C.III.3. Finality of Environmental Issues

C.III.3.1 Finality of Environmental Issues Associated with an ESP

A COL applicant may reference an early site permit (ESP). In this situation, the NRC has established a unique relationship between two major Federal actions - the ESP and COL. The conclusions from the ESP environmental impact statement (EIS) may be used in the COL application and considered by the NRC staff. The discussion that follows is applicable only to the special circumstances involving the referencing of an ESP in a COL application.

In reviewing an ESP application, the NRC staff prepares an EIS to inform the Commission's decision, determine whether there is an obviously superior alternative site, and, to the extent addressed by the applicant, disclose the environmental impacts associated with constructing and operating one or more nuclear units. Consequently, the ESP EIS is an important starting point for preparing a COL applicant's ER. Note that it is the EIS (and not the applicant's ER) that provides the basis for issuing the ESP. As such, the EIS prepared for an ESP would resolve issues within certain bounding conditions, and such issues are afforded finality at the COL stage, provided that no "new and significant" information has become available on the issue. By contrast, if a given environmental issue was not resolved at the ESP stage, either because sufficient information was not available to permit resolution or because the ESP applicant was permitted to defer the issue (e.g., the benefits assessment), the COL applicant must address the issue in its COL ER. A COL ER must also demonstrate that the design of the facility falls within the site characteristics and design parameters specified in the ESP. In addition, the COL ER must demonstrate that all environmental terms and conditions of the ESP will be satisfied by the date of issuance of the COL. Terms or conditions that cannot be satisfied before issuance of the COL must be included as terms or conditions in the COL.

The NRC is ultimately responsible for completing any review required to fulfill its responsibilities under the National Environmental Policy Act, for example, activities undertaken by the NRC staff to ensure that an issue that was resolved for the ESP remains resolved. However, the COL applicant (the proponent for the action) is expected to initially identify whether "new and significant" information has become available for such an issue. Thus, a COL applicant must have a reasonable process to ensure that it becomes aware of "new and significant" information that may bear on the NRC conclusion for the ESP, and should document the results of this process in an auditable form for issues for which the COL applicant does not identify "new and significant" information. Issues for which the COL applicant does identify "new and significant" information must be addressed in the COL ER. Under 10 CFR 51.70(b), the NRC is required to independently evaluate and be responsible for the reliability of all information used in the EIS, including an EIS prepared for a COL application. Toward that end, the NRC staff may (1) inquire about changes to information disclosed in an EIS for an ESP that is referenced in a COL application, and (2) identify new information that may affect the assumptions, analyses, or conclusions in the ESP EIS.

In the context of a COL application that references an ESP, the NRC staff defines "new" (in "new and significant" information) as information that was both (1) not considered in preparing the ESP environmental report or EIS (as may be evidenced by references in these documents, applicant responses to NRC requests for additional information, comment letters, etc.) and (2) not generally known or publicly available during the preparation of the EIS (such as information in reports, studies, and treatises). This new information may include (but is not limited to) specific design information that was not available at the time of the ESP application (especially where the design interacts with the environment), or information that was in the ESP application, but has changed by the time of the COL

application [for example, a change in the regional socioeconomic profile resulting from a natural event (e.g., Hurricane Katrina)]. New information may or may not also be "significant."

The NRC expects the COL applicant referencing an ESP to have a reasonable, auditable process to ensure that the applicant becomes aware of "new and significant" information, and to describe the process in its COL ER. This process description should include (1) the methods that the COL applicant uses to ensure that it is cognizant of new information, if it exists, and (2) the process for evaluating the significance of new information, if found. Methods to ensure cognizance of new information include the following examples:

