

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

LBP-07-03

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before the Licensing Board:

G. Paul Bollwerk, III, Chairman  
Nicholas G. Trikouros  
Dr. James Jackson

DOCKETED 03/12/07  
SERVED 03/12/07

In the Matter of

SOUTHERN NUCLEAR OPERATING CO.

(Early Site Permit for Vogtle ESP Site)

Docket No. 52-011-ESP

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

March 12, 2007

MEMORANDUM AND ORDER  
(Ruling on Standing and Contentions)

On August 15, 2006, Southern Nuclear Operating Company (SNC) applied to the Nuclear Regulatory Commission (NRC) for an early site permit (ESP) under 10 C.F.R. Part 52 for an additional two reactors at the Vogtle Electric Generating Plant site near Waynesboro, Georgia. On December 11, 2006, five organizations -- the Center for a Sustainable Coast, Savannah Riverkeeper, the Southern Alliance for Clean Energy, the Atlanta Women's Action for New Directions, and the Blue Ridge Environmental Defense League (hereinafter referred to collectively as Joint Petitioners) -- jointly filed a hearing petition seeking to intervene and challenge the ESP application, or more particularly, certain aspects of the SNC Environmental Report (ER).

For the reasons set forth below, we find that each of the Joint Petitioners has established the requisite standing to intervene in this proceeding and that they have submitted two admissible contentions, which are set forth in an appendix to this decision. Accordingly, we admit each of the Joint Petitioners as a party to this proceeding. Additionally, we outline certain

procedural and administrative rulings regarding the litigation of these admitted contentions, as well as certify to the Commission a question regarding the Licensing Board's ability to proceed with litigating the merits of the two admitted contentions on the basis of the NRC staff's draft environmental impact statement (DEIS).

## I. BACKGROUND

### A. SNC Early Site Permit Application

Under the Part 52 licensing process, an entity may apply for an ESP that allows it to resolve key site-related environmental, safety, and emergency planning issues before choosing the design of a nuclear power facility for, or deciding to build such a facility on, that site. Thus, if granted, an ESP essentially allows an entity to "bank" a possible site for the future construction of a specified number of new nuclear power generation facilities.

SNC filed its ESP application on behalf of itself and the owners of the Vogtle Electric Generating Plant site (Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and the City of Dalton, Georgia). In addition to the ER that is the focus of the Joint Petitioners concerns, the application consists of a section on Administrative Information (AI) about SNC and the site owners, a Site Safety Analysis Report (SSAR), an Emergency Plan (EP), and a Site Redress Plan (SRP). The particular site for which SNC seeks to obtain an ESP is the Vogtle Electric Generating Plant site (Plant Vogtle), where an existing two-unit nuclear power facility has been producing electricity since 1987. SNC is the licensed operator of the existing generating units at the Plant Vogtle site. See [SNC] Vogtle Early Site Permit Application (rev. 1 Nov. 2006).<sup>1</sup>

---

<sup>1</sup> Revision 1 of the Vogtle ESP application can be found in the agency's ADAMS document management system at accession numbers ML063210521, ML063210525 (AI),  
(continued...)

B. Joint Petitioners Hearing Request/Licensing Board Establishment and Initial Procedures

In response to the October 5, 2006 notice of hearing and opportunity to petition for leave to intervene regarding the Vogtle ESP application, 71 Fed. Reg. 60,195 (Oct. 12, 2006), Joint Petitioners filed a timely request for hearing and petition to intervene that sought to establish the case for their standing and the admissibility of what they designated as five contentions. See Petition for Intervention (Dec. 11, 2007) [hereinafter Intervention Petition]. Thereafter, on December 15, 2006, this Atomic Safety and Licensing Board was established to adjudicate the Vogtle ESP proceeding.<sup>2</sup> See 71 Fed. Reg. 77,071 (Dec. 22, 2006). In the December 18, 2006 initial prehearing order, in addition to establishing several procedural measures to govern matters such as the filing of time extension motions, the Licensing Board indicated that it would treat the three designated subparts of the first of the Joint Petitioners contentions as three separate contentions and requested that for these and their other contentions, Joint Petitioners designate each as being in one or more of the following subject matter categories: (1) Administrative, (2) Site Safety Analysis, (3) Environmental, (4) Emergency Planning, or (5) Miscellaneous. See Licensing Board Memorandum and Order (Initial Prehearing Order) (Dec. 18, 2006) at 1-2 (unpublished) [hereinafter Initial Prehearing Order]. This prehearing

---

<sup>1</sup>(...continued)

ML063210528 (SSAR), ML063210530 (SSAR), ML063210533 (SSAR), ML063210535 (SSAR), ML063210537 (SSAR), ML063210541 (SSAR), ML063210542 (SSAR), ML063210543 (SSAR), ML063210544 (SSAR), ML063210546 (SSAR), ML063210549 (SSAR), ML063210551 (SSAR), ML063210553 (SSAR), ML063210554 (SSAR), ML063210555 (ER), ML063210558 (ER), ML063210560 (ER), ML063210562 (ER), ML063210565 (ER), ML063210568 (SRP), ML063210569 (EP).

<sup>2</sup> Further, acting on a Commission directive designating this proceeding as a pilot for the use of an electronic, Internet-based document submission system in agency adjudicatory proceedings generally, the Chief Administrative Judge established procedures requiring the use of an E-Submittal process for all filings in this proceeding. See Chief Administrative Judge Memorandum and Order (Establishing Procedures for Submitting Documents Using Agency Electronic Information Exchange/ E-Submittal Process) (Dec. 15, 2006) (unpublished).

order also set a January 10, 2007 deadline for SNC and staff responses to the Joint Petitioners contention supplement and a January 17, 2007 deadline for the Joint Petitioners response, which was later extended to January 24, 2007. See id. at 3; Licensing Board Order (Granting in Part Motion for Time Extension to File Reply Pleading) (Jan. 16, 2007) at 2 (unpublished).

Within ten days of the initial prehearing order, Joint Petitioners timely complied with the Board's request regarding contention designation with a supplemental pleading indicating that their seven issue statements were all environmental contentions (EC). See Joint Supplement to Petition for Intervention (Dec. 27, 2006). Thereafter, SNC and the NRC staff both responded to the Joint Petitioners hearing request on January 10, 2007. See Southern Nuclear Operating Company's Answer in Response to Petition for Intervention (Jan. 10, 2007) at 11 [hereinafter SNC Answer]; NRC Staff Answer to Petition for Intervention (Jan. 10, 2007) at 14 [hereinafter Staff Answer]. The next day, the Board issued an order establishing the location and timing for an initial prehearing conference intended to provide the participants with an opportunity to present oral argument and answer Board questions regarding contention admissibility. See Licensing Board Memorandum and Order (Initial Prehearing Conference Schedule; Argument Allocations; Opportunity for Written Limited Appearance Statements) (Jan. 11, 2007) at 1 (unpublished). Finally, on January 24, Joint Petitioners filed their reply to the SNC and staff answers. See Petitioners' Reply to NRC Staff Answer and SNC Answer to Petition for Intervention of [Joint Petitioners] (Jan. 24, 2007) [hereinafter Joint Petitioners Reply].

On February 13, 2007, in Waynesboro, Georgia, the Board conducted a one-day prehearing conference during which it heard oral presentations from the participants regarding the admissibility of the Joint Petitioners seven contentions. See Tr. at 5-192. Less than two weeks later, on February 26, 2006, the Commission issued a series of decisions that arguably had an impact on one of the Joint Petitioners proffered environmental contentions, EC 4,

regarding the need to include in the ER a discussion of the impacts of a terrorist attack on the existing and proposed Vogtle facilities.<sup>3</sup> The next day, the Board issued an order permitting the participants to provide supplemental briefs and responsive filings addressing the impact of these Commission decisions on the admissibility of that contention, which SNC and the staff did on March 1, 2007. See Licensing Board Memorandum and Order (Briefing Schedule Regarding Impact of Commission Decisions on Joint Petitioners Environmental Contention 4) (Feb. 27, 2007) at 1-2 (unpublished); [SNC] Brief on the Commission's Recent Decisions Concerning Analysis of Terrorist Impacts under NEPA on the Admissibility of EC 4 (Mar. 1, 2007) [hereinafter SNC NEPA Terrorist Impacts Brief]; NRC Staff Brief Addressing Impact of Commission Decisions on Joint Petitioners' Proposed [EC] 4 (Mar. 1, 2007) [hereinafter Staff NEPA Terrorist Impacts Brief].

## II. ANALYSIS

### A. Joint Petitioners Standing

#### 1. Standards Governing Standing

In determining whether an individual or organization should be granted party status in a proceeding based on standing "as of right," the agency has applied contemporaneous judicial standing concepts that require a participant to establish (1) it has suffered or will suffer a distinct and palpable injury that constitutes injury-in-fact within the zones of interests arguably protected by the governing statutes (e.g., the Atomic Energy Act of 1954 (AEA), the National Environmental Policy Act of 1969 (NEPA)); (2) the injury is fairly traceable to the challenged

---

<sup>3</sup> See Pacific Gas & Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-07-11, 65 NRC \_\_ (Feb. 26, 2007); System Energy Resources, Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-07-10, 65 NRC \_\_ (Feb. 26, 2007); Nuclear Management Co., LLC (Palisades Nuclear Plant), CLI-07-09, 65 NRC \_\_ (Feb. 26, 2007); Amergen Energy Co., LLC (License Renewal for Oyster Creek Nuclear Generating Station), CLI-07-08, 65 NRC \_\_ (Feb. 26, 2007).

action; and (3) the injury is likely to be redressed by a favorable decision. See Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996). In this regard, in cases involving the possible construction or operation of a nuclear power reactor, proximity to the proposed facility has been considered sufficient to establish the requisite standing elements. See Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989). Further, when an entity seeks to intervene on behalf of its members, that entity must show it has an individual member who can fulfill all the necessary standing elements and who has authorized the organization to represent his or her interests. See Vermont Yankee Nuclear Power Corp. and Amergen Vermont, LLC (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000). In assessing a petition to determine whether these elements are met, which a presiding officer must do even though there are no objections to a petitioner's standing, the Commission has indicated that we are to "construe the petition in favor of the petitioner." Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995). We apply these rules and guidelines in evaluating each of the Joint Petitioners standing presentations.

2. Atlanta Women's Action for New Directions (Atlanta WAND)

DISCUSSION: Intervention Petition at 4-5 & exh. 1; SNC Answer at 6 n.7; Staff Answer at 9 & attach. A.

RULING: Atlanta WAND is a not-for-profit organization whose members oppose the issuance of an ESP to SNC. Attached to the Joint Petitioners hearing request are the affidavits of three WAND members, each of whom states that Atlanta WAND is authorized to represent his or her interests. All three members reside within fifty miles of the Plant Vogtle site, and at least one lives within thirty miles of the facility. These individuals' asserted health, safety, and

environmental interests and their agreement to permit Atlanta WAND to represent their interests are sufficient to establish Atlanta WAND's standing to intervene in this proceeding.

