

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
STRATA ENERGY INC.	)	Docket No. 40-9091-MLA
	)	
(Ross <i>In Situ</i> Uranium Recovery	)	ASLBP No. 12-915-01-MLA
Site)	)	

---

NRC STAFF'S ANSWER TO JOINT INTERVENORS'  
PETITION FOR REVIEW OF LBP-15-3

---

Emily Monteith  
David M. Cylkowski  
Counsel for NRC Staff

March 16, 2015

## TABLE OF CONTENTS

	<u>PAGE</u>
TABLE OF AUTHORITIES.....	iii
INTRODUCTION .....	1
BACKGROUND .....	2
LEGAL STANDARDS .....	4
ARGUMENT .....	5
I. Joint Intervenors Have Not Identified Any Error in the Board’s Dismissal of Two Contentions Prior to Hearing .....	6
II. Joint Intervenors Have Not Identified Any Error in the Board’s Consideration of CEQ Regulations .....	9
III. Joint Intervenors Have Not Identified Any Error or Abuse of Discretion in the Board’s Ruling on ECs 1, 2 and 3.....	10
A. The Board Did Not Err in Resolving EC 1 in Favor of the Staff and Strata .....	11
1. The Board Properly Determined the Scope of the Regulatory Program Governing Groundwater Quality Monitoring for the Purpose of NEPA Compliance .....	11
2. The Board Did Not Improperly Shift the Burden of Proof to Joint Intervenors .....	13
3. The Board Properly Found that the Staff’s Analysis of Baseline Groundwater Quality in the FSEIS Complied with NEPA .....	14
B. The Board Did Not Err in Resolving EC 2 in Favor of the Staff and Strata .....	16
1. The Board Did Not Err When It Supplemented the Analysis of Restoration Groundwater Impacts in the FSEIS through Its Initial Decision .....	16
2. The Board Properly Found that the Staff’s Analysis of Restoration Groundwater Impacts in the FSEIS Complied with NEPA.....	17
C. The Board Did Not Err in Resolving EC 3 in Favor of the Staff and Strata .....	19
1. The Board Did Not Improperly Rely on Strata or Staff Incentives to Ensure that Strata Complies With License Condition 10.12.....	19

2.	The Board Properly Evaluated Joint Intervenor and Staff Witness Testimony Regarding Confinement of the Mined Aquifer .....	21
3.	The Board Properly Found that the Staff Demonstrated that Uranium Is Not an Effective Excursion Indicator .....	22
4.	The Board Properly Evaluated Joint Intervenors' Evidence of Excursions at Other ISR Facilities .....	23
IV.	Joint Intervenors Cannot Raise Arguments for the First Time on Appeal .....	24
	CONCLUSION .....	25

## TABLE OF AUTHORITIES

### PAGE

### JUDICIAL DECISIONS

#### U.S. Supreme Court

*Marsh v. Oregon Natural Resources Council*, 490 U.S. 360 (1989).....12

#### U.S. Courts of Appeals

*Connors v. Hallmark*, 935 F.2d 336 (D.C. Cir. 1991) .....8

*Limerick Ecology Action v. NRC*, 869 F.2d 719 (3d Cir. 1989) .....9, 16

### ADMINISTRATIVE DECISIONS

#### Commission Decisions

*Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7,  
69 NRC 235 (2009).....15

*Baltimore Gas and Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2),  
CLI-98-25, 48 NRC 325 (1998) .....9

*Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), CLI-01-11,  
53 NRC 370 (2001).....5

*Detroit Edison Co.* (Fermi Power Plant Independent Spent Fuel Storage Installation),  
CLI-10-3, 71 NRC 49 (2010) .....5, 24

*Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3),  
CLI-04-36, 60 NRC 631 (2004) .....5

*Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-11,  
71 NRC 287 (2010).....13

*Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3),  
CLI-15-6, 81 NRC \_\_\_\_ (Mar. 9, 2015) (slip op.)..... 15, 16

*Hydro Resources, Inc.* (Crownpoint, New Mexico), CLI-06-1,  
63 NRC 1 (2006).....12

*Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-06-22,  
64 NRC 37 (2006).....15

*Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-06-15,  
63 NRC 687 (2006).....15

<i>Pa'ina Hawaii, LLC</i> (Materials License Application), CLI-10-18, 72 NRC 56 (2010).....	14
<i>Pacific Gas &amp; Electric Co.</i> (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427 (2011).....	10
<i>Philadelphia Electric Co.</i> (Limerick Generating Company, Units 1 and 2), CLI-86-5, 23 NRC 125 (1986).....	16
<i>Private Fuel Storage, L.L.C.</i> (Independent Spent Fuel Storage Installation), CLI-05-19, 62 NRC 403 (2005).....	15
<i>Private Fuel Storage, L.L.C.</i> (Independent Spent Fuel Storage Installation), CLI-03-8, 58 NRC 11 (2003).....	14, 15
<i>Private Fuel Storage, L.L.C.</i> (Independent Spent Fuel Storage Installation), CLI-01-9, 53 NRC 232 (2001).....	19

#### Atomic Safety and Licensing Appeal Board Decisions

<i>Commonwealth Edison Co.</i> (Zion Station, Units 1 & 2), ALAB-226, 8 AEC 381 (1974) .....	9
<i>Duke Power Co.</i> (Amendment to Materials License), ALAB-528, 9 NRC 146 (1979) .....	7
<i>Philadelphia Electric Co.</i> (Limerick Generating Company, Units 1 and 2), ALAB-819, 22 NRC 681 (1985).....	16
<i>Public Service Co. of New Hampshire</i> (Seabrook Station, Units 1 and 2), ALAB-924, 30 NRC 331 (1989).....	24
<i>Puerto Rico Electric Power Auth.</i> (North Coast Nuclear Plant, Unit 1), ALAB-648, 14 NRC 34 (1981).....	24

#### Atomic Safety and Licensing Board Decisions and Orders

<i>Calvert Cliffs 3 Nuclear Project, LLC</i> (Combined License Application for Calvert Cliffs Unit 3), LBP-10-24, 72 NRC 720 (2010) .....	8
<i>Consumers Power Co.</i> (Midland Plant, Units 1 & 2), LBP-84-20, 19 NRC 1285 (1984).....	9
<i>Dominion Nuclear Connecticut, Inc.</i> (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421 (2008).....	7
<i>Dominion Nuclear Connecticut, Inc.</i> (Millstone Nuclear Power Station, Unit 3), LBP-02-5, 55 NRC 131 (2002).....	7
<i>Duke Energy Carolinas, LLC</i> (William States Lee III Nuclear Station, Units 1 & 2), LBP-08-17, 68 NRC 431 (2008) .....	9
<i>Hydro Resources, Inc.</i> (Crownpoint, New Mexico), LBP-05-17, 62 NRC 77 (2005) .....	12

<i>Strata Energy, Inc.</i> (Ross In Situ Uranium Recovery Project), LBP-15-3, 81 NRC __ (Jan. 23, 2015) (slip op.).....	<i>passim</i>
<i>Strata Energy, Inc.</i> (Ross In Situ Uranium Recovery Project), LBP-13-10, 78 NRC 117 (2013).....	<i>passim</i>
<i>Strata Energy, Inc.</i> (Ross In Situ Uranium Recovery Project), LBP-12-3, 75 NRC 164 (2012).....	2
Licensing Board Memorandum and Order (Ruling on Summary Disposition Motion Regarding Environmental Contention 4/5A) (Jul. 25, 2014) (unpublished).....	4
Licensing Board Order (Ruling on Motion to Migrate/Amend Existing Contentions and Admit New Contentions Regarding Final Supplement to Generic Environmental Impact Statement) (May 23, 2014) (unpublished) .....	3
Licensing Board Memorandum and Order (Denying Motion for Reconsideration of LBP-13-10 Ruling Regarding Environmental Contention 4/5A or, Alternatively, to Admit Amended Contention) (Aug. 23, 2013) (unpublished).....	3, 8

## STATUTES

National Environmental Policy Act of 1969, 42 U.S.C. § 4321 <i>et seq</i> .....	<i>passim</i>
---	---------------

