UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSION

In the Matter of:	)	Docket Nos. 52-025-LA-2; 52-026-LA-2
SOUTHERN NUCLEAR OPERATING CO.	)	
License Amendment Application for Combined Licenses NPF-91 and NPF-92 Vogtle Electric Generating Plant Units 3 and 4	)	November 7, 2016

SOUTHERN NUCLEAR OPERATING COMPANY'S BRIEF IN OPPOSITION TO APPEAL

M. Stanford Blanton
Millicent W. Ronnlund
BALCH & BINGHAM, LLP
1710 Sixth Avenue North
Birmingham, AL 35203-2015
Telephone: (205) 251-8100
E-mail: sblanton@balch.com
E-mail: mronnlund@balch.com

COUNSEL FOR SOUTHERN NUCLEAR OPERATING COMPANY, INC.

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CASES

OTHER AUTHORITIES

REGULATIONS

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSION

In the Matter of:	)	Docket Nos. 52-025-LA-2; 52-026-LA-2
SOUTHERN NUCLEAR OPERATING CO.	)	
License Amendment Application for Combined Licenses NPF-91 and NPF-92 Vogtle Electric Generating Plant Units 3 and 4	)	November 7, 2016

SOUTHERN NUCLEAR OPERATING COMPANY'S BRIEF IN OPPOSITION TO APPEAL

In accordance with 10 C.F.R. § 2.311(b), Southern Nuclear Operating Company, Inc. ("SNC") submits this Brief in opposition to the "Notice of Appeal from ASLB's Denial of Petitioner's Request for Intervention and a Brief Supporting Notice of Appeal" submitted on October 11, 2016 (the "Appeal") by Blue Ridge Environmental Defense League and its chapter Concerned Citizens of Shell Bluff ("BREDL").[1] BREDL requests review of the Atomic Safety and Licensing Board's ("Board") Order denying BREDL's petition to intervene and request for hearing[2] in the above captioned proceeding.[3] BREDL submitted the Petition in response to the Nuclear Regulatory Commission's ("NRC") March 2, 2016 notice of an opportunity to request a

[1] Notice of Appeal from ASLB's Denial of Petitioner's Request for Intervention and a Brief Supporting Notice of Appeal (October 11, 2016) ("Appeal").

[2] Petition for Leave to Intervene and Request for Hearing by the Blue Ridge Environmental Defense League and its Chapter Concerned Citizens of Shell Bluff Regarding Southern Nuclear Operating Company's Request for a License Amendment and Exemption for Containment Hydrogen Igniter Changes, LAR-15-003 (May 2, 2016) (the "Petition").

[3] *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), LBP-16-10, 84 NRC ___ (slip op.) (September 15, 2016) ("September 15 Order").

hearing[4] regarding SNC's February 6, 2015 License Amendment Request for the Vogtle Electric Generating Plant ("VEGP") Units 3 and 4 Combined Licenses ("COLs").[5]

The arguments raised in the Appeal were previously made and addressed by the Board and fail to identify any legal error or abuse of discretion in the Board's admissibility ruling. Accordingly, for the reasons discussed herein and for the reasons articulated by the Board, the Appeal should be denied, and the September 15 Order should be affirmed.

Procedural History

On February 10, 2012, the NRC issued COLs NPF-91 and NPF-92 to SNC for the construction and operation of VEGP Units 3 and 4. The VEGP Units 3 and 4 COLs incorporate by reference 10 C.F.R. Part 52, Appendix D, the Design Certification Rule for Westinghouse's AP1000 Design. The AP1000 Design Control Document ("DCD"), the relevant portions of which are incorporated by reference into the VEGP Units 3 and 4 Updated Final Safety Analysis Report ("UFSAR"), includes a Containment Hydrogen Control System—a non-safety related system designed to mitigate beyond-design-basis accidents—which includes 64 hydrogen igniters in the hydrogen ignition subsystem. The igniters are distributed throughout containment based on igniter location criteria set forth in the DCD; these criteria are based on Westinghouse's analysis of hydrogen behavior in the AP1000 containment during certain severe accident scenarios. In certifying the AP1000 design, the NRC reviewed and approved the hydrogen igniter location criteria and the underlying hydrogen analysis.

---

[4] Vogtle Electric Generating Plant, Units 3 and 4: License Amendment Application; Opportunity to Comment, Request a Hearing, and Petition for Leave to Intervene, 81 Fed. Reg. 10,920 (Mar. 2, 2016).

[5] ND-15-0280, Letter from B. Whitley to NRC Control Desk, Vogtle Electric Generating Plant Units 3 and 4 Request for License Amendment and Exemption: Containment Hydrogen Igniter Changes (LAR-15-003) (Feb. 6, 2015) (ADAMS Accession No. ML15037A715) (hereafter "LAR-15-003" or "LAR").