3. Blue Ridge Environmental Defense League (BREDL)

DISCUSSION: Intervention Petition at 4-5 & exh. 1; SNC Answer at 6 n.7; Staff Answer at 10 & attach. A.

RULING: BREDL is a not-for-profit organization whose members oppose the issuance of an ESP to SNC. Attached to the Joint Petitioners hearing request are the affidavits of sixteen BREDL members, each of whom states that BREDL is authorized to represent his or her interests. All sixteen members reside within fifty miles of the Plant Vogtle site, and at least one lives within twenty-five miles of the facility. These individuals' asserted health, safety, and environmental interests and their agreement to permit BREDL to represent their interests are sufficient to establish BREDL's standing to intervene in this proceeding.

4. Center for a Sustainable Coast (CSC)

DISCUSSION: Intervention Petition at 4-5 & exh. 1; SNC Answer at 6 n.7; Staff Answer at 10-11 & attach. A.

RULING: CSC is a not-for-profit corporation whose members oppose the issuance of an ESP to SNC. Attached to the Joint Petitioners hearing request are the affidavits of three CSC members, each of whom states that CSC is authorized to represent his or her interests. One member resides within thirty-nine miles of the Plant Vogtle site. This individual's asserted health, safety, and environmental interests and his agreement to permit CSC to represent his interests are sufficient to establish CSC's standing to intervene in this proceeding.

5. Savannah Riverkeeper (SR)

DISCUSSION: Intervention Petition at 4-5 & exh. 1; SNC Answer at 6 n.7; Staff Answer at 8-9 & attach. A.

RULING: SR is a not-for-profit organization whose members oppose the issuance of an ESP to SNC. Attached to the Joint Petitioners hearing request are the affidavits of three SR members, each of whom states that SR is authorized to represent his interests. All three reside within forty miles of the Plant Vogtle site, and at least one lives within thirty-five miles of the facility. These individuals' asserted health, safety, and environmental interests and their agreement to permit SR to represent their interests are sufficient to establish SR's standing to intervene in this proceeding.

6. Southern Alliance for Clean Energy (SACE)

DISCUSSION: Intervention Petition at 4-5 & exh. 1; SNC Answer at 6 n.7; Staff Answer at 8 & attach. A.

RULING: SACE is a not-for-profit organization whose members oppose the issuance of an ESP to SNC. Attached to the Joint Petitioners hearing request are the affidavits of three SACE members, each of whom states that SACE is authorized to represent his or her interests. Two members reside within fifty miles of the Plant Vogtle site, and at least one lives within thirty-six miles of the facility. These individuals' asserted health, safety, and environmental interests and their agreement to permit SACE to represent their interests are sufficient to establish SACE's standing to intervene in this proceeding.

B. Joint Petitioners Contentions

1. Contention Admissibility Standards

Section 2.309(f) of the Commission's rules of practice specifies the requirements that must be met if a contention is to be deemed admissible. Specifically, a contention must provide (1) a specific statement of the legal or factual issue sought to be raised; (2) a brief explanation of its basis; (3) a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the

petitioner intends to rely at hearing; and (4) sufficient information demonstrating that a genuine dispute exists in regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief. See 10 C.F.R. § 2.309(f)(1)(i), (ii), (v), and (vi). In addition, the petitioner must demonstrate that the issue raised in the contention is both “within the scope of the proceeding” and “material to the findings the NRC must make to support the action that is involved in the proceeding.” Id. § 2.309(f)(1)(iii)-(iv). Failure to comply with any of these requirements is grounds for dismissing a contention. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999); see also Arizona Public Service Co. (Palo Verde Nuclear Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 143, 155-56 (1991).

NRC case law has further developed these requirements, as is summarized below:

a. Challenges to Statutory Requirements/Regulatory Process/Regulations

An adjudication is not the proper forum for challenging applicable statutory requirements or the basic structure of the agency's regulatory process. Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20, aff'd in part on other grounds, CLI-74-32, 8 AEC 217 (1974). Similarly, a contention that attacks a Commission rule, or which seeks to litigate a matter that is, or clearly is about to become, the subject of a rulemaking, is inadmissible. See 10 C.F.R. § 2.335; Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85, 89 (1974). This includes contentions that advocate stricter requirements than agency rules impose or that otherwise seek to litigate a generic determination established by a Commission rulemaking. See Florida Power and Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 159 (2001); Pacific Gas and Electric Co. (Diablo Canyon Nuclear

Power Plant, Units 1 and 2), LBP-93-1, 37 NRC 5, 29-30 (1993); Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982); see also Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 251 (1996); Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), LBP-91-19, 33 NRC 397, 410, aff'd in part and rev'd in part on other grounds, CLI-91-12, 34 NRC 149 (1991). By the same token, a contention that simply states the petitioner's views about what regulatory policy should be does not present a litigable issue. See Peach Bottom, ALAB-216, 8 AEC at 20-21 & n.33.

b. Challenges Outside Scope of Proceeding

All proffered contentions must be within the scope of the proceeding as defined by the Commission in its initial hearing notice and order referring the proceeding to the Licensing Board. See 10 C.F.R. § 2.309(f)(1)(iii); Florida Power and Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000); Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985). As a consequence, any contention that falls outside the specified scope of the proceeding must be rejected. See Portland General Electric Co. (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289 n.6 (1979).

c. Need for Adequate Factual Information or Expert Opinion

It is the petitioner's obligation to present factual information and/or expert opinion necessary to support its contention. See 10 C.F.R. § 2.309(f)(1)(v); Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, vacated in part and remanded on other grounds and aff'd in part, CLI-95-10, 42 NRC 1, and CLI-95-12, 42 NRC 111 (1995). While a Board may appropriately view a petitioner's supporting information in a light favorable to the petitioner, failure to provide such information regarding a

proffered contention requires the contention be rejected. See Palo Verde, CLI-91-12, 34 NRC at 155. In this connection, neither mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention. See Fansteel, Inc. (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003). If a petitioner neglects to provide the requisite support for its contentions, it is not within the Board's power to make assumptions of fact that favor the petitioner, nor may the Board supply information that is lacking. See Palo Verde, CLI-91-12, 34 NRC at 155; Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 422 (2001); Georgia Tech Research Reactor, LBP-95-6, 41 NRC at 305.

Likewise, simply attaching material or documents as a basis for a contention, without setting forth an explanation of that information's significance, is inadequate to support the admission of the contention. See Fansteel, CLI-03-13, 58 NRC at 204-05. Along these lines, any supporting material provided by a petitioner, including those portions of the material that are not relied upon, is subject to Board scrutiny. See Yankee Atomic Electric Co. (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1996); rev'd in part on other grounds, CLI-96-7, 43 NRC 235 (1996). Thus, the material provided in support of a contention will be carefully examined by the Board to confirm that on its face it does supply an adequate basis for the contention. See Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990).

d. Materiality

To be admissible, the regulations require that all contentions assert an issue of law or fact that is material to the outcome of a licensing proceeding, meaning that the subject matter of the contention must impact the grant or denial of a pending license application. See 10 C.F.R.

§ 2.309(f)(1)(iv). This requirement of materiality often dictates that any contention alleging deficiencies or errors in an application also indicate some significant link between the claimed deficiency and either the health and safety of the public or the environment. See Yankee Nuclear, LBP-96-2, 43 NRC at 75-76; see also Pacific Gas & Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), LBP-02-23, 56 NRC 413, 439-41(2002), petition for review denied, CLI-03-12, 58 NRC 185, 191 (2003).

e. Insufficient Challenges to the Application

All properly formulated contentions must focus on the license application in question, challenging either specific portions of or alleged omissions from the application (including the Safety Analysis Report and the Environmental Report) so as to establish that a genuine dispute exists with the applicant on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(vi). Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed. See Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), review declined, CLI-94-2, 39 NRC 91 (1994); Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992).

2. Scope of Contentions

Although licensing boards generally are to litigate “contentions” rather than “bases,” it has been recognized that “[t]he reach of a contention necessarily hinges upon its terms coupled with its stated bases.” Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988), aff’d sub nom. Massachusetts v. NRC, 924 F.2d 311 (D.C. Cir.), cert. denied, 502 U.S. 899 (1991); see also Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 379 (2002). As outlined below, exercising our authority under 10 C.F.R. §§ 2.316, 2.319, 2.329, we have

acted to further define the Joint Petitioners admitted contentions when redrafting would clarify the scope of the contention.

3. Environmental Contentions (EC)

EC 1.1 – ER FAILS TO INCLUDE AN ADEQUATE AQUATIC HABITAT BASELINE<sup>4</sup>

CONTENTION: The ER fails to use quantitative analysis and field surveys to assess baseline habitat conditions and species diversity and abundance in the project's area.

DISCUSSION: Intervention Petition at 7-9; SNC Answer at 11-16; Staff Answer at 14-15; Joint Petitioners Reply at 6-8; Tr. at 13-64.

RULING: Although, to some degree, Joint Petitioners intermingle the substance of this contention with that of contentions EC 1.2 and EC 1.3, the crux of their concern reflected in this issue statement is that the SNC ER suffers from a fundamental deficiency in that its analysis regarding the impacts and effects of the proposed ESP on the aquatic environment in the area of the Plant Vogtle site is based on information that is inadequate to establish the requisite environmental baseline. According to Joint Petitioners, the ER is inadequate because SNC has failed to include, i.e., omitted, a site-specific description of the Plant Vogtle aquatic environs that is based on recent field studies or a quantitative analysis of the circumstances regarding aquatic species assemblage, migration by anadromous (i.e., moving from the sea to rivers to breed) and diadromous (i.e., migrating between salt and fresh water) species, or habitat utilization within the proposed intake and discharge sites and/or the project area. Rather, according to Joint Petitioners, SNC has chosen to rely on long-term studies of the Savannah River Site (SRS), a

---

<sup>4</sup> In noting relative to their initial "contention" that the three "subcontentions" would be treated as separate issue statements, the Board afforded Joint Petitioners the opportunity to label and restate those contentions, including utilizing any of the information contained in support of the "main" contention. See Initial Prehearing Order at 3 n.2. In that regard, because Joint Petitioners did not assign a title to each of these three contentions, the Board has done so based on the contention's content and stated bases. The language of these and the Joint Petitioners other contentions as set forth below is verbatim.

Department of Energy (DOE) nuclear weapons facility that is across the river from the Plant Vogtle site, that collected data in the vicinity of Plant Vogtle. Applicant SNC opposes the admission of this baseline contention as failing to set forth sufficient information to show the existence of a genuine dispute and as lacking a legal basis. The staff does not oppose its admission in part, finding a sufficient basis for challenge to the ER based on an asserted lack of discussion of baseline aquatic ecology conditions in the Savannah River.

