

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

LBP-04-18

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman  
Dr. Paul B. Abramson  
Dr. Anthony J. Baratta

In the Matter of

DOMINION NUCLEAR NORTH ANNA, LLC

(Early Site Permit for North Anna ESP Site)

Docket No. 52-008-ESP

ASLBP No. 04-822-02-ESP

August 6, 2004

MEMORANDUM AND ORDER  
(Ruling on Standing and Contentions)

Before the Licensing Board is the request of the Blue Ridge Environmental Defense League (BREDL), the Nuclear Information and Resource Service (NIRS), and Public Citizen (PC) (collectively North Anna Petitioners) seeking to intervene in this proceeding to challenge the application of Dominion Nuclear North Anna, LLC, (DNNA) for a 10 C.F.R. Part 52 early site permit (ESP). The ESP application seeks approval of the site of the existing North Anna nuclear power stations in Louisa County, Virginia, for the possible construction of two or more new nuclear reactors. For the reasons set forth below, we find that the North Anna petitioners have established the requisite standing to intervene in this proceeding and have submitted two admissible contentions concerning the DNNA application, denoted as Environmental Contention (EC) 3.3.2 - Impacts on Striped Bass in Lake Anna, and EC 3.3.4 - Failure to Provide Adequate Consideration of the No-Action Alternative, which are set forth in an appendix to this decision. Accordingly, we admit the North Anna Petitioners as parties to this proceeding. Additionally, we outline certain procedural and administrative rulings regarding the litigation of these admitted contentions.

I. BACKGROUND

A. DNNA Early Site Permit Application

Under the Part 52 licensing process, an entity may apply for an ESP, which would allow it to resolve key site-related environmental, safety, and emergency planning issues before deciding to build, or choosing the design of, a nuclear power facility on that site. Thus, if granted, an ESP essentially would allow an entity to bank a possible site for the future construction of new nuclear power generation facilities. DNNA, a wholly-owned subsidiary of retail energy provider Dominion Resources, Inc., (DRI), filed an ESP application on September 25, 2003, that consists of a section on Administrative Information about DNNA, a Site Safety Analysis Report (SSAR), an Environmental Report (ER), an Emergency Plan (EP), and a Site Redress Plan (SRP). The particular site for which DNNA seeks to obtain an ESP is the North Anna Power Station (NAPS) property, where another subsidiary of DRI has operated two existing nuclear power plants since 1978. See [DNNA] North Anna [ESP] Application at 1-1-1 [hereinafter North Anna ESP Application].

Two other companies, Exelon Generation Company, LLC, (EGC) and System Energy Resources, Inc., (SERI) recently submitted ESP applications for the sites at the existing Clinton and Grand Gulf nuclear facilities. See [EGC ESP] Application (Sept. 25, 2003); [SERI] Grand Gulf Site ESP Application (Oct. 16, 2003). Because of the temporal and substantive similarity of the three applications, and because these Part 52 licensing proceedings are the first of their kind, as is noted below, preliminary matters in the Part 52 licensing process concerning these applications have been afforded joint consideration by the Commission and the Licensing Board for purposes of efficiency and ensuring uniformity among the three proceedings.

B. North Anna Petitioners Hearing Request and Petition to Intervene

In response to a November 25, 2003 notice of hearing and opportunity to petition for leave to intervene regarding the DNNA ESP application, 68 Fed. Reg. 67,489 (Dec. 2, 2003), on January 2, 2004, the North Anna Petitioners filed a request for hearing and petition to intervene, see Hearing Request and Petition to Intervene by [North Anna Petitioners] (Jan. 2, 2004) [hereinafter Hearing Request]. DNNA and the NRC staff responded to the North Anna Petitioners=hearing request on January 12 and 20, 2004, respectively. See [DNNA] Answer to Hearing Request and Petition to Intervene filed by [North Anna Petitioners] (Jan. 12, 2004) [hereinafter DNNA Hearing Request Response]; NRC Staff=s Answer to Hearing Request and Petition to Intervene by the [North Anna Petitioners] (Jan. 20, 2004) [hereinafter Staff Hearing Request Response]. Neither DNNA nor the staff challenged the North Anna Petitioners=representational standing, but emphasizing that the North Anna Petitioners must present at least one litigable contention to be admitted as parties to this proceeding, both challenged the admissibility of one or more of the North Anna Petitioners issue statements.

