

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	Docket No. 52-011-ESP
)	
Southern Nuclear Operating Company)	ASLBP No. 07-850-01-ESP-BD01
)	
(Early Site Permit for Vogtle ESP Site))	February 6, 2009
)	

**SOUTHERN NUCLEAR OPERATING COMPANY’S RESPONSE STATEMENT
ON ENVIRONMENTAL CONTENTION 6.0**

Pursuant to 10 C.F.R. § 2.1207(a)(2) and the Atomic Safety and Licensing Board’s (“ASLB” or “Board”) Orders of October 24, 2008 and December 15, 2008,¹ Southern Nuclear Operating Company (“SNC”) hereby submits its response to the legal arguments, factual assertions and supporting materials filed by Joint Intervenors on January 9, 2009, and revised on February 2, 2009, specifically with respect to Environmental Contention 6.0 (“EC 6.0”).² This Response Statement is supported by the rebuttal testimony of Dr. Charles Coutant (“Coutant 6.0 Rebuttal Testimony”) and the initial testimony of Dr. Coutant, Mr. Tom Moorer, Mr. Jeffrey Neubert, Mr. Benjamin Smith, and Captain H. David Scott.

I. Introduction

The procedural background of EC 6.0 is discussed in SNC’s Initial Statement of Position on EC 6.0 filed on January 9, 2009. EC 6.0 challenges the cumulative impacts chapter of the FEIS, asserting that the Final Environmental Impact Statement (“FEIS”) fails to provide an

¹ Memorandum and Order (Revised General Schedule) (“October 24 Order”) and Memorandum and Order (Contested Evidentiary Hearing Administrative Matters) (“December 15 Order”).

² Response Statements on EC 1.2 and EC 1.3 are being filed separately.

adequate discussion of impacts associated with dredging the Savannah River Federal navigation channel. *See* October 24, 2008 Memorandum and Order (Ruling on Motion to Admit New Contention). As discussed below, Joint Intervenors' Initial Position Statement fails to explain how the FEIS is inadequate to satisfy the Staff's National Environmental Protection Act ("NEPA") obligations.

II. Applicable Legal Standards

As an initial matter, Joint Intervenors mistakenly assign the burden in this case solely to SNC. *See* Joint Intervenors' Revised Initial Written Statement of Position and Prefiled Direct Testimony, Feb. 2, 2009, at 3 ("Joint Intervenors' Revised Position Statement"). Instead, the Staff and SNC share the burden to demonstrate compliance with NEPA. *See* [SNC's] Initial Statement of Position on Intervenors' [EC] 6.0 (Impacts Associated with Dredging the Savannah River Federal Navigation Channel), Jan. 9, 2009, at 8-9 ("SNC's EC 6.0 Position Statement").³

SNC has fully briefed this Board on the Nuclear Regulatory Commission's ("NRC") obligations under NEPA to take a "hard look" at the cumulative impacts of the issuance of an Early Site Permit ("ESP"). *See* SNC's EC 6.0 Position Statement at 5-6. Joint Intervenors completely agree with SNC that the "hard look" standard is subject to a "rule of reason," that "[a]gencies are given broad discretion in determining how thoroughly to analyze a particular subject," and that "an agency may, in its discretion, rely on data, analyses, or reports prepared by persons or entities other than agency staff." Joint Intervenors' Revised Position Statement at 20-21. The Staff is not required to consider environmental impacts that are not reasonably foreseeable, speculative or indefinite. *See City of Oxford, GA v. Fed'l Aviation Admin.*, 428 F.3d

³ And while SNC and the Staff share the overall burden, Joint Intervenors must also provide support for their contention. *See In re Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), 61 N.R.C. 319, 326 (2005) ("[H]earings are held on only those issues that an intervenor brings to the fore. And the burden of going forward on any issues that make it to the hearing process is on the intervenor that is pursuing that issue.").

1346, 1353-54 (11th Cir. 2005) (holding that the agency was not required under NEPA to consider possible cumulative impact of actions that were speculative, including highway widening for which no plan had been established). Moreover, when the nature of an impact is reasonably foreseeable, but the extent is not, the Staff may satisfy its NEPA obligations by making clear that the information is incomplete or unavailable. *See Mid States Coalition for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549-550 (8th Cir. 2004), *citing* 40 C.F.R. § 1502.22. An agency's analysis made "in the face of unavailable information" is "grounded in the 'rule of reason.'" 51 Fed. Reg. 15,618, 15,621 (Apr. 25, 1986). Nothing in Joint Intervenors' Revised Position Statement contradicts the legal conclusion that the NEPA analysis in the FEIS satisfies this standard.

