

October 29, 2007

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)	)	ASLBP No. 07-850-01-ESP-BD01

NRC STAFF ANSWER TO SOUTHERN NUCLEAR OPERATING COMPANY'S  
MOTION FOR SUMMARY DISPOSITION OF ENVIRONMENTAL CONTENTION 1.3

INTRODUCTION

Pursuant to 10 C.F.R § 2.1205(b) and the May 7, 2007 Memorandum and Order (Prehearing Conference and Scheduling Order) of the Atomic Safety and Licensing Board ("Board"), the staff of the Nuclear Regulatory Commission ("NRC Staff" or "Staff") hereby responds to "Southern Nuclear Operating Company's Motion for Summary Disposition on Intervenors' Contention EC 1.3," ("Southern EC 1.3 Motion") filed by Southern Nuclear Operating Company ("Southern" or "Applicant") on October 17, 2007. For the reasons set forth below, the Staff submits that there does not exist a genuine dispute of material fact concerning Environmental Contention ("EC") 1.3 and that, based on these facts, the Applicant is entitled to a decision in its favor as a matter of law. Accordingly, the Applicant's Motion should be granted.

BACKGROUND

On August 15, 2006, Southern submitted an application pursuant to 10 C.F.R. Part 52, Subpart A, in which it requested an Early Site Permit ("ESP") for a site within the existing Vogtle Electric Generating Plant ("VEGP") site near Waynesboro, Georgia. On December 11, 2006, a joint petition for leave to intervene was filed by 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 (collectively, "Joint Intervenors"), and several contentions were filed concerning the Environmental Report ("ER") filed as part of the Application.

On March 12, 2007, the Board ruled upon the admissibility of the Joint Intervenors' proffered contentions. See *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237 (2006) ("*Vogtle ESP*"). The Board admitted two contentions, EC 1.2 and EC 1.3.<sup>4</sup> The subject of the instant motion, EC 1.3, as admitted, was restated by the Board as follows:

The ER fails to satisfy 10 C.F.R. § 51.45(b)(3) because its analysis of the dry cooling alternative is inadequate to address the appropriateness of a dry cooling system given the presence of extremely sensitive biological resources.

*Vogtle ESP*, LBP-07-3, 65 NRC at 280.

In September 2007, the NRC Staff published the "Draft Environment Impact Statement for an Early Site Permit (ESP) at the Vogtle Electric Generating Plant Site," NUREG-1872 ("DEIS").<sup>5</sup> In the DEIS, the Staff evaluated a dry cooling system as a system design alternative to the proposed natural draft wet tower cooling system and found that the wet cooling tower system is environmentally preferable to a dry cooling system. See DEIS Section 9.3.2. On October 17, 2007, Southern filed the instant motion seeking summary disposition of Joint Intervenors' Contention EC 1.3.

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<sup>4</sup> EC 1.2 is the subject of another Southern motion for summary disposition and as such the NRC Staff is providing a separate answer to that motion. See NRC Staff Answer to Southern Nuclear Operating Company's Motion for Summary Disposition of Environmental Contention 1.2 (Oct. 29, 2007).

<sup>5</sup> The DEIS was made available to the Board and the parties to this proceeding on September 10, 2007. See Letter from J.M.Rund, NRC Staff Counsel, to Administrative Judges (Sept. 10, 2007).

DISCUSSION

I. Legal Standards

In a Subpart L proceeding, such as this one, the Board must apply the summary disposition standard set forth in Subpart G. See 10 C.F.R. § 2.1205(c). Under this standard, a motion for summary disposition should be granted “if the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law.” 10 C.F.R. § 2.710(d)(2).

The Commission’s summary disposition procedures have been analogized to Rule 56 of the Federal Rules of Civil Procedure. See *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), CLI-01-11, 53 NRC 370, 384 (2001); *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio), CLI-93-22, 38 NRC 98, 102 (1993) (“*Advanced Medical*”). As such, the movant bears the initial burden of demonstrating that there is no genuine issue as to any material fact and the evidence submitted must be construed in favor of the opposing party. *Id.* The movant is required to include a statement of material facts not at issue and may include affidavits setting forth the facts that would be admissible in evidence. See 10 C.F.R. § 2.710(a)-(b). Once the moving party satisfies its initial burden, the opposing party may not rest upon “mere allegations or denials,” but must submit rebutting evidence setting forth “specific facts showing that there is a genuine issue of fact.” See 10 C.F.R. § 2.710(b); see also *Advanced Medical*, CLI-93-22, 38 NRC at 102.

