# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

## **COMMISSIONERS:**

Gregory B. Jaczko, Chairman Dale E. Klein Kristine L. Svinicki

In the Matter of

SOUTHERN NUCLEAR OPERATING CO.

(Vogtle Electric Generating Plant, Units 3 and 4)

Docket Nos. 52-025-COL & 52-026-COL

## CLI-09-16

# **MEMORANDUM AND ORDER**

This proceeding concerns the application of Southern Nuclear Operating Company (SNC) for a combined license (COL) under 10 C.F.R. Part 52 to construct and operate two new nuclear reactor units (proposed Units 3 and 4) at the Vogtle Electric Generating Plant (Vogtle) site in Georgia. The NRC Staff (Staff) and SNC have appealed LBP-09-3, an Atomic Safety and Licensing Board decision granting the intervention petition filed by five organizations—the Center for a Sustainable Coast, Savannah Riverkeeper, the Southern Alliance for Clean Energy, Atlanta Women's Action for New Directions, and the Blue Ridge Environmental Defense League (collectively, Intervenors). Intervenors oppose the appeals filed by SNC and the Staff. We

<sup>&</sup>lt;sup>1</sup> See Southern Nuclear Operating Company's Brief in Support of Appeal of LBP-09-03 (Mar. 14, 2009)(SNC Appeal); NRC Staff Notice of Appeal of LBP-09-03, Memorandum and Order (Ruling on Standing and Contention Admissibility), and Accompanying Brief (Mar. 16, 2009)(Staff Appeal).

<sup>&</sup>lt;sup>2</sup> See Joint Intervenors' Brief in Opposition of Appeal (Mar. 24, 2009).

decline to disturb the Board's decision to

admit Contention SAFETY-1.

#### I. BACKGROUND

On March 5, 2009, the Board issued LBP-09-3, which found that Intervenors had demonstrated standing and had submitted one admissible contention, Contention SAFETY-1.<sup>3</sup> Based on these findings, the Board granted the intervention petition.

In proposed Contention SAFETY-1, Intervenors argued that SNC's COL application was insufficient because it failed to address long-term storage of low-level radioactive waste (LLRW) at the Vogtle site. The contention is founded on the premise that, following closure of the Barnwell, South Carolina disposal site to waste generated outside the Atlantic Compact, there currently is no licensed facility in the United States that is available to accept and dispose of certain LLRW that would be generated by the operation of Vogtle Units 3 and 4. As originally proffered, the contention stated:

SNC's [COL application] is incomplete because the FSAR [Final Safety Analysis Report] fails to consider how SNC will comply with NRC regulations governing storage and disposal of LLRW in the event an off-site waste disposal facility remains unavailable when [Vogtle] Units 3 and 4 begin operations.<sup>4</sup>

The Board rejected the portion of the contention relating to disposal of LLRW, reiterating that issues governing disposal pursuant to 10 C.F.R. Part 61 are not within the scope of COL proceedings,<sup>5</sup> but otherwise admitted a virtually identical version of the contention:

<sup>&</sup>lt;sup>3</sup> Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), LBP-09-3, 69 NRC \_\_ (Mar. 5, 2009)(slip op.). In addition, the Board referred to us its ruling declining to admit Contentions MISC-1 and MISC-2. We recently declined to review the referred rulings. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), CLI-09-13, 69 NRC \_\_ (June 25, 2009)(slip op.).

<sup>&</sup>lt;sup>4</sup> Petition for Intervention at 14 (Nov. 17, 2008).

<sup>&</sup>lt;sup>5</sup> LBP-09-3, 69 NRC (slip op. at 25).