Joint Petitioners correctly indicate that a NEPA analysis relating to aquatic impacts must, as a practical matter, have a baseline from which to operate. See American Rivers v. FERC, 201 F.3d 1186, 1195 n.15 (9th Cir. 2000). It is equally apparent, however, that nothing in the agency's Part 51 NEPA regulations, see 10 C.F.R. § 51.45(b) (ER must contain "description of the environment affected"), or the staff's ER preparation guidance regarding providing a description of the local environment, see Office of Standards Development, U.S. Nuclear Regulatory Commission [(NRC)], Preparation of [ERs] for Nuclear Power Stations, Regulatory Guide 4.2, at 2-3 to -4 (rev. 2 July 1976) (ADAMS Accession No. ML003739519) [hereinafter Regulatory Guide 4.2], indicates exactly how, as a general matter, such a baseline is to be established.

Although Joint Petitioners have provided the affidavit of Dr. Shawn Paul Young in which he suggests that the existing reference material and studies cited by SNC in its environmental report are inadequate to provide the necessary baseline, he does so in the context of his concern that there is inadequate information to assess the impacts upon the Savannah River aquatic population of the additional intake and discharge outlets that would be constructed and utilized for two additional Vogtle units. See Intervention Petition, exh. 1.3, at 3-9 (Declaration of Shawn Paul Young, Ph.D.) [hereinafter Young Declaration]. In contrast, it appears uncontested that the applicant has adequately described the general aquatic resources of the Savannah

River, including the river's important species and their habitats. See Intervention Petition at 8-9; ER at 2.4-7 to-16. In that regard, during the February 13 initial prehearing conference argument concerning this contention, Joint Petitioners counsel explained their position in a colloquy with one of the Board members:

JUDGE TRIKOUROS: So what you're saying – and really this goes to an earlier – a question that I was going to ask. In general, the baseline for that river on a general basis has been characterized adequately to your knowledge, based on work done by [the DOE SRS] and also the existing Vogtle units?

MR. SANDERS: I believe that the general population data and – yes. Let me just say yes. I think that there is sufficient information about the river in general. We are talking about the specific site.

JUDGE TRIKOUROS: Now, when you talk about the site, are you talking about some region around the intake and some region around the discharge? Is that what you're calling the site?

MR. SANDERS: Well, you see, again, this illustrates the problem with the ER is that it doesn't – that is should be identifying the site. It talks about the Savannah River in general, but it doesn't provide a description of the stretch of the river that is immediately adjacent to Plant Vogtle where the intake and discharge structure will be located. That's really the problem is that there really isn't that specific description of the exact site.

So there's the Savannah River. There's the Middle Savannah River around Plant Vogtle. There's, you know, the Savannah River below the city of Augusta. There's a description of that sort of stuff, but they didn't take the next step and actually describe the flow and habitat conditions on the river right there.

Tr. at 18-19.

As this discussion suggests, the information provided by Joint Petitioners would be inadequate to support the admission of a contention that the aquatic baseline set forth in the ER is wholly insufficient. At the same time, in support of their argument the ER is deficient because of its lack of site-specific studies, Joint Petitioners have not demonstrated with any references -- nor are we aware of any -- that suggest site-specific studies are generally required. Rather, the

appropriate scope of the baseline for a project is a functional concept: an applicant must provide enough information and in sufficient detail to allow for an evaluation of important impacts. See Office of Nuclear Reactor Regulation, [NRC], Standard Review Plans for Environmental Reviews for Nuclear Power Plants, NUREG-1555, at 4.3.2-1 to -2 (Oct. 1999) [hereinafter NUREG-1555]; Office of Nuclear Regulatory Research, [NRC], General Site Suitability Criteria for Nuclear Power Stations, Regulatory Guide 4.7, at 4.7-14 to -15 (rev 2. Apr. 1998) (ADAMS Accession No. ML003739894). Although, as we explain below, aspects of this contention may come into play relative to EC 1.2, see infra p. 18, we conclude Joint Petitioners have failed to provide sufficient factual or expert information to support its stated scope and, accordingly, we decline to admit this issue statement.<sup>5</sup> See 10 C.F.R. § 2.309(f)(1)(v).

---

<sup>5</sup> In their intervention petition, Joint Petitioners declared:

The ER's analysis of the cooling system intake and discharge structures and operation is not based on field surveys or quantitative analysis. ER § 5.3; 10 C.F.R. § 51.45(c). Thus, the ER fails to identify the current aquatic species assemblage or the presence or absence of threatened, endangered, or rare species in the project area. Similarly, the ER contains no data concerning upstream and downstream migration of anadromous and diadromous species in this section of the Savannah River or their habitat utilization within the project area. Likewise, the ER does not address specific habitat types and utilization by resident and anadromous fish in the project area. Nor does the ER examine flow-habitat relationships and the potential impacts of the project on habitat availability.

Intervention Petition at 8. In its answer to the intervention petition, the staff indicated this statement was sufficient to support the admission of this contention as it related to the adequacy of the ER's discussion of current aquatic species assemblage, migration/habitat utilization by anadromous/diadromous species, and habitat types/utilization by anadromous fish, but was insufficient to support the contention's admission relative to flow-habitat relationships and habitat availability impacts. See Staff Answer at 14-15; see also Tr. at 47-49. Given the factual support provided by Joint Petitioners, however, we are unable to conclude that any aspects of this contention are admissible.

EC 1.2 – ER FAILS TO IDENTIFY AND CONSIDER COOLING SYSTEM IMPACTS ON AQUATIC RESOURCES

CONTENTION: The ER fails to identify and consider direct, indirect, and cumulative impacts of the proposed cooling system intake and discharge structures on aquatic resources.

DISCUSSION: Intervention Petition at 10-13; SNC Answer at 16-23; Staff Answer at 16-19; Joint Petitioners Reply at 8-12; Tr. at 65-97.

RULING: SNC asserts that this contention regarding the inadequacy of the ER's discussion of intake/discharge structure aquatic impacts associated with impingement/entrainment and chemical and thermal effluent discharges should be dismissed as lacking sufficient factual and legal support and as not material to the agency's findings relative to ESP issuance. The staff does not oppose its admission.

In contrast to contention EC 1.1, we find the Joint Petitioners submission, in particular the affidavit of Dr. Shawn Paul Young, provides sufficient factual support for the admission of this contention. For each of the asserted deficiencies concerning the ER impact discussion regarding the intake/discharge structure for the two new proposed facilities -- impingement/entrainment, chemical discharges, and thermal discharges, including cumulative impacts from these items associated with the existing Vogtle facilities -- Dr. Young's affidavit provides specific references to a number of alleged errors in the ER. See Young Declaration at 3-11. Moreover, in the absence of a National Pollutant Discharge Elimination System (NPDES) permit for the new intake/discharge facility, we are unable to find dispositive of this contention's admissibility the SNC effort, see Tr. at 88-89, to rely upon an EPA rulemaking regarding the "best available technology" status of a closed-cycle recirculating cooling system, see 66 Fed. Reg. 65,256 (Dec. 18, 2001), purported to be like that proposed for the new Vogtle facilities. See NUREG-1555, at 5.3.1.2-5 to -6, 5.3.2.2-5 to -6 (if current NPDES permit or state

equivalent is not available, staff reviewer must continue with analysis of applicant's cooling water intake/discharge system impacts).

Accordingly, we conclude that this contention, as set forth in Appendix A to this opinion, is supported by bases establishing a genuine material dispute adequate to warrant further inquiry. In admitting this contention, we note that litigation regarding its merits may involve the question of the adequacy of the baseline information provided by SNC relative to the portion of the Savannah River that encompasses the project area associated with the intake/discharge structures for both the existing and proposed Vogtle facilities.

#### EC 1.3 – ER ALTERNATIVES DISCUSSION FAILS TO ADDRESS AQUATIC SPECIES IMPACTS

**CONTENTION:** The ER fails to satisfy 10 C.F.R. § 51.45(b)(3) because it fails to address impacts to aquatic species in its discussion of alternatives. In particular, the ER's discussion of the no-action alternative and of alternative cooling technologies fails to consider environmental and economic benefits of avoiding construction of the proposed cooling system.

**DISCUSSION:** Intervention Petition at 14-15; SNC Answer at 24-26; Staff Answer at 19-22; Joint Petitioners Reply at 12-14; Tr. at 97-117.

**RULING:** Joint Petitioners posit two bases in support of EC 1.3: the ER discussion of the no-action alternative does not provide an adequate discussion of economic and environmental benefits, and the ER discussion of the dry-cooling alternative and aquatic impacts is insufficient because extremely sensitive biological resources are present. Applicant SNC opposes this contention, arguing that it lacks a genuine factual or legal basis necessary for admission under 10 C.F.R. § 2.309(f). The staff originally opposed admitting the contention altogether, but at oral argument stated it would favor admitting a limited version of the contention if the Board admitted EC 1.2. The staff's revised EC 1.3 would provide that "the ER's discussion of alternative cooling technology related to dry cooling in Section 9.4 of the ER fails to consider the environmental and economic benefits of dry cooling over the proposed cooling system." Tr. at 108.

The Board concludes the Joint Petitioners argument addressing the no-action alternative is inadmissible because it does not specifically address any deficiencies in the ER discussion of the no-action alternative. Nor do Joint Petitioners address why more information regarding the no-action alternative is needed in the face of prior Commission statements noting that such discussions can be brief and can incorporate by reference other sections of the ER discussing the project's adverse consequences. See Hydro Resources, Inc. (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-04, 53 NRC 31, 54 (2001) (“[f]or the ‘no action’ alternative, there need not be much discussion”); Louisiana Energy Services, Inc. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 98 (1998) (“[w]e do not find the FEIS's incorporation by reference approach unreasonable as such”). By failing to point to specific parts of the ER's discussion of the no-action alternative they find inadequate and to provide support for that dispute, Joint Petitioners have failed to provide sufficient information to show that a genuine dispute exists with the applicant. See 10 C.F.R. § 2.309(f)(1)(vi).

The Joint Petitioners other, and seemingly primary, argument relative to this contention challenges whether SNC has provided an adequate analysis of dry cooling as an alternative cooling system for the proposed Vogtle facilities. SNC generally is obligated in the ER to discuss project alternatives and emphasize those that “appear promising in terms of environmental protection.” Regulatory Guide 4.2, at 10-1; see also Joint Petitioners Reply at 14. In this regard, the staff's regulatory guide instructs applicants to include alternatives that “although not necessarily economically attractive, . . . are based on feasible technology available to the applicant during the design state.” Id.

Established case law teaches that, except for its overall NEPA balancing, the NRC can limit its analysis of aquatic impacts to those determined by the EPA, see New England Coalition on Nuclear Pollution v. NRC, 582 F.2d 87, 98 (1st Cir. 1978), when EPA has analyzed an

alternative technology extensively and made conclusions as to its suitability. In light of that authority, it is not untoward that an applicant would seek to rely on that analysis. So in this context, in which EPA has rejected dry cooling as the best available technology for cooling systems (or as a national minimum requirement), finding that its environmental benefits are not so great as to offset its costs, regional disparities, and losses in energy efficiency, see 66 Fed. Reg. at 65,282, it hardly comes as a surprise the SNC discussion of dry cooling relies in significant part upon the EPA's analysis and conclusions regarding dry cooling, see ER at 9.4-2. Nor is such reliance necessarily inappropriate, given the deference to the EPA's analyses in areas such as these.

