

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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 REBUTTAL STATEMENT OF POSITION

The Staff of the U.S. Nuclear Regulatory Commission (NRC Staff) responds to the Initial Statement of Position and Initial Testimony of the Natural Resources Defense Council (NRDC) and Powder River Basin Resource Council (PRBRC) (collectively Joint Intervenors or Intervenors) on Environmental Contentions 1, 2, and 3. In Contentions 1 through 3, the Intervenors challenge the Final Supplemental Environmental Impact Statement (FSEIS) prepared by the Staff for Strata Energy, Inc.'s (Strata's or the Licensee's) proposed Ross Project. For the reasons set forth below and in the Staff's initial statement of position,<sup>1</sup> the Board should dismiss the contentions and affirm that the Staff's review of the Ross Project complied with applicable law.

I. Summary of Staff's Position

The Staff complied with NEPA by evaluating the potential impacts of the Ross Project on groundwater quality. The Staff described in the FSEIS the baseline groundwater quality at the Ross Project site and the procedures Strata must follow to obtain the post-licensing, pre-operational background water quality concentrations. The Staff also considered in the FSEIS the environmental impacts that may occur as a result of the NRC's issuance of a source and

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<sup>1</sup> NRC Staff's Initial Statement of Position (Aug. 25, 2014) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14237A730) ("Staff's Initial Statement").

byproduct materials license for the Ross Project. Because the Staff complied with NEPA, the Board should dismiss Contentions 1, 2 and 3.

II. The Staff's Expert Witnesses

The Staff submitted initial testimony from four witnesses: Johari Moore (providing testimony on Contentions 1, 2, and 3); John Saxton (providing testimony on Contentions 1, 2, and 3); Kathryn Johnson (providing testimony on Contentions 1, 2, and 3), and Anthony Burgess (providing testimony on Contention 3). On rebuttal, Ms. Moore will be providing testimony on Contentions 1 and 2; Mr. Saxton will be providing testimony on Contentions 1, 2, and 3; Dr. Johnson will be providing testimony on Contentions 1, 2, and 3, and Dr. Burgess will be providing testimony on Contention 3.<sup>2</sup> The qualifications for each of the Staff's witnesses are described in the Initial Statement of Position, Initial Testimony, and detailed in the Staff's Exhibits NRC002 through NRC005.

III. The Staff's Position on Individual Contentions

In their Initial Statement of Position and Initial Testimony (Exhibits (Exs.) JTI001-[R](#) and JTI003-[R](#)), the Intervenor rely on numerous arguments that they submitted previously in support of their contentions challenging Strata's application and the Staff's SEIS for the Ross Project. Through its initial statement of position and initial testimony,<sup>3</sup> the Staff has already addressed the vast majority of these arguments. In the sections below, the Staff addresses the Intervenor's new arguments and any arguments requiring further discussion. As the Staff explains below, when reviewing Strata's application for a source and byproduct materials license for the Ross Project, it complied with NEPA and the NRC's regulations implementing NEPA. Therefore, the Board should dismiss all of the admitted contentions because the Staff has provided evidence sufficient to show that the contentions lack merit.

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<sup>2</sup> Exhibits (Exs.) NRC044 at A.1a through A.1d.

<sup>3</sup> Ex. NRC001.

A. Contention 1

In their Initial Statement of Position,<sup>4</sup> the Intervenor advance the same arguments concerning the establishment of post-licensing, pre-operational background water quality data as they have in previous iterations of Contention 1. See, e.g., Intervenor's Initial Statement at 4-5, 9-10. The Staff addressed these arguments in its initial statement of position and initial testimony. In their latest pleading, the Intervenor argue that the law mandates that "where there is data essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement." Intervenor's Initial Statement at 9 (quoting 40 C.F.R. § 1502.22(a)). Because Strata provided site characterization information under 10 C.F.R. § 51.45 as part of its application, including detailed information on baseline groundwater quality required under Criterion 7 of 10 C.F.R. Part 40, Appendix A,<sup>5</sup> the information required under Criterion 5B(5) of Appendix A cannot be considered essential to informing the NRC's decision on whether or not to issue the license.<sup>6</sup>