C. Commission Application of Revised 10 C.F.R. Part 2 Rules of Practice and Referral of Hearing Petition

On January 16, 2004, DNNA submitted a motion to apply the recently revised version of 10 C.F.R. Part 2, which permits the use of an informal hearing process for ESP applications. See [DNNA] Motion to Apply New Adjudicatory Process (Jan. 16, 2004); see also 69 Fed. Reg. 2182, 2188 (Jan. 14, 2004). The North Anna Petitioners opposed DNNA=s motion, citing a lack of fairness, effectiveness, and efficiency in applying the new Part 2 procedures to this proceeding, while the staff supported using the newly adopted procedures. See [North Anna] Petitioners=Opposition to [DNNA] Application for New Adjudicatory Process (Jan. 26, 2004); NRC Staff=s Answer to [DNNA] Motion to Apply New Adjudicatory Process (Feb. 5, 2004). Ultimately, in a March 2, 2004 issuance, the Commission granted the DNNA motion and found that applying the new Part 2 would not result in any interruption, unwarranted delay, added burden, or unfairness in this or the other

two ESP proceedings. See CLI-04-08, 59 NRC 113, 118-19 (2004). As part of that decision, the Commission also gave the North Anna Petitioners sixty days within which to file their contentions in the proceeding and referred their hearing petition to the Atomic Safety and Licensing Board Panel for further consideration. See id. at 119.

D. Post-Referral Developments

Responding to the Commission's referral, in a March 8, 2004 initial prehearing order, among other things, the Licensing Board Panel Chief Administrative Judge reaffirmed the May 3, 2004 deadline for submitting contentions and requested that each contention be placed in one or more of the following subject matter categories: (1) Administrative, (2) Site Safety Analysis, (3) Environmental, (4) Emergency Planning, or (5) Miscellaneous.<sup>1</sup> See Licensing Board Panel Memorandum and Order (Initial Prehearing Order) at 3-4 (Mar. 8, 2004) (unpublished). The initial prehearing order also set a May 28, 2004 deadline for DNNA and staff responses to the North Anna Petitioners petition supplement and a June 4, 2004 deadline for the North Anna Petitioners to reply to the DNNA and staff responses. See id. at 4. Thereafter, on March 22, 2004, this Atomic Safety and Licensing Board was established to adjudicate this ESP proceeding.<sup>2</sup> See 69 Fed. Reg. 15,910 (Mar. 26, 2004). In a memorandum and order issued on the same day, the Board established a June 21, 2004 date for an initial prehearing conference for this proceeding (as well

---

<sup>1</sup> Because section 2.714(a)(3) of the superceded Part 2 rules permitting petitioners to supplement their hearing requests to provide standing-related information did not have an analog in the new Part 2, the North Anna Petitioners were allowed to supplement their petition with standing-related information when they filed their contentions. Further, they were permitted to make any request under section 2.309(g) regarding the selection of hearing procedures other than the Subpart L procedures that otherwise apply under the new Part 2. See Licensing Board Panel Memorandum and Order (Initial Prehearing Order) at 2 (Mar. 8, 2004) (unpublished).

<sup>2</sup> That same day, Board establishment notices were issued for the Clinton and Grand Gulf ESP proceedings setting up two Boards with the same membership as this Board. See 69 Fed. Reg. 15,910 (Mar. 26, 2004) (Clinton proceeding); 69 Fed. Reg. 15,911 (Mar. 26, 2004) (Grand Gulf proceeding). Although the Board designation notices for these proceedings established three separate licensing boards, for simplicity we will refer to these Boards in the singular when referencing rulings that affected all three proceedings identically.

as the Clinton and Grand Gulf ESP proceedings) at the NRC's Rockville, Maryland headquarters facility.<sup>3</sup> See Licensing Board Memorandum and Order (Scheduling Initial Prehearing Conference) (Mar. 22, 2004) (unpublished).