## REGULATIONS

10 C.F.R. Part 2 .....	8
10 C.F.R. § 2.309.....	9
10 C.F.R. § 2.309(c)(1) .....	6, 7, 9
10 C.F.R. § 2.309(f)(1).....	5, 6
10 C.F.R. § 2.309(f)(1)(vi) .....	7
10 C.F.R. § 2.309(f)(2).....	8
10 C.F.R. § 2.341.....	2
10 C.F.R. § 2.341(b)(4) .....	4, 6, 10
10 C.F.R. § 51.10(a) .....	10
10 C.F.R. Part 40, Appendix A, Criterion 7 .....	11, 13
10 C.F.R. Part 40, Appendix A, Criterion 5B(5) .....	11
10 C.F.R. Part 51 .....	10, 11, 13, 14

40 C.F.R. § 1500.1(b) .....	12
40 C.F.R. § 1502.22.....	10
40 C.F.R. § 1502.22(a) .....	12

#### FEDERAL REGISTER

<i>Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings</i> , 80 Fed. Reg. 4156 (Jan. 26, 2015).....	25
--	----

#### OTHER AUTHORITIES

<i>Statement of Policy on Conduct of Adjudicatory Proceedings</i> , CLI-98-12, 48 NRC 18 (1998).....	9
---	---

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	Docket No. 40-9091-MLA
	)	
STRATA ENERGY INC.	)	ASLBP No. 12-915-01-MLA
	)	
(Ross <i>In Situ</i> Uranium Recovery	)	March 16, 2015
Site)	)	

NRC STAFF'S ANSWER TO JOINT INTERVENORS'  
PETITION FOR REVIEW OF LBP-15-3

INTRODUCTION

The U.S. Nuclear Regulatory Commission (NRC) staff (Staff) responds to the petition for review filed by the Natural Resources Defense Council and the Powder River Basin Resource Council (collectively Joint Intervenors or Intervenors) on February 18, 2015.<sup>1</sup> Pursuant to 10 C.F.R. § 2.341,<sup>2</sup> Joint Intervenors challenge the Atomic Safety and Licensing Board's (Board) initial decision in this proceeding.<sup>3</sup> In its initial decision, the Board resolved three admitted environmental contentions (ECs) arising under the National Environmental Policy Act (NEPA)<sup>4</sup> in favor of the Staff and the licensee, Strata Energy, Inc. (Strata).<sup>5</sup> Joint Intervenors also petition the Commission for review of the Board's previous denial of admission of two proposed contentions challenging the scope of the Staff's draft and final supplemental environmental

---

<sup>1</sup> Natural Resources Defense Council's & Powder River Basin Resource Council's Petition for Review of Atomic Safety and Licensing Board's January 23, 2015 Initial Decision Denying Environmental Contentions 1 through 3, and Interlocutory Decisions Denying Environmental Contentions 4/5A and 6/7 (Feb. 17, 2015) (Petition).

<sup>2</sup> *Id.* at 1.

<sup>3</sup> *Strata Energy, Inc.* (Ross In Situ Uranium Recovery Project), LBP-15-3, 81 NRC \_\_ (Jan. 23, 2015) (slip op.).

<sup>4</sup> National Environmental Policy Act of 1969, 42 U.S.C. § 4321 *et. seq.*

<sup>5</sup> LBP-15-3 at \_\_ (slip op. at 2).



impact statements (SEISs) for the proposed Ross Project and the adequacy of the cumulative impacts assessments contained therein.<sup>6</sup> For the reasons stated below, the Commission should deny Joint Intervenors' Petition.

### BACKGROUND

This proceeding concerns the January 4, 2011 application of Strata Energy, Inc., for a combined NRC source and 11e.(2) byproduct material license for the construction and operation of an *in-situ* uranium recovery (ISR) and processing facility in Crook County, Wyoming.<sup>7</sup> In response to a July 13, 2011 notice of opportunity for hearing, Joint Intervenors filed a petition for leave to intervene on October 27, 2011, proffering five contentions for admission in the proceeding, which the Board characterized as "environmental/NEPA" contentions.<sup>8</sup> The Board admitted four contentions, as reformulated in its February 10, 2012 order.<sup>9</sup>

On March 21, 2013, the Staff issued a draft SEIS (DSEIS) for public comment.<sup>10</sup> After issuance of the DSEIS, the Intervenors sought to update or amend the admitted contentions to apply to the DSEIS and to add a new environmental contention.<sup>11</sup> On July 26, 2013, the Board

---

<sup>6</sup> See Petition at 1.

<sup>7</sup> Letter from Strata Energy, Inc. Submitting Combined Source and 11e.(2) Byproduct Material License Application Requesting Authorization to Construct and Operate Proposed Ross In Situ Leach Uranium Recovery Project Site (Jan. 4, 2011) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML110120055).

<sup>8</sup> Petition to Intervene and Request for Hearing by the Natural Resources Defense Council & Powder River Basin Resource Council (Oct. 27, 2011); *Strata Energy, Inc.* (Ross In Situ Uranium Recovery Project), LBP-12-3, 75 NRC 164, 192 (2012).

<sup>9</sup> LBP-12-3, 75 NRC at 210, 212.

<sup>10</sup> Exhibit (Exs.) NRC006A-B, "Environmental Impact Statement for the Ross ISR Project in Crook County, Wyoming; Supplement to the Generic Environmental Impact Statement for *In-Situ* Leach Uranium Mining Facilities: Draft Report for Comment," NUREG-1910, supp. 5 (March 2013).

<sup>11</sup> Natural Resources Defense Council's & Powder River Basin Resource Council's Joint Motion to Resubmit Contentions & Admit One New Contention in Response to Staff's Supplemental Draft Environmental Impact Statement (May 6, 2013), at 1. Resubmitted ECs 1 through 4/5A addressed the same issues as the previously-admitted contentions, while new EC 5 raised the new claim that the DSEIS improperly segmented the scope of the proposed federal action, leading to a failure to consider the environmental impacts of, and appropriate alternatives to, Strata's actual proposed project.

admitted “resubmitted” ECs 1 through 3, finding that these contentions challenged information in the DSEIS that was sufficiently similar to information in Strata’s environmental report and therefore “migrated” from the environmental report to the DSEIS.<sup>12</sup> The Board declined to migrate admitted EC 4/5A to the DSEIS, leaving it admitted as against the environmental report, and rejected the Intervenor’s remaining contention.<sup>13</sup>

On February 28, 2014, the Staff issued the final SEIS (FSEIS) for the Ross Project.<sup>14</sup> On March 31, 2014 the Intervenor’s filed a motion to migrate their admitted contentions to the Staff’s FSEIS or, in the alternative, to amend their admitted contentions to apply to the FSEIS, and also to admit two new environmental contentions.<sup>15</sup> On May 23, 2014, the Board issued an order migrating ECs 1 and 3 from the DSEIS to the FSEIS, admitting EC 2 as an amended contention challenging the FSEIS, and declining to migrate EC 4/5A to the FSEIS or to admit it as an amended contention.<sup>16</sup> In addition, the Board rejected the Intervenor’s two new contentions.<sup>17</sup>

---

<sup>12</sup> *Strata Energy, Inc.* (Ross In Situ Uranium Recovery Project), LBP-13-10, 78 NRC 117, 151 (2013), *reconsideration and motion to admit amended EC 4/5A denied*, Licensing Board Memorandum and Order (Denying Motion for Reconsideration of LBP-13-10 Ruling Regarding Environmental Contention 4/5A or, Alternatively, to Admit Amended Contention) (Aug. 23, 2013) (unpublished) (Order Denying Reconsideration).

<sup>13</sup> *Id.*

<sup>14</sup> Exs. SEI009A-B, “Environmental Impact Statement for the Ross ISR Project in Crook County, Wyoming; Supplement to the Generic Environmental Impact Statement for *In-Situ* Leach Uranium Mining Facilities: Final Report,” NUREG-1910, supp. 5 (February 2014).

<sup>15</sup> Natural Resources Defense Council’s & Powder River Basin Resource Council’s Joint Motion to Migrate or Amend Contentions, and to Admit New Contentions in Response to Staff’s Final Supplemental Environmental Impact Statement (Mar. 31, 2014), at 1.