In that analysis, however, EPA also stated:

Although EPA has rejected dry cooling technology as a national minimum requirement, EPA does not intend to restrict the use of dry cooling or to dispute that dry cooling may be the appropriate cooling technology for some facilities. This could be the case in areas with limited water available for cooling or waterbodies with extremely sensitive biological resources (e.g., endangered species, specially protected areas).

66 Fed. Reg. at 65,282. If the Vogtle site thus contains these extremely sensitive resources, it is arguable that, consistent with this EPA analysis, applicant SNC should be required to conduct further analysis as to whether, considering the present sensitive species and other pertinent factors, dry cooling is appropriate for the Vogtle site.

Joint Petitioners have asserted there are extremely sensitive resources present in the Savannah River in the vicinity of the Vogtle facility and have given examples of what they believe to be extremely sensitive species, including the shortnose sturgeon (which is a federally listed endangered species) and the robust redhorse (which until 1997 was thought to be extinct). See Intervention Petition at 15. SNC disputes that such species are present and appears to argue that the term "extremely sensitive" does not mean federally listed endangered

species. See SNC Answer at 25-26; Tr. at 107. The EPA has not defined the term “extremely sensitive biological resources,” other than to offer two examples, “i.e., endangered species and specially protected areas.” 66 Fed. Reg. at 65,282. The Board concludes that the meaning of this term and whether such resources are present are material factual and legal disputes best resolved in merits litigation regarding this contention.

Accordingly, we conclude that this contention concerning the need for an additional discussion of dry cooling as an alternative cooling system, as set forth in Appendix A to this opinion, is supported by bases establishing a genuine material dispute adequate to warrant further inquiry.

#### EC 2 – ENVIRONMENTAL JUSTICE - IMPACT ON MINORITY AND LOW-INCOME POPULATIONS

**CONTENTION:** The ER for the proposed new reactors at Plant Vogtle is inadequate to satisfy the NEPA because it fails to provide a thorough analysis of the disparate environmental impacts of the project on the minority and low-income communities residing in close proximity to the site. The ER fails to consider factors particular to those communities which will magnify the environmental impacts of the proposed reactors in a way that is both disparate and significant. In particular, the ER fails to acknowledge the widespread practice of subsistence fishing in the Savannah River, and the likelihood that this population's intake of radionuclides and other toxic substances generated by the proposed reactors will be significant and disproportionate to the rates of ingestion by the general population. In addition, the ER fails to address the fact that cancer rates in the minority and low-income communities surrounding Plant Vogtle are already higher than for the general population, and therefore that those communities are more vulnerable to the adverse impacts of additional radiological and chemical pollution in the environment. Finally, the ER fails to address disparate impacts on the minority and low-income communities during a radiological emergency and evacuation.

**DISCUSSION:** Intervention Petition at 15-26; SNC Answer at 26-40; Staff Answer at 23-29; Joint Petitioners Reply at 14-25; Tr. at 118-48.

**RULING:** In support of this contention, Joint Petitioners argue that the ER has neglected to discuss adequately three adverse impacts that fall disproportionately upon the minority and low-income populations that the ER acknowledges are in the communities surrounding the proposed Vogtle facilities: the area's heightened cancer rates, the evacuation methods used in the event of an emergency, and the effects of eating cesium (Cs)-137-laden fish caught by

minority and low-income community residents engaged in subsistence fishing. Both SNC and the staff oppose admitting this contention, arguing that it runs afoul of 10 C.F.R. § 2.309(f)(1) in that it neither includes sufficient information to show that a genuine dispute exists nor raises an issue material to these proceedings.

As noted by Joint Petitioners and the staff, the NRC has made a commitment as part of its NEPA review process to strive to reach the environmental justice goals described in Executive Order 12898. See 69 Fed. Reg. 52,040, 52,041-42 (Aug. 24, 2004) (final Commission environmental justice policy statement). As the Commission previously has noted in reviewing environmental justice claims, “[a]dverse impacts that fall heavily on minority and impoverished citizens call for particularly close scrutiny.” Louisiana Energy Services, CLI-98-3, 47 NRC at 106.

There are, however, two requirements necessary to implicate this close environmental justice scrutiny. First, support must be presented regarding the alleged existence of adverse impacts or harm on the physical or human environment. Second, a supported case must be made that these purported adverse impacts could disproportionately affect poor or minority communities in the vicinity of the facility at issue. See 69 Fed. Reg. at 52,047. Joint Petitioners have not met these two requirements relative to any of their three alleged disproportionate impacts.

Initially, we note Joint Petitioners argument regarding heightened cancer rates in the area of the existing Vogtle facilities is not supported by relevant evidence regarding such enhanced rates or any other possible harm. Although Joint Petitioners present one article discussing a study that found increased cervical and esophageal cancer rates in the vicinity of the SRS, they also note the study’s observation that “these types of cancer are not necessarily associated with exposure to radioactive materials.” Intervention Petition at 23. No evidence of

heightened rates for any cancers typically associated with radiation exposure is presented. In fact, the overall conclusion of the sole study cited by Joint Petitioners is that “most cancer rates in the area are about the same as in similar communities.” Id., exh. 2.7, at 1 (Researchers Find Cancer Rates Normal Near Nuclear Plant, *Cancer Weekly*, Feb. 3, 1997, at 13-14). All told,<sup>6</sup> the evidence presented for this argument is inadequate to provide the necessary “alleged facts or expert opinions which support the requestor’/petitioner’s position on the issue.” 10 C.F.R. § 2.309(f)(1)(v). Additionally, without relevant evidence of heightened cancer rates, there is no evidence of either adverse or disparate impacts. As such, this aspect of EC 2 fails to show, as is required by section 2.309(f)(1)(iv), “that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding.”

The emergency planning prong of EC 2 also fails to meet NRC contention admissibility standards because of its lack of relevant supporting material. The NRC requires that environmental justice contentions be based on the specific characteristics of a particular minority community. See Clairborne Enrichment Center, CLI-98-3, 47 NRC at 100. Thus, in the Clairborne Enrichment Center proceeding, to support an argument that the minority community surrounding the site would be disproportionately impacted by a longer bypass road, the petitioners presented evidence that a larger proportion of this community did not have cars. Id. at 107-08. No information of this type has been presented here. Instead, Joint Petitioners

---

<sup>6</sup> Joint Petitioners also make an assertion that this portion of EC 2 is supported by pre- and post-Vogtle facility mortality data concerning Burke County, but cite only to a general nationwide database of mortality data in which it is not apparent where the data that supposedly supports their assertion is to be found. See Intervention Petition at 24 n.30. It being well-established that the Board cannot be expected to sift through reams of data to determine whether a contention is admissible, see Georgia Tech Research Reactor, LBP-95-6, 41 NRC at 305; International Uranium Corp. (Receipt of Material from Tonawanda, New York), LBP-98-21, 48 NRC 137, 142 n.7 (1998); Tennessee Valley Authority (Browns Ferry Nuclear Plant, Units 1 and 2), LBP-76-10, 3 NRC 209, 216 (1976), this non-selective citation is not consistent with the Joint Petitioners obligation to provide analyses and expert opinion supporting their contention.

simply cite to a report regarding the evacuation of the urban poor population of New Orleans, Louisiana, during Hurricane Katrina and note that the area around Plant Vogtle would present different challenges, without explaining what those different challenges might be.<sup>7</sup> See Intervention Petition at 25-26; Joint Petitioners Reply at 25. This general, unsupported argument is not only insufficient to provide the necessary factual or expert opinion support for this contention in accord with section 2.309(f)(1)(v), but also is so vague as to fail to demonstrate a disagreement with the applicant as required by section 2.309(f)(1)(vi).

Finally, there is the Joint Petitioners primary environmental justice assertion that poor and minority populations will be disproportionately harmed by the cumulative impacts of the new Vogtle facilities given the current presence of Cs-137 pollution in the Savannah River fish population that is a subsistence food source. This concern, however, also lacks an adequate showing of adverse impacts, without which disparate impacts have no significance, making the potential issue immaterial to the environmental findings associated with the SNC ESP application and thus an inadmissible contention.<sup>8</sup>

At the contention admissibility stage, it is appropriate to ask as a threshold matter whether, assuming the Board could find the Joint Petitioners supporting evidence credible, they

---

<sup>7</sup> Joint Petitioners never specifically reference or discuss the section of the SNC emergency plan that addresses the process for evacuating those without cars, see EP at J-5, which seemingly would be the unique characteristic of the affected poor and minority communities at issue.

<sup>8</sup> In contesting the admission of this contention, the staff asserted that the Joint Petitioners argument wrongly focuses on impacts resulting from the SRS. NRC, however, has expressed a commitment to considering cumulative impacts in its environmental justice analysis, making SRS-related harm an appropriate issue to consider cumulatively with any impacts from the proposed reactors. See 69 Fed. Reg. at 52,042-43. Additionally, SNC's argument that there are no subsistence fishermen on the Savannah River based on its inquiries to the appropriate governmental entities improperly goes to the merits of the Joint Petitioners contention. See Commonwealth Edison Co. (Braidwood Nuclear Power Station, Units 1 and 2), LBP-85-20, 21 NRC 1732, 1741 (1985).

have shown that the issue raised in this contention is material to legitimate health and safety or environmental concerns about which the NRC must make findings. See 10 C.F.R.

§ 2.309(f)(1)(iv). Here, even if the Board assumes subsistence fishing takes place on the Savannah River, as Joint Petitioners contend, and a disproportionate number of local residents who are poor or members of a minority group eat the 50 kilograms (kg) or more of fish per year from the river that the Joint Petitioners proffered supporting study sets as the “subsistence” consumption level, see Intervention Petition, exh. 2.4, at 431 (J. Burger, et al., Factors in Exposure Assessment: Ethnic and Socioeconomic Differences in Fishing and Consumption of Fish Caught Along the Savannah River, 19 Risk Analysis 427 (1999)) [hereinafter Burger Study], Joint Petitioners have not alleged, much less presented any supporting information suggesting, that consuming 50 kg/year of fish from the Savannah River will create levels of Cs-137 in those eating the fish that violate NRC or EPA dose limits.<sup>9</sup>

As is explained in its ER, see ER at 5.4-1, SNC evaluated the dose to the maximally exposed individual (MEI) from liquid effluents from the Vogtle facilities using the methodology of relevant staff Regulatory Guide 1.109, [OSD], [NRC], Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR 50, Appendix I, Regulatory Guide 1.109 (rev. 1 Oct. 1977) (ADAMS Accession No. ML003740384), with input from the Vogtle Offsite Dose Calculation Manual (ODCM) (ver. 22 June 25, 2004) (referenced in ER at 5.4-13). In this regard, the two sources of ingestion

---

<sup>9</sup> Although Joint Petitioners cite as a primary source for their assertions regarding subsistence fishing a report from the Institute for Energy and Environment Research, see Intervention Petition at 20 n.14 (citing Arjun Makhijani, Ph.D., and Michele Boyd, Institute for Energy and Environmental Research, Nuclear Dumps by the Riverside: Threats to the Savannah River from Radioactive Contamination at the [SRS] (2004) (Exh. 2.3) [hereinafter IEER Study]), it is apparent that the basis for the conclusions in this report is the Burger study that is attached as Exhibit 2.4 to the Joint Petitioners hearing request, see Tr. at 133. We thus look to that article as the supporting basis for this aspect of their contention.

evaluated by SNC were ingestion of fish and ingestion of drinking water from the river. See ER at 5.4-1 to -2. The postulated total radiological releases from liquid effluents, which included a range of corrosion, activation, and fission products, were, excluding tritium, 0.26 curies (Ci)/year. Cs-137, the radionuclide found in various fish samples, see Intervention Petition at 19, was determined to be released at the rate of 0.013 Ci/year, one-twentieth of the total release, See ER at 3.5-15 (Table 3.5-1).

