

January 14, 2009

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
 )  
SOUTHERN NUCLEAR OPERATING CO. ) Docket No. 52-011-ESP  
 )  
(Early Site Permit for Vogtle ESP Site) )

NRC STAFF MOTION *IN LIMINE* TO EXCLUDE PORTIONS OF  
TESTIMONY AND EXHIBITS FILED BY JOINT INTERVENORS

Pursuant to 10 C.F.R. § 2.323 and the Atomic Safety and Licensing Board's ("Board") November 13, 2008 Memorandum and Order providing a Revised General Schedule (unpublished) ("Scheduling Order"), the NRC staff ("Staff") submits this motion to exclude portions of the pre-filed direct testimony and exhibits filed by Joint Intervenors<sup>1</sup> on January 9, 2009 ("Joint Intervenors' Testimony"). For the reasons set forth below, the Staff submits that portions of the Joint Intervenors' Testimony and exhibits are either outside the scope of this proceeding or are not adequately supported. Pursuant to 10 C.F.R. § 2.323(b), the Staff has contacted the Applicant and Joint Intervenors in an effort to resolve the issues raised in this motion. The position of the other parties with respect to specific aspects of the motion is described below.

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<sup>1</sup> Joint Intervenors include the Center for a Sustainable Coast, Savannah Riverkeeper, Southern Alliance for Clean Energy, Atlanta Women's Action for New Directions, and Blue Ridge Environmental Defense League.

## BACKGROUND

As stated in more detail in the Staff's statement of position and pre-filed direct testimony, this case involves an application for an early site permit filed by the Southern Nuclear Operating Company ("Applicant"). This contested hearing concerns three contentions admitted by the Board. On January 9, 2009, in conformance with the Board's Scheduling Order, the Joint Intervenors, Applicant, and the Staff filed their pre-filed direct testimony and exhibits for contentions EC 1.2, EC 1.3 and EC 6.0. Pursuant to the Scheduling Order, the Staff files this motion *in limine* to exclude portions of the Joint Intervenors' Testimony and associated exhibits.

## DISCUSSION

### A. Legal Standard

In an evidentiary hearing, "[o]nly 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." 10 C.F.R. § 2.337(a). While the "strict rules of evidence do not apply to written submissions," Licensing Boards may "on motion or on the presiding officer's own initiative, strike any portion of a written presentation or a response to a written question that is irrelevant, immaterial, unreliable, duplicative or cumulative." 10 C.F.R. § 2.319(d); *see also* § 2.319(e).

In addition, expert opinions must have an adequate factual basis; bare assertions and general denials, even by an expert, are insufficient. *See Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-05-04, 61 NRC 71, 80-81 (2005). An expert's opinion is only admissible if it would assist the trier of fact in understanding the evidence or determining a fact at issue and the opinion is based on sound methods and reliable principles rather than "subjective belief or unsupported speculation." *Id.* at 80 (quoting *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589-90 (1993)). The proponent of a witness has the burden to demonstrate that the expert's testimony will assist the trier of fact.

See *Pac. Gas & Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2), ALAB-410, 5 NRC 1398, 1405 (1977).

B. Testimony to be Excluded

1. Contention 1.2

a. Cumulative Water Use Impacts

With respect to Contention 1.2 (“EC 1.2”), the Staff believes that portions of the testimony of Barry W. Sulkin (“Sulkin Testimony”) should be excluded because they concern a topic – the cumulative impacts of water withdrawals by facilities on the Savannah River other than the four Vogtle Units – that the Board has ruled to be outside the scope of the contention. In his answers to Questions 27 and 28, Mr. Sulkin raises the issue of cumulative water use by users other than the four Vogtle Units. Specifically, in criticizing what he describes as the Staff’s use of the “surrogate method,” Mr. Sulkin states that the “FEIS uses the surrogate method to quantify the cumulative withdrawal of the new Units in combination with the existing Units, but does not quantify *other withdrawals nearby*.” Sulkin Testimony at A27 (emphasis added). Similarly, in his next response, Mr. Sulkin states that in a cumulative impact analysis, “we are concerned with the *total impact of all of the withdrawals* combined with the new Units; the fact that other nearby withdrawals are less than Plant Vogtle with the new Units is irrelevant.” Sulkin Testimony at A28 (emphasis in original).