---

<sup>3</sup> The petitioners in all three ESP proceedings filed a motion on April 1, 2004, to hold separate prehearing conferences in the vicinity of each proposed ESP site, as opposed to one single prehearing conference for all three proceedings at the NRC's Rockville, Maryland headquarters. See Petitioners' Motion for Reconsideration of Memorandum and Order Scheduling Initial Prehearing Conference (Apr. 1, 2004). The Licensing Board denied this motion on the grounds that, given the similarity of the three proceedings and the location of principal counsel for all parties in the Washington, D.C. area, the most efficient and effective means for conducting the prehearing conference was to do so jointly in Rockville. See Licensing Board Memorandum and Order (Denying Motion Requesting Reconsideration of Initial Prehearing Conference Location) at 2-3 (Apr. 5, 2004) (unpublished).

The North Anna Petitioners timely filed their contentions supplement on May 3, 2004.<sup>4</sup> See Contentions of [North Anna Petitioners] Regarding [ESP] Application for Site of North Anna Nuclear Power Plant (May 3, 2004) [hereinafter Contentions]. On May 25 and 28, 2004, respectively, DNNA and the staff filed their answers to the North Anna Petitioners-proposed contentions. See [DNNA] Answer to Petitioners-Contentions (May 25, 2004) [hereinafter DNNA Contentions Response]; NRC Staff Answer to Contentions of [North Anna Petitioners] Regarding the [ESP] Application for the North Anna Site (May 28, 2004) [hereinafter Staff Contentions Response]. Following a June 1, 2004 motion for extension of time to reply to the DNNA and staff responses to their contentions, which the Licensing Board granted on June 3, the North Anna Petitioners filed their reply to the DNNA and staff answers on June 9, 2004. See Petitioners-Motion for Extension of Time to Reply to Responses to Contentions (June 1, 2004); [DNNA] Answer to Petitioners-Motion for Extension of Time to Reply to Responses to Contentions (June 2, 2004); Licensing Board Order (Granting Extension Request) (June 3, 2004) (unpublished); Reply by [North Anna Petitioners] to [DNNA] and NRC Staff's Responses (June 9, 2004) [hereinafter North Anna Petitioners Reply].

On June 21-22, 2004, the Board conducted a two-day prehearing conference during which it heard oral presentations regarding the standing of each of the ESP petitioners and the

---

<sup>4</sup> In their supplement, the North Anna Petitioners did not provide any additional information regarding standing matters or address the use of other hearing procedures in this proceeding.

admissibility of their contentions, which were grouped by topic into separate categories.<sup>5</sup> See Tr. at 1-410.

## II. ANALYSIS

### A. North Anna Petitioners Standing

#### 1. Standards Governing Standing

In determining standing as of right for those seeking party status, 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 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 injury-in-fact. 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

---

<sup>5</sup> As a result of the Board's concurrent consideration of the three ESP cases, today we also are issuing standing/contentions admission rulings in those cases as well. See Exelon Generation Company, LLC (Early Site Permit for Clinton ESP Site), LBP-04-17, 60 NRC \_\_ (Aug. 6, 2004); System Energy Resources, Inc. (Early Site Permit for Grand Gulf ESP Site), LBP-04-19, 60 NRC (Aug. 6, 2004).

authorized the organization to represent his or her interests. Moreover, in assessing a petition to determine whether these elements are met, which the Board 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 North Anna Petitioners' standing presentations.

2. BREDL

DISCUSSION: Hearing Request at 2-4, attachments 3, 7, 9, 13; DNNA Hearing Request Response at 1; Staff Hearing Request Response at 1, 5-6; Tr. at 12-13.

RULING: BREDL is a not-for-profit organization whose members oppose the issuance of an ESP to DNNA. Attached to the North Anna Petitioners hearing request are the affidavits of four BREDL members, each of whom states that BREDL is authorized to represent his or her interests. All four members reside within fifty miles of the North Anna site, one as close as 15.9 miles from the site. 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.

3. NIRS

DISCUSSION: Hearing Request at 2-4, attachments 2, 4, 6, 8, 10-12, 14, 15, 17; DNNA Hearing Request Response at 1; Staff Hearing Request Response at 1, 5-6; Tr. at 12-13.

RULING: NIRS is a not-for-profit corporation whose members oppose the issuance of an ESP to DNNA. Attached to the North Anna Petitioners hearing request are the affidavits of ten NIRS members, each of whom states that NIRS is authorized to represent his or her interests. All ten members reside within fifty miles of the North Anna site, one as close as fifteen miles from the site. These individuals' asserted health, safety, and environmental interests and their agreement

to permit NIRS to represent their interests are sufficient to establish NIRS's standing to intervene in this proceeding.