On February 6, 2015, pursuant to 10 C.F.R. § 52.98(c) and in accordance with 10 C.F.R. § 50.90, SNC submitted LAR-15-003 to modify the design of the hydrogen ignition subsystem by adding two hydrogen igniters above the In-Containment Refueling Water Storage Tank ("IRWST") roof vents to ensure that any hydrogen exiting the IRWST through the roof vents in a severe accident scenario would be burned off as close to the source as possible.[6] These two additional igniters are proposed to be located consistent with the igniter location criteria in the DCD. The AP1000 hydrogen analysis was the basis for the igniter location criteria; therefore, the additional igniters proposed to be located in accordance with those criteria fall within, and do not affect, the hydrogen analysis underlying those criteria.[7]

BREDL filed the Petition on May 2, 2016, which included two contentions. Contention One asserted that the LAR's proposed addition of new igniters is not supported by an adequate evaluation of hydrogen behavior in the AP1000 containment. Contention Two asserted that the analysis of hydrogen behavior in the AP1000 containment failed to account for historical precedents of hydrogen explosions, alleging that the analysis suffers from five specific defects. On May 27, 2016, SNC filed an answer to the Petition arguing that BREDL lacked standing to challenge the LAR and that its alleged contentions were inadmissible according to the NRC's contention admissibility requirements.[8] NRC Staff filed an answer also arguing that BREDL's

---

[6] LAR-15-003, Encl. 1 at 4. The LAR also proposes to clarify that control of the hydrogen igniters is through the Plant Control System in lieu of the Protection and Safety Monitoring System and to make consistency changes to UFSAR language describing the minimum surface temperature of hydrogen igniters and the location of an existing hydrogen igniter. Because the proposed changes require a departure from Tier 1 information in the AP1000 DCD, SNC also requested an exemption from the requirements of the generic DCD, pursuant to 10 C.F.R. § 52.63(b)(1). Neither the Petition nor Appeal challenge the exemption, the LAR's clarification regarding the Plant Control System, or the minimum surface temperature of hydrogen igniters; therefore, these issues are not discussed herein.

[7] LAR-15-003, Encl. 1 at 12.

[8] Southern Nuclear Operating Company's Answer Opposing Petition to Intervene and Request for Hearing (May 27, 2016) at 1.

contentions were inadmissible.[9] BREDL filed its reply on June 3, 2016.[10] The Board heard oral argument regarding standing and contention admissibility on August 3, 2016.[11]

In the September 15 Order, the Board found that, while BREDL had standing to intervene, BREDL's proposed contentions failed to satisfy the admissibility requirements of 10 C.F.R. § 2.309(f)(1). The Board concluded that BREDL's contentions could not be admitted because they amounted to challenges to the approved hydrogen ignition subsystem of the AP1000 certified design, the VEGP Units 3 and 4 COLs, and NRC regulations.[12] Therefore, the Board denied the Petition.[13]

Standard of Review

"The Commission defers to a Board's rulings on standing and contention admissibility in the absence of clear error or abuse of discretion."[14] When the "brief on appeal points to no error of law or abuse of discretion that might serve as grounds for reversal," the Commission generally

---

[9] Nuclear Regulatory Commission Staff Answer to Petition for Leave to Intervene and Request for Hearing (May 27, 2016).

[10] Reply of the Blue Ridge Environmental Defense League and its Chapter Concerned Citizens of Shell Bluff to Answers of Nuclear Regulatory Commission and Southern Nuclear Operating Company, LAR-15-003 (June 3, 2016) ("Reply").

[11] On September 15, 2016, the Board granted the joint motion of SNC, NRC Staff and BREDL to correct the transcript of the oral argument. Atomic Safety and Licensing Board Order Approving Joint Proposed Transcript Corrections (September 15, 2016), available at ADAMS Accession No. ML16259A159. All transcript quotations used herein reflect the corrections approved by the Board.

[12] *See* September 15 Order at 22.

[13] *Id.* at 39.

[14] *Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 336 (2009); *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-08-17, 68 NRC 231 (2008); *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111 (2006) ("We give substantial deference to our boards' determinations on threshold issues, such as standing and contention admissibility. We regularly affirm Board decisions on the admissibility of contentions where the appellant points to no error of law or abuse of discretion.") (citations omitted).

declines to grant review of a Board decision.[15] Similarly, where the Board has "thoroughly analyzed the issues, the arguments, and the underlying supporting facts and expert opinions" its ruling will be upheld.[16] Furthermore, a party appealing a Board's denial of intervention "bears the responsibility of clearly identifying the errors in the decision below and ensuring that its brief contains sufficient information and cogent argument to alert the other parties and the Commission to the precise nature of and support for the appellant's claims."[17]

Appeals which do not address the Board's explanations underlying its ruling and simply repeat or add to previous claims are insufficient to show error.[18] "A mere recitation of an appellant's prior positions in a proceeding or a statement of his or her general disagreement with a decision's result 'is no substitute for a brief that identifies and explains the errors of the Licensing Board in the order below.'"[19] "[G]eneral arguments [that] do not come to grips with the Board's reasons for rejecting" a contention will not "revive a contention that lacks support in the law or facts."[20] Similarly, an appellant's failure to address the Board's reasoning for dismissing a particular contention is sufficient justification to reject an appeal.[21]

As was discussed at length in the September 15 Order, the question before the Board was whether BREDL satisfied the requirements of 10 C.F.R. § 2.309. In order to form a valid request

---

[15] *See Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-00-21, 52 NRC 261, 265 (2000); *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-04-36, 60 NRC 631 (2004).

[16] *Oyster Creek*, CLI-06-24, 64 NRC at 121.

[17] *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 297 (1994).

[18] *See PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 and 2), CLI-07-25, 66 NRC 101, 104 (2007) (upholding Board's determination where petitioner simply repeated and added to his previous claims).

[19] *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Unit 2), CLI-93-10, 37 NRC 192, 198 (1993) (quoting *Georgia Power Co., et al.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-92-03, 35 NRC 63, 67 (1992)).

[20] *Millstone*, CLI-04-36, 60 NRC at 639.

