

February 5, 2003

Dr. Ronald L. Simard  
Nuclear Energy Institute (NEI)  
1776 I Street, NW, Suite 400  
Washington, DC 20006-3708

SUBJECT: RESOLUTION OF EARLY SITE PERMIT TOPIC 6 (ESP-6), USE OF PLANT  
PARAMETER ENVELOPE (PPE) APPROACH

Dear Dr. Simard:

The purpose of this letter is to inform you of the Nuclear Regulatory Commission's (NRC) understandings and expectations regarding the use of the plant parameter envelope (PPE) approach for the preparation and review of early site permit (ESP) applications. This topic, which is identified as ESP-6 on the list of Nuclear Energy Institute (NEI) generic ESP issues, was discussed during public meetings between July 17 and December 5, 2002. Subsequently, NEI documented its position on this topic in a letter dated December 20, 2002. The NRC staff agrees with NEI's position that ESP applicants may use the PPE approach as a surrogate for facility information to support required safety and environmental review subject to the observations and clarifications below. However, the staff does not concur with all of the statements and assumptions in the NEI white paper (Enclosure 1 to the subject letter).

1. ESP applicants may use the PPE approach as a surrogate for actual facility information to support required safety and environmental reviews. In NEI's August 1, 2002, letter, NEI indicated that the information listed in 10 CFR 52.17(a)(1)(i)-(viii) is not required. Should this information not be provided, it may complicate the staff review (i.e., resulting in increased review time) and have a bearing on the staff assumptions and associated staff findings.
2. The ESP application information that contains PPE values along with site investigation efforts (i.e., data and analyses) and existing information (i.e., data and analyses) must adequately address three areas - site safety, environmental impacts, and emergency preparedness.
3. No comment on Item 3 of the subject NEI letter.
4. The staff understands that PPE values may differ among the ESP applicants. It is the staff's expectation that margins applied to account for uncertainties in PPE values will be identified in the subject application in order to avoid any ambiguity or confusion with the NEI PPE worksheet information.
5. NEI has indicated that the PPE values will represent composite parameters that are not indicative of any specific reactor design or type. Although the bounding PPE values are intended for future use (i.e., during the combined license (COL) application), issuing an

ESP is an independent licensing action. As such, the NRC staff review will determine whether the PPE values are sufficient to enable the NRC staff to conduct its required review and that the PPE values are not unreasonable for consideration in the staff findings to comply with 10 CFR Part 52, Subpart A.

6. Given that PPE values do not reflect a specific design and will not be reviewed by the NRC staff for correctness, the granting of an ESP by the NRC does not indicate NRC approval of the site for any specific plant or type of plant. In addition to the emergency preparedness and environmental impact findings, site approval will be contingent on the staff's ability to make a finding, taking into consideration the site criteria contained in 10 CFR Part 100, that a reactor or reactors having characteristics that fall within the parameters for the site can be constructed and operated without undue risk to the health and safety of the public. This finding may result in conditions or limitations on the ESP in specific areas, as set forth in 10 CFR Section 52.24.
7. No comment on Item 7 of the subject NEI letter.
8. COL applicants who reference an ESP bear the risk that the design ultimately selected for the approved site might fall outside of the terms and conditions of the ESP.
9. The NRC review will be conducted using the review guidance cited in the Draft ESP Review Standard (ML023530045). The NRC review will result in safety and environmental impact determinations based upon the NRC's independent evaluation of the information provided in the ESP application, assumptions or limitations or both as established by the staff, as well as independent information developed by the staff. We agree that a combination of site characteristics and PPE values will comprise the ESP bases that will be the focus for comparison at COL with the design of the actual plant proposed for the site.
10. NEI's position regarding compliance with 10 CFR 52.17(a)(1) (Topic ESP-7) will be addressed in a separate staff response.
11. NEI's position regarding alternative site reviews (Topic ESP-18a) will be addressed in a separate staff response.

Please contact Ronaldo Jenkins, the ESP Senior Project Manager, at 301-415-2985 if you have any questions on this matter.

Sincerely,

*/RA/*

James E. Lyons, Director  
New Reactor Licensing Project Office  
Office of Nuclear Reactor Regulation

Project No. 689

cc: See next page

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/RA/

James E. Lyons, Director  
New Reactor Licensing Project Office  
Office of Nuclear Reactor Regulation

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**ACCESSION NO. ML030230071 \*See previous concurrence**

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Distribution for letter to R. Simard dated February 5, 2003

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ESP-Generic

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