SNC's [COL application] is incomplete because the FSAR fails to provide any detail as to how SNC will comply with NRC regulations governing storage of LLRW in the event an off-site waste disposal facility remains unavailable when [Vogtle] Units 3 and 4 begin operations.<sup>6</sup>

As reformulated, the Board admitted this contention as one of omission, finding that the contention and its foundation were "sufficient to establish a genuine material dispute adequate to warrant further inquiry." The Board distinguished the contention before it from a similar contention in the *Bellefonte* COL proceeding, which we recently rejected.<sup>8</sup>

## II. DISCUSSION

We will give substantial deference to a Board's rulings on contention admissibility in the absence of clear error or abuse of discretion.<sup>9</sup>

At issue here are the requirements of 10 C.F.R. § 52.79(a)(3), which states as follows:

(a) The [COL] application must contain a final safety analysis report that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components of the facility as a whole. The final safety analysis report shall include the following information, at a level of information sufficient to enable the Commission to reach a final conclusion on all safety matters that must be resolved by the Commission before issuance of a combined

<sup>8</sup> Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-08-16, 68 NRC 361, 413-15 (2008), rev'd, CLI-09-3, 69 NRC \_\_ (Feb. 17, 2009) (slip op. at 13). In particular, the Board observed that the contention admitted in the *Bellefonte* proceeding focused exclusively on the regulations governing waste disposal, whereas Contention SAFETY-1 also was grounded in 10 C.F.R. Parts 20 and 52. LBP-09-3, 69 NRC \_\_ (slip op. at 23).

<sup>&</sup>lt;sup>6</sup> *Id.* (slip op., App. A).

<sup>&</sup>lt;sup>7</sup> *Id.* (slip op. at 20).

<sup>&</sup>lt;sup>9</sup> See Crow Butte Resources, Inc. (License Renewal for In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC \_\_ (May 18, 2009) (slip op. at 4); AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 121 (2006); Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 324 (1999); Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-855, 24 NRC 792, 795 (1986).

license: . . .

(3) The kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in part 20 of this chapter . . . .

The Board agreed with Intervenors' assertion, raised in their reply filing, that this regulation requires COL applicants to consider long-term onsite LLRW storage, and reasoned, "we do not see how, if offsite disposal for LLRW remains unavailable, a COL applicant could address compliance with 10 CFR Part 20 limits in accordance with section 52.79(a)(3) without addressing what it intends to do with the LLRW . . . expected to be produced in the operation of the proposed units."

On appeal, SNC argues that several factors compel reversal of the Board's decision.

First, SNC relies on our recent decision in *Bellefonte*, and, particularly, argues that the contention rejected in that COL proceeding is substantively identical to the contention at issue here. Second, SNC argues that our regulations do not require COL applicants to address long-term LLRW storage. Third, SNC claims that the COL application does, in fact, address the potential availability of long-term LLRW storage at the Vogtle site. Site of the Board's decision.

The arguments submitted by the Staff overlap those made by SNC. First, the Staff argues that the Board erred in admitting SAFETY-1 as a contention of omission, because the

<sup>&</sup>lt;sup>10</sup> LBP-09-3, 69 NRC \_\_\_ (slip op. at 24).

<sup>&</sup>lt;sup>11</sup> SNC Appeal at 8.

<sup>&</sup>lt;sup>12</sup> *Id.* at 10.

<sup>&</sup>lt;sup>13</sup> *Id.* at 12-13.

asserted missing information is available in the COL application.<sup>14</sup> Second, the Staff claims that Petitioners failed to demonstrate that the contention is legally or factually material to the proceeding, because 10 C.F.R. § 52.79(a)(3) contains no requirement for a detailed discussion of long-term, onsite storage, and Petitioners cited no other regulatory provision.<sup>15</sup> Finally, the Staff argues that the contention lacks an adequate basis, because Petitioners confuse the issues of onsite storage and long-term disposal of LLRW and provide no legal basis for the contention in the Petition.<sup>16</sup>

We agree that the plain language of section 52.79(a)(3) does not explicitly require a description of LLRW storage for a specified duration.<sup>17</sup> On its face, therefore, section 52.79(a)(3) sets no quantity or time restrictions relative to onsite storage of such waste. Rather, it requires that a COL application contain information of first, the "kinds and quantities of materials expected to be produced" during plant operation, and second, the "means for controlling and limiting radioactive effluents and radiation exposures" to comply with Part 20 limits. In short, the rule pertains to how the COL applicant intends, through its design, operational organization, and procedures, to comply with relevant substantive radiation

<sup>&</sup>lt;sup>14</sup> NRC Staff Notice of Appeal of LBP-09-03, Memorandum and Order (Ruling on Standing and Contention Admissibility), and Accompanying Brief, at 7 (Mar. 16, 2009)(Staff Appeal).