<sup>16</sup> Order (Ruling on Motion to Migrate/Amend Existing Contentions and Admit New Contentions Regarding Final Supplement to Generic Environmental Impact Statement) (May 23, 2014) (unpublished).

<sup>17</sup> *Id.* at 2.

On June 13, 2014, the Staff and Strata each requested that the Board grant summary disposition of Contention 4/5A.<sup>18</sup> On July 25, 2014, the Board granted the Staff's and Strata's respective requests for summary disposition.<sup>19</sup> As a result of these rulings, the scope of the hearing was limited to those issues that were pled with particularity in ECs 1, 2, and 3. The contentions admitted by the Board for hearing were titled as follows:

[EC] 1: The [FSEIS] fails to adequately characterize baseline (i.e., original or pre-mining) groundwater quality.

[EC] 2: The FSEIS fails to analyze the environmental impacts that will occur if the applicant cannot restore groundwater to primary or secondary limits.

[EC] 3: The FSEIS fails to include adequate hydrological information to demonstrate [Strata's] ability to contain groundwater fluid migration.<sup>20</sup>

On September 30 and October 1, 2014, the Board held an evidentiary hearing on ECs 1, 2, and 3 in Gillette, Wyoming. On January 23, 2015, the Board issued its initial decision, resolving all three contentions in favor of the Staff and Strata.<sup>21</sup>

#### LEGAL STANDARDS

Under 10 C.F.R. § 2.341(b)(4), a "petition for review may be granted in the discretion of the Commission, giving due weight to the existence of a substantial question with respect to the following considerations:"

(i) A finding of material fact is clearly erroneous or in conflict with a finding as to the same fact in a different proceeding;

(ii) A necessary legal conclusion is without governing precedent or is a departure from or contrary to established law;

(iii) A substantial and important question of law, policy, or discretion has been raised;

---

<sup>18</sup> See NRC Staff's Motion for Summary Disposition of Contention 4/5A (Jun. 13, 2014); Licensee Strata Energy, Inc.'s Motion for Summary Disposition (Jun. 13, 2014).

<sup>19</sup> Memorandum and Order (Ruling on Summary Disposition Motion Regarding Environmental Contention 4/5A) (Jul. 25, 2014).

<sup>20</sup> LBP-15-3 at \_\_ (slip op. at 1-2).

<sup>21</sup> *Id.* at \_\_ (slip op. at 2).

- (iv) The conduct of the proceeding involved a prejudicial procedural error; or
- (v) Any other consideration which the Commission may deem to be in the public interest.

An issue raised for the first time on appeal will not be entertained.<sup>22</sup> In addition, a petition for review must adequately identify any claimed errors in a licensing board's approach.<sup>23</sup> If a licensing board rules that a contention is inadmissible for failing to satisfy more than one of the requirements specified in 10 C.F.R. § 2.309(f)(1), a petitioner's failure to address each of those grounds provides sufficient justification for the Commission to reject the petitioner's appeal.<sup>24</sup> Thus, the Commission "deem[s] waived any arguments not raised before the Board or not clearly articulated in the petition for review."<sup>25</sup>

### ARGUMENT

Joint Intervenors argue that the Board erred as a matter of law by denying admission of two contentions proffered at the contention admissibility stage of this proceeding.<sup>26</sup> The Intervenors also argue that the Board committed various errors in resolving ECs 1, 2 and 3 in favor of the Staff and Strata.<sup>27</sup> However, they have not established that a necessary legal conclusion in any of the relevant Board decisions is without governing precedent or is a departure from or contrary to established law. Likewise, the Intervenors have not shown that any material fact upon which the Board relied was clearly erroneous or in conflict with a finding

---

<sup>22</sup> *Detroit Edison Co.* (Fermi Power Plant Independent Spent Fuel Storage Installation), CLI-10-3, 71 NRC 49, 51 n. 7 (2010) ("We do not consider arguments or new facts raised for the first time on appeal unless their proponent can demonstrate that the information was previously unavailable, which does not appear to be the case here") (citations omitted).

<sup>23</sup> *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), CLI-01-11, 53 NRC 370, 383 (2001).

<sup>24</sup> *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 638 (2004).

<sup>25</sup> *Carolina Power & Light Co.*, CLI-01-11, 53 NRC at 383 (citations omitted).

<sup>26</sup> Petition at 4-5, 7-10.

<sup>27</sup> *Id.* at 2.

as to the same fact in a different proceeding. For these reasons, and because no other considerations embodied in 10 C.F.R. § 2.341(b)(4) justify review of the Board's decisions on these matters, the Commission should deny Joint Intervenors' Petition.

I. Joint Intervenors Have Not Identified Any Error in the Board's Dismissal of Two Contentions Prior to Hearing

Joint Intervenors argue that the Board misapplied the contention admissibility standards in 10 C.F.R. § 2.309(f)(1) and the timeliness standards in 10 C.F.R. § 2.309(c)(1) in denying admission to a contention alleging that the DSEIS and, subsequently, the FSEIS, failed to consider Strata's potential future ISR developments in the greater Lance District as a "connected action" for the purposes of defining the scope of the project considered in the SEIS.<sup>28</sup> In LBP-13-10, the Board determined that the Intervenors' proposed contention did not show a genuine issue of material fact as to whether "the Ross facility lacks any independent utility in the absence of the completion of the other Lance District ISR sites," which the Board determined was necessary in light of Council on Environmental Quality (CEQ) regulations defining "connected action" and case law interpreting those regulations.<sup>29</sup>

The Intervenors state that the Board erred in this ruling by "conflating admissibility with the merits." This is not correct. The Board reasonably rejected this contention because it failed to address, with the requisite factual support, the essential element necessary to show that Strata's other potential future developments in the Lance District could, in fact, constitute a "connected action" such that a comprehensive SEIS encompassing the Lance District would be required in the context of licensing the Ross ISR facility.<sup>30</sup> The Intervenors have not challenged the Board's interpretation of NEPA, the pertinent regulations, or the interpretive case law relative to the question of whether the Ross ISR facility and the other potential ISR facilities in

---

<sup>28</sup> *Id.* at 4, 7-9.

<sup>29</sup> LBP-13-10, 78 NRC at 147-50.

<sup>30</sup> *Id.* at 148-50.

the Lance District could constitute a connected action.<sup>31</sup> Therefore, they have not demonstrated that the Board erred in determining that the Intervenor did not present a showing sufficient to create a genuine dispute about the material issue at the heart of their proposed contention, a showing that is required by 10 C.F.R. § 2.309(f)(1)(vi) for the tendering of an admissible contention.<sup>32</sup>

Joint Intervenor also claim that the Board should not have found that they were untimely in bringing this contention.<sup>33</sup> With respect to the timeliness of the proposed contention, the Board found, based upon the documentary evidence put forward by the Intervenor, that “by the time of the filing of their October 2011 hearing petition or perhaps shortly thereafter, Joint Intervenor could have sought to raise the question of whether . . . the Ross ISR site and the other Lance District ISR sites did constitute ‘cumulative’ or ‘similar’ actions” such that the Staff would need to prepare a single SEIS addressing all potential Lance District ISR sites.<sup>34</sup>

While Joint Intervenor claim that the Board’s interpretation of 10 C.F.R. § 2.309(c)(1) was overly expansive, they do not show how the Board’s ruling departed from controlling law. As Joint Intervenor recognize in their Petition, the information that formed the basis for their contention was available at least as early as the publication date of Strata’s environmental

---

<sup>31</sup> “[A] contention must have a *basis in fact or law* and . . . it must entitle a petitioner to relief.” *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-02-5, 55 NRC 131, 141 (2002) (emphasis added); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421 (2008).

<sup>32</sup> Joint Intervenor cite *Duke Power Co.* (Amendment to Materials License), ALAB-528, 9 NRC 146, 151 (1979), to support their claim that the Board “misapplied the applicable legal standard.” Petition at 8. However, they do not explain how this case stands for the proposition for which it is cited. While the Appeal Board in that case found that a contention had been pled with sufficient specificity to support its admission, the facts underlying that decision do not suggest obvious parallels with the facts in the present case.