In addition, it is often necessary to consider the scope of a contention in order to determine whether summary disposition is appropriate. See, e.g., *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-28, 56 NRC 373, 378-84 (2002) (“*McGuire*”). The Commission has held that a contention contesting an applicant’s ER may be viewed as a challenge to the Staff’s subsequently issued DEIS. See

*Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 84 (1998) (“LES”). The Commission has also held that, “[w]here a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant or considered by the Staff in a draft EIS, the contention is moot.” *McGuire*, CLI-02-28, 56 NRC at 383. Summary disposition is an appropriate procedural mechanism to resolve a mooted contention. See *id.* at 384.

As more fully set forth below, the Staff submits that summary disposition of EC 1.3 is appropriate in accordance with these standards.

II. Applicant’s Motion for Summary Disposition of EC 1.3

A. Contention 1.3 is a Contention of Omission

EC 1.3 is a contention of omission, as it challenges the ER for failing to consider the presence of sensitive biological resources in the analysis of a dry cooling system as a system design alternative. The language of EC 1.3 unambiguously indicates that relevant information was missing from Southern’s ER. Therefore, a review of the basis provided by the Joint Intervenors in support of EC 1.3 is not necessary in order to confirm that EC 1.3 is a contention of omission.<sup>6</sup> However, the Commission has indicated that it is helpful to examine a contention’s supporting bases to determine the proper scope of the contention.<sup>7</sup>

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<sup>6</sup> See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-26, 54 NRC 199, 207-09 (2001); LBP-01-23, 54 NRC 163, 171-72 (2001); LBP-02-2, 55 NRC 20, 29-30 (2002).

<sup>7</sup> See, e.g., *McGuire*, CLI-02-28, 56 NRC at 379 (“Where an issue arises over the scope of an admitted contention, NRC opinions have long referred back to the bases set forth in support of the contention.”).

The basis provided by the Joint Intervenors supports the conclusion that EC 1.3 is a contention of omission. With respect to dry cooling system aspect of EC 1.3,<sup>8</sup> the Joint Intervenors' basis alleged:

Other than a vague reference to the preamble to an EPA rule implementing the Clean Water Act, there is no discussion or analysis of the dry cooling as an alternative to the proposed cooling system. In addition, the ER recognizes that "dry cooling is appropriate in areas with limited water available for cooling or where the source of cooling water is associated with extremely sensitive biological resources." However, the ER ignores the fact that there are extremely sensitive biological resources in the Savannah River.

Petition for Intervention at 15 (Dec. 11, 2006) (citations omitted). In essence, the Joint Intervenors alleged that the dry cooling system alternative analysis was deficient because Southern failed to consider whether a dry cooling system was appropriate given the impacts on aquatic resources.

B. Contention EC 1.3 is Moot

1. The DEIS provides the alleged missing analysis

In contrast to the ER, the DEIS evaluation of the dry cooling system alternative considers the comparative environmental benefits of a dry cooling system. See DEIS at 9-25. Specifically, the DEIS states: "The use of a dry cooling system design versus the proposed combination wet tower design for VEGP Units 3 and 4 would largely eliminate the impacts on aquatic biota in the Savannah River." DEIS at 9-25.

While the Staff's analysis found some positive attributes related to the use of dry or wet/dry cooling towers, it also found disadvantages. For example, the Staff indicated: (1) dry

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<sup>8</sup> As proffered by the Joint Intervenors, EC 1.3 also challenged the ER's discussion of the no-action alternative. See Petition at 14-15. The Board specifically rejected this aspect of the contention and restated EC 1.3 to include only the Joint Intervenors' challenge to the dry cooling system alternative. See Vogtle ESP, LBP-07-3, 65 NRC at 259-60, 280.

cooling is less cost effective than wet cooling towers; (2) the dry cooling fans consume a significant amount of power; (3) the dry cooling system would occupy more land than a wet cooling tower; and (4) the dry cooling process is not as efficient as the wet cooling process because it requires the movement of a large amount of air through the heat exchanger to achieve the necessary cooling. See DEIS at 9-25 to 9-26. In comparison, the Staff found that the impacts of the proposed natural draft cooling system on water use, water quality, and aquatic resources would be small. *Id.* As a result, the Staff ultimately concluded that the wet cooling tower system is environmentally preferable to the dry cooling system for VEGP Units 3 and 4. See DEIS at 9-26.

The analysis described above is the analysis that the Joint Intervenors alleged was omitted from Southern's ER. As a result, the Joint Intervenors' concern, and EC 1.3, has been rendered moot by the DEIS.