The Staff submits that this testimony is precluded by the Board’s Order ruling on the Applicant’s Motion for Summary Disposition for Contention EC 1.2. *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54 (2008). In that Order, the Board held that “Joint Intervenors current argument that the DEIS must consider the cumulative impacts of water withdrawals by other facilities on the Savannah River. . . is outside the scope of EC 1.2 and will not be considered further by the Board.” *Id.* at 77-78. Because the Board has ruled that discussion of cumulative impacts from withdrawals at facilities other than the four

Vogtle Units is outside the scope of this contention, these portions of the Sulkin Testimony should be excluded. For the same reasons, the Staff submits that certain portions of affidavits previously submitted by Dr. Shawn P. Young and Mr. Sulkin in this proceeding and attached as exhibits to the Joint Intervenors' Testimony should be excluded. Specifically, paragraph 28 from Dr. Young's November 13, 2007 Affidavit (JTI000003), paragraph 17 from Dr. Young's September 22, 2008 Affidavit (JTI000005), and paragraphs 22, 23, and 24 from Mr. Sulkin's November 9, 2007 Affidavit (JTI000031) discuss cumulative water withdrawals at facilities other than the four Vogtle Units, and these references accordingly should be excluded.

Joint Intervenors indicate that they oppose this portion of the Staff's motion. The Applicant agrees with this portion of the motion.

b. Municipal Withdrawals

Further, Mr. Sulkin's testimony in A24 and A25 discusses the possibility of future reductions in Savannah River flow due to "increasing municipal withdrawals." In particular, Question 25 asks "Does the Staff's analysis account for future reductions in flow due to increasing municipal withdrawals?" To the extent Mr. Sulkin's statements in this respect are intended to challenge the Staff's cumulative impacts analysis with respect to water use by other users, these statements should be excluded because, as discussed above, the Board has found the issue of cumulative impacts of water withdrawals by other users to be outside the scope of this contention. See LBP-08-2, 67 NRC at 77-78. Even if these statements are not presented as a challenge to the Staff's cumulative impacts analysis, they should be excluded because they are not supported by any stated factual basis. For example, in A24, Mr. Sulkin states that "the flow at the Vogtle site will decrease in the future as upstream municipal water supply withdrawals increase." This answer and Question 25 appear to be based on an assumption for which no factual basis is stated – that upstream municipal water withdrawals will increase and will reduce future flow at the VEGP site. Even experts must have an adequate factual basis for

their assertions. *Savannah River Mixed Oxide Fuel Fabrication Facility*, LBP-05-04, 61 NRC at 80-81. Because Mr. Sulkin provides no support for this factual assertion, the Staff submits that it should be excluded from the record.

However, in discussions concerning this motion, Joint Intervenors indicate that they do not consider the reference to municipal withdrawals in Sulkin A24 to be necessary to their testimony and that Question 25 is directed at whether the range of flows evaluated in the FEIS and the Staff's calculation of flow percentages are reasonable as a methodology. The Joint Intervenors indicate that they therefore do not oppose the exclusion of references to "municipal withdrawals" in A24 and Question 25. The Applicant agrees. Thus, the parties jointly stipulate that the last sentence of A24 of the Sulkin Testimony should be excluded from the record and that the words "due to increasing municipal withdrawals" should be excluded from Question 25. On the understanding that the testimony as limited will thus involve no specific assertions about the impacts or significance of municipal withdrawals in assessing flow, the Staff does not seek the exclusion of other portions of A24 or A25.