The Intervenor also argue that the NRC's construction rule does not preclude installation of the Criterion 5B(5) background wells, and contend that the essential legal question presented by Contention 1 is one of interpretation of 10 C.F.R. Part 40's definition of "construction." Intervenor's Initial Statement at 11. The Intervenor cite the exclusion from the definition of "construction" that allows an applicant to perform site characterization activities, such as preconstruction monitoring to establish background information related to the suitability

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<sup>4</sup> Natural Resources Defense Council's & Powder River Basin Resource Council's Statement of Position Supporting Environmental Contentions 1, 2 and 3 (Aug. 25, 2014) (ADAMS Accession No. ML14237A617) ("Intervenor's Initial Statement").

<sup>5</sup> NUREG-1569 (Ex. SEI007) provides guidance on how an applicant can submit the required information on baseline groundwater quality. Regulatory Guide 4.14 (Ex. SEI008) also provides guidance in this area.

<sup>6</sup> See Ex. NRC009 (documenting the NRC's decision, after weighing the impacts of the proposed action and comparing the alternatives, to issue a source and byproduct materials license to Strata for the Ross Project).

of the site and the environmental impacts of construction or operation, as support for their claim that baseline groundwater information was required to be provided by Strata and considered by the Staff prior to issuance of the source and byproduct materials license.<sup>7</sup> However, the Intervenor fail to acknowledge that Strata has already provided just such information, and it is this information that forms the basis of the Staff's environmental review.<sup>8</sup> In addition, the Intervenor note that the Commission stated, in promulgating the construction definition in Part 40, that it has no regulatory authority over private actions that are "not subject to its regulatory authority." Intervenor's Initial Statement at 11 (quoting 76 Fed. Reg. 56,951, 56,956 (Sept. 15, 2011)). But the Intervenor do not explain how the development of Criterion 5B(5) background values is not subject to the NRC's regulatory authority when the criteria for the monitoring well network Strata must establish and the sampling criteria that Strata must follow in order to provide these values exist as conditions of Strata's source and byproduct materials license.<sup>9</sup>

The applicability of the construction rule aside, the Intervenor have not established that the baseline groundwater data provided by Strata with its application and assessed in the FSEIS is inadequate to support the Staff's conclusion that the impacts of the Ross Project are expected to be SMALL, such that Strata must install a new series of monitoring wells and develop further information for inclusion by the Staff in the FSEIS. The Intervenor argue that the FSEIS's discussion of baseline groundwater quality is deficient because the FSEIS relies upon the site-characterization groundwater information provided by Strata to support its license application. Intervenor's Initial Statement at 46-50. The Intervenor allege that in order to comply with NEPA, the Staff must perform a quantitative and statistical analysis, as delineated by Dr. Abitz in his testimony, on data that is sampled from wells installed according to "approved

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<sup>7</sup> 10 C.F.R. § 40.4, *Construction*.

<sup>8</sup> Exs. NRC001 at A.1.3; NRC044 at A.1.2.

<sup>9</sup> See Ex. SEI015 at 12-13 (License Condition 11.3).

procedures and valid statistical sampling plans, upgradient of known or suspected contamination zones, with sampling occurring more than 8 times.” Intervenor’s Initial Statement at 47.<sup>10</sup>

Most of Dr. Abitz’s claims are repeated from his previous declarations filed in the case, and the Staff has addressed each of these arguments at length in its initial statement of position and testimony. In its rebuttal testimony, the Staff explains that the empirical data on groundwater quality collected by Strata met the requirements of Criterion 7 and was consistent with guidance in Section 2.7 of NUREG-1569.<sup>11</sup> The Staff found that Strata provided information from a sufficient number of wells to support the Staff’s review of its application for the Ross Project, and that Strata’s reported sampling and analytical methods were acceptable as industry standard practices, and that the parameters analyzed were consistent with recommendations in Regulatory Guide 4.14.<sup>12</sup> The Staff found that that data provided by Strata was adequate for the Staff to characterize the baseline groundwater conditions at the Ross Project site and support its conclusion that the potential impacts from the Ross Project would be SMALL.<sup>13</sup>