<sup>&</sup>lt;sup>15</sup> *Id.* at 11.

<sup>&</sup>lt;sup>16</sup> *Id.* at 13-14.

<sup>&</sup>lt;sup>17</sup> This is also true of relevant agency guidance. In particular, the Standard Review Plan (SRP) provides two separate sets of review guidelines: one set for areas designed to accommodate approximately 6 months of waste generation, and one set for longer term onsite storage (several years, but within the operational life of the plant). See U.S. Nuclear Regulatory Commission Standard Review Plan, NUREG-0800, Section 11.4, "Solid Waste Management System" (Rev. 3 Mar. 2007), at subsection III.4 (citing Branch Technical Position 11-3 for 6 months' storage, and SRP Appendix 11.4-A to the SRP for longer storage terms).

protection requirements in 10 C.F.R. Part 20. This includes, but is not limited to, low-level radioactive waste handling and storage. Part 20 outlines a number of radiation protection requirements with which licensees must comply. For example, a licensee must use procedures and controls to reduce occupational doses and doses to members of the public to levels that are as low as reasonably achievable. Part 20 also sets forth upper limitations on occupational doses as well as dose limits for individual members of the public. Ultimately, the combined license holder must comply with these requirements regardless of the amount of LLRW stored on the site – be it one cubic foot or one thousand.

As such, the required information is tied to the COL applicant's particular plans for compliance through design, operational organization, and procedures. However, the scope and extent of that required information on specific plans or contingency planning is not clear.

Moreover, we observe that the Staff appears to have taken a potentially inconsistent position on this issue in another of the COL proceedings in which it has been raised.<sup>21</sup> In the ongoing *North Anna* COL proceeding, the Board admitted, in part, Contention One, a low-level

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<sup>&</sup>lt;sup>18</sup> See 10 C.F.R. § 20.1101(b).

<sup>&</sup>lt;sup>19</sup> See id. §§ 20.1201-20.1208.

<sup>&</sup>lt;sup>20</sup> See *id.* §§ 20.1301-20.1302. See generally NRC Regulatory Issue Summary 2008-32, "Interim Low Level Radioactive Waste Storage at Reactor Sites" (Dec. 30, 2008)(ADAMS accession number ML082190768), at 3-4 (stating among other things, that a licensee's onsite LLRW storage facility must comply with, among other provisions, 10 C.F.R. § 20.1801 (security of stored material), occupational and public dose limits, and the Part 20 requirements for surveys and monitoring, labeling, and reports and record retention).

<sup>&</sup>lt;sup>21</sup> To be sure, contested issues in this proceeding must be decided *solely* on the basis of information in the adjudicatory record of *this* proceeding. However, we monitor parallel proceedings to ensure the consistency of our decisions.

waste contention substantively identical to Contention SAFETY-1.<sup>22</sup> Subsequently in the *North Anna* matter, the NRC Staff posed a Request for Additional Information (RAI) in which it requested that the applicant "describe the facilities planned for long-term storage of low-level radioactive wastes projected to be generated during the operation of North Anna Unit 3, and the operational program addressing the long-term management and storage of such wastes . . ."<sup>23</sup> Thereafter, the applicant provided a revision to the COL application that included its response to the Staff's RAI, providing (among other things) for storage to accommodate "at least 10 years of packaged Class B and C waste."<sup>24</sup>

The NRC Staff maintains the position in *North Anna*, as it does here, that the contention is not material to a decision the NRC must make regarding public health or safety, because the intervenor "does not point to any NRC regulation that requires any specific duration for planning for long-term storage."<sup>25</sup> The Staff's issuance of an RAI on the very subject of long-term LLRW

<sup>&</sup>lt;sup>22</sup> Virginia Electric and Power Co. (Combined License Application for North Anna Unit 3), LBP-08-15, 68 NRC 294 (2008).