Bioaccumulation of Cs-137 and other radiological isotopes was considered in the MEI analysis in the ER accompanying the Vogtle ESP application, in accordance with the Vogtle ODCM. In evaluating the dose from these liquid radiological releases, SNC assumed an individual fish consumption of 21 kg/year and a drinking water consumption of 730 liters/year. See ER at 5.4-7 (Table 5.4-2). Using these assumptions, the calculated MEI total body and maximum organ annual doses from all radionuclide releases for both fish and water ingestion from the two new Vogtle units and the existing Vogtle units are, however, substantially less than the 10 C.F.R. Part 50, App. I, and 40 C.F.R. Part 190 limits. See ER at 5.4-7, 5.4-10 (Tables 5.4-2, 5.4-8, 5.4-9).

Although the drinking water dose was not identified by Joint Petitioners as contributing to an environmental justice concern, Joint Petitioners did identify fish consumption associated with subsistence fishing as a concern. See Intervention Petition at 20; Burger Study at 432-37. Given the large margin that would have to be eliminated before regulatory limits were violated, a review of the information available in the ER and the Vogtle ODCM indicates that, commensurate with the Joint Petitioners concern regarding subsistence fishing, an increase to 50 kg/year of fish from the 21 kg/year currently assumed under the SNC ER would result in an MEI dose that would still remain well below the current regulatory limits for liquid releases and for all pathways.

It should be added that when the SRS cesium releases into the river are taken into account as well, doses still remain under regulatory limits. The Cs-137 released from the SRS was 0.134 Ci/year and accounted for about 57 percent of the 0.08 millirem (mrem) MEI total body dose from liquid radiological releases in 2005, assuming a fish ingestion of 19 kg/year and a regulatory limit of 25 mrem/year. See Washington Savannah River Co., [SRS] [ER] for 2005, WSRC-TR-2006-0007, at 43 (Table 6-1), 48 ([www.srs.gov/general/pubs/ERsum/er06/er2005.htm](http://www.srs.gov/general/pubs/ERsum/er06/er2005.htm)).<sup>10</sup> While increasing the fish consumption rate for SRS to 50 kg/year would proportionally increase the dose, that dose still would be well below the NRC and EPA limits. Moreover, the cumulative annual dose from the SRS, existing Vogtle units, and proposed Vogtle units from liquid releases would remain well below the regulatory limit if the liquid pathway dose were increased to account for the higher fish consumption associated with subsistence fishing.<sup>11</sup> Certainly, Joint Petitioners have not provided any information that suggests a contrary result.

When a contention alleges that increases in radioactive releases create higher doses, but does not provide information or expert opinion to dispute the conclusion that the higher doses would still be under NRC regulatory limits, and no evidence has been presented to show that the higher levels will cause harm, sufficient information to show that a material dispute exists has not been provided and the contention making these claims should not be admitted. See 10 C.F.R. § 2.309(f)(1)(iv), (vi). Illustrative is Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 2), LBP-03-12, 58 NRC 75, 83, 93-94, aff'd, CLI-03-14,

---

<sup>10</sup> This report is the most recent version of the annual SRS report that is cited in the SNC ER at 10.5-4 and in the IEER Study at 76-77.

<sup>11</sup> Indeed, even increasing fish consumption to 100 kg/year, the high-end figure for black subsistence fisherman found in the Burger paper, see Burger Study at 432 (Table IV), would still not exceed NRC or EPA regulatory limits on an individual facility or cumulative basis.

58 NRC 207 (2003), in which an applicant sought a change to that facility's technical specifications regarding fuel-handling procedures that the petitioners alleged could increase the amounts of radiological effluents released offsite. Because the projected increased levels remained below regulatory limits and the petitioner did not provide a basis for showing why the increased levels might be unsafe, the Board found the petitioner had not provided a sufficient basis to demonstrate a genuine dispute on a material issue and dismissed the contention, a ruling with which the Commission agreed.<sup>12</sup> Similarly, in accord with the environmental justice executive order, the NRC has obligated itself to address only the disproportionate distribution of "high and adverse" effects in its NEPA analysis. See Private Fuel Storage, LLC (Independent Spent Fuel Storage Installation), CLI-02-20, 56 NRC 147, 154 (2002). A dosage increase that remains well under regulatory limits is not a "high and adverse" effect.<sup>13</sup>

Joint Petitioners assert repeatedly that the adverse impacts created by plant releases will fall disproportionately on the poor and minorities because most of those who eat more than

---

<sup>12</sup> Additionally, a contention based on the dangers of a dose below NRC regulatory limits could be considered an impermissible challenge to the Commission's regulations. In Millstone, the Commission found the petitioner's argument that "any increase in dose, no matter the amount, and regardless of whether the change complies with NRC radiological dose requirements, is unacceptable," amounted to an attack upon NRC dosage regulations. Millstone, CLI-03-14, 58 NRC at 217-18; see also Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982) ("In the absence of a 'regulatory gap,' . . . an attempt to advocate stricter requirements than those imposed by the regulations will result in a rejection of the contention, the latter as an impermissible collateral attack on the Commission's rules.").

<sup>13</sup> While one of the central purposes of NEPA is information-gathering and disclosure, information immaterial to the proceeding does not necessarily need not be included. See Exelon Generating Co., LLC (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 811 (2005) ("There may, of course, be mistakes in the DEIS, but in an NRC adjudication, it is intervenors' burden to show their significance and materiality. Our boards do not sit to 'flyspeck' environmental documents or to add details or nuances."); see also Private Fuel Storage, LLC (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002) ("NEPA does not call for examination of every conceivable aspect of federally licensed projects." (internal quotes omitted)).

50 kg of fish per year are African-American.<sup>14</sup> Without adverse effects, however, how those impacts are distributed is immaterial to this proceeding, and so the Joint Petitioners contention seeking further consideration of those impacts is not admissible.

In sum, Joint Petitioners have not provided sufficient relevant support in any of their three environmental justice arguments to show “some significant link between the claimed deficiency and either the health and safety of the public or the environment.” Louisiana Energy Services (National Enrichment Facility) LBP-04-14, 60 NRC 40, 56 (2004). Without this link, EC 2 does not assert an issue of law or fact that is material to the findings the NRC must make in this licensing proceeding and thus cannot be admitted. See 10 C.F.R. § 2.309(f)(1)(iv).

EC 3 – FAILURE TO EVALUATE WHETHER AND IN WHAT TIME FRAME SPENT FUEL GENERATED BY PROPOSED REACTORS CAN BE SAFELY DISPOSED OF

CONTENTION: The ER for the Vogtle ESP is deficient because it fails to discuss the environmental implications of the substantial likelihood that spent fuel generated by the new reactors will have to be stored at the Vogtle site for more than 30 years after the reactors cease to operate, and perhaps indefinitely. The Waste Confidence Decision does not support SNC’s failure to address this issue in the ER, because it has been outdated by changed circumstances and new and significant information. [(Footnote omitted)] As required [by] NEPA, the NRC may not permit construction or operation of the new Vogtle reactors unless and until it has taken into account these changed circumstances and new and significant information. 10 C.F.R. § 51.92; see also Marsh v. Oregon Natural Resources Council, 490 U.S. 360 (1989).

DISCUSSION: Intervention Petition at 26-31; SNC Answer at 41-49; Staff Answer at 29-33; Joint Petitioners Reply at 25-27; Tr. at 148-52.

RULING: As both SNC and the staff point out, this contention challenging the agency’s Waste Confidence Decision, which is embodied in 10 C.F.R. § 51.23, seemingly suffers from two potentially fatal deficiencies. First, it constitutes a challenge to an agency rule, which is not

---

<sup>14</sup> Although Joint Petitioners seek to claim that low income is a relevant environmental justice factor in connection with subsistence fishing, ultimately their material does not support an argument that adverse impacts, were there any, fall disproportionately upon the area’s poor. See Burger Study at 431 (“There were few significant differences as a function of income”); id. at 436 (“Income did not enter any of the models independently as a significant variable.”).

permitted in an agency adjudication. See 10 C.F.R. § 2.335(a); see also Entergy Nuclear Vermont Yankee LLC & Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), CLI-07-03, 65 NRC \_\_, \_\_ (slip op. at 7) (Jan. 22, 2007) (contention seeking ER analysis of long-term effects of high-density pool spent fuel storage inappropriately challenges rule-based generic environmental findings for reactor life extension proceedings). Additionally, notwithstanding the fact the agency's procedural rules offer an opportunity to request a waiver or exception to the application of a rule in a particular adjudicatory proceeding, see 10 C.F.R. § 2.335(b); see also Vermont Yankee, CLI-07-03, 65 NRC at \_\_ (slip op. at 7), the contention fails to address any of the elements required to seek and obtain such a waiver.

Apparently recognizing this difficulty, in their reply pleading Joint Petitioners indicated they intend to submit a rulemaking petition to the Commission in an attempt to have the Waste Confidence Decision reconsidered in light of what they assert is new and significant information regarding, among other things, (1) lack of any progress regarding a second high-level radioactive waste repository in addition to the proposed Yucca Mountain, Nevada facility; (2) the prospect that a number of new power reactors will be constructed and operated; and (3) whether, in light of the terrorist attacks of September 11, 2001, spent fuel can continue to be safely stored at existing power reactor sites during the lengthy period that will be required for a HLW repository to be licensed, constructed, and operated. Moreover, acknowledging their contention is likely to be dismissed from this proceeding, they request that the Board issue a ruling "retaining" them as parties in this proceeding pending agency completion of action on their rulemaking petition. See Joint Petitioners Reply at 27; see also Tr. at 149, 152. While we agree that Joint Petitioners issue statement EC 3 must be dismissed, we cannot agree to their request essentially to grant them provisional/conditional party status based on an anticipated

(but as yet unrealized) challenge associated with possible agency action on a promised (but yet-to-be-submitted) rulemaking petition.<sup>15</sup>

#### EC 4 – FAILURE TO ADDRESS ENVIRONMENTAL IMPACTS OF INTENTIONAL ATTACKS

CONTENTION: The [ER] for the Vogtle ESP application is inadequate to satisfy [NEPA] and NRC regulation 10 C.F.R. § 51.45(b) and (c) for the following reasons:

(a) it fails to address the environmental impacts of intentional attacks on the proposed nuclear power plants, or to evaluate a reasonable range of alternatives for avoiding or mitigating those impacts.