<sup>33</sup> Petition at 8-9.

<sup>34</sup> LBP-13-10, 78 NRC at 149-50. Having found that Joint Intervenor did not meet their burden under 10 C.F.R. § 2.309(f)(1)(vi) to show that Strata’s proposed future developments in the greater Lance District could constitute a “connected action” so as to require a comprehensive SEIS for all the proposed ISR developments, the Board did not address the timeliness of that particular claim. *Id.* at 149.

report.<sup>35</sup> Consequently, from the standpoint of timeliness, Joint Intervenor's challenge to the scope of the proposed project could have been made at the time of their initial petition to intervene. It is a basic precept of the Commission's rules of practice that if an intervenor could have filed a contention with their intervention petition, 10 C.F.R. § 2.309(f)(2) required that they do so.<sup>36</sup> Further, the Intervenor's claim that Strata "deliberately mischaracterized the scope of the project"<sup>37</sup> in their environmental report is an allegation unsupported by any facts or expert opinion, and consequently does not serve to suggest that the Board's determination as to the timeliness of this proposed contention was in error.<sup>38</sup>

Joint Intervenor's next argument is that the Board erred in finding that the Intervenor failed to proffer an admissible contention challenging the sufficiency of the cumulative impacts analysis in the DSEIS and, subsequently, the FSEIS. The Board determined that the Intervenor did not attempt to satisfy the contention admissibility and timeliness standards by amending their previously admitted environmental report-based cumulative impacts contention, or by submitting a new contention, when it was apparent that the DSEIS contained a substantially different cumulative impacts analysis discussion from that contained in the applicant's environmental report.<sup>39</sup> The Intervenor's claim that the Board's own finding that a new or amended contention

---

<sup>35</sup> *Id.* at 8-9.

<sup>36</sup> *Calvert Cliffs 3 Nuclear Project, LLC* (Combined License Application for Calvert Cliffs Unit 3), LBP-10-24, 72 NRC 720, 737 (2010); see 10 C.F.R. § 2.309(f)(2) ("Contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner.").

<sup>37</sup> Petition at 9.

<sup>38</sup> While Joint Intervenor's rely upon *Connors v. Hallmark*, 935 F.2d 336, 342 (D.C. Cir. 1991) for the proposition that the information concerning the potential development of satellite ISR sites "should not be deemed previously available," they have not provided information to suggest, in accordance with that decision, that (1) the discovery rule at issue in *Connors* is the applicable standard in the alleged situation and (2) they reasonably relied upon the "misinformation provided by the defendant." See Petition at 9.

<sup>39</sup> LBP-13-10, 78 NRC at 142-44; see also Order Denying Reconsideration at 4-5.

was necessary in and of itself satisfied the mere “formalistic invocation” of the timeliness standards required by 10 C.F.R. § 2.309(c)(1).<sup>40</sup>

Contrary to Joint Intervenors’ claim, it is an intervenor, rather than the Board, who bears the burden of complying with the contention admissibility requirements of 10 C.F.R. Part 2. Where a contention is defective, a licensing board has no duty to recast it to make it acceptable under 10 C.F.R. § 2.309.<sup>41</sup> The Commission has stated that if, as here, an intervenor has failed to address the criteria in 10 C.F.R. § 2.309(c)(1) governing late-filed contentions, then the *intervenor* has not met its burden to establish the admissibility of such contentions.<sup>42</sup> Therefore, because the Board found that the DSEIS contained a materially different cumulative impacts analysis discussion from that contained in the applicant’s environmental report, and the Intervenors did not address the required elements of 10 C.F.R. § 2.309(c)(1) through a new or amended contention, it was proper for the Board to deny this contention as untimely.

## II. Joint Intervenors Have Not Identified Any Error in the Board’s Consideration of CEQ Regulations

In its initial decision, the Board recognized that the CEQ has issued regulations implementing NEPA that, “while not binding on the NRC when the agency has not expressly adopted them, are entitled to considerable deference.”<sup>43</sup> Joint Intervenors argue that, “[c]ontrary

---

<sup>40</sup> Petition at 4, 7-9.

<sup>41</sup> *Commonwealth Edison Co.* (Zion Station, Units 1 & 2), ALAB-226, 8 AEC 381, 406 (1974); *see also Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 & 2), LBP-08-17, 68 NRC 431, 447 (2008) (“A contention’s proponent, not the licensing board, is responsible for formulating the contention”) (quoting *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 22 (1998)).

<sup>42</sup> *Baltimore Gas and Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), CLI-98-25, 48 NRC 325, 347 n.9 (1998); *see also Consumers Power Co.* (Midland Plant, Units 1 & 2), LBP-84-20, 19 NRC 1285, 1290 (1984) (declining to utilize licensing board’s “general authority to shape the course of a proceeding as the foundation for accepting” a new contention where “subject matter is disparate enough that the . . . proposed contention must properly be deemed a new contention” and “the Commission has in place explicit standards for dealing with new ‘late-filed’ contentions”).

<sup>43</sup> LBP-15-3 at \_\_ (slip op. at 12) (citing *Limerick Ecology Action v. NRC*, 869 F.2d 719, 725, 743 (3d Cir. 1989)).



to the Board's assertion," the NRC is required to comply with all of CEQ's regulations.<sup>44</sup> But the Commission has long taken the position that, as an independent regulatory agency, it is not bound by the regulations of the CEQ. According to 10 C.F.R. § 51.10(a), the NRC takes "account of the regulations of the [CEQ] published November 29, 1978 [ . . . ] voluntarily, subject to certain conditions." The Commission has recently stated that "the NRC, as an independent regulatory agency, is not bound by those portions of CEQ's NEPA regulations that . . . have a substantive impact on the way in which the Commission performs its regulatory functions" and that have not been directly incorporated by reference into 10 C.F.R. Part 51.<sup>45</sup> Most significantly, the Board acknowledged that CEQ's regulations are entitled to consideration<sup>46</sup> – and, indeed, the Board referenced these regulations as pertinent to the issues raised by Joint Intervenors in their admitted contentions.<sup>47</sup> Joint Intervenors do not challenge the Board's consideration of the CEQ regulations as applied to the issues raised in their contentions. Therefore, they have not shown that this is a substantial question warranting Commission review.<sup>48</sup>

III. Joint Intervenors Have Not Identified Any Error or Abuse of Discretion in the Board's Ruling on ECs 1, 2 and 3

Joint Intervenors challenge the legal and factual supportability of the Board's ruling in several respects, but none of their concerns identifies any error or abuse of discretion in the Board's legal conclusions or factual findings so as to justify Commission review of the Board's decision.

---

<sup>44</sup> Petition at 3.

<sup>45</sup> *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 443-44 (2011) (holding that licensing board erred in its reformulation of an admitted contention to the extent that it would make 40 C.F.R. § 1502.22 binding on the NRC) (internal citations omitted).

<sup>46</sup> LBP-15-3 at \_\_ (slip op. at 12).

<sup>47</sup> See *id.* at \_\_ (slip op. at 16, 30-31, 64 n.47).

<sup>48</sup> See 10 C.F.R. § 2.341(b)(4).

A. The Board Did Not Err in Resolving EC 1 in Favor of the Staff and Strata

1. The Board Properly Determined the Scope of the Regulatory Program Governing Groundwater Quality Monitoring for the Purpose of NEPA Compliance

Joint Intervenors claim that “[n]either [Strata] nor [the] Staff disputed that the baseline water quality data relied on in the FSEIS was insufficient to meaningfully characterize the site” and that the Staff and Strata promoted, and the Board accepted, the “false legal premise” that “accurate baseline data may be collected long after the license is issued.”<sup>49</sup> As an initial matter, the Staff notes that both the Staff and Strata submitted voluminous testimony and exhibits disputing the Intervenors’ allegation that the baseline water quality data analyzed in the FSEIS was insufficient to support the Staff’s NEPA obligations, which the Board carefully examined in its ruling on Contention 1.<sup>50</sup>

More significantly, however, Joint Intervenors fundamentally misconstrue the Staff’s position and the Board’s finding. This misconception is rooted in a failure to distinguish between: (1) groundwater quality information that an applicant must supply pre-licensing for the purposes of characterizing the proposed project site, as required by 10 C.F.R. Part 51, and 10 C.F.R. Part 40, Appendix A, Criterion 7 – which is the information that must be considered by the Staff in its SEIS – and (2) groundwater quality information that a licensee must collect post-licensing, but prior to commencement of operations, pursuant to Appendix A, Criterion 5B(5) and the terms of its license in order to set the Commission-approved background concentration of constituents used to detect lixiviant excursions and to set aquifer restoration standards.<sup>51</sup> The Board examined the regulations, regulatory history, and Commission precedent relating to

---

<sup>49</sup> Petition at 10-11.

