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 OPPOSITION TO NRC STAFF MOTION *IN LIMINE*

Joint Intervenors oppose the NRC Staff Motion *In Limine* to exclude portions of our direct and rebuttal testimony and exhibits and to strike portions our rebuttal statement of position.

In a conversation with NRC counsel prior to filing of the NRC's motion, Joint Intervenors did agree to exclude and/or strike several passages in testimony and rebuttal position statement identified by the NRC as outside the scope of the hearing.

However, we believe the remaining items meet the standards of 10 CFR 2.337. They are relevant, material, reliable, not unduly repetitious and within the scope of this Contention.

NRC staff has placed the items they wish to strike into six categories. We address these in order.

1. Energy Production Outside the Region of Interest

NRC staff argues "'The purpose and need for the proposed NRC action is to provide for additional large baseload electrical generating capacity within the State of Maryland.'…Thus, the Joint Intervenors' discussion of electric generation potential outside of Maryland cannot inform a reasonable alternative, as it would, by definition, be outside the purpose and need of the proposed action."[1]

NRC mischaracterizes the purpose and need of the proposed Calvert Cliffs-3 reactor as simply being a "large baseload" power plant physically located with the State of Maryland rather than an entity that would provide electrical power to the State of Maryland. There is simply no basis for an argument that there is a need for a power plant, baseload or otherwise, physically located in Maryland that provides no power for Maryland. If that is what NRC is asserting, Joint Intervenors will certainly challenge the entire purpose and need for the project. It is obvious that the stated purpose and need imply that the electricity generated by this proposed project would provide power to Maryland and thus a benefit to Maryland.

As Joint Intervenors discuss on pages 17-19 of our rebuttal statement of position (and we note NRC has not attempted to strike most of this discussion), "Applicants have made no commitment to provide power within Maryland" and indeed acknowledge that their sales of power would be made on the wholesale market without consideration to traditional service areas.

[1] NRC Motion in Limine, page 4

NRC and Applicants seem to want it both ways. On one hand, they argue that Joint Intervenors cannot reference any potential solar and wind alternatives to Calvert Cliffs-3 produced outside of Maryland. On the other hand, there is no argument presented and thus no basis in fact that would indicate any power at all from Calvert Cliffs-3 would be provided within Maryland.

Absent any factual indication that the electricity, or even some percentage of the electricity, from Calvert Cliffs-3 would be sold within Maryland and provided to Maryland customers, we can find no justification for limiting the discussion of alternatives to Calvert Cliffs-3 to those entities physically located in the State of Maryland.

Joint Intervenors are willing to argue the issue either way—as long as the standard is the same for the competing power sources. Either we are discussing Maryland only, or we are discussing the PJM grid that services Maryland. It is simply specious for NRC to argue that for the alternatives to Calvert Cliffs-3 we are discussing Maryland only, but for Calvert Cliffs-3 we are discussing the much larger wholesale market Applicants explicitly state is their region of interest, which is, in fact, the PJM grid referenced in our expert testimony and rebuttal statement of position.

Thus, the items in this section that we have not already agreed to strike should be retained.

2. Alternatives Other than Wind and Solar

We have agreed to several of the NRC-requested deletions under this section as outside the scope of this Contention. The remaining items are intended by Joint Intervenors not as an attempt to add additional renewable technologies to the potential contributions of wind and solar, but rather to demonstrate how various renewable and efficiency technologies act together to provide functional equivalence of baseload power.

NRC agrees that the issue of baseload power is relevant to this Contention. Thus, some understanding of how renewables and efficiency work together to provide baseload equivalence is appropriate. While the scope of the Contention is indeed limited to the understated contributions of solar and wind power, that does not mean that there is no contribution at all from other renewables and efficiency (and indeed the FEIS itself does include some discussion of these). We are not arguing in the context of this Contention that these are understated in the FEIS (although they probably are), we are simply trying to show how they, which the FEIS acknowledges will exist, help meet the criteria for baseload power. Thus, the sections that we did not agree to strike should remain.

3. Back-up Power

As noted above, NRC agrees that the issue of baseload power is relevant to this Contention. NRC and Applicants argue that solar and wind cannot provide baseload power. Thus, a portion of our expert testimony and our position statement argues that solar and wind, especially when combined with other technologies, can indeed provide baseload power—or at least the functional equivalence of baseload power under any rational definition.

However, since baseload power is relevant, it also becomes incumbent to examine the assertion that Calvert Cliffs-3 would provide baseload power. It is insufficient to simply accept this assertion without examination. If it would not provide baseload power, then there is no rationale to accept the argument that its power must be replaced with baseload power.

Our expert testimony and position statement thus address the issue of whether Calvert Cliffs-3 would, in fact, provide baseload power. And we argue that it does not. Part of our argument hinges on the fact that Applicants do not own or operate any other power plants of any kind, and thus cannot replace the electricity lost when Calvert Cliffs-3 is not operating due to refueling, maintenance or unanticipated problems, which historically are frequent with new reactor designs such as the EPR design Calvert Cliffs-3 would use. This testimony, therefore, should remain.