2. Contention 1.3

With respect to Contention 1.3 ("EC 1.3"), the Staff believes that certain questions and answers from the testimony of William Powers ("Powers Testimony") and portions of an associated exhibit should be excluded because they address a topic – the viability of a parallel wet-dry cooling system – that the Board has held to be outside the scope of this contention. Specifically, Mr. Powers' answers to Questions 18, 27, 34 and 35, as well as portions of his previous affidavit submitted as Exhibit JTI000035<sup>2</sup>, address a "parallel dry-wet cooling system."

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<sup>2</sup> In particular, paragraphs 9, 20 and 22 in JTI000035 discuss the use of a "parallel dry-wet cooling system."

In its Memorandum and Order ruling on the Applicant's Motion for Summary Disposition on Contention EC 1.3, the Board found that "assuming EC 1.3 goes to an evidentiary hearing, Joint Intervenors will be free to present arguments and evidence regarding the merits of dry cooling and the impacts of a wet cooling system upon 'extremely sensitive biological resources,' *but any attempt to introduce into this litigation the subject of the viability of a hybrid wet/dry cooling system as a NEPA alternative is precluded as outside the scope of that contention as admitted. Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-08-3, 67 NRC 85, 102-03 (2008) (emphasis added).* Exhibit 35 includes his previous affidavit. For this reason, Answer 34 and the limited portions of Answers 18, 27, and 35 and Exhibit JTI000035 referring to parallel dry-wet cooling systems should be excluded as outside the scope of this contention.

The Joint Intervenors indicate that they do not oppose the exclusion of these specific references in the Powers Testimony and Exhibit JTI000035. The Applicant agrees with this portion of the motion.

3. Contention 6.0

a. Impacts of Barge Traffic

With respect to Contention 6.0 ("EC 6.0"), the Staff submits that portions of the Joint Intervenors testimony referring to the impacts of "barge traffic" should be excluded. The Joint Intervenors have submitted the testimony of two witnesses regarding EC 6.0. That contention deals with the Joint Intervenors' allegation that the FEIS failed to adequately discuss the impacts of dredging of the Savannah River Federal navigation channel and the impacts of upstream reservoir operations. However, portions of the testimony of Shawn P. Young and Donald F. Hayes also discuss the impacts of "barge traffic" on aquatic biota and their habitat, independent of the impacts of dredging or upstream reservoir operations. The issue of impacts from barge traffic was not part of the bases of the original contention as proposed by the Joint Intervenors nor was it part of the contention as admitted by the Board. See *Joint Intervenors'*

*Motion to Admit New Contention* dated September 22, 2008 (“New Contention Motion”); *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), Memorandum and Order (Ruling on Motion to Admit New Contention), slip op. at Appendix A (Oct. 24, 2008) (“New Contention Ruling”).

In his testimony, Dr. Young states that “*beyond the dredging*, the shipping of materials up to VEGP also has potential for large impacts on fish and mussels.” Young Testimony at A32 (emphasis added). Dr. Young alleges that “[n]avigation-induced habitat disruption has been observed to affect small sized fish” and that juvenile freshwater fish suffer from an “inability to withstand bank-directed navigation-induced physical forces.” *Id.*

These assertions are echoed in the direct testimony of Mr. Hayes. Following portions of his testimony regarding the impacts of dredging activities, Mr. Hayes states that “[t]he impact of barge traffic *is a different issue . . .*” Hayes Testimony at A16 (emphasis added). Mr. Hayes alleges that the impacts of barging along the river “could easily be *similar in scale to those associated with dredging.*” *Id.* (emphasis added).

As reflected in these statements, the “impact of barge traffic” is an issue distinct from the impacts associated with potential dredging of the Federal navigation channel. The witnesses state that the impact of barge traffic is “beyond” the dredging action or is a “different issue.” Young Testimony at A32; Hayes Testimony at A16. Likewise, the impacts the witnesses identify from “barge traffic” are not within the scope of any upstream reservoir operations within the meaning of the Contention. Accordingly, the alleged navigation-induced impacts from barge traffic are matters outside the scope of the admitted contention, and testimony on this matter should be excluded.