<sup>50</sup> See *generally* LBP-15-3 at \_\_ (slip op. at 21-53) (referencing Staff testimony and exhibits); see also Ex. NRC001, NRC Staff’s Initial Testimony (Aug. 25, 2014), at 3-27; Ex. NRC044-R2, NRC Staff’s Rebuttal Testimony (Sept. 12, 2014), at 3-16; Tr. at 379-99, 440-75.

<sup>51</sup> See LBP-15-3 at \_\_ (slip op. at 23-26).

the question of whether an applicant is required to develop the latter type of information prior to obtaining its license, and reasonably concluded that it did not.<sup>52</sup>

Joint Intervenors do not challenge the Board's rationale for its conclusion, other than to suggest that the Commission's prior decision in *Hydro Resources, Inc.* should not be accorded the weight given it by the Board because "[t]hat decision did not concern NEPA's requirements, but rather an intervenors' [sic] right to a hearing on material licensing issues."<sup>53</sup> The Intervenors instead assert the broad argument that because NEPA requires agencies to take a "hard look" at environmental consequences of a proposed action based upon "high quality data and accurate scientific analysis of all information essential to the decision,"<sup>54</sup> the Board's conclusion was in error. In essence, Joint Intervenors assert that the Board erred because it determined that the dictates of NEPA could be satisfied with less information on baseline groundwater quality than was sought by the Intervenors.<sup>55</sup> The fact that Joint Intervenors believe that more information was required to satisfy NEPA does not, in and of itself, establish that the Board committed an error of law when it focused its inquiry into the sufficiency of the Staff's

---

<sup>52</sup> *Id.*

<sup>53</sup> Petition at 11 (citing *Hydro Resources, Inc.* (Crownpoint, New Mexico), CLI-06-1, 63 NRC 1 (2006)). Contrary to Joint Intervenors' assertion, *Hydro Resources* is directly relevant to the present case. In *Hydro Resources*, the intervenors sought review of a presiding officer's partial initial decision resolving on the merits various challenges to an ISR license application, including challenges relating to groundwater protection and groundwater restoration. *Hydro Resources*, CLI-06-1, 63 NRC at 2 (citing *Hydro Resources, Inc.* (Crownpoint, New Mexico), LBP-05-17, 62 NRC 77 (2005)). The Commission found that the presiding officer issued a detailed decision that rested upon an "analysis of extensive fact-specific arguments presented by the parties' technical experts." *Hydro Resources*, CLI-06-1, 63 NRC at 2. In declining to take review of that decision, the Commission cited with approval the presiding officer's finding that "[w]aiting until after licensing (although before mining operations begin) to establish definitively the groundwater quality baselines and upper control limits is . . . 'consistent with industry practice and NRC methodology.'" *Id.* at 6 (citing *Hydro Resources*, LBP-05-17, 62 NRC at 94 n.11).

<sup>54</sup> Petition at 10 (quoting *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 374 (1989); 40 C.F.R. § 1500.1(b); 40 C.F.R. § 1502.22(a)) (internal quotations omitted).

<sup>55</sup> See *id.* at 10-11.

assessment in its FSEIS of the groundwater quality information that was already developed and provided by Strata in accordance with 10 C.F.R. Part 51 and Criterion 7.<sup>56</sup>

2. The Board Did Not Improperly Shift the Burden of Proof to Joint  
Intervenors

Joint Intervenors claim that the Board improperly placed the burden of proof on the Intervenors by requiring them to show “evidence of actual bias” in the location and number of sampling wells. Relatedly, they claim that the Board did not explain how the Staff and Strata met their burden to demonstrate that the location and number of sampling wells “complied with basic scientific principles.”<sup>57</sup> However, it is not the case that the Board shifted the burden of proof from the Staff to Joint Intervenors. As described in detail in its initial decision, the Board found that the evidence put forward by the Staff and Strata supported their position that the well siting and sampling protocols used to develop the baseline groundwater data characterized in the FSEIS were, if perhaps not developed in accordance with the “best practices” suggested by Joint Intervenors as necessary, nevertheless sufficient to withstand the Intervenors’ challenge.<sup>58</sup> Finding that the Intervenors put forward no further allegations (such as evidence of actual or intended bias) other than a failure to conform to their understanding of the “best practices” for

---

<sup>56</sup> This is particularly true in view of the fact that the Commission has clearly stated that NEPA does not require the adoption of best practices. See LBP-15-3 at \_\_\_ (slip op. at 28) (citing *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 315 (2010)). Joint Intervenors state that the Board’s reliance on *Pilgrim* is misplaced because it “stands for the . . . proposition that the agency is free to choose any ‘reasonable’ methodology . . . [and] the methodologies used here were *not* reasonably designed to collect accurate baseline data.” Petition at 11 n.13. By this argument the Intervenors do not establish that the Board misapplied controlling law, but only that a difference of expert opinion exists as to the sufficiency of the information assessed by the Staff in the FSEIS, a circumstance that is not in dispute.

<sup>57</sup> Petition at 12.

<sup>58</sup> LBP-15-3 at \_\_\_ (slip op. at 27-29 & n.19). For example, the Board notes that “the six monitoring clusters and the twenty-nine existing water supply wells . . . that were used by [Strata] and the staff, along with the historic Nubeth R&D site information, to characterize . . . baseline for the Ross Project site generated some 362 groundwater samples (with over 16,000 chemical and radiological parameters.” *Id.* at \_\_\_ (slip op. at 28-29). The Board noted that the FSEIS presented 41 pages of this data in an appendix and the collection of samples “generally seems consistent with the EPA Unified Guidance on the number of well samples referenced by Joint Intervenors.” *Id.* at \_\_\_ (slip op. at 29 n.18).

well sampling and siting, the Board stated that it resolved this issue in favor of the Staff and Strata.<sup>59</sup> Therefore, the Board found ample support in the record for its resolution of this issue in the Staff's favor. Joint Intervenors, accordingly, fail to show that the Board committed a material error of law or fact.

3. The Board Properly Found that the Staff's Analysis of Baseline Groundwater Quality in the FSEIS Complied with NEPA

Joint Intervenors argue that the Board's findings of fact concerning the methodology used to collect representative baseline water quality information are clearly erroneous and that the Board's findings are, consequently, insufficient to support its conclusions. Specifically, the Intervenors argue that the Board erred in finding that the number and location of groundwater sampling wells used to develop pre-licensing baseline water quality information were sufficient to support the Staff's characterization of site groundwater quality in the FSEIS.<sup>60</sup> The Intervenors also suggest that the Board erred in dismissing their concerns regarding Strata's well sampling protocol because, in their view, the sampling wells were not screened at the proper intervals through the ore horizon, thereby "bias[ing] results to high values."<sup>61</sup>

The Commission will affirm the Board's factual findings where it has "issued a plausible decision that rests on carefully rendered findings of fact."<sup>62</sup> The Commission has stated repeatedly that, "[w]hile [we have] discretion to review all underlying factual issues *de novo*, we are disinclined to do so where a Board has weighed arguments presented by experts and

---

<sup>59</sup> *Id.* at \_\_ (slip op. at 29, 53); *see also id.* at \_\_ (slip op. at 2 ("[I]n the face of Joint Intervenors' challenges to the FSEIS in EC 1, EC 2, and EC 3, the Board finds that the NRC staff, in conjunction with [Strata], has carried its burden of proof to demonstrate the adequacy of the FSEIS in accordance with 10 C.F.R. Part 51."))

<sup>60</sup> Petition at 11-14.