[21] *Id.* at 638.

for hearing, a petitioner must propose at least one contention that meets the admissibility requirements in 10 C.F.R. § 2.309(f)(1).[22] A contention that fails to comply with even one of the 10 C.F.R. § 2.309(f)(1) criteria is inadmissible.[23] Challenges to the existing licensing basis which are not proposed to be modified cannot form the basis for an admissible contention in a license amendment proceeding.[24] Likewise, challenges to a certified design may not be raised in proceedings on a COL that incorporates the relevant portions of the certified design's DCD.[25] The Board held that BREDL failed to meet the § 2.309(f)(1) criteria.[26]

In the Appeal, BREDL argues that SNC's LAR violated 10 C.F.R. § 50.44(c)(5) by not performing the allegedly "obligatory" analysis in support of the LAR.[27] BREDL's argument appears to rely on a distinction between SNC's LAR, which is applicable only to VEGP Units 3 and 4, and a "generic change in the AP1000 [DCD]".[28] Apparently, although BREDL fails to articulate its rationale, BREDL is maintaining that because the LAR is Vogtle-specific, § 50.44 does not allow SNC to rely on the AP1000 DCD's approved § 50.44(c) analysis, and instead requires a standalone analysis for the additional two proposed igniters. Therefore, according to

---

[22] *See* 10 C.F.R. § 2.309(a).

[23] *See, e.g.*, *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), CLI-12-8, 75 NRC 393, 395–96 (2012); *see also* Changes to Adjudicatory Process, 69 Fed. Reg. 2,182, 2,221 (Jan. 14, 2004).

[24] *See Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 437–38 (2008).

[25] *See* 10 C.F.R. §§ 52.63, 2.335; 10 C.F.R. Part 52, App. D.VI.B; *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 & 3), CLI-10-9, 71 NRC 245, 260 (2010) ("To the extent that [Petitioner] challenges the AP1000 design certified in Part 52, Appendix D, it is an impermissible challenge to NRC regulations . . . ."); *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-03, 65 NRC 237, 252 (2007).

[26] *See infra* pp. 8–17.

[27] Appeal at 2.

[28] Appeal at 3.

BREDL, the Board erred in relying on the AP1000 § 50.44(c) analysis in the September 15 Order.[29]

As discussed below, BREDL's argument on appeal must be rejected by the Commission. The Board considered the material issues associated with BREDL's contentions and issued a well-reasoned order addressing the arguments made in the Petition as well as BREDL's restated arguments in the Appeal. The Board's decision rests, in particular, on a thorough legal analysis of the AP1000 rulemaking and the associated finality provisions in 10 C.F.R. § 52.63, which control the LAR's reliance on the AP1000 certified design.[30] Further, the Board explicitly considered § 50.44 requirements and determined that BREDL's requested analysis was an improper challenge to § 50.44.[31] The Appeal provides no basis for reversal of the September 15 Order.

Summary of Argument

I. Statement of Issue on Appeal

(1) Has BREDL demonstrated that the Board's conclusion that the proposed contentions in the Petition failed to satisfy 10 C.F.R. § 2.309(f)(1)'s admissibility requirements was clear error or an abuse of discretion?

(2) Has BREDL demonstrated that the Board's findings of fact in its decision to dismiss BREDL's contentions were clearly erroneous?

II. Summary of SNC's Argument in Opposition to Appeal

BREDL's argument on appeal fails to identify any error or abuse of discretion by the Board in the September 15 Order. BREDL's argument amounts to a general disagreement with

[29] *See* generally Appeal at 2–3.

[30] *See infra* pp. 9–12.

[31] *See infra* pp. 13–15.

the conclusions of the Board as it relates to the admissibility of BREDL's proffered contentions without any attempt to engage the thorough reasoning of the Board. Furthermore, BREDL's argument is simply a restatement of its prior arguments in the Petition that do not offer any new analysis regarding the conclusions of the Board. Additionally, BREDL has neither provided any support for its assertion that an evidentiary hearing is needed to reconsider the Board's findings of fact, nor actually disputed any factual conclusion of the Board. The Board's decision denying the Petition properly considered the admissibility of the contentions, was not in error or an abuse of discretion, and should be upheld. Therefore, the Appeal should be dismissed.

Argument

I. BREDL Fails to Identify Any Error or Abuse of Discretion in the Board's Decision

The Board thoroughly examined and properly concluded that Contention One and Contention Two were inadmissible, and BREDL does not explicitly articulate any claimed error in the Appeal. Instead, BREDL relies on general assertions without any discussion regarding the Board's findings that the contentions failed to satisfy the NRC's contention admissibility regulations under 10 C.F.R. § 2.309(f)(1). BREDL simply states its disagreement with the Board's decision that the requirements of 10 C.F.R. § 50.44(c) were addressed by the AP1000 design certification rulemaking and subject to finality for the LAR and makes the conclusory claim that the decision was in error. BREDL has not identified any errors in the decision below or provided sufficient information and cogent arguments to alert the other parties and the Commission to the precise nature of and support for BREDL's claims. Therefore, BREDL has not met the burden of proof required to raise a successful appeal of the Board's decision.[32]

[32] *One Factory Row*, CLI-94-6, 39 NRC at 297.

a. The Board Correctly Rejected Contention One and Contention Two As Claims Outside the Scope of the LAR Proceeding Under 10 C.F.R. § 2.309(f)(1)(iii).