4. PC

DISCUSSION: Hearing Request at 2-4, attachments 5, 16; DNNA Hearing Request Response at 1; Staff Hearing Request Response at 1, 5-6; Tr. at 12-13.

RULING: PC is a not-for-profit organization whose members oppose the issuance of an ESP to DNNA. Attached to the North Anna Petitioners hearing request are the affidavits of two PC members, each of whom states that PC is authorized to represent his or her interests. Both members reside within fifty miles of the North Anna site, one as close as thirty-five miles from the site. These individuals' asserted health, safety, and environmental interests and their agreement to permit PC to represent their interests are sufficient to establish PC's standing to intervene in this proceeding.

B. North Anna 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 Company (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); see also Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003). 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 Company (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 Florida Power and Light Company (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000); Duke Power Company (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 Company (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289-90 n.6 (1979).

c. Need for Adequate Factual Information or Expert Opinion

It is the petitioner's obligation to present factual information and expert opinions necessary to support its contention. See 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). Failure to provide

such an explanation regarding the bases of 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 to 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 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, providing any material or document as a basis for a contention, without setting forth an explanation of its significance, is inadequate to support the admission of the contention. See Fansteel, CLI-03-13, 58 NRC at 205. 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 Company (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 it does indeed 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

In order 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; 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). Agency case law further suggests this requirement of materiality mandates certain showings in specific contexts. For instance, a contention challenging whether an emergency response plan's provisions provide the requisite reasonable assurance based on the adequacy of implementing procedures for those provisions fails to present a material issue. See Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1107 (1983).

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 SAR and ER) 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 Acontentions@rather than Abases,@it has been recognized that A[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

and/or consolidate contentions when the issues sought to be raised by one or more of the petitioners appear related or when redrafting would clarify the scope of a contention.

3. Contentions Regarding Site Safety Analysis Report (SSA)

SSA 2.1 - FAILURE TO PROVIDE ADEQUATE SAFETY ASSESSMENT OF REACTOR INTERACTION

CONTENTION: The ESP application for the North Anna site fails to comply with 10 C.F.R. ' 52.17 because its safety assessment does not contain an adequate analysis and evaluation of the major structures, systems, and components of the facility that bear significantly on the acceptability of the site under the radiological consequences evaluation factors identified in 10 C.F.R. ' 50.34(a)(1). In particular, the safety assessment does not adequately take into account the potential effects on radiological accident consequences of co-locating new reactors with advanced designs next to an older reactor. The safety assessment should contain a comprehensive evaluation and analysis of the ways in which interaction of the old and new plants under accident conditions may exacerbate the consequences of a radiological accident. Without such an evaluation and analysis, the presiding officer cannot make a finding that, taking into consideration the site criteria in Part 100 of the regulations, the proposed reactors can be operated without undue risk to the health and safety of the public. @ 10 C.F.R. ' 52.21.

DISCUSSION: Contentions at 2-7; DNNA Contentions Response at 11-15; Staff Contentions Response at 10-18; North Anna Petitioners Reply at 2-8; Tr. at 16-62.

RULING: Inadmissible, in that this contention and its supporting bases raise a matter that is not within the scope of this proceeding and/or impermissibly challenges Commission regulatory requirements. See section II.B.1. a, b.

This contention of omission alleges that the SSAR does not contain information relating to the design of the control room and equipment of the not-as-yet selected new plant; however, that information is not required to be specified at the ESP stage, which focuses upon acceptability of the site assuming the new plant falls within the applicant-s submitted plant parameters envelope (PPE). It is neither possible nor necessary for the applicant to provide the requested level of detailed information about control room and equipment design at the ESP stage of the licensing process. A challenge to the applicant-s choice of control room and equipment design, which this contention posits, belongs in a proceeding under either Subparts B or C of the 10 C.F.R. Part 52 licensing process.

SSA 2.2 - FAILURE TO EVALUATE SITE SUITABILITY FOR BELOW-GRADE PLACEMENT OF REACTOR CONTAINMENT

CONTENTION: The Site Safety Analysis Report for the North Anna ESP is inadequate because it does not evaluate the suitability of the site to locate the reactor containment below grade-level. Below-grade construction is advisable and appropriate, if not necessary, in order to maintain an adequate level of security in the post-9/11 threat environment.

