

September 26, 2001

ORGANIZATION: Exelon Generation (Exelon)

SUBJECT: SUMMARY OF PRE-APPLICATION MEETING ON THE PEBBLE BED
MODULAR REACTOR TO DISCUSS CONTENT OF LICENSE
APPLICATION AND REVIEW PROCESS

On September 5, 2001, representatives of Exelon met with the Nuclear Regulatory Commission (NRC) to discuss the content of the license application and licensing review process for the Pebble Bed Modular Reactor (PBMR). Enclosure 1 is the meeting agenda; Enclosure 2 is a listing of the meeting attendees; and Enclosure 3 is a copy of the handouts provided by Exelon and Enclosure 4 is a copy of the handouts provided by the staff.

This meeting is expected to be the first in a series of interactions between Exelon and the staff to discuss the format and content of the PBMR combined license (COL) application and the staff review process. The goals of these interactions are to aid Exelon in submitting a high quality, complete safety analysis report (SAR) and to increase predictability in the review process.

Exelon began the discussion with a review of application regulations and SAR form and content for a COL application that references an early site permit (ESP). They requested that the staff notify them of any known changes to regulations that may affect their application. The staff mentioned the update to Part 52 and Part 2, Hearing Process, as possible regulations. Exelon provided a list of areas that would be included in the SAR. The staff discussed where these areas usually are located in the SAR and added other areas that are included in the SAR, such as addressing generic safety issues. Exelon is interested in exploring an alternative SAR format to Regulatory Guide (RG) 1.70, "Standard Format and Content of the Safety Analysis Report for Nuclear Power Plants - Light Water Reactor Edition." An example Exelon used was a DOE document that developed a new report format for a gas-cooled reactor (DOE-HTGR-100221, "Detailed Outline for the GT-MHR PSSAR" August 1994). Exelon has the action to verify if this document is publicly available. The staff informed Exelon that following RG 1.70 was not required and that it is understood that even if they followed the basic guidance that some existing sections would not apply and other new sections would be added for a gas-cooled reactor design. The staff also discussed lessons learned from a previous review of a new SAR format which caused additional time for staff review. This was discussed as a factor for Exelon to consider due to their proposed expedited review schedule. Additionally, there was discussion on the media that could be used for an application. The staff discussed the option of an electronic application. Both the staff and Exelon have an action to explore software options that are available and have been successful for past applications, particularly for drawings.

The staff presented information on the role of inspections, tests, analyses and acceptance criteria (ITAAC) for a COL application. The staff stated that all three previous design

certifications used similar ITAAC structure, which was a systems-based approach. In using this approach, the majority of ITAAC are not completed until near the end of construction. The staff informed Exelon that they were flexible in how an applicant approached ITAAC and that Exelon could choose another method for completing ITAAC.

The staff led the discussions for the expectations for application quality and project management of the review process. The presentation supplied Exelon with guidance on the issues such as the application, responding to requests for additional information, submitting proprietary information, scheduling, and changes to the SAR. The staff provided information on meetings and requests for additional information for the COL and ESP review processes. Many of the discussion items were based on experience gained from design certification, license renewal, and dry cask storage reviews. The staff has an action to provide Exelon with the current ESP guidance on notifying the staff.

Exelon expressed interested in knowing how often the Advisory Committee on Reactor Safeguards (ACRS) would be interested in meeting during the PBMR review. The staff informed Exelon that the number of meetings was determined by the ACRS members and the number of issues that arose. Exelon has an action to provide the ACRS with copies of the August 30, 2001, letter which transmitted an informational overview of the PBMR.

/RA/

Diane T. Jackson, Project Manager
New Reactor Licensing Project Office
Office of Nuclear Reactor Regulation

Project No. 713

Enclosures: As stated (4)

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Proposed Agenda
Exelon/NRC Meeting on Licensing Application Content and Review
for the Pebble Bed Modular Reactor
September 5, 2001

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| 1. Introductory Remarks/Meeting Objectives | NRC/Exelon |
| 2. Application Regulations | Exelon |
| 3. Form and Content of Safety Analysis Report | Exelon/NRC |
| 4. Role of ITAAC | NRC |
| 5. Quality of Applications | NRC |
| 6. Application Review - Project Management | NRC |

Meeting Attendees
Meeting with Exelon Licensing Application Content and Review
for the Pebble Bed Modular Reactor
September 5, 2001

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