## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

#### BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

Docket No. 52-016

Calvert Cliffs-3 Nuclear Power Plant Combined Construction and License Application

# JOINT INTERVENORS' MEMORANDUM IN REPLY TO OPPOSITIONS TO ADMISSION OF NEW CONTENTION

NOTE: This version of this memorandum corrects two minor issues from the memorandum submitted on September 13, 2011. Specifically, this version slightly changes the sentence in the text associated with footnote 1 and corrects the date of the *Union Electric* (CLI-11-05) case to September 9, 2011.

Pursuant to 10 C.F.R. § 2.309(h)(2), Joint Intervenors hereby reply to the oppositions submitted by the applicant, UniStar Nuclear, and the U.S. Nuclear Regulatory Commission ("NRC") Staff to Joint Intervenors' new contention 11 seeking consideration of the environmental implications of the Fukushima Task Force Report. Joint Intervenors respectfully submit that the arguments by applicant and the NRC Staff regarding the timeliness and admissibility of the contention are without merit and the contention should be admitted.

The arguments raised by the applicant and the NRC Staff in response to Joint Intervenors' contention are similar or identical to arguments made by the applicant and staff in response to Fukushima Task Force Report-related contentions that were filed in other reactor licensing proceedings on the same day. Joint Intervenors attach and incorporate by reference the attached Reply Memorandum, which addresses the most common arguments that are made in the responses and was prepared by counsel for intervenors in several of the cases.<sup>1</sup> The Reply Memorandum also discusses the effect of the NRC Commissioners' recent decision regarding the Emergency Petition that was submitted by Joint Intervenors and many other intervenors and petitioners in April 2011. *Union Electric Co., d/b/a/ Ameren Missouri* (Callaway Plant, Unit 2) et al., CLI-11-05, NRC (Sept. 9, 2011) ("CLI-11-05").<sup>2</sup>

In addition, Intervenors hereby reply to arguments by the applicant and NRC Staff that Contention 11 is not specific enough to the Calvert Cliffs-3 application and the FEIS for this application. It is our fundamental contention that the entire FEIS and the entire application do not reflect the real-world implications of the Fukushima disaster and that, in particular, NEPA requires that the FEIS do so.

The application, of course, was first submitted in 2007-2008. The most recent revision (Rev. 7) was submitted in December 2010. Thus, the application naturally does

<sup>&</sup>lt;sup>1</sup> The Reply Memorandum was prepared by Diane Curran (counsel for the intervenor in the Diablo Canyon license renewal proceeding and Watts Bar operating license proceeding), Mindy Goldstein (counsel for some of the intervenors in the Vogtle and Turkey Point COL proceedings), and Jason Totoui (counsel for some of the intervenors in the Turkey Point COL proceeding).

<sup>&</sup>lt;sup>2</sup> Because the applicant and the NRC Staff have not had an opportunity to address the effect of CLI-11-05 on the timeliness and admissibility of Joint Intervenors' contention, we would not object to a response by the applicant and the Staff to their arguments regarding the relevance of CLI-11-05 to their contention.

not reflect events that began in March 2011 and continue today, nor does it reflect the July 2011 Fukushima Task Force Report.

Similarly, the FEIS, while completed in April 2011, was based on the DEIS completed in April 2010 and public comments received during May and June, 2010. Thus, it does not reflect events that began in mid-March 2011 and continue today, nor do they reflect the July 2011 Fukushima Task Force Report.

While Joint Intervenors did not point to specific page numbers in the application and FEIS in filing our initial contention, we believe we offered sufficient specificity in this passage of our contention:

"Moreover, the Task Force's recommendation that the scope of mandatory safety regulations be expanded to include severe accidents raises significant environmental concerns in this proceeding, including that (1) the risks of operating the proposed Calvert Cliffs-3 reactor are higher than estimated in the Final Environmental Impact Statement for the Combined License (COL) for Calvert Cliffs Nuclear Power Plant Unit 3 (NUREG-1936, May 2011) (the "EIS"), and (2) the NRC's previous environmental analysis of the relative costs and benefits of severe accident mitigation alternatives ("SAMAs") is fundamentally inadequate because those measures are, in fact, necessary to assure adequate protection of the public health and safety and, therefore, should be imposed without regard to their cost."<sup>3</sup>

The Applicant argues that "...the Intervenors make no attempt to show that these issues have not been considered in the U.S. EPR design or in the Calvert Cliffs COL or

<sup>&</sup>lt;sup>3</sup> Joint Intervenors' filing of Contention 11, August 11, 2011, pages 2-3.