4. Alleged Violation of the Maryland Renewable Portfolio Standard

Joint Intervenors, quite frankly, have a difficult time even understanding the NRC's objection to the statements we make under this section.

We do not allege that Maryland utilities will be in non-compliance with the Maryland Renewable Portfolio Standard (MRPS), as NRC seems to imply on page 8 of its Motion. To the contrary, it is the NRC's FEIS that tacitly assumes Maryland utilities will be in non-compliance with the MRPS, and we are pointing out that a federal Environmental Impact Statement cannot base its case based on an assumption that a State law will not be complied with.

In this case, the MRPS mandates that 20% of Maryland's electricity be produced by renewable energy by 2022, of which 2% of the state's electricity must be provided by solar power. Joint Intervenors assume the law will be complied with. And if the law is complied with, far more solar power—and almost certainly wind power—will be produced in Maryland than the FEIS indicates. By assuming far less solar and wind power will be produced in Maryland than the MRPS mandates, it is the NRC that clearly assumes the law will not be complied with.

Although it does not include a specific carve-out for wind power as it does for solar power, the MRPS specifically includes wind power as one of the renewable technologies to be used to meet the remaining 18% mandate (i.e. that portion above the 2% solar mandate) and, in practical terms, wind power is the technology most likely to account for the majority of that mandate.

Thus, the NRC's argument that this adjudicatory process is "not the proper forum for investigating alleged violations that are primarily the responsibility of other Federal, state or local agencies" is correct, but irrelevant.

Joint Intervenors' argument is that if the MRPS is, in fact complied with—as we believe it will be—then the production of solar and wind power in Maryland will be far higher than stated in the FEIS. Indeed, the only way Maryland could see solar and wind power production as low as stated in the FEIS is if the MRPS is not complied with. It is an untenable position for the FEIS to base its projections assuming that a state law will not be complied with. These arguments should remain in our rebuttal statement of position.

5. Project Uncertainty and Timeframe

The lines the NRC wishes to strike in this area reflect Joint Intervenors' concern that once again, there is a double standard at work. The FEIS seems to base its projections on solar and wind deployment in Maryland as needing to be fully in place when Calvert Cliffs-3 is scheduled to enter operation. Additionally, Applicants and NRC argue that permitting processes for some wind projects and other types of difficulties may delay or prevent solar and wind technologies from coming online in an adequate time frame.

But no similar uncertainty, or acknowledgement that there already are substantial delays in the Calvert Cliffs-3 permitting process, is included in the FEIS. Joint Intervenors are merely pointing out that uncertainty, and, in terms of this Contention, pointing out that the timeframe available for deployment of potential solar and wind technologies before Calvert Cliffs-3 could reach commercial operation may be longer than the FEIS anticipates. If there is uncertainty over deployment of these technologies—and we acknowledge in some cases there may be--it is equally true that there is significant uncertainty over deployment of Calvert Cliffs-3.

Thus, the time frame for projections of both Calvert Cliffs-3 and for solar and wind power deployment is ambiguous. The NRC cannot assume, as it does for example, that the proposed Bluewater Wind project cannot be operational within the time frame of Calvert Cliffs-3, if it is unknown when Calvert Cliffs-3, which is experiencing substantial licensing and design certification delays of its own, could be operational. While NRC testimony indicates that the

Applicants' 2010 license application update indicates that construction of Calvert Cliffs-3 is expected to be completed by December 31, 2017, this is highly speculative. It already has been pushed back by two years, as NRC admits. Further, the date for approval of design certification for the EPR is now June 2013[2], and construction of Calvert Cliffs-3 cannot begin before this certification is obtained. To be completed by December 2017 would thus require, if certification or licensing is not further delayed, a 4 ½ year construction schedule. To the best of our knowledge, no commercial U.S. reactor since Millstone-1 was completed in 1970 has been built in 4 ½ years. Nor, simply because it is asserted in the application, is there any reason to believe the largest single reactor ever proposed for the United States could be probably the fastest reactor ever built in the United States.

It is disingenuous of the FEIS to assert that it only need consider solar and wind technologies deployable by December 2017 when the NRC knows well that Calvert Cliffs-3 will not be in operation by that date under even the most optimistic scenario.

Accepting a time frame for deployment of solar and wind deployment contingent on a wildly unreliable time frame for deployment of Calvert Cliffs-3 and presumed delays in the permitting process for renewables—without even recognizing that similar delays are likely, if not inevitable for Calvert Cliffs-3, would be a double standard. Clearly, if the time frame examined extends, for example, until full enforcement of the Maryland Renewable Portfolio Standard in 2022, a different mix of electricity production technologies can be envisioned. These arguments should remain in our rebuttal statement of position.