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<sup>10</sup> The Intervenor’s also implicitly renew their challenge to the Staff’s use of the labels “small” and “moderate” to characterize impacts, citing case law that prohibits the use of these labels when the agency does not explain their basis. Intervenor’s Initial Statement at 14. But the two cases proffered by the Intervenor’s can be easily distinguished from the case at hand. In one, the agency had not defined what the labels meant, and in the other, the labels assigned to impacts did not match the definitions given elsewhere in the NEPA document. See *Sierra Club v. Mainella*, 459 F.Supp. 2d 76, 100-01 (D.D.C. 2006); *Greater Yellowstone Coal v. Kempthorne*, 577 F. Supp. 2d 183, 201 (D.D.C. 2008). In the FSEIS, the Staff defines these labels as it does in every EIS it issues. See Ex. SEI009A at 5-14 (defining “SMALL,” “MODERATE,” and “LARGE” impacts). More importantly, the labels are not the beginning and end of the Staff’s analysis of the resource areas. They serve as relatively objective summaries of the impacts, not as the entirety of the analysis of the impacts. See Ex. SEI009A at 5-14 (defining “SMALL,” “MODERATE,” and “LARGE” impacts).

<sup>11</sup> Ex. NRC044 at A.1.1.

<sup>12</sup> *Id.*

<sup>13</sup> Exs. NRC001 at A.1.6 through A.1.8; NRC044 at A.1.1, A.1.4.

The Staff also addresses Dr. Abitz's assertions that a quantitative assessment of baseline groundwater values is necessary and would show that the Ross Project will in fact have a LARGE impact on groundwater quality. As the Staff explains in its testimony, the FSEIS, in conformance with the GEIS, defines a LARGE impact as one that is clearly noticeable and is *sufficient to destabilize important attributes of the resource considered*.<sup>14</sup> By contrast, an impact that is expected to be SMALL is one that is not detectable or is so minor that it will neither destabilize nor noticeably alter any important attribute of the resource considered.<sup>15</sup> The Staff explains that the FSEIS concludes that the long-term impacts of the Ross Project would be SMALL because the requirements imposed by 10 C.F.R. Part 40, the requirements imposed by the Environmental Protection Agency and Wyoming Department of Environmental Quality, and the conditions in Strata's source and byproduct materials license, would collectively ensure that the groundwater would be available to be used after restoration in the manner that it was being used prior to licensing and in a manner that would be protective of public health and the environment.<sup>16</sup> In other words, to show that the impacts of the Ross Project would be LARGE, the Intervenors would need to demonstrate that the important attributes of the groundwater would be destabilized after operation and restoration of the Ross Project such that it could not be restored to a state that would be protective of public health and the environment.<sup>17</sup>

In the remainder of the Staff's rebuttal testimony, the Staff also responds to Dr. Abitz's additional arguments concerning characterization of baseline groundwater conditions at the Ross Project site, including his understanding of the terms "background" and "baseline" water

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<sup>14</sup> Ex. SEI009A at xxi (emphasis added).

<sup>15</sup> *Id.* at xx.

<sup>16</sup> Ex. NRC044 at A.1.4.