It is clear that the Board must apply for itself the same substantive standard applicable to the Staff's NEPA review, i.e., the "hard look" standard, subject to the "rule of reason." *See Ka Makani 'O Kohala Ohana Inc. v. Dep't of Water Supply*, 295 F.3d 955, 959 (9th Cir. 2002).

III. SNC's Rebuttal Testimony

SNC's rebuttal testimony on EC 6.0 is presented by Dr. Charles Coutant. As demonstrated in his direct testimony, Dr. Coutant has significant and essential experience with NEPA analyses and with the actual conditions at the proposed site for Vogtle Units 3 and 4. Dr. Coutant has analyzed impacts from dredging based on an actual survey of the Savannah River. *See* [SNC's] Testimony of Dr. Charles Coutant Concerning EC 6.0, Jan. 9, 2009, at 5-6 ("Coutant EC 6.0 Testimony"). This is in stark contrast to Joint Intervenors' witnesses, Dr. Donald Hayes and Dr. Shawn Young, neither of whom identifies any NEPA experience or participation in actual river surveys as the basis for their testimony.

IV. SNC's Response Statement on EC 6.0

Joint Intervenors' contention is wholly founded on the assumption that pervasive dredging is required for the construction of Vogtle Units 3 & 4. This assumption is incorrect and unsupported. Joint Intervenors have not provided any evidence or testimony establishing that dredging is necessary for the construction of VEGP Units 3 & 4, nor could they. While the preferred method for transportation of components to the site is barging, SNC has offered evidence that 1) barging could occur without dredging, and 2) the components could be delivered to the construction site via some method other than barging. *See* [SNC's] Testimony of Jeffrey Neubert, Benjamin Smith, and David Scott Concerning EC 6.0, Jan. 9, 2009, at 5, 10 ("Neubert/Smith/Scott EC 6.0 Testimony"). This evidence is not contradicted.

Joint Intervenors' other principal objection under EC 6.0 requires them to simultaneously rely upon and ignore the fact that there is no current plan to dredge the Savannah River. In fact, the U.S. Army Corps of Engineers ("the Corps") has indicated that there are no funds available for such dredging. *See* [SNC's] Testimony of Thomas Moorer Concerning EC 6.0, Jan. 9, 2009, at 7 ("Moorer EC 6.0 Testimony"). On the one hand, Joint Intervenors use this to argue that information about the unknown dredging is lacking. *See* Joint Intervenors' Revised Position Statement at 6. On the other hand, Joint Intervenors ignore the legal and practical implications of a NEPA analysis where no details about possible future actions exist. *See* 40 C.F.R. § 1502.22. They cannot have it both ways.

More specifically, Joint Intervenors' Position Statement contains several specific, unsupported assumptions and conclusions. First, Joint Intervenors assert that any dredging will be "sizeable . . . with a significant duration." *See* Revised Pre-filed Direct Testimony of Donald F. Hayes in Support of EC 6.0, Feb. 2, 2009, at A.14 ("Hayes Revised EC 6.0 Testimony").

Next, they assert that dredging “will likely require the construction of multiple confined disposal facilities (“CDFs”)” which “could potentially have significant impacts.” *Id.* at A.21, A.22. Finally, they suggest that hazardous materials are a concern for sediment management and disposal. *Id.* at A.23. In each instance, Joint Intervenors provide no support for their conclusions. Rather, they take as certain information described as speculative in the FEIS and characterized by the Staff as “incompletely defined,” “unknown,” and “[un]identified.” *See* FEIS at 7-20.

A. Size and Duration of Dredging

Joint Intervenors’ assumption that any potential dredging of the Savannah River will be “sizable . . . with a significant duration” is unsupported and incorrect. *See* Neubert/Smith/Scott EC 6.0 Testimony at 10. Dr. Hayes’ opinions regarding the potential impacts from dredging are based on this assumption, yet it conflicts with the only evidence regarding the likely scope of any possible dredging, as offered by the testimony of Neubert/Scott/Smith filed with SNC’s Initial Position Statement on EC 6.0. *Id.* Dr. Hayes’ conclusions are based simply on his assumption that no part of the Savannah River from the Vogtle site to the Savannah Harbor will support dredging, which in turn leads to an assumption that every foot of the Savannah River Federal navigation channel from RM 35 to RM 150.9 will be dredged, and finally results in his simple calculation of that volume. His testimony, therefore, that “two million cubic yards of sediment to be dredged per foot of deepening,” is based on assumption built upon assumption, each of which is incorrect. Hayes Revised EC 6.0 Testimony at A.14.