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[2] Letter of August 18, 2011 to Areva NP from David B. Matthews, Director, Division of New Reactor Licensing Office of New Reactors, U.S. Nuclear Regulatory Commission. Docket No. 52-20.

6. Evidentiary/Admissibility Issues

A. Exhibits JNT000010 and JNT000011

NRC agrees that these exhibits could be relevant, but notes that they are not specifically cited in our expert testimony or any other document. Joint Intervenors acknowledge these two exhibits, which we believe are highly relevant to an understanding of the Maryland Renewable Portfolio Standard, are not explicitly cited in our expert testimony. However, we see nothing in 10 CFR 2.337[3] that explicitly states exhibits must be cited in expert testimony. These two exhibits are material, relevant and reliable, and in our view then meet the standards of 10 CFR 2.337.

B. Exhibits JNT000021 through JNT000025

NRC states that these documents are inadmissible because they are cited only in Joint Intervenors' rebuttal statement of position, and not in our expert testimony. Similar to the issue above, our reading of 10 CFR 2.337 does not indicate that exhibits cannot be submitted in a rebuttal statement of position as long as they are material, relevant and reliable.

Exhibit JNT000021 is material, relevant and reliable for this Contention, as it indicates a major utility's substantial investment in solar power and, more telling perhaps, its belief that small-scale solar, which is highly viable for Maryland, is poised for major growth.

[3] Our reading of 10 CFR 2.337 is based on the text found on NRC's website here: http://www.nrc.gov/reading-rm/doc-collections/cfr/part002/part002-0337.html which reads on admissibility of evidence in its entirety: "(a) Admissibility. Only relevant, material, and reliable evidence which is not unduly repetitious will be admitted. Immaterial or irrelevant parts of an admissible document will be segregated and excluded so far as is practicable."

Exhibit JNT000022 relates to the viability of the Calvert Cliffs-3 project at all, and more specifically to the Project Uncertainty and Time Frame discussion under Number 5 above. It is certainly reliable, and we believe it to be material and relevant.

Exhibit JNT000023 was, as we stated, submitted for reference, again in the context of Project Uncertainty and Time Frame. As an NRC document, it is obviously reliable. We believe in the context submitted, it is material and relevant.

Exhibit JNT000024 is objected to on two grounds. The issue of it being only in the rebuttal statement of position is discussed above. We believe it is admissible on that issue. We also believe it to be material and relevant.

The more relevant question, in our view, is whether something on Wikipedia is admissible as evidence as reliable, and we admit to some hesitation here ourselves. There are certainly many items on Wikipedia that we would be troubled to see admitted as evidence in an NRC proceeding. As background, we were merely searching for a generally accepted definition of "baseload power." Neither the FEIS nor the Environmental Report, clearly define "baseload power." And neither document really addresses the function of "baseload power," i.e., what is an entity attempting to accomplish with the use of baseload power? The discussion of "baseload power" we found on Wikipedia we believed would be noncontroversial and generally accepted.

And, it is clear that while Wikipedia articles have often been rejected as admissible evidence, they have sometimes been accepted. For example, there is this discussion on a legal blog about admissibility of Wikipedia evidence:

"Citations to Wikipedia are not outright inadmissible. In In re Bayer Aktiengesellschaft*, the Federal Circuit held that articles accessed on the Internet are admissible as evidence available to the general public, but must be carefully evaluated because of reliability concerns. 488 F.3d 960 (Fed. Cir. 2007). Similarly, the Southern District of New York has provided some guidance in how to approach Wikipedia articles used as evidence. Because of the adversary system inherent in legal disputed [sic], the information in a Wikipedia entry "is not so inherently unreliable" to make it inadmissible* per se*.* Alfa Corp. v. OAO Alfa Bank*, 475 F. Supp. 2d 357, 362 (S.D.N.Y. 2007)."*[4]

We believe that the discussion of baseload power submitted as Exhibit JNT000024 may be admissible in this instance.

Exhibit JNT000025 relates to the issue of baseload power and especially of whether Calvert Cliffs-3 can be considered a baseload power plant when Applicants have no other power to offer customers when Calvert Cliffs-3 is not operating. The point is that not only would Calvert Cliffs-3 be down periodically for refueling and routine maintenance—calling into question its viability as a baseload power source when no backup power is available--but that extreme weather events and other unforeseen incidents can suddenly take power plants off-line. Under normal

[4] The Hazards of Citing Wikipedia, http://randazza.wordpress.com/2011/01/05/the-hazards-of-citing-to-wikipedia/, January 5, 2011.

circumstances, a utility can turn to other power sources to keep the electricity supply stable (and, of course, we recognize that at times there are blackouts); Applicants do not have the option to turn to other power sources to provide electricity to its customers.

We believe this exhibit is material, relevant and reliable.

Conclusion

Joint Intervenors believe that the NRC's Motion *In Limine* should be denied in its entirety beyond those items already agreed to by Joint Intervenors.

Respectfully submitted,

This 19th day of December 2011

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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 December 19, 2011 via the EIE system.

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