(b) it fails to address the cumulative impacts of an intentional attack on the existing Plant Vogtle, or to evaluate a reasonable range of alternatives for avoiding or mitigating those impacts.

DISCUSSION: Intervention Petition at 32-36; SNC Answer at 49-57; Staff Answer at 33-35; Joint Petitioners Reply at 27-29; SNC NEPA Terrorist Impacts Brief at 2-4; Staff NEPA Terrorist Impacts Brief at 2-4; Tr. at 152-61.

RULING: In various rulings, including its recent decision in the Grand Gulf ESP proceeding,<sup>16</sup> the Commission has made clear its position that a NEPA analysis is not the vehicle for exploring questions about the potential for a terrorist attack upon a proposed nuclear facility. To be sure, the ruling of the United States Court of Appeals for the Ninth Circuit in San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016 (9th Cir. 2006), cert. denied, \_\_\_ U.S. \_\_\_, 127 S. Ct. 1124 (2007), indicates that this Commission precedent is not applicable to independent spent fuel storage installation (ISFSI) licensing proceedings in the Ninth Circuit. At this juncture, however, as the Commission's Grand Gulf determination makes clear, the Board

---

<sup>15</sup> If a future rulemaking regarding the Waste Confidence Decision were instituted, presumably it would address how it should be applied to any pending proceedings.

<sup>16</sup> See Grand Gulf, CLI-07-10, 65 NRC at \_\_ (slip op. at 3-4); see also Palisades, CLI-07-09; 65 NRC at \_\_ (slip op. at 3-4); Oyster Creek, CLI-06-08, 65 NRC at \_\_ (slip op. at 4-12); Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Unit 3), CLI-02-27, 56 NRC 367, 371 (2002); Duke Energy Corp. (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-26, 56 NRC 358, 365-66 (2002); Private Fuel Storage, CLI-02-25, 56 NRC at 346-57; Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-02-24, 56 NRC 335, 338-39 (2002).

must, in this case being litigated far outside the boundaries of the Ninth Circuit, apply the Commission's existing case law directives.<sup>17</sup> As a consequence, we dismiss this contention,<sup>18</sup> finding it is outside the scope of this proceeding and fails to present a dispute regarding a material issue of law or fact.<sup>19</sup> See 10 C.F.R. § 2.309(f)(1)(iii), (vi).

#### EC 5 – FAILURE TO EVALUATE ENERGY ALTERNATIVES

**CONTENTION:** The ER for the Vogtle ESP is deficient because the Alternatives analysis is flawed on two accounts: First, it is based on premature and incomplete information that cannot be adequately assessed at this point in time, as Georgia Power has been ordered to submit a detailed assessment of the maximum achievable cost effective potential for energy efficiency and demand response programs in its service area in 2007. [(Footnote omitted.)] Second, it lacks a full and objective evaluation of all reasonable alternatives.

**DISCUSSION:** Intervention Petition at 36-39; SNC Answer at 58-63; Staff Answer at 35-41; Joint Petitioners Reply at 29-34; Tr. at 161-85.

**RULING:** In their initial pleading in support of this contention, Joint Petitioners argue the ER is incomplete in that it neither takes into account the 2007 version of SNC corporate affiliate Georgia Power's Integrated Resources Plan (IRP), which was not due to be filed with state regulators until after the deadline for filing contentions in this proceeding, nor includes a complete assessment of all reasonable alternatives. Both SNC and the staff oppose admitting this contention, arguing that it fails to meet the requirements of 10 C.F.R. § 2.309(f) because it

---

<sup>17</sup> Compare Grand Gulf, CLI-07-10, 65 NRC at \_\_ (slip op. at 3-4) with Diablo Canyon, CLI-07-11, 65 NRC at \_\_ (slip op. at 2-5).

<sup>18</sup> Although Joint Petitioners suggested that, in accord with 10 C.F.R. § 2.323(f), we refer any ruling dismissing this contention to the Commission for its further consideration, see Joint Petitioners Reply at 29, given the very recent vintage of the Commission decisions regarding this matter, see supra note 3, we decline to do so as it would serve no useful purpose at this point.

<sup>19</sup> In doing so, we also note that, unlike the Diablo Canyon ISFSI proceeding, this case concerns the licensing of a power reactor for which the ER already contains an analysis of the impacts of a beyond design basis severe accident, see ER at 7.2-1 to -8, that might envelop any impacts asserted to arise from a terrorism incident, see Tr. at 154-55; see also Oyster Creek, CLI-07-08, 65 NRC at \_\_ (slip op. at 8).

raises issues that fall outside the scope of, or are not material to, these proceedings and because it fails to include sufficient information to show that a genuine dispute exists.

The first prong of the contention is the Joint Petitioners claim the information in the ER is “premature, and necessarily incomplete” because it does not include information subsequently submitted in the 2007 version of Georgia Power’s IRP. Intervention Petition at 37. Joint Petitioners argue that “Georgia Power has been ordered to submit a detailed assessment of the maximum achievable cost effective potential for energy efficiency and demand response” in this document, id. at 36, and that the ER is incomplete because it does not reflect this assessment. Additionally, Joint Petitioners challenge the adequacy of the ER’s analysis because (1) the 2004 IRP did not include nuclear power as an option for meeting identified future needs; and (2) the two proposed additional Vogtle units have not been approved by (or even been submitted for approval by) the Georgia Public Service Commission (GPSC). See id. at 38.

Both SNC and the staff argue that this prong of the Joint Petitioners claim fails to satisfy the pleading requirements of 10 C.F.R. § 2.309 because it neither includes any specific challenge to the ER’s need for power discussion nor provides any factual or legal citations to support the assertion the ER is deficient. Additionally, SNC notes the Commission has established that “a state-approved need for power analysis can serve as the basis for satisfying the Commission’s need for power requirements” and that the current IRP was approved by state regulators as recently as 2006. SNC Answer at 59.

Initially, the Board notes that the ER, in an attempt to resolve this “need for power” issue now rather than awaiting the filing of a COL application relative to the proposed facilities, includes a section on the need for power in its “Energy Alternatives” analysis. As a consequence, SNC has opened the door for consideration and resolution of this issue as part of

the ESP hearing process.<sup>20</sup> The legal requirements for this analysis are found in 10 C.F.R. § 51.45(b)-(c) and are supplemented by NRC guidance that, although not legally binding, provides potential applicants with information about how to comply with regulatory requirements. See Regulatory Guide 4.2, at 9-1 to -4. This guidance specifies that an applicant must consider alternatives that do not require the creation of new power generating capacity to “support[] the justification for new generating capacity.” Id. at 9-1. The Standard Review Plan related to this guidance directs staff reviewers to consider energy conservation as one such alternative. See NUREG-1555, at 9.2.1-1.

In the relevant ER section, SNC describes the methods used in its most recent IRP to assess potential energy conservation (i.e., demand side management, or DSM) measures and notes that “no new DSM programs were identified for development” to supplement those already in place. ER at 9.2-3. SNC also cites a report prepared for the state that concludes that energy conservation programs “are insufficient to meet future demand.” Id. at 9.2-4 (citing Intervention Petition, exh. 5.2 (ICF Consulting, Georgia Environmental Facilities Authority Assessment of Energy Efficiency Potential in Georgia, Final Report (May 5, 2005)) [hereinafter ICF Report]).

Joint Petitioners present the ICF Report in support of their argument that a more complete analysis of the need for power is both possible and necessary. This position has some facial merit, in that GPSC has ordered Georgia Power to include an analysis resembling

---

<sup>20</sup> Applicants are not required to evaluate the need for power at the ESP stage. 10 C.F.R. § 52.17(a)(2) (the “environmental report must focus on the environmental effects of the construction and operation of a reactor . . . and . . . need not include an assessment of the benefits (for example, need for power)”). In this case, however, SNC has chosen to include such an assessment.

that in the ICF Report in the 2007 version of its IRP.<sup>21</sup> However, nothing presented in the Joint Petitioners pleadings or in its exhibits addresses the fundamental problem with the contention, which is the lack of “sufficient information to demonstrate that a genuine dispute exists . . . on a material issue of law or fact.” 10 C.F.R. § 2.309(f)(1)(vi).

Joint Petitioners provide no direct critique of the analysis currently in the ER and no factual or expert support for their claim that a new analysis would yield a materially different result. They do not even purport to do so, saying instead that the information in the ER “cannot be adequately assessed” until the 2007 IRP is prepared according to the model of the ICF Report. Intervention Petition at 36. However, contentions in NRC proceedings are to be filed “based on documents or other information available at the time the petition is to be filed,” which at this stage in the proceeding means the most recent IRP filing as described in the ER. See 10 C.F.R. § 2.309(f)(2). The fact that a new analysis is being prepared, taken alone, does not provide support for the claim that the analysis in the ER is flawed. This problem was noted at oral argument by SNC’s counsel, who stated:

the fact that there’s still somebody working on demand-side options does not raise a question of fact regarding whether the conclusions in the ER are correct. I mean, if they think the conclusions in the ER are incorrect, they ought to tell us what their conclusion is and support it.

---

<sup>21</sup> Intervention Petition, exh. 5.1, at 4 (In Re: Georgia Power Company Request for an Accounting Order, Order (GPSC June 22, 2006)) (“Georgia Power Company’s filing in the 2007 IRP shall include a detailed assessment of the maximum achievable cost effective potential for energy efficiency and demand response programs in its service area. Such assessment shall follow the scope and detail used in the May 5, 2005 Georgia Environmental Facilities Authority Final Report on Assessment of Energy Efficiency Potential in Georgia.” (emphasis added)). We note, in passing, that the participants represent the content of the ICF Report in very different ways. To SNC, the report says that “[e]nergy conservation would offset only a small fraction of the energy needed in the region.” ER at 9.2-4. To Joint Petitioners it says that “demand side resources could significantly offset the need for new capacity in the future.” Intervention Petition at 38. Neither provides support for its interpretation of the document. This difference, however, does not influence our decision. The document at issue here is the ER, not the ICF Report.

Tr. at 184. Similarly, the Joint Petitioners citation to a state order requiring a new analysis does not, without further explanation, point to any specific flaw in the existing analysis.

The Joint Petitioners argument is also flawed because a fully analyzed determination by the GPSC that nuclear power is an appropriate option for meeting future demand is not a relevant consideration in the context of an appropriate need for power analysis. In fact, the NRC's concern in this context is whether there is a high-quality process for assessing the need for power in the jurisdiction in which a proposed facility is located. See NUREG-1555, at 8.2.1-1. Ultimately, in considering an authorization request for the two new Vogtle units, the GPSC might determine that, for any of a number of economic reasons, those facilities are, or are not, the appropriate generating source to meet any state-determined need for power. That, however, is not a determination that is within the scope of the NRC's concerns in the context of its NEPA analysis. Rather, this agency is to evaluate the nature of the GPSC IRP process for assessing the need for power, which Joint Petitioners have not suggested is in any way inadequate in this case. (In fact, Joint Petitioners arguably have suggested the opposite by insisting the ongoing GPSC process be fully followed).