DISCUSSION: Contentions at 7-12; DNNA Contentions Response at 16-22; Staff Contentions Response at 18-23; North Anna Petitioners Reply at 8-12; Tr. at 64-115, 227-33.

RULING: Inadmissible, in that this contention and its supporting bases improperly challenge the Commission's regulatory requirements and/or raise an issue outside the scope of the proceeding. See section II.B.1.a, b above.

Petitioners would have this Board rely upon the provisions of 10 C.F.R. ' 100.21(f), which require that site characteristics be such that adequate security plans and measures can be developed, to impose a new regulatory requirement to include analysis of below-grade placement in ESP applications. Because the regulations that govern an ESP application do not impose any requirement upon an applicant to select any particular plant design or surface/subsurface location, this contention improperly challenges Commission regulations.

In fact, this contention does not raise any question of site suitability, which is the focus of the ESP proceeding, but instead essentially raises a Apolicy@matter, i.e., whether or not a site approval hearing Atoday@should attempt to project future requirements or needs in the site review process. A contention that attempts to litigate the merits of below-grade reactor placement and requires speculation about the Commission's possible future modification of the review process is not within the scope of this proceeding.

3. Environmental Contentions (EC)

EC 3.1 - INADEQUATE DISCUSSION OF SEVERE ACCIDENT IMPACTS

CONTENTION: The ER's discussion of severe accident is inadequate, because it relies on the findings and conclusions of NUREG-1437, Vol. 1, the Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants (1996), without providing specific design information that would justify the applicability of the NUREG.

DISCUSSION: Contentions at 12-15; DNNA Contentions Response at 22; Staff Contentions Response at 23-27; North Anna Petitioners Reply at 12-13; Tr. at 115-16.

RULING: This contention was withdrawn by North Anna Petitioners during the June 21, 2004 session of the initial prehearing conference. See Tr. at 115-16.

EC 3.2.1 - 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 North Anna ESP is deficient because it fails to discuss the environmental implications of the lack of options for permanent disposal of the irradiated fuel that will be generated by the proposed reactors if they are built and operated. Nor has the NRC made an assessment on which Dominion can rely regarding the degree of assurance now available that radioactive waste generated by the proposed reactors can be safely disposed of [and] when such disposal or off-site storage will be available.<sup>6</sup> Final Waste Confidence Decision, 49 Fed. Reg. 34,658 (August 31, 1984), citing State of Minnesota v. NRC, 602 F.2d 412 (D.C. Cir. 1979). Accordingly, the ER fails to provide a sufficient discussion of the environmental impacts of the proposed new nuclear reactors.

DISCUSSION: Contentions at 15-20; DNNA Contentions Response at 28-32; Staff Contentions Response at 28-30; North Anna Petitioners Reply at 13-19; Tr. at 140-80.

RULING: Inadmissible, in that this contention and its supporting bases impermissibly challenge the Commission's regulatory requirements. See section II.B.1.a above. The matters the petitioners seek to raise have been generically addressed by the Commission through the Waste Confidence Rule, the plain language of which states:

[T]he Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of *any* reactor to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time.

10 C.F.R. ' 51.23(a) (emphasis added). Furthermore, when the Commission amended this rule in 1990, it clearly contemplated and intended to include waste produced by a new generation of reactors.<sup>6</sup>

---

<sup>6</sup>See 55 Fed. Reg. 38,474, 38,504 (Sept. 18, 1990) (The availability of a second repository would permit spent fuel to be shipped offsite well within 30 years after expiration of [the

EC 3.2.2 - EVEN IF THE WASTE CONFIDENCE DECISION APPLIES TO THIS PROCEEDING, IT SHOULD BE RECONSIDERED

CONTENTION: Even if the Waste Confidence Decision applies to this proceeding, it should be reconsidered, in light of significant and pertinent unexpected events that raise substantial doubt about its continuing validity, i.e., the increased threat of terrorist attacks against U.S. facilities.

DISCUSSION: Contentions at 20-23; DNNA Contentions Response at 32-37; Staff Contentions Response at 30-32; North Anna Petitioners Reply at 19-20; Tr. at 180-85.