i. Contention One

The Board properly concluded that Contention One is actually an argument aimed at the rulemaking certifying the AP1000 design and, therefore, inadmissibly outside the scope of the LAR proceeding.[33] BREDL's Contention One asserts that a hydrogen igniter in close proximity to hydrogen in containment creates an "extremely dangerous situation" due to SNC's failure to properly evaluate the effects of the two new igniters on the behavior of hydrogen in the AP1000 containment.[34] Although not included in the original Petition, BREDL later claimed in its Reply that 10 C.F.R. § 50.44(c) required an analysis for the LAR. In order to be admissible, a contention must "demonstrate that the issue raised in the contention is within the scope of the proceeding."[35] The Board properly rejected Contention One for failing to meet this requirement of the NRC contention admissibility regulations.[36]

Fundamental to the Board's conclusion regarding Contention One, the Board found that a complete analysis under 10 C.F.R. § 50.44 had already been performed for the AP1000 design and approved in the AP1000 design certification rulemaking.[37] Based on this analysis, the Board

---

[33] 10 C.F.R. § 2.309(f)(1)(iii).

[34] *See* Petition at 7–8, 11–12.

[35] 10 C.F.R. § 2.309(f)(1)(iii).

[36] *See, e.g.*, *Davis-Besse*, CLI-12-8, 75 NRC at 395–96.

[37] *See* September 15 Order at 23–26 (noting that "[t]he hydrogen control system of the AP1000 design, including, hydrogen igniters was subject to the combustible gas control requirements of 10 C.F.R. Part 50 during the [AP1000] design certification process" and discussing the NRC's review of igniter placement per § 50.44); *see also id.* at 38 ("In the AP1000 design certification rulemaking, the NRC concluded that the AP1000's hydrogen control system is adequate to satisfy the requirements of 10 C.F.R. § 50.44(c).") *see also* 10 C.F.R. Part 52, App. D.VI.A. Because the finality of the hydrogen analysis was a factor in the Board's decision, SNC notes that a physical design change to openings in the Core Makeup Tank (CMT) compartment, that could also potentially result in a modification to the hydrogen combustion analysis that supported the AP1000 design certification, is currently under review by SNC. Depending on the details of the design change, a LAR proposing changes to the § 50.44(c) analysis could be necessary. Neither the potential change to the CMT compartment nor the potential revision to the § 50.44(c)

determined that the approved AP1000 DCD included the hydrogen igniter location criteria.[38] The Board further concluded that SNC was proposing to locate the two additional igniters consistent with those approved criteria and that SNC was not proposing any change to the approved criteria.[39] After explaining how the AP1000 design certification rulemaking complied with § 50.44 and established the igniter location criteria, and finding that the proposed igniters complied with those criteria already bounded by the certification, the Board concluded that the testing and analysis demanded by BREDL would be an improper new requirement on the AP1000 design.[40] Not only does the Board's decision indicate thorough consideration of these issues, but the Board probed these issues during oral argument.[41]

The Board's comprehensive examination of the regulatory framework associated with the design certification of the AP1000 and the legal effect of the design certification led it to conclude that approved content in the AP1000 DCD relied upon by the LAR is afforded finality

---

analysis would impact the location of the hydrogen igniters in the IRWST vents, which are the subject of the Appeal.

[38] *See* September 15 Order at 27, 31–32 ("Southern Nuclear's placement of hydrogen igniters as close to the IRWST vents as feasible is not subject to challenge in this proceeding, because the criteria for locating hydrogen igniters in containment have been settled through rulemaking and the licensing of Vogtle Units 3 and 4."); *see also* 10 C.F.R. Part 52, App. D.VI.B.1.

[39] *See* September 15 Order at 26 ("The placement criteria of Table 6.2.4–6 are not modified by the LAR."); *id.* at 29 ("Southern Nuclear relied on UFSAR Table 6.2.4 –6 to locate the proposed hydrogen igniters."); *see also id.* at 31–32.

[40] *See* September 15 Order at 30–31 ("BREDL contends, however, that Southern Nuclear has not provided an adequate technical basis for locating the proposed new igniters at the IRWST roof vents.… BREDL wants Southern Nuclear to perform "rigorous testing and analysis" to determine whether new igniters should be located at the IRWST roof vents. BREDL, however, does not identify any regulatory basis for requiring these analyses. Pursuant to 10 C.F.R. § 52.63, new requirements may not be imposed on a certified design. Therefore, absent a regulation requiring a gaseous diffusion and flame propagation analysis for the new igniters, the analyses BREDL demands cannot be imposed through this proceeding.") (additional citations omitted).

[41] *See* August 3 Transcript at 48, 70, 114 (numerous questions from Judge Arnold: "[W]hat exactly is that violation of the license that [Gunderson] . . . is referring to?";"Is the method of locating the two additional igniters consistent with the methodology used for locating the original igniters?"; "Is there any rule stating that all proposed license amendments must increase safety?"); s*ee also id.* at 72–76 (Judge Arnold: "So, is it correct that the ignition igniter location criteria are part of the DCD and it and they received approval from the NRC?" . . . [SNC]: "Yes."; Judge Arnold: "Petitioners asserted that there is a requirement for four analyses . . . Do the igniter criteria include any of these requirements?" . . . [SNC]: "No, they do not."; Judge Arnold: "So, now you're basically making the actual igniter design closer to what is recommended in the DCD?" . . . [SNC]: "Yes.").