In addition, testimony on this topic must be considered untimely. In its ruling on the admissibility of EC 6.0, the Board did not admit proposed bases concerning dredging of the barge slip and intake channel, finding that this challenge was untimely because these activities

were addressed in the Draft EIS. New Contention Ruling at 9-10. Because the statements in Mr. Hayes' previous declaration that the Board found to be untimely in the New Contention ruling are presented again in Exhibit JTI000041 (specifically, paragraphs 6 and 8) any references to those aspects of dredging in Exhibit JTI000041 should be excluded. Similarly, the assertions in the Young and Hayes testimony about general impacts of barge traffic could have been raised earlier in this proceeding. As noted in the Joint Intervenors' motion to admit EC 6.0, Southern's anticipated use of the navigation channel to support delivery of large components was described in the Applicant's Environmental Report. New Contention Motion at 3 (citing ER at 2.5-10). Likewise, that discussion and the dredging of the barge slip was discussed in the DEIS. Contentions regarding impacts associated with barge traffic to the site could have been brought in the initial petition to intervene or after the DEIS was issued. Accordingly, the Intervenors' attempts to raise the issue for the first time in testimony are untimely

For these reasons, the Staff requests that the Board exclude the portions of Young A32 and Hayes A16 that discuss the impact of barge traffic. The Board should also exclude references in paragraphs 6 and 8 in Exhibit JTI000041 to impacts of dredging of the barge slip and the water intake channel.

The Joint Intervenors indicate that they do not oppose this portion of the Staff motion. The Applicant agrees with this portion of the motion.

b. References to "Dredging Activities"

In the portions of the Hayes Testimony, Young Testimony and that appear to concern EC 6.0, several of the questions to the witnesses refer to "dredging activities," "dredging impacts," "impacts of the construction of the New Units," or "dredging required for construction of the New Units." See Hayes Testimony at Question 11, 12, 21; Young Testimony at Questions 29-32. As stated, these questions are not clearly limited to dredging associated with the potential dredging of the Federal navigation channel. As noted above, the Board did not

admit proposed bases concerning dredging of the barge slip and intake channel, finding that this challenge was untimely because these activities were addressed in the Draft EIS. New Contention Ruling at 9-10. There is similar ambiguity in references in those Exhibits containing earlier affidavits from Dr. Young (JTI000005, see paragraph 11) and Mr. Hayes (JTI000045, see paragraphs 7 and 10).

In discussion with the Staff concerning this motion, Joint Intervenors have confirmed that these questions refer only to the dredging activities or impacts associated with potential dredging of the Federal navigation channel. The Applicant supports this clarification. To resolve any ambiguity, therefore, the parties jointly stipulate to that clarification as to the scope of the associated questions and responses.

CONCLUSION

For the reasons discussed above, the Staff moves that the identified portions of the Joint Intervenors' Testimony and associated exhibits be excluded from consideration in this proceeding. As described above, the Joint Intervenors oppose the motion in part. Southern supports the motion. The parties jointly stipulate to the clarifications described in parts B.1.b and B.3.b of this motion.

Respectfully submitted,

**/signed (electronically) by/**

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**/Executed in Accord With 10 C.F.R. § 2.304(d)/**

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Dated at Rockville, Maryland  
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NUCLEAR REGULATORY COMMISSION

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CERTIFICATE OF SERVICE

I hereby certify that copies of the "NRC STAFF MOTION *IN LIMINE* TO EXCLUDE PORTIONS OF TESTIMONY AND EXHIBITS FILED BY JOINT INTERVENORS" have been served upon the following persons by Electronic Information Exchange this 14<sup>th</sup> day of January, 2009:

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