

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE COMMISSION**

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In the Matter of

Exelon Nuclear Texas Holdings, LLC  
(Victoria County Station, Units 1 and 2)

Docket Nos. 52-031 COL and 52-032 COL

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**NUCLEAR INFORMATION AND RESOURCE SERVICE, BEYOND NUCLEAR AND  
PUBLIC CITIZEN'S ENERGY PROGRAM'S RESPONSE TO  
TEXANS FOR A SOUND ENERGY POLICY'S PETITION TO  
HOLD DOCKETING DECISION AND/OR HEARING NOTICE FOR VICTORIA  
COMBINED LICENSE APPLICATION IN ABEYANCE  
PENDING COMPLETION OF RULEMAKING ON  
DESIGN CERTIFICATION APPLICATION FOR  
ECONOMICALLY SIMPLIFIED BOILING WATER REACTOR**

Now comes Nuclear Information and Resource Service, Beyond Nuclear and Public Citizen's Energy Program (Joint Petitioners) with a Response to the Texans for a Sound Energy Policy's Petition to Hold Docketing Decision And/or Hearing Notice for Victoria Combined License Application in Abeyance Pending Completion of Rulemaking on Design Certification Application for Economically Simplified Boiling Water Reactor (the "Petition"), filed with the Commission on November 3, 2008.

Joint Petitioners support the Petition and offers the following:

1. Joint Petitioners are petitioners, intervenors or prospective intervenors in the applications for early site permits and/or combined operating license applications ("COLAs") for the following

proposed nuclear reactors: UniStar Nuclear's Calvert Cliffs and Nine Mile Point, Ameren's Callaway and Pennsylvania Power & Light's Bell Bend. Each of these proposed reactors has incorporated the Areva EPR reactor by reference.

2. In its Petition, the Texans for a Sound Energy Policy compellingly argues that the manner in which the NRC Staff proposes to conduct the licensing proceeding for the proposed Victoria nuclear power plant violates the Atomic Energy Act, the NRC Part 52 Regulations and the Administrative Procedures Act requirements for fair hearing. These same arguments go beyond the proposed Victoria nuclear power plant, and beyond all of the other General Electric Economically Simplified Boiling Water Reactor ("ESBWRs"), to include other uncertified reactors, such as the Areva EPR reactors. The licensing proceedings for all of these nuclear power plants are premised on an unworkable policy that the COLAs for proposed reactors can be reviewed without a final, certified design.<sup>1</sup>

3. Similar to the ESBWRs proposed at Exelon's Victoria nuclear power plant, the final design for the EPR reactors has not been completed and reviewed by the NRC staff, and neither the ESBWR nor the EPR designs have been finally certified. As a result, the most significant elements of the proposed reactors, i.e., the design and operational practices, are lacking in the COLA.

4. The EPR design was submitted to the NRC by AREVA NP on December 11, 2007, and supplemented by AREVA on February 7, 2008, and February 18, 2008. The Standard Design

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<sup>1</sup> [www.nrc.gov/reactors/new-reactors/new-licensing-files/new-rx-licensing-app-legend.pdf](http://www.nrc.gov/reactors/new-reactors/new-licensing-files/new-rx-licensing-app-legend.pdf) (October 22, 2008)

Certification for the U.S. EPR is the subject of an ongoing rulemaking under docket number 52–020 with an estimated completion date for certification of notice-and-comment rulemaking in mid-2011.

5. Joint Petitioners, and members of the public, have not been able to adequately review the various COLAs that have referenced the EPR design. There are numerous unresolved issues involved in the EPR design. Even the NRC’s initial review of the design certification documents resulted in these comments from the NRC staff on March 26, 2008:

1. The U.S. EPR design does not rely on active containment cooling systems for post-accident containment mixing. As a result, to adequately justify the level of mixing in the containment and the level of steam condensation in the reactor coolant system credited in the post-accident analysis, the staff anticipates requesting additional information which may require long lead items to properly address the issue.
2. The proposed use of earthquake experience and/or test experience approach for seismic and dynamic qualification of mechanical and electrical equipment is highly dependent on the selection of equipment and the type of experience database proposed. AREVA will be requested to submit the database and the equipment to be qualified. Based on past experience with similar applications, it has taken longer than anticipated to complete the review. If AREVA chooses to proceed with this approach the scheduled may be impacted.
3. AREVA has proposed to use M5™ cladding material for the U.S. EPR fuel. M5™ fuel cladding material has exhibited unanticipated axial growth in current operating plants. Resolution of this issue and its impact on EPR design is unknown.
4. AREVA has submitted four topical reports that are incorporated by reference in the accident analyses and fuel design chapters of the U.S. EPR Final Safety Analysis Report. If issues arise regarding the use of new methodologies in these topical reports, they may impact the review schedule.
5. The staff will require additional information to address emergency core cooling system strainer downstream effects on post-loss-of-coolant accident long-term core cooling with recirculation flow. Based on past experience with operating plants, resolution of this issue may take longer than anticipated. This is an industry-wide issue and the resolution of it is uncertain.

These are all significant safety-related items that must be resolved prior to even the initial determination that an application is complete and ready to be docketed, let alone the final granting of a license. Other unresolved items are likely to be determined upon further review of

the EPR design certification documents. We note that one knowledgeable independent assessment of the EPR design predicts that only 70% of the detailed design documents will even be complete by the “first safety-related concrete pour” of the proposed Calvert Cliffs-3 reactor.<sup>2</sup> If this assessment is correct, the apparent intent to begin construction of an EPR without completed designs would appear to defeat the purpose both of design certification and of a COLA based on a certified design, as well as the hearing rights of Joint Petitioners.

7. What is at the heart of the certification problem is that members of the public, the petitioners in license proceedings, are given sixty days to review the voluminous site permit applications or COLAs, and then are required to raise valid contentions about inadequacies in the applications without having a final design in place. For several of the COLAs, the EPR reactors will have changed after that sixty-day time period has run, and for all of the above-listed reactors, the final design is still unknown. Design related issues cannot be removed from COLA adjudications.

8. In conclusion, Joint Petitioners explicitly request that the Petition by the Texans for a Sound Energy Policy be granted, and that the precedent in that Petition be carried over to the licensing proceedings for which the EPR is the reference design.

This is the 18th day of November 2008.

\_\_\_\_\_/s/\_\_\_\_\_  
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<sup>2</sup> Standard & Poor’s, “Construction Costs To Soar For New U.S. Nuclear Power Plants,” October 15, 2008

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## **CERTIFICATE OF SERVICE**

It is my understanding that all on the Calvert Cliffs-3 service list are receiving this motion through the submission I am making on November 18, 2008 via the EIE system.

**JOINT PETITIONERS RESPONSE TO TEXANS FOR A SOUND ENERGY POLICY'S PETITION TO HOLD DOCKETING DECISION AND/OR HEARING NOTICE FOR VICTORIA COMBINED LICENSE APPLICATION IN ABEYANCE PENDING COMPLETION OF RULEMAKING ON DESIGN CERTIFICATION APPLICATION FOR ECONOMICALLY SIMPLIFIED BOILING WATER REACTOR.**

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