under 10 C.F.R. § 52.63. The Board recognized that under § 52.63, the NRC "may not modify, rescind, or impose new requirements on the certification information, whether on its own motion, or in response to a petition from any person."[42] Furthermore, the Board found that challenges to the AP1000 design are impermissible in an adjudicatory setting.[43]

The Board recognized that BREDL's Contention One never challenges the LAR's conclusion that the placement of the new hydrogen igniters is consistent with the placement criteria approved by the DCD, which were developed based on the hydrogen analysis already approved as in compliance with 10 C.F.R. § 50.44(c). Instead, Contention One asserts that an adequate technical basis for the placement of the new igniters has not been provided and maintains that the placement of the proposed igniters should be subject to additional testing and analysis. However, BREDL did not identify any regulatory basis for requiring such additional analyses.[44] In fact, BREDL did not even suggest that the LAR failed to meet the requirements of 10 C.F.R. § 50.44(c)(5) until it submitted its reply to the answers of SNC and the NRC Staff.[45] The Board gave BREDL ample opportunity to further explain its argument that an additional analysis was required for the new hydrogen igniters at oral argument, but BREDL was unable to articulate any NRC precedent or regulation that would require an additional analysis.[46] As such,

---

[42] September 15 Order at 26. *See also* 10 C.F.R. § 52.63(a)(1).

[43] September 15 Order at 27. *See also Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), LBP-10-9, 71 NRC 493, 525 & n.146 (2010); *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), LBP-08-21, 68 NRC 554, 571 (2008) ("[T]o the extent Contention TC-5 challenges matters addressed in the AP1000 DC Rule, Contention TC-5 is inadmissible because it is an impermissible challenge to the rule, failing to comply with the requirements of section 2.335 and contravening the provisions of section 52.63(a)(1).").

[44] September 15 Order at 30.

[45] *See* Reply at 3.

[46] *See, e.g.*, August 3 Transcript at 19 (BREDL: "[W]e're talking additional igniters, which are not outlined in the Design Control Document . . . There's no analysis to show where they should be located." Judge Arnold: "[A]ren't they being more consistent with these new igniters than they were with the original igniters?"); *id.* at 25 (BREDL: "[T]here are uncertainties with regards to hydrogen . . . So there is certainly additional analysis that needs to be done." Judge Trikouros: "Okay . . . I do not understand what these additional analyses are and I haven't yet heard

the Board concluded that those requirements could not be imposed in the LAR proceeding.[47] The Board correctly identified BREDL's arguments underlying Contention One as attacks on the previous licensing decisions of the NRC made during the AP1000 certified design rulemaking and concluded that the arguments were outside the scope of the LAR proceeding based on the finality afforded to such determinations under NRC regulations.[48] Therefore, the Board concluded that Contention One failed to satisfy § 2.309(f)(1)(iii).

Furthermore, BREDL's brief does not, nor can it, identify any error in the Board's decision regarding the rejection of Contention One on the basis that it is outside the scope of the proceeding. The Appeal does not assert any specific error in relation to Contention One (or Contention Two for that matter). It merely restates arguments that BREDL raised in the Petition and its Reply to answers of SNC and the NRC Staff.[49] The Appeal's claim that an analysis under § 50.44 is required utterly ignores the Board's reasoning that a § 50.44 analysis already exists and is the basis for the hydrogen igniter location criteria that the LAR follows. The Appeal provides no explanation for overturning the Board's legal finding as to the finality of the AP1000 DCD, in particular the hydrogen igniter location criteria that SNC proposes to use for the two additional igniters. The Appeal only generically claims that the Board erred in not admitting the contentions because the LAR did not include additional analyses of the two new hydrogen igniters. General arguments that do not address the reasons for the rejection of a contention are

---

from you what they are."); *id.* at 63 (Judge Trikouros: "[S]o, I still don't understand the analysis that Mr. Gunderson is referring to. We never did get that cleared up in this hearing so far, or in this oral argument so far.").

[47] September 15 Order at 31 (noting that 10 C.F.R. § 52.63 would not allow new requirements to be imposed on a certified design).

[48] 10 C.F.R. § 52.63(a); *see also* September 15 Order at 31–32.

[49] *See Georgia Power Co., et al.*, CLI-92-03, 35 NRC at 67 ("Mere recitation of [appellant's] prior position in the proceeding and its general dissatisfaction with the outcome of the proceeding is no substitute for a brief that identifies and explains the errors of the Licensing Board in the order below.").

not sufficient to show error in the Board's decision.[50] Because BREDL fails to address the Board's analysis supporting the rejection of Contention One as outside the scope of the LAR proceeding under § 2.309(f)(1)(iii), the Appeal should be denied.

ii. Contention Two

The Board thoroughly addressed each portion of BREDL's Contention Two and correctly found that it improperly challenged NRC regulations and the AP1000 design certification rulemaking. The Board determined that Contention Two — which claimed that the LAR did not perform the correct analyses to show that the hydrogen control system properly considered the required criteria — is outside the scope of the LAR proceeding. This determination is without error or abuse of discretion.