RULING: Inadmissible, in that the contention and its supporting bases raise a matter that is not within the scope of this proceeding and/or impermissibly seek to challenge a Commission regulatory requirement. See section II.B.1.a, b above. Absent a showing of special circumstances under 10 C.F.R. ' 2.335(b), which the petitioners have not made, this matter must be addressed through Commission rulemaking.

EC 3.3.1 - INADEQUATE DISCUSSION OF IMPACTS ON WATER QUANTITY IN LAKE ANNA AND DOWNSTREAM

CONTENTION: The ER does not contain a complete or sufficient assessment of the adequacy of water supplies required for the operation of new units at the North Anna site. In particular, the ER does not sufficiently address the adequacy of water supplies in Lake Anna for the proposed new Units 3 and 4, and fails to identify the supplementary external water source for Unit 4. The ER also fails to account for the impact of an additional unit or units on the river flow downstream.

---

current fleet of] reactors' [operating licenses]. The same would be true of the spent fuel discharged from any new generation of reactor designs.); see also id. at 38,501-04.

DISCUSSION: Contentions at 26-32;<sup>7</sup> DNNA Contentions Response at 37-42; Staff Contentions Response at 32-36; North Anna Petitioners Reply at 20-26; Tr. at 234-91.

RULING: Inadmissible, in that this contention and its supporting bases lack adequate factual or expert opinion support and/or fail properly to challenge the ER. See section II.B.1.c, e above. In this regard, the petitioners failed to acknowledge or discuss a March 31, 2004 DNNA application supplement indicating a fourth unit at the North Anna site would use closed cycle cooling employing dry towers and, relative to unit three, failed to provide facts or analysis sufficient to support their assertion that the ER discussions regarding water supply adequacy and impacts upon downstream waterflow are inadequate.

#### EC 3.3.2 - IMPACTS ON FISH AND OTHER AQUATIC LIFE IN LAKE ANNA AND DOWNSTREAM

CONTENTION: The ER does not adequately address the adverse impact of operating one or two additional reactors on fish and other aquatic life health in Lake Anna and the North Anna River. In particular, the ER does not adequately consider the four primary impacts of the proposed reactors to the fish and other aquatic life at Lake Anna and downstream: increased water temperature, impingement, entrainment, and downstream flow rates.<sup>25</sup> In addition, the ER does not address conflicts between Dominion's proposals for water use and the requirements of the Clean Water Act (ACWA®) and its implementing regulations. Finally, the ER does not address the cumulative impacts of proposed Units 3 and 4 on the already-stressed aquatic systems in Lake Anna and the North Anna River.

<sup>25</sup> Impingement is the accumulation of fish and other aquatic life caught against the cooling water intake screen. Entrainment is the forced influx of aquatic life into the cooling system through the cooling water intake screen, resulting in the death of the aquatic life.

DISCUSSION: Contentions at 32-40; DNNA Contentions Response at 42-52; Staff Contentions Response at 36-44; North Anna Petitioners Reply at 26-36; Tr. at 234-91.

---

<sup>7</sup> Relative to this contention, as well as contentions EC 3.3.2, EC 3.3.3, and EC 3.3.4, the North Anna Petitioners provided an introductory statement, labeled contention EC 3.3, that provided general information regarding NEPA environmental impact analyses.

RULING: Admitted as supported by bases sufficient to raise a genuine issue of material fact adequate to further inquiry as it concerns the adverse thermal impacts on the striped bass population of Lake Anna. Inadmissible, as to the other generalized portions of the contention regarding the failure adequately to address effects on other aquatic life in that they lack adequate factual or expert opinion support, fail properly to challenge the ER, and/or raise matters outside the scope of the proceeding. See section II.B.1.b, c, e above.

In this regard, asserted inadequacies (bases b and c) relative to the DNNA application arising from purported non-compliance with the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), 33 U.S.C. ' 1251 et seq. -- the nonradiological regulation and enforcement of which is expressly reserved to the Environmental Protection Agency (EPA) (or state agencies to which it delegates that authority) -- are matters outside the scope of this proceeding. See 10 C.F.R. ' 51.10(c); see also Hydro Resources, Inc. (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 122 n.3 (1998); see also Consumers Power Co. (Palisades Nuclear Plant), LBP-79-20, 10 NRC 108, 124 (1979). Further, the petitioners impingement and entrainment assertions (basis c) fail to identify any deficiency in the application as it reflects the need for consideration of identified mitigation measures at the COL stage, while their downstream impact assertions fail to raise and lack support regarding ESP-related concerns.

