

September 9, 2002

Kevin Borton, Licensing Manager  
Exelon Generation  
200 Exelon Way  
Kennett Square, Pennsylvania 19348

SUBJECT: EXELON CLOSEOUT SUBMITTALS ASSOCIATED WITH THE PEBBLE BED  
MODULAR REACTOR (PBMR) PRE-APPLICATION REVIEW

Dear Mr. Borton:

The purpose of this letter is to inform you that Project 713 (Exelon Pebble Bed Modular Reactor [PBMR]) is officially closed.

The final public meeting between the United States Nuclear Regulatory Commission (USNRC) staff and Exelon Generation on the PBMR pre-application review was conducted on May 16, 2002. At that meeting, Exelon discussed its plans for closure of PBMR pre-application review activities. Among the final closure activities were Exelon's plans to formally submit several technical documents. These documents included: (1) information addressing issues in the D. A. Powers trip report for the "High-Temperature Gas-Cooled Reactor Safety and Research Issues Workshop," (2) a complete summary of pre-application review activities and correspondence, (3) an Exelon position paper on PBMR containment and, (4) a summary of historical German fuel testing. In addition to closure of Project 713, we acknowledge receipt of these documents, and have included them as part of the record of correspondence within Project 713.

Each of the reference letters (see attached) states that the submittal is provided for information only, and not for NRC review and comment. Accordingly, the NRC staff did not perform a detailed technical review of these documents. However, as was explained at the May 16 meeting, the staff planned to conduct, and has conducted, a limited screening review of these documents. The purpose of the screening review was to ensure that the issues, review status, and views and positions noted within the documents, were consistent with our views and

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understanding. Based on this limited review, the staff identified four instances in Reference 4 which warrant clarification as provided in the enclosure to this letter.

Please contact me (301-415-7499) or Stuart Rubin (301-415-7480) if you have any questions on the enclosure.

Sincerely,

*/RA/*

Farouk Eltawila, Director  
Division of Systems Analysis and Regulatory Effectiveness  
Office of Nuclear Regulatory Research

Enclosures: As stated

cc w/encls: Standard Service List Addresses

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Farouk Eltawila, Director  
Division of Systems Analysis and Regulatory Effectiveness  
Office of Nuclear Regulatory Research

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DATE	08/29/02*	08/29/02*	09/09/02*
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REFERENCES

1. K. Borton, Exelon Generation, letter to USNRC, "Submittal of Historical Fuel Qualification Process Document," dated May 30, 2002.
2. Kevin Borton, Exelon Generation, letter to USNRC, "Submittal of Pebble Bed Modular Reactor Containment Design Position Paper," dated May 31, 2002.
3. Kevin Borton, Exelon Generation, letter to USNRC, "Submittal of Position Paper Addressing Significant Observations and Conclusions in D. A. Powers Trip Report Covering the 'High-Temperature Gas-Cooled Reactor Safety and Research Issues Workshop,' Held October 10-12, 2001," dated June 3, 2002.
4. Kevin Borton, Exelon Generation, letter to USNRC, "Submittal of Pebble Bed Modular Reactor US Pre-application Review Activities Summary," dated July 22, 2002.

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Letter dated: 09/09/02

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MODULAR REACTOR (PBMR) PRE-APPLICATION REVIEW

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ACRS  
JDunn-Lee, IP  
JMoore, OGC  
MVirgilio, NMSS

## NRC Clarification of Statements in Reference 4

### Area 2 - Merchant, Multi-Module Plant Licensing

On page 7, the first sentence in the first paragraph states:

“The NRC indicated that there are substantial doubts whether the NRC has the authority to treat multi-module reactor plants as one facility, and would approve exemptions for that purpose.”

Clarification comment: We have not identified any statements in the PBMR pre-application correspondence or in the transcript of the March 27, 2002, public workshop related to this issue, where the NRC stated that they would approve exemptions to the financial protection requirements.

### Area 10 - PBMR Source Term

On page 25, the last sentence of this section states:

“The NRC did not provide any specific findings regarding PBMR source terms; however, during discussions the NRC indicated that source terms for advanced plant designs would need to be developed mechanistically.”

Clarification comment: No decision has been made regarding the use of scenario-specific (mechanistic) source terms for non-light water reactor designs. As discussed in SECY-02-139, “Plan for Resolving Policy Issues Related to Licensing Non-Light Water Reactor Designs,” dated July 22, 2002, the staff is currently evaluating this issue and will provide an evaluation of the issue, options for resolution and a recommendation to the Commission for its consideration and guidance.

### Area 12 - Required Testing

On page 26, the first sentence of this section states:

“The NRC has proposed to revise 10 CFR 52 to, in part, address required COL prototype testing for advanced reactors similar to the current provisions for DC.”

Clarification comment: The proposed rule addresses testing requirements for COLs in general and is not limited to prototype testing.

On page 27, the next to the last sentence in the last paragraph of this section states:

“The NRC did indicate during discussions that a multi-module facility COL application might be viewed to be similar to a DC application due to the extended length of time over which all the modules would be constructed.”

Clarification comment: We have not identified any statements in the PBMR pre-application correspondence or recall meeting discussions in which the staff expressed the view that a multi-module facility COL application might be viewed to be similar to a design certification application due to the facility construction time.