The Board analyzed the relevant regulatory requirements with respect to hydrogen control in new reactors under 10 C.F.R. § 50.44(c). The Board concluded that the regulation only requires new reactor applicants to analyze the zirconium and water source of hydrogen and limits the applicable hydrogen source by requiring a reactor design to address and control a 100 percent fuel clad-coolant reaction.[51] The Board noted that the hydrogen control system utilized in the VEGP Units 3 and 4 COL was found to meet all these applicable requirements in the AP1000 design certification rulemaking and is not subject to any different or additional requirements.[52] The Board concluded that BREDL's assertion that *additional* requirements must

---

[50] *Millstone*, CLI-04-36, 60 NRC at 639 n.25 (citing generally *One Factory Row*, CLI-94-6, 39 NRC at 297 ("The appellant bears the responsibility of clearly identifying the errors in the decision below and ensuring that its brief contains sufficient information and cogent argument to alert the other parties and the Commission to the precise nature of and support for the appellant's claims")); *General Public Utilities Nuclear Corp.* (Three Mile Island Nuclear Station, Unit 2), ALAB-926, 31 NRC 1, 6 (1990) ("[W]e will not create issues from the shadows of the intervenors' brief, for the intervenors bear the full responsibility for their failure to identify clearly and to brief adequately the issues they seek to raise.").

[51] September 15 Order at 32; *see also* 10 C.F.R. § 50.44(c)(2)–(3), (5).

[52] September 15 Order at 33.

be met impermissibly challenged NRC regulations,[53] and that, furthermore, additional requirements cannot be imposed on a licensee utilizing a certified design pursuant to 10 C.F.R. § 52.63.[54]

The Board also found that NRC considered possible additional hydrogen control requirements in connection with its review of the Fukushima accident and concluded that no additional steps are necessary regarding hydrogen control as it pertains to the AP1000 design.[55] The Board noted that recent NRC Staff statements suggest that any enhancements for new plants beyond those that are already required in existing regulations are not likely to be justified.[56] The Board correctly concluded that any challenges associated with Fukushima modifications related to hydrogen igniters of the AP1000 certified design are outside the scope of the LAR proceeding because the Commission has elected to address those issues generically through consideration of a rulemaking.[57]

Based on this, the Board considered BREDL's Contention Two, which claimed that the LAR did not properly assess certain hydrogen sources and failed to take into account historical precedents of hydrogen explosions, and determined that the contention was an inadmissible attack on NRC regulations, the AP1000 design certification rulemaking, the VEGP Units 3 and 4 COL proceeding, and the NRC's generic post-Fukushima findings. Accordingly, the Board

---

[53] 10 C.F.R. § 50.44.

[54] September 15 Order at 32–33; *see also* 10 C.F.R. § 52.63(a)(1).

[55] AP1000 Design Certification Amendment, 76 Fed. Reg. 82,079, 82,081 (Dec. 30, 2011); September 15 Order at 35.

[56] September 15 Order at 36.

[57] *Id.*; *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 345 (1999) (addressing a challenge to the waste confidence rule and stating that when an issue is resolved generically, a petitioner's remedy lies in the rulemaking process, not through adjudication).

concluded that Contention Two was not within the scope of the LAR proceeding and, therefore, inadmissible.[58]

Similar to Contention One, BREDL does not attempt to identify any specific error with the Board's decision to reject Contention Two. Nor does BREDL make any separate argument regarding the Board's reasoned analysis for determining that Contention Two is not properly within the scope of the LAR proceeding. Just as stated above in relation to Contention One, BREDL makes no new arguments regarding purported Board errors of law or abuse of discretion and simply restates the same arguments offered below that were properly reviewed and denied by the Board. This recitation of previously-reviewed arguments without additional analysis regarding some alleged error by the Board does not meet the necessary burden to call into question the reasoned decision by the Board.[59]

BREDL claims that the LAR does not meet the requirements of 10 C.F.R. § 50.44(c)(5). However, it does not address the Board's statements noting that the hydrogen ignition subsystem was reviewed and deemed to be in compliance with the regulation during the review of the AP1000 design certification rulemaking.[60] In fact, instead of addressing the Board's reasoning or explaining why the AP1000 DCD hydrogen analysis should not have been relied upon by the Board, BREDL simply states that § 50.44(c)(5) requires a "thoroughgoing analysis" but "[n]one has been done in this case."[61] General arguments that its contentions should not have been

---

[58] September 15 Order at 32, 37, 39; 10 C.F.R. § 2.309(f)(1)(iii). *See also Shearon Harris*, CLI-10-09, 71 NRC at 260 ("To the extent that [Petitioner] challenges the AP1000 design certified in Part 52, Appendix D, it is an impermissible challenge to NRC regulations . . . ."); *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-03, 65 NRC at 252.

[59] *See Susquehanna Steam Electric Station*, CLI-07-25, 66 NRC at 104 (upholding Board's determination where petitioner simply repeated and added to his previous claims) (citation omitted); *Comanche Peak*, CLI-93-10, 37 NRC at 198.

[60] September 15 Order at 32–33.

[61] Appeal at 4.

rejected that do not address reasoned analysis to the contrary on the part of the Board cannot "revive a contention that lacks support in the law or facts."[62] Furthermore, BREDL's failure to address the reasoning by the Board for the rejection of its contention provides sufficient grounds for dismissal of the Appeal.[63] Because BREDL has not identified any error with the Board's conclusion, merely restates arguments that have already been addressed, and never engages the reason for its rejection as clearly articulated by the Board, the Commission should uphold the Board's decision rejecting Contention Two as inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(iii).

b. The Board Correctly Rejected Contention One for Failing to Raise a Genuine Dispute with the LAR on a Material Issue Under 10 C.F.R. § 2.309(f)(1)(vi).