<sup>&</sup>lt;sup>23</sup> Letter from T.A. Kevern, NRC, to E.S. Grecheck, Dominion, "Request for Additional Information Letter No. 020 (SRP Sections: 09.05.01, 11.04) Related to the North Anna Unit 3 Combined License Application" (July 27, 2008)(ML082100346), NRC RAI 11.04-3. In the case of the *North Anna* COL application, the staff observed that Final Safety Analysis Report (FSAR) stated that the proposed plant *would not* utilize temporary LLRW storage facilities to support plant operation, whereas the Economic Simplified Boiling Water Reactor Design Control Document provides for the capacity to store the amount of LLRW that could be generated in 6 months of operation.

<sup>&</sup>lt;sup>24</sup> Letter from E.S. Grecheck, Dominion, to U.S. NRC Document Control Desk, "Dominion Virginia Power – North Anna Power Station Unit 3 – Combined License Application – Submission 4" (May 21, 2009)(ML091540526). The intervenor offered late-filed Contention Tenbased on this revision to the COL application.

<sup>&</sup>lt;sup>25</sup> See NRC Staff's Answer to Intervenor's Amended Contention Ten (July 21, 2009), at 12 (citing 10 C.F.R. § 2.309(f)(1)(iv)). The North Anna Board has not yet ruled on the admissibility of Contention Ten, or on the applicant's related motion to dismiss the originally-admitted Contention One. We do not comment on the resolution of those motions here, and the fact that (continued. . .)

disposal, in a proceeding with a substantively identical admitted contention, appears to conflict with its argument that the issue is immaterial to the findings that must be made on the application.<sup>26</sup>

In light of the above, we cannot say with confidence that the Board committed clear error in admitting Contention SAFETY-1. We find that the adjudicatory record on Contention SAFETY-1 would benefit from further development by the Board and the parties, particularly with respect to the information a COL applicant should supply in order to satisfy our regulations regarding the safety of long-term storage of low-level radioactive waste.<sup>27</sup>

## (...continued)

we take notice of the RAI here should not be construed as an opinion on the admissibility of Contention Ten. See Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 336-39 (1999)(finding that issuance of an RAI does not alone establish deficiencies in an application, and that a petitioner must do more than merely quote an RAI to justify admission of a contention into the proceeding).

<sup>&</sup>lt;sup>26</sup> Cf. Office Instruction NRO-REG-101, "Processing Requests for Additional Information" (Rev. 0), at 2 ("RAIs should be directly related to the applicable requirements related to the submittal . . . It is expected that before the staff determines that an RAI is needed, . . . the need for additional information in order to reach a regulatory determination is clear and unambiguous.")(emphasis added)(ML080600394).

<sup>&</sup>lt;sup>27</sup> As we observed in *Bellefonte*, contentions of this sort are application-specific. CLI-09-3, 69 NRC \_\_ (slip op. at 11 n.42). We do not opine here on the scope of the requirements of 10 C.F.R. § 52.79(a)(3), including any specific time frame for which a COL applicant should address LLRW storage.

# III. CONCLUSION

We *deny* SNC's and the Staff's appeals, and *decline to disturb* the Board's admission of Contention SAFETY-1.

IT IS SO ORDERED.

For the Commission

**NRC SEAL** 

/RA/

Andrew L. Bates
Acting Secretary of the Commission

Dated at Rockville, Maryland, this <u>31<sup>st</sup></u> day of July, 2009.