<sup>61</sup> *Id.* at 13.

<sup>62</sup> *Pa'ina Hawaii, LLC* (Materials License Application), CLI-10-18, 72 NRC 56, 72-73 (2010) (quoting *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-03-8, 58 NRC 11, 25-26 (2003)).

rendered reasonable, record-based factual findings.”<sup>63</sup> The Commission’s standard of “clear error” for overturning a Board’s factual findings is “quite high,” particularly with respect to intricate factual findings based on expert witness testimony and credibility determinations.<sup>64</sup> The Commission “defer[s] to the Board’s factual findings unless they are clearly erroneous,” stepping in “only to correct factual findings ‘not even plausible in light of the record reviewed in its entirety’ – for example, where it appears that the Board has overlooked or misunderstood important evidence.”<sup>65</sup>

The Board’s findings of fact have clear support in the record. In making its findings supporting its resolution of Contention 1, the Board carefully weighed numerous exhibits and extensive written and oral testimony from several expert witnesses, and found that the Staff’s characterization of baseline groundwater quality at the project site was based upon a sampling protocol that was sufficient for the purposes of NEPA.<sup>66</sup> The Board determined that the evidence upon which the Intervenor relied to sustain their arguments, particularly U.S. Environmental Protection Agency (EPA) guidance for characterizing groundwater baseline water quality, did not support the Intervenor’s claim that the FSEIS relied upon an insufficient set of groundwater data.<sup>67</sup> The Board also determined that, while the information in the record supported the Intervenor’s claim that the sampling wells were only partially screened through the ore horizons, the screening protocol utilized by Strata was nevertheless sufficient for the

---

<sup>63</sup> *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-06-22, 64 NRC 37, 40 (2006) (internal quotations omitted in part).

<sup>64</sup> *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 259 (2009) (citing *Private Fuel Storage*, CLI-03-8, 58 NRC at 26).

<sup>65</sup> *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), CLI-15-6, 81 NRC \_\_ (Mar. 9, 2015) (slip op. at 12) (citing *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-06-15, 63 NRC 687, 697 (2006); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-05-19, 62 NRC 403, 411 (2005)).

<sup>66</sup> See LBP-15-3 at \_\_ (slip op. at 28-29 & n.19).

<sup>67</sup> See *id.* at \_\_ (slip op. at 27-29 & n.18).

purposes of characterizing the existing water quality at the site because the wells sampled groundwater from non-mineralized parts of the ore zone aquifer.<sup>68</sup> In sum, the Board had a sufficient basis in fact for its finding that the Staff's FSEIS adequately considered these issues, and the Intervenor's have consequently not shown that the Board's findings were clearly erroneous or an abuse of discretion.

B. The Board Did Not Err in Resolving EC 2 in Favor of the Staff and Strata

1. The Board Did Not Err When It Supplemented the Analysis of Restoration Groundwater Impacts in the FSEIS through Its Initial Decision

Joint Intervenor's state that the Board erred by finding that information on post-restoration uranium concentration levels reported in the Staff's prefiled testimony supplemented the FSEIS, by way of its adoption and reformulation in the Board's initial decision, so as to cure any potential defect in the Staff's analysis of potential restoration groundwater impacts in the FSEIS.<sup>69</sup> The Intervenor's argue that, because Strata's license was issued before the Board issued its initial decision, the agency's record of decision under NEPA was *effectively* no longer open.<sup>70</sup> In advancing this argument, however, the Intervenor's disregard controlling precedent holding that a licensing board's decision *can* supplement an EIS,<sup>71</sup> and that, when a hearing is held on a proposed action, "the initial decision of the presiding officer or the final decision of the Commissioners acting as a collegial body will constitute the record of decision."<sup>72</sup> Therefore, Joint Intervenor's have not established that the Board's conclusion in this instance is without governing precedent or is a departure from or contrary to established law.

---

<sup>68</sup> *Id.* at \_\_\_ (slip op. at 33-35).

<sup>69</sup> Petition at 14; see LBP-15-3 at \_\_\_ (slip op. at 68-69, 77 & n.58).

<sup>70</sup> Petition at 14-15.

<sup>71</sup> See *Indian Point*, CLI-15-6, 81 NRC at \_\_\_ (slip op. at 62) (collecting cases).

<sup>72</sup> *Id.* (citing 10 C.F.R. § 51.102(c)); see also *Philadelphia Electric Co.* (Limerick Generating Company, Units 1 and 2), ALAB-819, 22 NRC 681, 706 (1985), *aff'd in part*, CLI-86-5, 23 NRC 125 (1986), *remanded in part on other grounds sub nom. Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719 (1989)).

2.     The Board Properly Found that the Staff's Analysis of Restoration  
          Groundwater Impacts in the FSEIS Complied with NEPA

Joint Intervenor next challenge the bases for some of the Board's factual findings, and state that as a consequence of these alleged errors, the Board's ruling regarding Contention 2 must be overturned. The Intervenor state that these errors consist of: (1) relying on "non-existent" information regarding aquifer restoration approval at Crow Butte Wellfield 1;<sup>73</sup> (2) inaccurately characterizing Intervenor's approach to analyzing post-restoration uranium concentrations at Smith Ranch-Highland<sup>74</sup> and finding the Staff's approach to analyzing post-restoration uranium concentrations at Smith Ranch-Highland to be "more accurate" than Intervenor's;<sup>75</sup> (3) failing to include data from Smith Ranch-Highland unit B, Christensen Ranch mine units 2-6, and Nubeth;<sup>76</sup> and (4) "rel[ying] on the existence of an aquifer exemption for the mined aquifer and the potential for a future NEPA process for an [alternate concentration limit (ACL)] as support for" the Staff's analysis of restoration groundwater impacts.<sup>77</sup> However, none of these claims raise a legitimate challenge to the Board's conclusions regarding Contention 2.

First, the Board did not rely solely upon the Staff's testimony regarding the use of transport modeling as part of the Staff's ACL decisionmaking in concluding that there was no basis in the record for discounting the data from Crow Butte Wellfield 1 as a legitimate part of

---

<sup>73</sup> Petition at 16-17.

<sup>74</sup> *Id.* at 17.

<sup>75</sup> *Id.* at 18.

<sup>76</sup> *Id.* at 18-19. Joint Intervenor assert that the Board also "erred in dismissing the data from Smith Ranch-Highland mine unit B" because, they state, the Staff relied on Christensen Ranch in the FSEIS. See Petition at 18 n.20. However, this is incorrect. The Staff did not rely on data from Christensen Ranch to support its bounding analysis of historically approved ACLs; the Staff simply reported that Christensen Ranch was in the process of seeking restoration approval from the NRC. See Ex. SEI009A at 4-46.

<sup>77</sup> *Id.* at 19-20. In their Petition, the Intervenor also allude to, but fail to pursue, arguments relating to the categorization of impacts and the use of "mitigation techniques" in the FSEIS. See *id.* at 20-21. Neither of these issues, however, were within the scope of the contention as admitted for hearing by the Board.



the Staff's bounding analysis.<sup>78</sup> The Intervenor's are also mistaken in their assertion that the Board relied upon a "non-existent transport model for Crow Butte"; as part of its characterization of witness testimony, the Board simply reported that the Staff's witness testified that it is NRC practice to complete transport modeling before approving an aquifer restoration.<sup>79</sup> Second, the Intervenor's' claims concerning Smith-Ranch Highland – (1) that the Board inaccurately asserted that their witness's approach to analyzing post-restoration uranium concentrations at the site relies on sampling results collected during the groundwater sweep and restoration period and (2) that the Board found the Staff's approach to be more accurate – are both incorrect. The Board did not assert these statements as fact, but simply reported that the Staff characterized the Intervenor's' approach in this way, and that the Staff claimed to have the more accurate method.<sup>80</sup> Third, the Intervenor's have not shown that it was unreasonable for the Board to decline to consider data from Smith Ranch-Highland unit B, Christensen Ranch mine units 2-6, and Nubeth, where these sites had either not received approval of restoration from the NRC, and so could not provide information as to what concentrations of constituents the NRC might approve as an ACL in the future, or were not analogous to the Ross Project.<sup>81</sup>

Finally, the Board's determination that the preponderance of the evidence supported the Staff's finding that the impacts of groundwater restoration would be SMALL did not rest only upon a finding that a future ACL for the Ross Project would be subject to the NEPA process; the Board described several independent bases for its finding, including the fact that the Intervenor's

---

<sup>78</sup> See LBP-15-3 at \_\_\_ (slip op. at 67) ("*No testimony or other evidence before us substantiates Joint Intervenor's' assertion that the staff failed to undertake a serious review of the Crow Butte wellfield 1 restoration request[.]*" (emphasis added)).