The Board properly concluded that Contention One failed to show a genuine dispute concerning the placement of the hydrogen igniters in compliance with the certified DCD location criteria. After concluding that the hydrogen igniter location criteria in the COL as incorporated from the certified AP1000 DCD were subject to finality and unchanged by the LAR, the Board considered whether SNC's proposed additional igniters would be located consistent with the criteria.[64] The Board concluded that SNC was proposing to place the hydrogen igniters in accordance with the approved location criteria.[65] As noted above, BREDL's Contention One did not challenge the LAR's placement of the new hydrogen igniters on the basis that they could be

---

[62] *Millstone*, CLI-04-36, 60 NRC at 639 n.25 (citing generally *One Factory Row*, CLI-94-6, 39 NRC at 297).

[63] *See Millstone*, CLI-04-36, 60 NRC at 38; see also *One Factory Row*, CLI-94-6, 39 NRC at 297 ("[F]ailure to illuminate its bases for exception would in itself be sufficient grounds to reject it as a basis for appeal.").

[64] *See, e.g.,* August 3 Transcript at 70 (Judge Arnold: "[I]s the method of locating the two additional igniters consistent with the methodology used for locating the original igniters?" SNC: "Yes."); *id.* at 74 (Judge Arnold: "[C]an simply adding an additional igniter . . . increase the potential or severity for release of radioactive material from the containment during an accident?" SNC: "No, this is directly contrary to the Commission findings in the AP1000 DCD which clearly states that igniters are used to limit hydrogen concentrations."); *id.* at 75 (Judge Arnold: "So, now you're basically making the actual igniter design closer to what is recommended in the DCD?" SNC: Yes.").

[65] *See* September 15 Order at 31–32; *see also supra* note 39.

placed closer to the hydrogen source,[66] or otherwise that the new locations were inconsistent with the location criteria. Therefore, the Board rejected the contention for failure to raise a material issue per 10 C.F.R. § 2.309(f)(1)(vi).

BREDL does not address this issue at all on appeal. BREDL's generic arguments claiming that the Petition was a challenge only to the new hydrogen igniters that are the subject of the LAR and that additional analyses are required cannot be construed to address the Board's rejection of Contention One for BREDL's failure to show a genuine dispute of a material issue.[67] Where an appellant fails to address the Board's reasoning on appeal for the rejection of a contention, the Appeal should be denied.[68]

The Board's finding that Contention One failed to meet § 2.309(f)(1)(vi), alone, is adequate to support the Board's finding that Contention One is inadmissible. As stated above, the failure to comply with even one of the contention admissibility requirements will render a contention inadmissible.[69] BREDL has shown no error or abuse of discretion by the Board, and, therefore, the Commission should uphold the Board's decision to reject Contention One pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

---

[66] September 15 Order at 29–30.

[67] *Carolina Power & Light Co. and North Carolina Eastern Municipal Power Agency* (Shearon Harris Nuclear Power Plant), ALAB-837, 23 NRC 525, 533 (1986) ("'[I]t is not enough simply to declare flatly that a particular Board ruling was in error. Rather, it is incumbent upon the appellant to confront directly the reasons assigned for the challenged ruling and to identify with particularity the infirmities purportedly inherent in those reasons.'") (quoting *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB–813, 22 NRC 59, 84 n.128 (1985)).

[68] *Millstone*, CLI-04-36, 60 NRC at 638 (finding that the failure of appellant to address the Board's finding that a contention did not meet the admissibility requirements "is, in and of itself, sufficient justification to reject [appellant's] appeal."); *Shearon Harris*, ALAB-837, 25 NRC at 533–34 ("'[A] party's failure to submit a brief containing sufficient information and argument to allow the appellate tribunal to make an intelligent disposition of the issues raised . . . is tantamount to their abandonment.'") (quoting *Duke Power Co.* (Catawba Nuclear Station, Units 1 & 2), ALAB-355, 4 NRC 397, 413 (1976)).

[69] *See, e.g.*, *Davis-Besse*, CLI-12-8, 75 NRC at 395–96; *see also* Changes to Adjudicatory Process, 69 Fed. Reg. 2,182, 2,221 (Jan. 14, 2004).

II. BREDL Fails to Provide Any Basis for An Evidentiary Hearing to Replace the Board's Findings of Fact

BREDL claims on appeal that the Commission should order an evidentiary hearing in order to properly consider the facts and expertise placed before the Board.[70] BREDL asserts, without support, that a proper and thorough consideration of the expertise provided to the Board by BREDL "would have led to a safer and therefore preferable result."[71] Further, BREDL requests that the Commission substitute its own judgment for the judgment of the Board as it relates to the Board's findings of fact in the September 15 Order.[72]

Before turning to the relevant standard for alleged issues of fact on appeal, which is that the Board's findings of fact are without error or any abuse of discretion, it is important to note that much of the Board's decision was based on legal conclusions, not particular findings of fact. As discussed above, the Board rejected BREDL's contentions as inadmissible. The ruling of the Board was based on the finality of the AP1000 certified design and the fact that the NRC's review of the hydrogen ignition subsystem concluded that all requirements of 10 C.F.R. § 50.44(c) had been met. Because these requirements had been met and approved by the NRC, the Board correctly concluded that the contentions raised by BREDL did not meet the admissibility requirements for a hearing under NRC regulations.[73]

BREDL's contentions and its argument on appeal do not raise any material issues of fact. The issue BREDL attempts to raise in its contentions and on appeal is that SNC should have provided additional analysis regarding the LAR's addition of the two hydrogen igniters in order to comply with the NRC's regulations regarding hydrogen control. This issue boils down to a

---

[70] Appeal at 3–4.

