

June 4, 2002

ORGANIZATION: Multiple

SUBJECT: SUMMARY OF WORKSHOP ON SECY-01-0207, "LEGAL AND FINANCIAL ISSUES RELATED TO EXELON'S PEBBLE BED MODULAR REACTOR (PBMR)"

The New Reactor Licensing Project Office held a public workshop on March 27, 2002, to discuss the preliminary staff positions presented in SECY-01-0207, "Legal and Financial Issues Related to Exelon's Pebble Bed Modular Reactor (PBMR)," dated November 20, 2002, and to solicit feedback from external stakeholders on these issues. The workshop was held in the TWFN Auditorium from 1:00 p.m. to 5:00 p.m. on March 27, 2002. Workshop topics included: (1) number of licenses for a facility with multiple reactors; (2) annual fee requirements; (3) testing of new design features for combined license; (4) fuel cycle issues; (5) financial protection requirements; (6) antitrust review requirements; (7) financial qualifications; (8) operator staffing requirements; and (9) decommissioning funding. The workshop agenda and SECY-01-0207 were made available on the NRC web page prior to the workshop to facilitate public participation.

For each of the agenda topics, the NRC staff discussed the preliminary staff position on the issue. The remainder of the allotted time for each topic was then used for an open dialogue among all workshop participants providing an opportunity for the NRC staff to obtain stakeholder feedback on the issues and preliminary positions presented in SECY-01-0207.

The workshop was attended by 29 non-NRC participants. Enclosure 1 is a list of meeting attendees; Enclosure 2 is a summary of the areas of interest identified during the workshop; Enclosure 3 is the workshop presentation materials; and Enclosure 4 is the transcript of the workshop.

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Enclosures: As stated

cc w/encls: See next page

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EXELON'S PEBBLE BED MODULAR REACTOR (PBMR)"**

MARCH 27, 2002

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Summary of Workshop Areas of Interest

(1) Number of licenses for a facility with multiple reactors:

A number of comments were made related to this topic. Ron Simard, Nuclear Energy Institute (NEI), informed the staff that NEI will be submitting a white paper which will take an integrated approach to addressing this issue and several other issues discussed in SECY-01-0207, "Legal and Financial Issues Related to Exelon's Pebble Bed Modular Reactor (PBMR)," on a more generic basis. In response to the preliminary staff position that the duration of design approval for a single combined license (COL) should be limited to 5 years, NEI and Exelon expressed concerns as to the ability to standardize the modules at a facility. James Riccio, Greenpeace, indicated that the NRC needs flexibility to backfit the design since the PBMR does not have any operating experience.

(2) Annual fee requirements:

The staff informed stakeholders that a proposed fee rule was published in the *Federal Register* on March 27, 2002, and the public comment period on this proposed rule would be 30 days. Kevin Borton, Exelon, indicated that Exelon agrees with the staff position on this issue. There were no other stakeholder comments related to this issue.

(3) Testing of new design features for combined license:

This topic generated the most discussion at the workshop. Russell Bell, NEI, expressed strong disagreement with the staff position that necessary testing should be completed prior to issuance of a COL. James Riccio, Greenpeace indicated that it would be prudent to test the design before attempting to build it and referenced a trip report by Dana Powers of the Advisory Committee on Reactor Safety (ACRS) (ADAMS Accession Number ML01365004) which calls into question the licensibility of this reactor design. Stuart Rubin, NRC/RES provided further clarification on the referenced trip report. Ron Simard, NEI, in response to James Riccio, stated that the design would not go into commercial operation without a thorough demonstration of the unique, new safety features through test or design. He stated that the issue is whether this is required before issuance of the license or as part of the startup and operation as has been done in the past. Kevin Borton, Exelon, agreed with the NEI position and stated that testing would be confirmatory in nature. Laurence Parme, General Atomics also agreed with the NEI position on this issue. Jerry Wilson, NRC/NRR, stated that the NRC has released draft rule language for a revision to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52 on the NRC rulemaking web site. He also stated that a proposed rule will be issued for public comment.