<sup>79</sup> See *id.* at \_\_\_ (slip op. at 66-67) (citing Tr. at 617). Joint Intervenor's also assert that "the ACL selected for Crow Butte lacked a scientific or empirical basis for assessing restoration performance." *Id.* However, as the Board properly recognized, this proceeding is not "the forum for relitigating the efficacy of prior staff ACL determinations." *Id.* at 67.

<sup>80</sup> See *id.* at \_\_\_ (slip op. at 70).

<sup>81</sup> See *id.* at \_\_\_ (slip op. at 76-77).

did not show that the impacts from employing an ACL at the Ross Project site would be “clearly noticeable” and “sufficient to destabilize important attributes of groundwater.”<sup>82</sup> Therefore, the Intervenor have not shown that the Board’s findings are implausible or an abuse of discretion.

C. The Board Did Not Err in Resolving EC 3 in Favor of the Staff and Strata

1. The Board Did Not Improperly Rely on Strata or Staff Incentives to Ensure that Strata Complies with License Condition 10.12

Joint Intervenor argue that the Board improperly relied upon Strata’s and the Staff’s “incentive” to locate and abandon unplugged boreholes. Specifically, the Intervenor assert that the Board erred in finding that Strata has “a clear incentive here to put its best efforts into completing timely and fully the drill hole locate-and-abandon mission” required by license condition (LC) 10.12, which requires Strata to attempt to locate and abandon all historic boreholes prior to conducting tests for a wellfield package (and, consequently, prior to beginning operations).<sup>83</sup> In this regard, the Intervenor argue that the Board ignored that the Texas Railroad Commission issued a Notice of Violation to a Texas mining company in 2007 for failing to properly fill boreholes, and that “[t]he Board’s failure to address why [Strata’s] ‘incentive’ to fill the holes in this case is likely to be greater than that of Uranium Energy Corp., or other instances cited by Intervenor, warrants review.”<sup>84</sup>

However, the Board relied on several factors in reaching its conclusion. First, the Board noted that in the absence of a showing that Strata has committed “substantial prior misdeeds,” it is legally presumed to maintain compliance with its license.<sup>85</sup> Second, the Board credited the “nonstandard” provision in LC 11.5 requiring immediate cessation of operations if an excursion

---

<sup>82</sup> *Id.* at \_\_ (slip op. at 81-82).

<sup>83</sup> Petition at 22 (citing LBP-15-3 at \_\_ (slip op. at 94)).

<sup>84</sup> Petition at 22.

<sup>85</sup> LBP-15-3 at \_\_ (slip op. at 93-94) (citing *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-9, 53 NRC 232, 235 (2001)).

is detected as significantly bolstering Strata's incentive to locate and abandon boreholes.<sup>86</sup>

Third, the Board noted the existence of additional measures that will provide Strata and the Staff with assurance that it has made the requisite effort to locate and abandon boreholes.<sup>87</sup> Finally, the Board found that "ongoing monitoring of water levels in the aquifers overlying and underlying the OZ pursuant to LC 11.5 . . . will provide a continuing check that the aquifers within the wellfield are hydrologically isolated."<sup>88</sup> In the face of these measures, and in the absence of evidence that Strata and Uranium Energy Corp. are similarly situated with respect to these requirements such that violations committed by Uranium Energy Corp. in Texas would be probative of Strata's expected compliance, the Board's conclusion was proper.

Next, Joint Intervenors claim that the Board based its conclusion on the Staff's incentive to ensure that boreholes are filled to support the Staff's predictive finding of SMALL long-term impacts.<sup>89</sup> But the Board's note of the Staff's additional incentive is a secondary point in a footnote, not a factor necessary to the Board's conclusion. Indeed, the Board begins the footnote by noting the general assumption "that the staff will be fair and judge the matter on the merits," rather than overlook potential noncompliance by Strata.<sup>90</sup> Coupled with the above-mentioned demonstration that Strata will likely make the requisite effort to locate and abandon all boreholes, these facts are sufficient to support the Board's conclusion. The Board's aside about the Staff's additional incentive in this action serves only to bolster that conclusion further. As the Intervenors note, the issue before the Board is ultimately whether "the Staff . . . met the burden of demonstrating [that] the risk of significant impacts from these excursions will be

---

<sup>86</sup> *Id.* at \_\_ (slip op. at 93).

<sup>87</sup> *Id.* at \_\_ (slip op. at 94) (noting that Strata must complete and maintain well abandonment records and post-license, pre-production pump tests).

<sup>88</sup> *Id.* at \_\_ (slip op. at 96 n.68).

<sup>89</sup> Petition at 22-23.

<sup>90</sup> LBP-15-3 at \_\_ (slip op. at 95 n.66) (citations omitted).

SMALL.”<sup>91</sup> The Board squarely addressed that issue, concluding that “in most respects, LC 10.12 provides substantial support for the FSEIS conclusion,”<sup>92</sup> and Joint Intervenor has not demonstrated that the Board’s finding is implausible or an abuse of discretion.

2. The Board Properly Evaluated Joint Intervenor and Staff Witness Testimony Regarding Confinement of the Mined Aquifer

Joint Intervenor further argue that the Board erred in rejecting their expert witness’s testimony regarding the variable levels of sodium and sulfate as measured across monitoring wells in the ore zone aquifer – which they assert indicates communication between the ore zone and shallow monitoring aquifers – in favor of the Staff’s expert witness’s testimony, which indicated that the composition of groundwater in across the ore zone aquifer may vary as a result of the minerals with which the groundwater is in contact. Joint Intervenor asserts that the Board erred in finding that groundwater composition may vary depending on the minerals in contact with the groundwater because, in the Intervenor’s estimation, that finding contradicts the Board’s finding in Contention 1 that Strata’s “limited” groundwater sampling approach was sufficient to demonstrate baseline data for the site.<sup>93</sup>

The Intervenor has not shown that the Board committed an error or abused its discretion in finding the Staff’s testimony more persuasive than the Intervenor’s on this matter. After weighing the evidence and testimony of both the Intervenor’s and Staff’s witnesses, the Board determined that the better explanation for the variability in sodium and sulfate composition in the groundwater samples was the Staff’s, as it found that the Intervenor’s testimony amounted to “little more than speculation.”<sup>94</sup> In making its determination, the Board placed significant weight on its finding that the Intervenor’s own testimony suggested that the

---

<sup>91</sup> Petition at 23.

<sup>92</sup> LBP-15-3 at \_\_ (slip op. at 96).

<sup>93</sup> Petition at 23.

<sup>94</sup> LBP-15-3 at \_\_ (slip op. at 103).

Staff's explanation was correct.<sup>95</sup> Further, the Intervenor's have not shown that this finding is inconsistent with the Board's findings in Contention 1. Contrary to their suggestion that Strata's groundwater sampling protocol was "limited," the Board noted in its findings regarding Contention 1 that this protocol "generated some 362 groundwater samples (with over 16,000 chemical and radiological parameters)."<sup>96</sup> Given this information, as well as other characteristics of the sampling protocol noted by the Board in its resolution of Contention 1,<sup>97</sup> Joint Intervenor's have not shown why it was an error or abuse of discretion for the Board to find both (1) that the chemical composition of some of Strata's groundwater samples may be affected by the minerals in contact with the groundwater and (2) that Strata's groundwater sampling protocol produced a sufficient data set to satisfy NEPA's requirement to adequately characterize the baseline groundwater at the site.