[71] *Id.*

[72] *Id.* at 4.

[73] September 15 Order at 22; *see also* 10 C.F.R. § 2.309(f)(1).

legal question regarding the requirements of the applicable NRC regulation. As the Board determined, BREDL's contentions amount to challenges to the AP1000 certified design, the VEGP Units 3 and 4 COL proceeding, and NRC regulations. There is no question of fact as to whether a hydrogen analysis under 10 C.F.R. § 50.44(c)(5) was submitted and accepted by the NRC during the AP1000 design certification rulemaking. BREDL's argument, which was raised in the Petition and the Appeal, is that the addition of the two new hydrogen igniters requires an *additional* analysis to be provided. This dispute is not factual, but rather, it concerns the scope of the § 50.44(c)(5) requirement. Because there is no issue of material fact in dispute in this proceeding, BREDL's request that the Commission disregard the findings of fact made by the Board is not proper and should be denied.

Furthermore, to the extent the Board did decide any factual issues in the September 15 Order, BREDL has not identified them and has offered no explanation as to why the Commission should take the unusual step of substituting its own judgment for that of the Board with respect to any such issues. The Commission will only exercise that authority when the Board's findings of fact are "clearly erroneous."[74] Clear error can only be found when "the majority's findings are 'not even plausible in light of the record viewed in its entirety.'"[75] "[W]here a Licensing Board has issued a plausible decision that rests on carefully rendered findings of fact," its decision will not be overturned.[76] The Commission has made it apparent that clear error is a very difficult standard to prove.[77]

---

[74] *David Geisen*, CLI-10-23, 72 NRC 210, 219 (2010).

[75] *Id.* at 224–25 (quoting *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Unit 1), CLI-04-24, 60 NRC 160, 189 (2004)).

[76] *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-03-8, 58 NRC 11, 25–26 (2003) (applying the similar standard of review to an appeal of a board's initial decision under 10 C.F.R. § 2.341).

[77] *See David Geisen,* CLI-10-23, 72 NRC at 7 ("The Staff's brief did not cite an example - nor have we found one - where the Commission has overturned a Board finding of fact due to 'clear error.'"). Most notably, in both cases

Here, the Board's decision is certainly plausible and, again, BREDL does not point to any particular finding being challenged in the Appeal. BREDL only generally asserts that the "expertise"[78] that it presented to the Board was not properly considered, but does not provide any detail as to which of the Board's findings of fact that it disputes (if any), allege any specific error in the Board's decision as a result of its fact finding, or make any assertion other than the conclusory statement that a proper consideration of the facts would result in a "safer and therefore preferable result."[79] For example, the Board found that SNC was locating the new hydrogen igniters consistent with the approved hydrogen igniter placement criteria. On Appeal, BREDL is silent regarding what, if anything, it offered to the Board that contradicts this conclusion, providing no explanation regarding how additional consideration of its proffered information could change this conclusion. BREDL fails to make any showing that the Board's decision is not plausible or otherwise in error. Therefore, the Commission should uphold the Board's determination in the September 15 Order.

III. Conclusion

The Board correctly found that BREDL's contentions were inadmissible under 10 C.F.R. § 2.309(f)(1). On appeal, BREDL has wholly failed to show that the Board erred or otherwise abused its discretion. Accordingly, SNC respectfully requests that the Commission affirm the Board's September 15 Order denying the Petition.

---

relied on by BREDL, the Commission refused to substitute its judgment for that of the Board. *See Tennessee Valley Authority* (Hartsville Nuclear Plant, Units 1A, 2A, 1B, & 2B), ALAB-367, 5 NRC 92, 94 (1977); *Catawba Nuclear Station*, ALAB-355, 4 NRC at 411.

[78] The Board made no determination as to whether the Petition was accompanied by expert opinion. In fact, Judge Arnold pointed out that the Board would only look to see that a sufficient *claim* of expertise had been made and not whether that claim of expertise is supported. See September 15 Order, Concurring Opinion of Judge Arnold.

[79] Appeal at 3–4.

Respectfully submitted,

Executed in accord with 10 C.F.R. § 2.304(d)
M. Stanford Blanton
Counsel for Southern Nuclear Operating Company
BALCH & BINGHAM LLP
1710 Sixth Avenue North
Birmingham, AL 35203-2015
(205) 251-8100
sblanton@balch.com
Date of Signature: November 7, 2016

Signed (electronically) by Millicent W. Ronnlund
Counsel for Southern Nuclear Operating Company
BALCH & BINGHAM LLP
1710 Sixth Avenue North
Birmingham, AL 35203-2015
(205) 251-8100
mronnlund@balch.com
Date of Signature: November 7, 2016

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSION

In the Matter of:	)	Docket Nos. 52-025-LA-2; 52-026-LA-2
SOUTHERN NUCLEAR OPERATING CO.	)	
License Amendment Application for Combined Licenses NPF-91 and NPF-92 Vogtle Electric Generating Plant Units 3 and 4	)	November 7, 2016

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305, I certify that on this date copies of the foregoing Brief in Opposition to Appeal were served upon the Electronic Information Exchange (the NRC's E-Filing System) in the above captioned matter.

Signed electronically by

/s/ Millicent W. Ronnlund

Millicent W. Ronnlund
BALCH & BINGHAM, LLP
1710 Sixth Avenue North
Birmingham, AL 35203-2015
Telephone: (205) 226-8744
E-mail: mronnlund@balch.com
Date of Signature: November 7, 2016