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

quality, the limitations of the various guidance documents on which he relies to support his arguments, and specific claims regarding well development and sampling methodology.<sup>18</sup>

B. Contention 2

In their Initial Statement of Position on Contention 2, the Intervenor argue that the Staff “did not adequately assess the impacts stemming from the high likelihood that the Lance District will remain contaminated at the conclusion of the restoration process[.]” Intervenor’s Initial Statement at 46. They argue that information the Staff provided in the FSEIS concerning the historical experience of other sites’ approved restoration values “does not and cannot fulfill Staff’s NEPA obligation to disclose the likely outcome – including, at a minimum, a bounding analysis of likely results – at this site[.]” *Id.* The Intervenor rely on the testimony of Dr. Lance Larson to support Contention 2.<sup>19</sup> The Staff addressed the majority of Dr. Larson’s claims and the Intervenor’s arguments at length in its initial statement of position and initial testimony; only their new or expanded arguments are further addressed in this rebuttal statement of position.<sup>20</sup>

The Intervenor and Dr. Abitz argue that no ISL project has successfully restored an aquifer, and characterize the restoration of groundwater to limits other than post-licensing, pre-operational background values as restoration failure. Intervenor’s Initial Statement at 50, 51.<sup>21</sup> The Intervenor and Dr. Larson make this argument to support their claim that, contrary to the Staff’s findings in the FSEIS, the impacts from the Ross Project will be LARGE.<sup>22</sup> This argument, however, fails to recognize that the Commission’s regulations provide for restoration to alternate standards from those set according to Criterion 5B(5)(a). The NRC can approve

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<sup>18</sup> See generally *id.*

<sup>19</sup> Ex. JTI003-[R](#).

<sup>20</sup> Ex. NRC001 at A.2.1 through A.2.11.

<sup>21</sup> See also e.g., Ex. JTI003-[R](#) at A.15, A.16

<sup>22</sup> Ex. JTI003-[R](#) at A.22, A.66.

restoration of a constituent to an alternate concentration limit if the licensee is unable to restore the constituent to Commission-approved background values or drinking water limits. As the Staff explains in its testimony, the conclusion in the FSEIS the potential impacts to groundwater quality from the Ross Project would be SMALL is based in part on the requirement that any restoration value for a constituent that exceeds its post-licensing, pre-operational value must be approved by the Commission as a concentration that is as low as reasonably achievable and that will not pose a substantial present or potential hazard to human health or the environment.<sup>23</sup> While Dr. Larson and the Intervenors claim that the impacts of restoration to an ACL rather than the Criterion 5B(5) background values would be “significant,”<sup>24</sup> past experience has shown that restoration to alternate values has not changed the class-of-use of the affected aquifer and has not impacted the quality of groundwater outside the affected aquifer.<sup>25</sup> This support’s the Staff’s conclusion that the Ross Project will not have a destabilizing impact on any important attribute of the groundwater resources at the site and that the potential impacts of the Ross Project on groundwater quality should be categorized as SMALL.<sup>26</sup>

In support of their argument that the impacts of the Ross Project should be classified as LARGE, the Intervenors and Dr. Larson rely upon two new sets of supporting information – a discussion of another ISR facility that has conducted restoration activities, Christensen Ranch Mine Units 2-6, and a website containing visually plotted information sourced from the NRC, referred to by the Intervenors as “storymaps.” Intervenors’ Initial Statement at 51-55.<sup>27</sup> As the Staff explains in its testimony, neither set of new information is relevant to the discussion in the

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<sup>23</sup> Ex. NRC044 at A.2.2.

<sup>24</sup> See Intervenors’ Initial Statement at 50; Ex. JTI003-[R](#) at A.66.

<sup>25</sup> Ex. SEI009A at 4-48.

<sup>26</sup> *Id.*; see also Ex. NRC044 at A.1.4, A.2.2.

<sup>27</sup> See also Ex. JTI003-[R](#) at A.25-A.66.



FSEIS of historical ISR restoration approvals or the Staff's conclusion that the expected impacts to groundwater quality from the Ross Project would be SMALL.