## 2. The DEIS analysis satisfies NEPA

As discussed above, Contention EC 1.3 alleged that the ER was deficient because it omitted consideration of whether a dry cooling system is appropriate given the potential impacts on aquatic resources and, as a result, the ER failed to comply with 10 C.F.R. § 51.45(b)(3).

Section 51.45(b)(3) states:

Alternatives to the proposed action. The discussion of alternatives shall be sufficiently complete to aid the Commission in developing and exploring, pursuant to section 102(2)(E) of NEPA, "appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." To the extent practicable, the environmental impacts of the proposal and the alternatives should be presented in comparative form.

10 C.F.R. § 51.45(b)(3).

The Commission has held that an EIS need only "briefly discuss' the reasons why an alternative was rejected and not further studied." See *LES*, CLI-98-3, 47 NRC at 98 (citing

*Tongass Conservation Soc’y v. Cheney*, 924 F.2d 1137, 1141 (D.C. Cir. 1991)). Furthermore, the Commission has indicated the alternatives discussion should “contain a comparative analysis, ‘a concise, descriptive summary’ comparing the advantages and disadvantages of the alternative to the proposed action.” See *id.* at 98 (citing Council on Environmental Quality, “Memorandum to Agencies: Answers to 40 Most Asked Questions on NEPA Regulations,” 46 Fed. Reg. 18,026 (Mar. 1, 1981)).

Section 9.3.2 of the DEIS provides an alternatives analysis that complies with Commission precedent and, accordingly, the requirements of NEPA. Section 9.3.2 provides a comparative analysis of the potential environmental consequences stemming from the use of a dry cooling system alternative, as opposed to a wet cooling tower. See DEIS at 9-25 to 9-26. Moreover, the DEIS provides a concise, descriptive summary comparing the advantages and disadvantages of the dry cooling alternative to the proposed wet cooling tower system. See *id.* Given that Section 9.3.2 of the DEIS complies with NEPA and provides analysis that cures the alleged omission in the ER, Southern is entitled to a decision in its favor as a matter of law.<sup>9</sup> Accordingly, the Board should grant Southern summary disposition on Contention EC 1.3.

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<sup>9</sup> This conclusion is supported by the fact that the Joint Intervenors have not submitted an amended contention or expressed any concerns regarding the analysis performed in Section 9.3.2 of the DEIS.

III. Staff Analysis of Southern's Statement of Material Facts

With its motion, Southern has appended a "[Southern's] Statement of Undisputed Facts in Support of the Applicant's Motion for Summary Disposition of Intervenors' Contention 1.3" ("Fact Statement"), in which Southern identifies twenty-seven material facts it claims are not in dispute. Based on its Fact Statement, Southern concludes that there is no genuine factual dispute remaining that would preclude summary disposition on EC 1.3.

Although much of the detailed technical information in the Fact Statement lends additional support to the disadvantages of the dry cooling system discussed in the DEIS, the Staff does not view this additional information as being material to the Board's granting summary disposition.<sup>10</sup> As discussed above, the Staff's consideration of the advantages of the dry cooling system in the DEIS moots this contention. Accordingly, the Board should grant the Applicant summary disposition with respect to EC 1.3.

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<sup>10</sup> In addition, despite Southern's suggestion to the contrary, the NRC's policy of standardization of site specific systems does not conflict with its duty under NEPA to consider reasonable alternatives, including cooling system design alternatives that have the potential to mitigate adverse environmental impacts. In a draft policy statement, the Commission has stated that it "encourages [COL] applicants to standardize the balance of their plants *insofar as is practicable*." Draft Statement of Policy on Conduct of New Reactor Licensing Proceedings, 72 Fed. Reg. 32,139, 32,142 (June 11, 2007) (emphasis added). By invoking the standard of practicableness the Commission contemplated there might be several reasons why certain systems might not be appropriate at all sites. Where the use of a given system at a site results in large adverse environmental impacts it might be impracticable to achieve standardization. Nonetheless, because the Staff *has considered* the dry cooling system as an alternative in the DEIS, the issue of whether consideration of the dry cooling alternative conflicts with the NRC policy on standardization of the site specific portion of a reactor design is not material to disposition of Southern's motion.



CONCLUSION

For the reasons discussed above, the NRC Staff submits that the Applicant's motion for summary disposition of EC 1.3 should be granted as a matter of law.

Respectfully submitted,

**/signed (electronically) by/**

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF ANSWER TO SOUTHERN NUCLEAR OPERATING COMPANY'S MOTION FOR SUMMARY DISPOSITION OF ENVIRONMENTAL CONTENTION 1.3," have been served upon the following persons by Electronic Information Exchange this 29<sup>th</sup> day of October, 2007:

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