(4) Fuel cycle issues:

Fuel Cycle Impacts: Tables S3 and S4 in 10 CFR 51.51 and 51.52

Ron Simard, NEI, agreed with the staff position that it is premature to undertake rulemaking on the environmental impacts of gas-cooled technologies until there is more experience in this area. He stated his understanding that the environmental report for the an early site permit would bound the environmental impacts, and that a COL applicant would demonstrate that the

environmental impacts for a particular design would be bounded by the information provided in the early site permit application.

Fuel Cycle Impacts: Waste Confidence Rule in 10 CFR 51.23

Kevin Borton, Exelon, agreed that PBMR fuel is covered by 10 CFR 51.23. He raised an issue regarding the timing of licensing fresh fuel casks and spent fuel casks relative to an application for a COL. He said that Exelon would like to have further discussions with NMSS related to this issue.

(5) Operator staffing requirements:

Kevin Borton, Exelon, said that he understood that Exelon would have to justify any exemptions from operator staffing regulations, and that there was ample guidance in this area in the current regulatory framework.

Ed Lyman, Nuclear Control Institute, stated that he approved of the staff's caution in this area. He cautioned that the performance of demonstrations on simulators is going to be a key element in justifying any proposals for reduced staffing and that the selection of accidents and transients simulated will be important.

(6) Financial protection requirements:

Janice Moore, OGC, stated that Congress has undertaken legislation to amend the Price-Anderson Act to assure that multiple modules at a single site are treated as one facility.

Ron Simard, NEI, stated that if the House and Senate agree on the language, the NRC would need to make a conforming change to 10 CFR Part 140 to resolve this issue. Janice Moore, OGC, agreed that NRC rulemaking would be required and the exact nature and scope of the rulemaking would be decided later depending on the language approved by Congress.

Ed Lyman, Nuclear Control Institute, stated his organization's opposition to this provision because there is no technical basis right now for concluding that it is appropriate to reduce the insurance requirements for modular based on a reduction in power level. He also stated that the existing assessment is probably at least ten times too small to cover the real damage from a beyond design basis nuclear accident.

(7) Antitrust review requirements:

Ron Simard, NEI, stated that there appears to be a sound basis for eliminating the NRC antitrust review given the oversight that exists among the NRC, the Department of Justice (DOJ), and the Federal Trade Commission (FTC). He said that he hoped that a resolution could be put in place in time to support the first application for a COL.

(8) Financial qualifications:

Ron Simard, NEI, stated that it is not necessary for NRC rulemaking in this area to support the first COL applications. He said that there is enough flexibility in the current alternatives, and that seems prudent to wait until there is more experience before engaging in rulemaking.

James Riccio, Greenpeace, stated that in the post-Enron environment, the NRC should not be waiving any financial requirements. He said that the public would be well served if the NRC requires that financial requirements be met and does not exempt any merchant plant from that requirement.

John Matthews, Morgan Lewis, said that he thought it would be appropriate to consider rulemaking in the future and entities with investment grade bond ratings are presumptively as financially qualified as many electric utilities that would be exempted from existing financial qualifications regulations.

(9) Decommissioning funding:

Jim Riccio, Greenpeace, asked whether the NRC has considered having Exelon or new applicants front load the decommissioning fund given the limited operating experience with gas cooled reactors. Michael Dusaniwkyj, NRC, stated that by taking away the sinking fund option the NRC is essentially requiring that the funds be made available up front.

Ron Simard, NEI, indicated that of the six available options for decommissioning funding, industry is considering pursuing the surety bond option with insurance providers. He said the objective is to make sure that there are sufficient funds available.

Rod Krich, Exelon, indicated that the decommissioning costs for a PBMR module would be about \$20,000,000, and that Exelon is looking at other alternatives for decommissioning funding to propose to the NRC.

Enclosures 3 and 4

Handouts and Meeting Transcripts

The NRC maintains an Agencywide Documents Access and Management System (ADAMS), which provides text and image files of NRC's public documents. The handouts and transcripts mentioned above may be accessed through the ADAMS system under Accession Nos. ML021000492 and ML021000425. If you do not have access to ADAMS or if there are problems in accessing the handouts located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737 or by e-mail to pdr@nrc.gov.

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