- reviewing environmental monitoring results
- reviewing related scientific literature
- surveying environmental professionals familiar with the site environs (for example, the environmental and operations staff of a nearby nuclear or other industrial facility)
- exchanging information within the industry through peer groups and industry organizations
- consultations with academicians knowledgeable of the local environment
- consultations with Federal, State, Tribal, and local environmental, natural resource, permitting, and land use agencies
- verifying that the assumptions and representations made in the ESP ER are still valid
- verifying that the NRC staff's assumptions in the ESP EIS are still valid
- reviewing information needs in the Environmental Standard Review Plan

The description of the process for evaluating the significance of new information should also include the organizational procedures for handling reports of new information and the criteria used to determine the applicability of such information. Detailed supporting information need not be included in the ER, but should be available in auditable form for review by the NRC staff. Such supporting information may include the following:

- qualifications of participants involved in the process, their organizational affiliations, how they interact among themselves, and the role they serve in the process
- consultations with academicians and Federal, State, Tribal, and local environmental, natural resource, permitting, and land use agencies
- new information identified and the assessment of its significance (with information that the applicant determines to be both new and significant submitted in the ER, as required by 10 CFR 51.50(c)(1)(iii)).

If the staff determines that new information that was not submitted is significant, it may send a request to the applicant to submit the information.

The NRC staff has explained the relationship between the environmental review of an ESP application and that of a COL application referencing the ESP by analogy to the environmental review process for license renewal. In fact, the process described above for a COL applicant referencing an ESP is consistent with the well-established process for license renewal. For additional information, the attributes of the process to identify "new and significant" information for license renewal applications are described in Regulatory Guide 4.2, Supplement 1, "Preparation of Supplemental Environmental Reports for Applications to Renew Nuclear Power Plant Operating Licenses," dated September 2000.

For matters resolved at the ESP stage, if there is no new and significant information for issues that were resolved in the ESP proceeding, the NRC staff will rely upon ("tier off") the ESP EIS, and will disclose its conclusion for matters covered in the environmental review for the ESP EIS. Toward that end, the

COL EIS will provide a summary discussion of the NRC staff's conclusion from the ESP EIS. This approach will ensure that the COL EIS is complete.

In addition, the initial burden to assess issues that were deferred to the COL application falls to the COL applicant. The COL applicant must provide sufficient information to resolve any significant environmental issue that was not resolved in the ESP proceeding. The information contained in the COL application should be sufficient to aid the NRC staff in developing its independent analysis (see 10 CFR 51.45).

Regarding the requirement in 10 CFR 51.50(c)(1)(i) to provide information "to demonstrate that the design of the facility falls within the site characteristics and design parameters specified in the early site permit," an applicant for a COL that references an ESP must provide in its ER the information that the NRC staff needs to perform the analyses required to be included in the COL EIS under § 51.92(e). This required demonstration involves providing actual design or site characteristics and showing that the actual values are bounded by the values assumed in the ESP. For example, if there was a design parameter in the ESP for a system flow of ≤ 5000 gpm, it would not be sufficient for the COL ER to include a simple statement that the actual flow is ≤ 5000 gpm. Rather, the ER should provide the actual system flow and show that it is bounded in a conservative direction by the flow value assumed in the ESP.

C.III.3.2 Finality of Environmental Issues Associated with a Design Certification or Manufacturing License

For environmental matters resolved in a design certification Environmental Assessment (EA) or a manufacturing license EA, the COL ER may incorporate by reference the EA previously prepared by the NRC for the referenced design certification or manufacturing license. If the previous EA is referenced, then the COL ER must contain information to demonstrate that the site characteristics for the combined license site fall within the site parameters in the design certification or manufacturing license EA.

For matters resolved at the design certification or manufacturing license stage, if the site characteristics for the COL site fall within the site parameters in the design certification or manufacturing license EA, then the NRC staff will rely upon ("tier off") the earlier EA, and will disclose its conclusion for matters covered in the environmental review for the design certification or manufacturing license. Toward that end, the COL EIS will provide a summary discussion of the NRC staff's conclusion from the earlier EA. This approach will ensure that the COL EIS is complete.