Dr. Larson relies heavily on data from Christensen Ranch Mine Units 2-6 to support his claim that the Staff incorrectly found that the impacts from the Ross Project would be SMALL and temporary.<sup>28</sup> However, as the Staff stated in the FSEIS, and again emphasizes in its rebuttal testimony, while Cogema Mining Company has conducted restoration activities at Christensen Ranch facility and has sought approval of restoration from the NRC, the Commission has not granted it.<sup>29</sup> Instead, the Commission has sought further information from Cogema and has identified additional corrective actions that would be needed for all of the Christensen Ranch.<sup>30</sup> Rather than serving as evidence that the Commission's decision to approve restoration of Crow Butte Wellfield 1, Smith Ranch-Highland A-Wellfield, and Irigaray Mine Units 1-9 was faulty, the fact that the Commission declined to approve Cogema's request based on the groundwater quality information analyzed by Dr. Larson indicates that the NRC takes seriously its responsibility to determine that any approved ACL meets the requirements of Criterion 5B(6).<sup>31</sup> Furthermore, because the data analyzed by Dr. Larson for this facility do not represent alternate values approved by the Commission, they are not useful as a source of information for the Staff's assessment in the FSEIS of what the Commission might approve as an alternate concentration limit for the Ross Project in the future.<sup>32</sup>

The Staff also testifies that the storymaps developed by Dr. Larson for the Christensen Ranch and Smith Ranch-Highland wellfields do not affect the Staff's analysis or conclusions in

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<sup>28</sup> Ex. JTI003-[R](#) at A.25-A.60, A.66.

<sup>29</sup> See Ex. SEI009A at 4-46; Ex. NRC044 at A.2.6.

<sup>30</sup> Ex. NRC044 at A.2.6; see *also* Ex. JTI035.

<sup>31</sup> *Id.* at A.2.6.

<sup>32</sup> *Id.*

the FSEIS.<sup>33</sup> Joint Intervenor state that the purpose of these storymaps is to “illustrate the failure of restoration at ISL uranium recovery sites and the kind of meaningful analysis necessary to meet the requirements of 10 C.F.R. §§ 51.90-94 and NEPA in the likely event [Strata] will be unable to restore groundwater to primary or secondary limits.” Intervenor’s Initial Statement at 51-52. First, as noted above, Christensen Ranch has not received approval for restoration, and consequently a visualization of the site’s groundwater cannot demonstrate “failure of restoration” at that site.<sup>34</sup> Second, as Dr. Larson admits, the data on which his storymaps are based was derived from NRC sources, and as the Staff explains, all of the relevant information necessary to support the FSEIS’s discussion of historical Commission-approved aquifer restoration values was already considered by the Staff.<sup>35</sup> Third, the Intervenor have not established that NEPA or 10 C.F.R. Part 51<sup>36</sup> require the type of “visual, interactive representation of spatial data” that they present in their storymaps in order for the Staff to adequately evaluate the potential impacts of the Ross Project. The Staff’s review of groundwater quality information in the FSEIS was consistent with the approach used in the ISR GEIS.<sup>37</sup> Finally, the Staff discusses in its rebuttal testimony the additional points Dr. Abitz raises in connection with the former Nubeth R&D project.<sup>38</sup>

Once more, as in the Staff’s initial statement of position, the Staff respectfully notes that the remaining claims made by Joint Intervenor and Dr. Larson are not material to, or within the

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<sup>33</sup> *Id.* at A.2.7.

<sup>34</sup> *Id.* at A.2.6.

<sup>35</sup> Ex. JTI003-[R](#) at A.28-A.30; Ex. NRC044 at A.2.7.

<sup>36</sup> While the Intervenor refer to 10 C.F.R. §§ 51.90-94 here and in Contentions 1 and 3, they do not explain how the Staff’s FSEIS for the Ross Project violates, or fails to conform to, any of the provisions of these regulations. These provisions primarily establish general requirements for the content and format of the FSEIS and assorted directives of an administrative nature. None of the provisions of 10 C.F.R. §§ 51.90-94 appear to pertain to the subject of any of the Intervenor’s admitted contentions.

<sup>37</sup> See Ex. NRC044 at A.1.4, A.1.5, A.2.6.