3. The Board Properly Found that the Staff Demonstrated that Uranium Is Not an Effective Excursion Indicator

Joint Intervenor's challenge the Board's finding that "compared to other possible indicators . . . uranium is not as effective a tool for providing a timely alert regarding a lixiviant excursion from an ISR facility."<sup>98</sup> Specifically, Joint Intervenor's argue that the Board improperly shifted the burden to them to demonstrate that uranium is an appropriate excursion indicator.<sup>99</sup> But Joint Intervenor's mischaracterize the Board's reasoning. The Board did not, as Joint Intervenor's suggest, base its conclusion simply on the Intervenor's' failure to demonstrate that

---

<sup>95</sup> *Id.* at \_\_\_ (slip op. at 103-04 n.72).

<sup>96</sup> *Id.* at \_\_\_ (slip op. at 28-29).

<sup>97</sup> For example, the Board also found that the number and location of Strata's sampling wells "was based on factors such as [Wyoming Department of Environmental Quality] guidelines (including at least one production zone well per square mile), having consistent/continuous water-bearing intervals above and below mineralization, satisfactory confining layer thickness, proximity to existing drilling data, sufficient spatial distribution for development of potentiometric data, and landowner considerations." *Id.* at \_\_\_ (slip op. at 29 n.19).

<sup>98</sup> *Id.* at \_\_\_ (slip op. at 107).

<sup>99</sup> Petition at 24.

uranium should be included as an excursion indicator. Rather, the Board weighed Joint Intervenors' witness testimony that uranium-carbonate will be highly mobile in groundwater, and therefore an effective excursion indicator, against Staff and Strata witness testimony that uranium-carbonate complexes can break down when groundwater moves out of the OZ, leaving uranium in its low-mobility state. The Board further considered Staff exhibits that explain that because uranium's behavior in mobile groundwater is not yet well understood, and because its mobility will vary based on its immediate environment, it is not as conservative an excursion indicator as other choices.<sup>100</sup> Based the preponderance of the evidence before it, the Board concluded that uranium is not as reliable an excursion indicator as chloride, alkalinity, sulfate, and electrical conductivity.<sup>101</sup> Only then did the Board note that proof of site-specific characteristics making uranium a reliable excursion indicator might have affected the weight of the evidence – and that such proof was not offered in this case.<sup>102</sup> In so reasoning, the Board properly held the Staff to its burden. Joint Intervenors have not demonstrated that the Board abused its discretion by shifting that burden to opposing parties.

4. The Board Properly Evaluated Joint Intervenors' Evidence of Excursions at Other ISR Facilities

Finally, Joint Intervenors argue that the Board improperly discounted evidence regarding excursions at other ISR facilities. In particular, the Intervenors state that the Board "speculated [that] excursions elsewhere might be due to 'an engineering failure, i.e., a casing leak,' . . . without either relying on *any* evidence supporting that speculation, or explaining why [Strata's] project will not be prone to the same kind of problems . . . ."<sup>103</sup> But the Board did examine Joint Intervenors' evidence of excursions at other ISR facilities, and concluded that in the absence of

---

<sup>100</sup> LBP-15-3 at \_\_ (slip op. at 104-07 & n.77).

<sup>101</sup> See *id.* at \_\_ (slip op. at 107).

<sup>102</sup> LBP-15-3 at \_\_ (slip op. at 107-08).

<sup>103</sup> Petition at 25 (quoting LBP-15-3 at \_\_ (slip op. at 109)) (emphasis in original).

a “failure of the basic design of the ISR facility,” there was insufficient data to draw a connection between those facilities and the Ross Project.<sup>104</sup> For example, the Board noted that Joint Intervenor’s own exhibit regarding the Smith Ranch-Highland site concluded that it was difficult to determine whether the observed aquifer contamination was due to ISR mining or to pre-existing factors, such as natural mineralization or historic surface mining. The Board similarly found that Joint Intervenor’s attempt to analogize the Ross Project to the Kingsville Dome site failed due to distinctions between monitoring well placement.<sup>105</sup> In sum, Joint Intervenor has not demonstrated that the Board’s reasoned “discount[ing]” of these arguments represents an implausible finding or an abuse of discretion.

#### IV. Joint Intervenor Cannot Raise Arguments for the First Time on Appeal

Joint Intervenor also raise a new argument for the first time on appeal that should not be considered should the Commission decide to take up Joint Intervenor’s petition for review. It is well established that the Commission will generally not entertain an issue that has been raised for the first time on appeal.<sup>106</sup> The “disinclination to do so is particularly strong in circumstances where the issue and the factual averments underlying it could have been – but were not – timely put before the Licensing Board.”<sup>107</sup>

In their Petition, Joint Intervenor cite 10 C.F.R. § 51.71(d) n.3 for the proposition that “compliance with the water quality requirements [of the EPA] is not a substitute, and does not negate the requirement for NRC to weigh all environmental effects of the proposed action,

---

<sup>104</sup> LBP-15-3 at \_\_\_ (slip op. at 109).

<sup>105</sup> *Id.* (citing Ex. JTI021, Carl F. Crownover, Jordan Labs, Inc., Reports of Analysis (May 12, 1988 & July 13, 2007), at unnumbered pp. 2, 3, 6).

<sup>106</sup> *Fermi*, CLI-10-3, 71 NRC at 51 n.7; *see also Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-924, 30 NRC 331, 358 (1989) (“[I]t is a settled principle of appellate practice that an appellant is ordinarily precluded from pressing issues or advancing arguments not presented to the trial tribunal,” except possibly “in the case of a serious substantive issue as to which a genuine problem has been demonstrated.”).

<sup>107</sup> *Puerto Rico Electric Power Auth.* (North Coast Nuclear Plant, Unit 1), ALAB-648, 14 NRC 34, 37 (1981).

including the degradation, if any, of water quality.”<sup>108</sup> The Intervenor has not previously raised this provision in the regulations or argued its applicability to the present case, despite numerous opportunities to do so, including in pre-hearing testimony and briefs, at the hearing, and in post-hearing briefs and proposed findings of fact. Therefore, in accordance with longstanding and well-established precedent, the Intervenor may not raise this provision or arguments based upon it for the first time here.<sup>109</sup>

### CONCLUSION

The Joint Intervenor fails to show that the Board applied incorrect legal standards when dismissing its contentions on connected actions and cumulative impacts prior to the evidentiary hearing and when resolving ECs 1, 2 and 3 in favor of the Staff and Strata. The Intervenor also fails to show that the Board’s factual findings concerning ECs 1, 2 and 3 are clearly erroneous or that the Board’s conclusions otherwise lack evidentiary support. The Commission should therefore deny Joint Intervenor’s Petition.

Respectfully submitted,

**/Signed (electronically) by EM/**

Emily Monteith  
David M. Cylkowski  
Counsel for NRC Staff

Dated at Rockville, Maryland  
this 16th day of March, 2015.

---

<sup>108</sup> Petition at 13 n.16; *see also* Petition at 20 n.23.

<sup>109</sup> Joint Intervenor also support a similar argument by reference to a proposed rule recently issued by the EPA. *See* Petition at 1 n.4 (citing *Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings*, 80 Fed. Reg. 4156, 4171 (Jan. 26, 2015)); *see also id.* at 12 n.15 (citing 80 Fed. Reg. at 4186). However, as a *proposed* rule, the rule does not carry the force of law.



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
STRATA ENERGY, INC.	)	Docket No. 40-9091-MLA
	)	
(Ross In Situ Recovery Uranium Project)	)	ASLBP No. 12-915-01-MLA-BD01
	)	

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R § 2.305, I hereby certify that copies of the foregoing "NRC STAFF'S ANSWER TO JOINT INTERVENORS' PETITION FOR REVIEW OF LBP-15-3" in the above-captioned proceeding have been served via the Electronic Information Exchange (EIE) this 16th day of March, 2015, which to the best of my knowledge resulted in transmittal of the foregoing to those on the EIE Service List for the above-captioned proceeding.

**/Signed (electronically) by/**

Emily Monteith  
Counsel for the NRC Staff  
U.S. Nuclear Regulatory Commission  
Mail Stop O-15 D21  
Washington, DC 20555-0001  
(301) 415-2718  
Emily.Monteith@nrc.gov

Date of Signature: March 16, 2015