A revised version of this contention incorporating this ruling is set forth in Appendix A of this memorandum and order.

#### EC 3.3.3 - IMPACTS ON PUBLIC AND CLASSIFIED USES OF LAKE ANNA

CONTENTION: The ER does not contain a complete or adequate assessment of the potential impacts of the proposed expansion of the NAPS on water-based recreational uses of Lake Anna and on homeowners who live around the lake.

DISCUSSION: Contentions at 41-44; DNNA Contentions Response at 53-56; Staff Contentions Response at 44-47; North Anna Petitioners Reply at 3640; Tr. at 234-91.

RULING: Inadmissible, in that the contentions and its supporting bases raise matters outside the scope of this proceeding. See section II.B.1.b above. In this regard, asserted

inadequacies relative to the DNNA application involving the federal CWA (Basis b) or assertions that question the existing easement scheme under which the public is permitted access to Lake Anna (Basis c) are matters outside the scope of this proceeding.

4 EC 3.3.4 - FAILURE TO PROVIDE ADEQUATE CONSIDERATION OF ALTERNATIVES FOR COOLING UNITS 3 AND 4

CONTENTION: The ER fails to satisfy 10 C.F.R. ' 51.45(b)(3) because it fails to consider alternatives to the use of Lake Anna water for cooling Units 3 and 4, as well as the no-action alternative.

DISCUSSION: Contentions at 44-45; DNNA Contentions Response at 56-58; Staff Contentions Response at 47-49; North Anna Petitioners Reply at 40-41; Tr. at 292-309.

RULING: As discussed at the initial prehearing conference, see Tr. at 292-93, this contention has been limited to an allegation that the ER fails to examine the no-action alternative with respect to the effects of proposed unit three on Lake Anna and, on this basis, is admitted as supported by bases sufficient to raise a genuine issue of material fact adequate to further inquiry.

A revised version of this contention incorporating this ruling is set forth in Appendix A of this memorandum and order.

### III. PROCEDURAL/ADMINISTRATIVE MATTERS

As indicated above, the North Anna Petitioners are admitted as parties to this proceeding as they each have established standing and have set forth at least one admissible contention. Below is procedural guidance for further litigating the above-admitted contentions.

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 do not consent to conducting this proceeding under Subpart N, per our discussion at the end of the June 2004 prehearing conference (Tr. at 401), the parties should meet 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 make arrangements for the required disclosures under 10 C.F.R.

' 2.336(a).<sup>8</sup>

---

<sup>8</sup> In this regard, 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.

Relative to the staff's hearing file, in accord with 10 C.F.R. ' 2.336(b), in creating and providing the hearing file for this proceeding, the staff can utilize one of two options:

1. Hard copy file. The hearing file that is submitted to the Licensing Board and the parties in hard copy must contain a chronologically numbered index of each item contained in it and each file item shall be separately tabbed in accordance with the index and be separated from the other file items by a substantial colored sheet of paper that contains the tab(s) for the immediately following item. Additionally, the items shall be housed in hole-punched three ring binders of no more than four inches in thickness.

2. Electronic file. For 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 AFind@function. Additionally, the staff should create a separate folder in the agency's ADAMS system, which it should label "Dominion North Anna Nuclear - 52-008-ESP Hearing File," and give James Cutchin of ASLBP and the SECY group (Office of the Secretary) viewer rights to that folder. Once created, the staff should place in that folder copies of the ADAMS files for all the Hearing Docket materials. For documents in ADAMS packages a subfolder should be created into which the package content should be placed. The subfolder should have a title that comports with the title of the package. Thereafter, as part of its notice to the parties and the Licensing Board regarding the availability of the Hearing File materials in ADAMS, the staff should advise the Licensing Board that this process is complete and the AHearing File@folder is available for viewing. (As an information matter for the parties, once this notice is received, the contents of the folder will be copied so as to make its contents available to an ASLBP-created ADAMS folder that will be accessible to ASLBP personnel only and into a folder that will be accessible by the parties from the NRC web site.)