FEIS...<sup>94</sup> "These issues" refers to issues raised by the NRC's Fukushima Task Force and include issues such as station blackout, hardened containment venting, emergency response capability, etc.

Joint Intervenors agree that hardened containment venting, which applies only to General Electric Boiling Water Reactors, does not apply in this case. The other issues certainly do apply. And, as we stated above, the Calvert Cliffs COL and the FEIS could not have considered them, because they were prepared and for the most part submitted before the events that began March 11, 2011 even occurred. Of course they have not been considered in either document (nor in the EPR design certification, for that matter).

The Applicant then provides a list of portions of the application that deal with the station blackout issue, which certainly suggests an agreement that the issue is relevant. But the Applicant does not state that any of these portions reflect the lessons learned from the Fukushima accident or the Fukushima Task Force Report, nor what changes to them may be required because of those lessons learned. This is precisely our point in submitting this contention: this fundamental work has not yet been incorporated into this application and proceeding and the FEIS in particular must be revised to incorporate the lessons learned.

The Applicant also argues that Contention 11 presents no new information about seismic or flooding risk at Calvert Cliffs.<sup>5</sup> But safety concerns prompted by station blackout, for example, are not contingent on seismic activity or flooding—station blackout can occur from any one of a multitude of scenarios, from large solar flares to a squirrel eating into a transmission line (the root cause of the most recent large-scale U.S.

<sup>&</sup>lt;sup>4</sup> UniStar Response to Proposed Contention 11, September 6, 2011, page 16

<sup>&</sup>lt;sup>5</sup> Ibid, page 15.

blackout). What is new--what is a lesson from Fukushima--are the potential effects of a prolonged station blackout. This is no longer a hypothetical scenario, it is a real one and merits serious attention. The same holds true for the other issues identified in the Fukushima Task Force Report and our Contention 11.

Moreover, since Joint Intervenors submitted Contention 11, we have experienced a major earthquake in the Mid-Atlantic States that according to initial USGS and NRC evaluations triggered ground motion approximately double that which the North Anna nuclear power station closest to the epicenter was designed to withstand. The implications of this earthquake on seismic standards for all U.S. reactors, and especially those, like Calvert Cliffs, relatively close to the epicenter, are not yet fully understood but are likely to be significant and at the least certainly provide substantial new information about seismic risk in our region.

In addition, since Joint Intervenors submitted Contention 11, we have experienced Hurricane Irene, which caused an unexpected scram of one of the existing Calvert Cliffs reactors, raising additional safety concerns. Natural disasters are not limited to the Japanese coastline.

While perhaps these events should form the basis of another new contention, we suggest that they also fall into the broader concerns addressed by Contention 11 and simply reflect additional urgency for a revision of the FEIS and COL as outlined in Contention 11.

Finally, the Applicant makes this remarkable argument: "The only basis offered for filing the New Contention at this time is the issuance of the Task Force Report. However, contentions related to the adequacy of the FEIS discussions of design basis accidents or severe accidents, or the adequacy of SAMDAs considered in the U.S. EPR design, could (and should) have been submitted as part of an initial petition to intervene or following issuance of the DEIS and FEIS."<sup>6</sup>

In fact, the Task Force Report is based on the real life nuclear meltdowns at Fukushima; which have been of considerable consequence to the entire world. As such, the Report holds perhaps greater import than the average NRC report. Moreover, because the meltdowns took place in March 2011 and the Task Force Report was issued in July 2011, it would have been astonishingly prescient for Joint Intervenors to have been able to submit this as a contention as part of our initial petition to intervene, filed in November 2008, or following issuance of the DEIS and FEIS, both filed before July 2011. We are Joint Intervenors, not Seers.

Respectfully submitted this 13th day of September 2011,

Signed Electronically by Michael Mariotte Executive Director Nuclear Information and Resource Service 6930 Carroll Avenue, Suite 340 Takoma Park, MD 20912 301-270-6477 nirsnet@nirs.org

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<sup>&</sup>lt;sup>6</sup> Ibid, page 18

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#### **CERTIFICATE OF SERVICE**

It is our understanding that all on the Calvert Cliffs-3 service list are receiving this motion through the submission I am making on September 13, 2011 via the EIE system.

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