Dr. Hayes does not indicate that he has personally conducted any river survey to support this analysis. The only such analysis in the record of this proceeding is a preliminary river study that was completed in 2008, described in Exhibit SNC000051, and discussed in SNC’s Initial

Statement of Position. *See* SNC’s EC 6.0 Position Statement at 19-20. That survey estimated that roughly 36,000 cubic yards of dredged material would need to be removed from the entire 110 mile stretch of river. *See* Neubert/Smith/Scott EC 6.0 Testimony at 8.

And, as Dr. Hayes recognizes, “[r]educing the length, width, and depth of the dredging would reduce the sediment volume to be dredged” and “[d]redging impacts would like [sic] be reduced accordingly” Hayes Revised EC 6.0 Testimony at A.15. Dr. Hayes’ conclusion with respect to dredging seems to be simply that dredging “could be significant.” Joint Intervenors have not established how this testimony is contrary to the Staff’s own conclusion in the FEIS that impacts may be MODERATE.⁴ In fact, based on the only evidence available, impacts are likely SMALL. *See* SNC000051 at 13.

B. Sediment Management and Disposal

Joint Intervenors make two unsupported claims with respect to sediment management and disposal. First, they offer no evidence that construction of CDFs will be required. Rather, Dr. Hayes simply asserts that construction of CDFs would “likely” be required “unless those facilities already exist and have adequate capacity.” Hayes Revised EC 6.0 Testimony at A.21. Obviously, because Dr. Hayes’ assumption regarding the volume of sediment to be removed is incorrect and unsupported, his conclusions regarding the management of such sediment are also flawed. Moreover, Joint Intervenors make no effort to explain how, if construction of CDFs is required, this would impact the aquatic species of the Savannah River in the vicinity of the Vogtle site. It is certainly not obvious to SNC. Again, EC 6.0 is a contention challenging the cumulative impacts analysis. Joint Intervenors cannot simply assert that dredging might require construction of upland CDFs which nonetheless might result in impacts on the Savannah River,

⁴ In the same vein, Dr. Young’s call for a “thorough freshwater mussel survey for the entire affected area” is based on the assumption that “large-scale dredging” will occur. Young Revised 6.0 Testimony at A.13. As Dr. Coutant testifies, such a survey is not necessary to assess impacts. *See* Coutant 6.0 Rebuttal Testimony at A6.

which impacts might accumulate in the vicinity of Plant Vogtle. Joint Intervenors have provided no evidence to support this chain of claims. *See Private Fuel Storage*, 61 N.R.C. at 326.

Finally, Joint Intervenors' "evidence" to suggest the sediment may contain hazardous materials is completely irrelevant to the Vogtle site. Dr. Hayes relies on a study conducted at a Chlor-alkali plant 30 miles upstream from Vogtle to suggest "that hazardous materials are a concern." Hayes Revised EC 6.0 Testimony at A.23; JTI000040. As SNC's expert Dr. Coutant testifies, interpreting this study in this way is misleading and not reliable for several reasons:

First, the paper was published in the proceedings of a meeting and does not appear to have been peer reviewed (a generally accepted method for ensuring quality). Peer review and careful editing would have caught some of the document's deficiencies, such as not giving units for mercury concentration in Table 1. Second, the study concerned locations in the immediate vicinity of a Chlor-alkali plant at Augusta (the discharge canal and stations in the Savannah River immediately upstream and downstream of the canal discharge), not in the river reach between Vogtle and the estuary where selective dredging would potentially occur. Third, the study found that differences in the mercury concentrations in the Savannah River upstream and downstream of the plant's discharge were not statistically significant. Fourth, the mean mercury concentrations for downstream samples shown in the paper's Table 1 are within the freshwater sediment background levels (4-51 ppb) reported by NOAA in its Screening Quick Reference Tables. *See Nat'l Oceanic & Atmospheric Admin., Screening Quick Reference Tables at http://response.restoration.noaa.gov/book_shelf/122_NEW-SQUIRTS.pdf. [SNC000067]. If relevant at all, these study results contradict Dr. Hayes' contention.*

Coutant 6.0 Rebuttal Testimony at 5-6 (emphasis added).

V. Conclusion

Joint Intervenors' EC 6.0 should not be sustained. The claims made by Joint Intervenors in their Initial Statement of Position and through their Pre-filed Direct testimony are unfounded and unsupported. SNC again respectfully requests that the Board rule that the FEIS provides an appropriate and adequate discussion of the cumulative impacts of any potential dredging.

Respectfully submitted,

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Dated this 6th day of February, 2009.

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CERTIFICATE OF SERVICE

I hereby certify that copies of SOUTHERN NUCLEAR OPERATING COMPANY'S RESPONSE STATEMENT ON ENVIRONMENTAL CONTENTION 6.0 in the above captioned proceeding have been served by electronic mail as shown below, this 6th day of February, 2009, and/or by e-submittal.

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