If the staff thereafter provides any updates to the hearing file, it should place a copy of those items in "Dominion North Anna Nuclear - 52-008-ESP Hearing File" ADAMS folder and indicate it has done so in the notification regarding the update that is then 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 the proceeding, it should notify the Licensing Board of that intent prior to placing those documents into the A"Dominion North Anna Nuclear - 52-008-ESP Hearing File@and await further instructions regarding those documents from the Licensing Board. (Questions regarding the electronic hearing file creation process should be addressed to James Cutchin at 301-415-7397 or [jmc3@nrc.gov](mailto:jmc3@nrc.gov).)

If the staff decides to utilize option two, as part of the discovery report required under this section it should give notice to the Licensing Board and the parties of that election. If any party objects to this method of providing the hearing file, it shall file a response within seven days outlining the reasons why access to an electronic hearing file will place an undue burden on that party's ability to participate in this proceeding.

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 failure to do so resulting in appropriate Board sanctions.<sup>9</sup> In this regard, the Board will 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. Additionally, during that prehearing conference the parties should be prepared to provide 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.<sup>10</sup> They also should be prepared

---

<sup>9</sup> In this regard, when a party claims privilege and withholds information otherwise 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 such disclosure of the withheld materials. See 10 C.F.R. ' 2.336(a)(3), (b)(5).

<sup>10</sup> DNNA and the staff also should be prepared to provide their views on how the Board should proceed relative to the mandatory hearing findings required of the Board under the December 2003 hearing notice. See 68 Fed. Reg. at 67,489. In this regard, we ask that these parties provide their views on the difference, if any, between what is required under this mandatory hearing proceeding and that involving the proposed Louisiana Energy Services, L.P. uranium enrichment facility relative to matters that are not the subject of admitted contentions. Compare Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-3, 59 NRC 10, 12-13 (2004).

to indicate the status of any settlement negotiations relative to any of the admitted contentions, and whether a settlement judge would be helpful in those discussions.

#### IV. CONCLUSION

For the reasons set forth above, we find that the North Anna Petitioners have established their standing to intervene and have 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 sixth day of August 2004, ORDERED, that:

1. Relative to the contentions specified in paragraph two below, the North Anna Petitioners hearing request is granted and these petitioners are admitted as parties to this proceeding.
2. The following petitioner contentions are admitted for litigation in this proceeding: EC-3.3.2 and EC-3.3.4.
3. The following petitioner contentions are rejected as inadmissible for litigation in this proceeding:<sup>11</sup> SAR 2.1, SAR 2.2, EC 3.2.1, EC 3.2.2, EC 3.3.1, and EC 3.3.3.
4. The parties are to take the actions required by section III above in accordance with the schedule established herein.

---

<sup>11</sup> Contention EC 3.1 was withdrawn by the North Anna Petitioners.

5. In accordance with the provisions of 10 C.F.R. ' 2.311, as it rules upon intervention petitions, 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>12</sup>

Original Signed By  
G. Paul Bollwerk, III  
ADMINISTRATIVE JUDGE

Original Signed By  
Paul B. Abramson  
ADMINISTRATIVE JUDGE

Original Signed By  
Anthony J. Baratta  
ADMINISTRATIVE JUDGE

Rockville, Maryland

August 6, 2004

---

<sup>12</sup> Copies of this memorandum and order were sent this date by Internet e-mail transmission to counsel for (1) applicant DNNA; (2) the North Anna Petitioners; and (3) the staff.

APPENDIX A

ADMITTED CONTENTIONS

EC 3.3.2 - IMPACTS ON STRIPED BASS IN LAKE ANNA

The ER does not adequately address the adverse impact of operating one or two additional reactors on the striped bass in Lake Anna and the North Anna River. In particular, the ER does not adequately consider the impacts of the proposed reactors on the striped bass at Lake Anna and downstream arising from increased water temperature.

4 EC 3.3.4 - FAILURE TO PROVIDE ADEQUATE CONSIDERATION OF ALTERNATIVES FOR COOLING UNITS 3 AND

CONTENTION: The ER fails to satisfy 10 C.F.R. ' 51.45(b)(3) because it fails to consider the no-action alternative to the use of Lake Anna water for cooling Unit 3.