Thus, the portion of this contention based on the lack of a completed IRP process and GPSC approval of the proposed Vogtle facilities must be dismissed as outside the scope of the proceeding, 10 C.F.R. § 2.309(f)(1)(iii), and lacking adequate factual or expert opinion support, id. § 2.309(f)(1)(v), as well as for failing to bring forward relevant information sufficient to show that there is a material issue of fact or law, id. § 2.309(f)(1)(vi).

The second prong of the contention encompasses the first, but is considerably broader in that it challenges SNC's overall presentation of alternatives to the proposed action under 10 C.F.R. § 51.45(b)-(c). As specified in Regulatory Guide 4.2, a complete analysis of alternatives includes consideration of alternatives such as DSM that do not require new

generating capacity, as well as of alternatives that do require new capacity. Regulatory Guide 4.2, at 9-1. The ER includes the consideration of a range of alternatives of the second type, including wind power, solar technologies, hydroelectric, geothermal, waste-to-energy, and several other power-generating technologies. ER at 9.2.-4 to -18. Joint Petitioners allege that this consideration is inadequate because (1) it does not include the potential for combined heat and power (CHP) generation;<sup>22</sup> (2) it does not include a sufficient analysis of biomass technologies and feedstocks; and (3) it makes erroneous claims regarding Integrated Gasification Combined Cycle (IGCC) plants. Intervention Petition at 39 n.47.

Joint Petitioners do not adequately support these allegations. With regard to CHP, Joint Petitioners allege that a discussion of it should have been included in the ER because there is a “technical potential” for up to 6,445 MW of generating capacity in Georgia. Neither Joint Petitioners nor the slide presentation they rely upon explains either the significance or requirements of this generating capacity or why CHP should have been discussed as an alternative to nuclear power. In fact, Joint Petitioners do not include any other information regarding CHP. Their similarly brief discussion of the ER’s deficiencies regarding biomass and the risk assessment of IGCC plants also does not include any evidence or explanation of why the ER assessment is wrong. Instead, in support of the former Joint Petitioners simply state that “[i]n Georgia, some biomass energy technologies, particularly those utilizing gasification technologies, along with some existing biomass feedstocks, such as pecan hulls, pine bark, and poultry litter, among others, could be more cost effective and should be studied as alternatives to new nuclear reactors,” while the latter is only explicated with the declaration that “an overall

---

<sup>22</sup> Joint Petitioners do not define this term, but SNC notes that it is usually interpreted to refer to small generating units, geographically disbursed and located near customers, that produce both heat and electrical power. See SNC Answer at 61-62.

risk comparison has not been made available nor has it been reviewed yet by the [GPSC].” Intervention Petition at 39 n.47. More support than this is needed for an admissible contention.

The Joint Petitioners discussion of these alternatives also fails to show that including the omitted discussions would result in material changes to the ER’s analysis and thus be material to the decision before the Board. See supra note 13. The ER evaluates all power sources based upon base load power capacity, but Joint Petitioners neither discuss how CHP or biomass could be a base load power source nor challenge this evaluation. Without this, the SNC response that the mere potential for a decentralized, widely distributed power source or for biomass power does not mean those sources represent viable alternative sources of base load generating capacity, and so are immaterial, is persuasive. SNC Answer at 62. Similarly, Joint Petitioners never explain why a different risk assessment for IGCC plants would change the conclusions reached in the ER in any material way.

In short, Joint Petitioners have not provided sufficient argument or factual support in relation to either prong of this contention to demonstrate -- to the preliminary extent required at the contention admissibility stage -- that the alternatives analysis presented in the ER fails to comply with 10 C.F.R. § 51.45(b)-(c) or any associated guidance. In the absence of such a showing, the contention lacks sufficient factual or expert support and fails to assert any issue of law or fact that is material to the findings the NRC must make in this proceeding. For these reasons, it cannot be admitted. See 10 C.F.R. § 2.309(f)(1)(iv), (v).

### III. PROCEDURAL/ADMINISTRATIVE MATTERS

As indicated above, each of the Joint Petitioners is admitted as a party to this proceeding because they all have established standing and have set forth at least one

admissible contention. Below is procedural guidance for further litigating the above-admitted contentions.

A. General Guidance

Unless all parties agree that this proceeding should be conducted pursuant to 10 C.F.R. Part 2, Subpart N, this proceeding will be conducted in accordance with the procedures of 10 C.F.R. Part 2, Subparts C and L. Assuming the parties currently do not consent to conducting this proceeding under Subpart N, the parties should conduct a meeting within ten days of the date of this issuance to discuss their particular claims and defenses and the possibility of settlement or resolution of any part of the proceeding and to make arrangements for the required disclosures under 10 C.F.R. § 2.336(a).<sup>23</sup>

The Board will oversee the discovery process through status reports and/or conferences, and expects that each of the parties will comply with the process to the maximum extent possible, with the understanding that failing to do so will result in appropriate Board sanctions.<sup>24</sup>

---

<sup>23</sup> Among the items to be discussed is whether the staff's section 2.336(b) hearing file can be provided electronically via the NRC web site sooner than 30 days from the date of this issuance. In that regard, in accord with section 2.336(b), the staff should create an electronic hearing file. The staff shall make available to the parties and the Licensing Board a list that contains the ADAMS accession number, date and title of each item so as to make the item readily retrievable from the agency's web site, [www.nrc.gov](http://www.nrc.gov), using the ADAMS "Find" function. Additionally, the staff should create (or have created) a separate folder in the agency's Electronic Hearing Docket (EHD) associated with the Vogtle ESP proceeding. Thereafter, the staff should provide notice to the other parties and the Licensing Board regarding the availability of the Hearing File materials in the EHD.

If the staff thereafter provides any updates to the hearing file, it should place a copy of those items in the the hearing file portion of the Vogtle ESP EHD folder and indicate it has done so in a notification regarding the update that is sent to the Licensing Board and the parties. Additionally, if at any juncture the staff anticipates placing any non-public documents into the hearing file for this proceeding, it should promptly notify the Licensing Board of that intent prior to placing those documents into the Vogtle ESP EHD hearing file folder and await further instructions regarding those documents from the Licensing Board.

<sup>24</sup> In this regard, when a party claims a privilege and withholds information otherwise  
(continued...)

Pursuant to 10 C.F.R. § 2.332(d), the Board is to consider the staff's projected schedule for completion of its safety and environmental evaluations in developing the hearing schedule. Accordingly, on or before Friday, March 23, 2007, the staff shall submit to the Board through the E-Submittal system a written estimate of its projected schedule for completion of its safety and environmental evaluations, including but not limited to its best estimate of the dates for issuance of the draft and final safety evaluation reports and the draft and final environmental impact statements.

The Board will then conduct a prehearing conference call to discuss initial discovery disclosures, scheduling, and other matters on a date to be established by the Board in a subsequent order. The parties should be prepared to address the following matters at the prehearing conference call:

1. Estimates (discussed during their meeting) regarding exactly when this case will be ready to go to hearing and the time necessary to try each of the admitted contentions if they were to go to hearing.
2. Establishing time limits for updating mandatory disclosures under 10 C.F.R. § 2.336(d) and for updating the hearing file under 10 C.F.R. § 2.1203(c).
3. Whether any party intends to assert a privilege or protected status for any information or documents otherwise required to be disclosed herein and, if so, proposals for the submission of privilege logs under 10 C.F.R. § 2.336(a)(3),

---

<sup>24</sup>(...continued)

discoverable under the rules, the party shall expressly make the claim and describe the nature of what is not being disclosed to the extent that, without revealing what is sought to be protected, other parties will be able to determine the applicability of the privilege or protection. The claim and identification of privileged materials must occur within the time provided for disclosing withheld materials. See 10 C.F.R. § 2.336(a)(3), (b)(5).

- (b)(5), procedures and time limits for challenges to such assertions, and the development of a protective order and nondisclosure agreement.
4. Whether any of the parties anticipate submitting a motion for summary disposition regarding any of the admitted contentions and the timing and page length of such a motion and responses thereto.
  5. Establishing time limits for filing “timely” motions for leave to file new or amended contentions under 10 C.F.R. § 2.309(f)(2)(iii), and specifying pleading rules for motions for leave to file new or amended contentions that accommodate both 10 C.F.R. § 2.323 (motions and answers to motions) and id. § 2.309(h) (answers and replies to contentions).
  6. Establishing time limits for various evidentiary hearing-related filings, including:
    - a. The final list of potential witnesses for each contention pursuant to 10 C.F.R. § 2.336(a)(1).
    - b. Any motion for the use of Subpart G hearing procedures pursuant to 10 C.F.R. § 2.310(d).
    - c. Any unanimous request, pursuant to 10 C.F.R. § 2.310(h), to handle any specific contention under 10 C.F.R. Part 2, Subpart N.
    - d. Any motion for cross-examination under 10 C.F.R. § 2.1204(b).
    - e. The parties’ initial written statements of position and written direct testimony with supporting affidavits pursuant to 10 C.F.R. § 2.1207(a)(1), along with consideration of (i) whether the parties should file simultaneously or sequentially, and, if sequentially, which party should file first; and (ii) the timing of filing of written responses, rebuttal testimony, and in limine motions relative to direct or rebuttal testimony.

7. The items outlined in 10 C.F.R. § 2.329(c)(1)-(3).
  8. The possibility of settling any of the contentions, in whole or in part, including the status of any current settlement negotiations and the utility of appointing a settlement judge pursuant to 10 C.F.R. § 2.338(b).
  9. Whether a site visit would be appropriate and helpful to the Board in the resolution of the contentions.
  10. Any other procedural or scheduling matters the Board may deem appropriate.
- B. Certified Question to the Commission Regarding Proceeding with Merits Litigation on Admitted Environmental Contentions Following Issuance of the Staff's DEIS

The agency's Part 2 rules of practice require licensing boards to "take into consideration the NRC staff's projected schedule for completion of its safety and environmental evaluations to ensure that the hearing schedule does not adversely impact the staff's ability to complete its reviews in a timely manner." 10 C.F.R. § 2.332(d). To this end, the regulations mandate that, unlike for safety issues, "[w]here an environmental impact statement (EIS) is involved, hearings on environmental issues addressed in the EIS may not commence before the issuance of the final EIS." *Id.* The Commission, however, has the authority to enter case-specific procedural orders to facilitate the efficient resolution of issues before a licensing board. See Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-88-9, 28 NRC 567, 569 (1988) (noting "the Commission's inherent supervisory authority over the conduct of adjudicatory proceedings."); see also, e.g., Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-3, 59 NRC 10, 16-21 (2004) (establishing general schedule for proceeding).

