent with the DCRA strategy. To support this effort, the NRC is seeking updated (from RIS 2006-06) information with respect to standardization and the schedules for submitting DC, ESP, and COL applications as well as quality assurance activities and construction plans. The planned application schedules may be shared with other Federal agencies to support their planning efforts related to the licensing of new plants. If a prospective applicant deems this information to be proprietary, this information may be accompanied by a public disclosure withholding request in accordance with 10 CFR 2.390. If an addressee chooses to provide a voluntary response, the NRC is interested in obtaining, within 45 days of the date of this RIS, information related to the following:

### Licensing Submittal Information

- Will the applicants be organized into DCWGs? If so, what is the membership and who is the single point of contact designated for each DCWG? Have protocols been developed to provide coordinated responses for RAIs with generic applicability to a design center?
- Which applicant referencing the design will be designated as the R-COL applicant?
- When (month and year) will each of the COL applications be submitted for review? In addition, what is the design, site location, and the number of units at each site?
- What portions of the COL application (chapters, sections, subsections) will be relying on the DC?
- What portions of the R-COL application (chapters, sections, subsections) will be referenced (i.e., replicated verbatim) in S-COL applications, and what portions of the application are likely to be site-specific?
- When (month and year) will applicants complete the detailed design information to be verified under those inspections, tests, analyses, and acceptance criteria that are directed at certification information (design acceptance criteria)? Will this information be completed in a design certification amendment application, in the R-COL application, in S-COL applications, in post-COL Final Safety Analysis Report updates, or a combination thereof?

### Site and Environmental Information

 Do any applicants intend to apply for an ESP prior to submitting their COL applications? If so, when (month and year) would the proposed ESP be submitted to the NRC for review?

- For ESP applicants, is the applicant going to be seeking approval of either "proposed major features of the emergency plans" per 10 CFR 52.17(b)(2)(i), or "proposed complete and integrated emergency plans" per 10 CFR 52.17(b)(2)(ii)?
- Do the applicants plan to submit an environmental report or limited work authorization request prior to other portions of the COL application, and if so, when (month and year)?
- What scope and schedule do applicants project for site characterization activities, such as core borings and testing of core samples?
- What interactions have taken place with local and State authorities and other Federal agencies to support licensing new reactors?

### Plant Construction Requirements Information

- Who are the vendors and consultants that are assisting in the preparation of the application? The NRC requests that the potential applicants submit a list of entities that are providing input to and are preparing the COL application under a QA program.
- What information do the applicants have regarding the timing of construction, the ordering of long lead time components, and other commitments to construction? Furthermore, what vendors will be designing, manufacturing, fabricating, and testing safety-related components for eventual plant construction?

Addressees that choose to provide a voluntary response should send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001.

#### **BACKFIT DISCUSSION**

This RIS requires no action or written response. Any action on the part of addressees to provide information regarding standardization, advance notice of intent to pursue a combined license, in accordance with the guidance contained in this RIS for the purpose of aiding the NRC in planning the use of its resources, is strictly voluntary. Therefore, this is not a backfit under 10 CFR 50.109, and the staff did not perform a backfit analysis.

### FEDERAL REGISTER NOTIFICATION

A notice of opportunity for public comment on this RIS was not published in the Federal Register because it pertains to an administrative aspect of the regulatory process that involves the voluntary submission of information on the part of addressees.

## CONGRESSIONAL REVIEW ACT

The NRC has determined that this action is not a rule and therefore is not subject to the Congressional Review Act.

#### PAPERWORK REDUCTION ACT STATEMENT

This RIS contains information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). These information collections were approved by the Office of Management and Budget, approval 3150-0151.

The burden to the public for these voluntary information collections is estimated to average 12 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspects of these information collections, including suggestions for reducing the burden, to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet electronic mail to infocollects@nrc.gov; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0011), Office of Management and Budget (OMB), Washington, DC 20503.

### PUBLIC PROTECTION NOTIFICATION

The NRC may not conduct or sponsor, and a person is not required to respond to, an information collection unless the requesting document displays a currently valid OMB clearance number.

### CONTACT

Please direct any questions about this matter to the technical contact listed below.

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Note: NRC generic communications may be found on the NRC public Web site, http://www.nrc.gov, under Electronic Reading Room/Document Collections.