Given that the admitted issues in this case are all environmental, the Board believes that permitting litigation on the merits of these contentions to proceed following issuance of the DEIS, rather than awaiting the FEIS, could promote "the Commission's dual goals of public safety and timely adjudication." Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage

Installation), CLI-01-26, 54 NRC 376, 381 (2001). In this proceeding, the DEIS currently is scheduled to be made publicly available in July 2007, while the FEIS is not due to be issued until May 2008. Given that any Board merits litigation-based findings have the effect of amending or supplementing the FEIS, see Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-06-15, 63 NRC 687, 707 n.91 (2006), permitting merits litigation to proceed based on the DEIS thus could allow for a resolution of the contested portion of this proceeding a number of months earlier.<sup>25</sup>

In the recent Louisiana Energy Services (LES) litigation, without objection from the parties, the Licensing Board proceeded to litigate the merits of environmental contentions based on the DEIS, instead of awaiting the FEIS. See Louisiana Energy Services, L.P. (National Enrichment Facility), LBP-05-13, 61 NRC 385, 396 n.1 (2005). The Commission had discussed such a possibility in its notice of hearing, stating that the Board could start the evidentiary hearing without the final EIS or SER if the Board “in its discretion finds that starting the hearing with respect to one or more safety issues prior to issuance of the final SER (or one or more environmental contentions directed to the Applicant’s Environmental Report) will expedite the proceeding without adversely impacting the Staff’s ability to complete its evaluations in a timely manner.” Louisiana Energy Services, CLI-04-3, 59 NRC at 17 (footnote omitted). In its review of the Board’s findings, the Commission did not speak to the propriety of the licensing board going forward based on the DEIS. See Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-05-20, 62 NRC 523 (2005); Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-05-28, 62 NRC 721 (2005).

---

<sup>25</sup> Of course, as is the case in any proceeding, even if the current admitted contentions are resolved before the FEIS is issued so as to conclude the contested portion of this proceeding, Joint Petitioners (or anyone else) could timely seek to litigate contentions regarding FEIS data or conclusions that differ significantly from the ER or the DEIS. See 10 C.F.R. § 2.309(c), (f)(2).

At the request of this Board, see Tr. at 185-87; Licensing Board Memorandum and Order (Submission of Joint Report Regarding Scheduling) (Feb. 16, 2007) (unpublished), the three participants in this proceeding submitted a joint response regarding permitting merits litigation on any admitted contentions to proceed based on the DEIS issued in this cause. See Joint Report Regarding Scheduling (Feb. 23, 2007). The staff opposes this approach, writing that “[t]he Staff is of the view that NRC regulations do not provide for going to hearing on environmental issues in advance of the issuance of the final EIS.” Id. at 1. The staff finds the LES proceeding distinguishable from the current proceeding because of the specific authorization given in the LES notice of hearing. See id. at 3. Joint Petitioners concur with the staff’s argument, adding that “Joint Petitioners believe that expediting this ESP proceeding could potentially undermine its integrity.” Id. at 4. Applicant SNC does not object to the use of the DEIS as the basis for going forward with an evidentiary hearing. It notes that while the procedural posture in LES was different, the Commission could choose to fashion a similar case-specific order in this proceeding because “the substantive reasons for proceeding to hearing on the DEIS in this proceeding (i.e., the need for expeditious decision-making) are as valid as those in LES.” Id. at 5.

Under the circumstances, and for the reasons given above, pursuant to 10 C.F.R. §§ 2.319(l), 2.341(f), the Licensing Board thus certifies the following question for authoritative resolution by the Commission:

May the Vogtle ESP Licensing Board go forward with merits litigation on admitted environmental contentions in the proceeding such that any evidentiary hearing could be conducted following the issuance of the staff’s DEIS, as opposed to the FEIS?

#### IV. CONCLUSION

For the reasons set forth above, we find that each of the Joint Petitioners has established its standing to intervene and that they put forth two litigable contentions so as to be entitled to party status in this proceeding. The text of their admitted contentions are set forth in Appendix A to this decision.

---

For the foregoing reasons, it is this twelfth day of March 2007, ORDERED, that:

1. Relative to the contentions specified in paragraph two below, the Joint Petitioners hearing request is granted and those petitioners are admitted as parties to this proceeding.

2. The following Joint Petitioner contentions are admitted for litigation in this proceeding: EC 1.2 and EC 1.3.

3. The following Joint Petitioner contentions are rejected as inadmissible for litigation in this proceeding: EC 1.1, EC 2, EC 3, EC 4, and EC 5.

4. The parties are to take the actions required by section III.A above in accordance with the schedule established herein.

5. In accordance with the provisions of 10 C.F.R. § 2.341(f), the question set forth in section III.B. above is certified to the Commission.

6. In accordance with the provisions of 10 C.F.R. § 2.311, as it rules upon an intervention petition, any appeal to the Commission from this memorandum and order must be taken within ten (10) days after it is served.

THE ATOMIC SAFETY  
AND LICENSING BOARD<sup>26</sup>

*/RA/*

---

G. Paul Bollwerk, III  
ADMINISTRATIVE JUDGE

*/RA/*

---

Nicholas G. Trikouros  
ADMINISTRATIVE JUDGE

*/RA/*

---

James Jackson  
ADMINISTRATIVE JUDGE

Rockville, Maryland

March 12, 2007

---

<sup>26</sup> Copies of this memorandum and order were sent this date by Internet e-mail transmission and the agency's E-Submittal system to counsel for (1) applicant SNC; (2) Joint Petitioners; and (3) the staff.

## APPENDIX A

### ADMITTED CONTENTIONS

1. ENVIRONMENTAL CONTENTION (EC) 1.2 – ER FAILS TO IDENTIFY AND CONSIDER COOLING SYSTEM IMPACTS ON AQUATIC RESOURCES

CONTENTION: The ER fails to identify and consider direct, indirect, and cumulative impingement/entrainment and chemical and thermal effluent discharge impacts of the proposed cooling system intake and discharge structures on aquatic resources.

2. EC 1.3 – ER DRY COOLING SYSTEM ALTERNATIVES DISCUSSION FAILS TO ADDRESS AQUATIC SPECIES IMPACTS

CONTENTION: 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.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB MEMORANDUM AND ORDER (RULING ON STANDING AND CONTENTIONS) (LBP-07-03) have been served upon the following persons by Electronic Information Exchange and/or electronic mail.

Office of Commission Appellate  
Adjudication  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
E-mail: [ocaamail@nrc.gov](mailto:ocaamail@nrc.gov)

Administrative Judge  
G. Paul Bollwerk, III, Chair  
Atomic Safety and Licensing Board Panel  
Mail Stop - T-3 F23  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
E-mail: [gpb@nrc.gov](mailto:gpb@nrc.gov)

Administrative Judge  
Nicholas G. Trikourous  
Atomic Safety and Licensing Board Panel  
Mail Stop - T-3 F23  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
E-mail: [ngt@nrc.gov](mailto:ngt@nrc.gov)

Administrative Judge  
James Jackson  
Atomic Safety and Licensing Board Panel  
Mail Stop - T-3 F23  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
E-mail: [jackson538@comcast.net](mailto:jackson538@comcast.net)

Ann P. Hodgdon, Esq.  
Tison A. Campbell, Esq.  
Patrick A. Moulding, Esq.  
Brooke D. Poole, Esq.  
Jonathan M. Rund, Esq.  
Robert M. Weisman, Esq.  
Kathryn L. Winsberg, Esq.  
Office of the General Counsel  
Mail Stop - O-15 D21  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
E-mail: [aph@nrc.gov](mailto:aph@nrc.gov); [tac2@nrc.gov](mailto:tac2@nrc.gov);  
[pam3@nrc.gov](mailto:pam3@nrc.gov); [bdp@nrc.gov](mailto:bdp@nrc.gov); [jmr3@nrc.gov](mailto:jmr3@nrc.gov);  
[rmw@nrc.gov](mailto:rmw@nrc.gov); [klw@nrc.gov](mailto:klw@nrc.gov)

Kenneth C. Hairston, Esq.  
M. Stanford Blanton, Esq.  
Peter D. LeJeune, Esq.  
Balch & Bingham LLP  
1710 Sixth Avenue North  
Birmingham, Alabama 35203-2014  
E-mail: [kchairston@balch.com](mailto:kchairston@balch.com);  
[sblanton@balch.com](mailto:sblanton@balch.com); [plejeune@balch.com](mailto:plejeune@balch.com)

Docket No. 52-011-ESP  
LB MEMORANDUM AND ORDER  
(RULING ON STANDING AND CONTENTIONS) (LBP-07-03)

Bentina C. Terry, Esq.  
Southern Nuclear Operating Company, Inc.  
40 Inverness Center Parkway  
P.O. Box 1295, Bin B-022  
Birmingham, AL 35201-1295  
E-mail: [bdchisol@southernco.com](mailto:bdchisol@southernco.com),

Diane Curran, Esq.  
Harmon, Curran, Spielberg &  
Eisenberg, L.L.P.  
1726 M Street, NW, Suite 600  
Washington, DC 20036  
E-mail: [dcurran@harmoncurran.com](mailto:dcurran@harmoncurran.com)

Kathryn M. Sutton, Esq.  
Steven P. Frantz, Esq.  
Paul M. Bessette, Esq.  
Mary Freeze, Admin. Assist.  
Morgan, Lewis & Bockius, LLP  
Co-Counsel for Southern Nuclear Operating  
Company, Inc.  
1111 Pennsylvania Ave., NW  
Washington, DC 20004  
E-mail: [ksutton@morganlewis.com](mailto:ksutton@morganlewis.com)  
[sfrantz@morganlewis.com](mailto:sfrantz@morganlewis.com)  
[pbessette@morganlewis.com](mailto:pbessette@morganlewis.com)  
[mfreeze@morganlewis.com](mailto:mfreeze@morganlewis.com)

Margaret Parish  
Law Clerk  
Atomic Safety and Licensing Board Panel  
Mail Stop - T-3 F23  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
E-mail: [map4@nrc.gov](mailto:map4@nrc.gov)

Mary Maclean D. Asbill, Esq.  
Lawrence D. Sanders, Esq.  
Turner Environmental Law Clinic  
Emory University School of Law  
1301 Clifton Road  
Atlanta, GA 30322  
E-mail: [masbill@law.emory.edu](mailto:masbill@law.emory.edu);  
[lawrence.sanders@emory.edu](mailto:lawrence.sanders@emory.edu)

C. Grady Moore, III, Esq.  
Balch & Bingham, LLP  
1901 6<sup>TH</sup> Avenue, Suite 2600  
Birmingham, AL 35203  
E-mail: [gmoore@balch.com](mailto:gmoore@balch.com)

Charles R. Pierce  
Southern Company Services, Inc.  
600 North 18<sup>th</sup> Street, BIN B056  
Birmingham, AL 35291-0300  
E-mail: [crpierce@southernco.com](mailto:crpierce@southernco.com)

[Original signed by Adria T. Byrdsong] \_\_\_\_\_  
Office of the Secretary of the Commission

Dated at Rockville, Maryland  
this 12<sup>th</sup> day of March 2007