<sup>38</sup> Ex. NRC044 at A.2.8.

scope of, the issues presented by Contention 2 as admitted and limited by the Board. As discussed in the Staff's initial statement of position, the Board has expressly and repeatedly limited the scope of Contention 2 to the narrow question of whether the Staff has described and analyzed a reasonable range of hazardous constituent concentration values that are likely to be applicable should Strata require an ACL. Any arguments concerning, *inter alia*, Strata's proposed restoration process, restoration timeframe, aquifer restoration criteria, aquifer restoration techniques, the likelihood that Strata will require an ACL, and the likelihood that Strata will fail to comply with any ACL approved by the Commission, are unrelated to whether the Staff described and analyzed a reasonable range of potentially applicable ACL values in the FSEIS. Therefore, these issues are not addressed in the Staff's rebuttal testimony on Contention 2, and the Board should not consider them in ruling on the contention.

C. Contention 3

The Intervenors argue that the FSEIS failed to include adequate hydrological information sufficient to demonstrate Strata's ability to contain groundwater fluid migration. In his initial testimony, Dr. Abitz claimed three fundamental flaws in the Staff's FSEIS analysis: (1) the FSEIS discounts the risk of fluid migration from unplugged boreholes throughout the Ross Project Area; (2) the pump tests relied upon in the FSEIS were inadequate to demonstrate aquifer containment; and (3) the FSEIS inappropriately failed to include uranium as an excursion indicator.<sup>39</sup> Dr. Larson similarly argued that the Staff erred in concluding that the ore zone (OZ) aquifer was confined because the Staff assumed that Strata would be able to locate and abandon all Nubeth drillholes.<sup>40</sup> Dr. Larson provided a series of "storymaps" of past ISR facility in an attempt to draw a connection between the issues at those facilities and the current

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<sup>39</sup> Ex. JTI001-[R](#) at A.37.

<sup>40</sup> Ex. JTI003-[R](#) at A.69-A.85.

project.<sup>41</sup> However, as explained below, Drs. Abitz's and Larsen's arguments incorrectly assess both the Staff's evaluation of Strata's license application and the underlying data informing that analysis. As such, the Board should find in favor of the Staff and Strata and dismiss Contention 3.

In his initial testimony, Dr. Abitz faults the Staff for not including uranium as an excursion indicator.<sup>42</sup> The Staff dealt with Dr. Abitz's arguments regarding using uranium as an excursion indicator in A.3.2.10, A.3.2.11, and A.3.2.12 of its own initial testimony (Ex. NRC001), where the Staff thoroughly explained the scientific basis for its determination that uranium was an inappropriate excursion indicator. In its rebuttal testimony, the Staff illustrates that this determination is not new or unique, but is supported by past NRC practice and scholarly publications which clearly state that uranium is not useful as an excursion indicator.<sup>43</sup>

Regarding Dr. Abitz's claim that the FSEIS is silent on the extent to which mining activities affect geochemical conditions in the exempted aquifer, the Staff clarified that, as discussed in more detail in A.3.2.10 of the Staff's initial testimony, these activities were thoroughly discussed in both the GEIS and FSEIS.<sup>44</sup> Further, Dr. Abitz's concern about the reducing geochemical conditions in the production zone is not relevant to the discussion of excursion indicators.<sup>45</sup> It is not the state of reducing conditions inside of the production area, as indicated by Dr. Abitz, but outside the production area that are relevant to the selection of indicator parameters for detecting a horizontal excursion.<sup>46</sup>

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<sup>41</sup> *Id.* at A.76-A.85.

<sup>42</sup> See Ex. JT1001-[R](#) at A.38.

<sup>43</sup> Ex. NRC044 at A.3.2-A.3.5.

<sup>44</sup> *Id.* at A.3.3.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.*

Both Drs. Abitz and Larson continue to focus on historic drillholes throughout the Ross Project Area.<sup>47</sup> Drs. Abitz's and Larson's claims are dealt with extensively in the Staff's initial testimony at A.3.1.1–A.3.1.15. But Drs. Abitz's and Larson's arguments are flawed because their claims ignore Strata's success in locating and properly abandoning all historic drillholes within a 522-foot radius feet of the test well.<sup>48</sup> They also miss the differentiation between the drillholes inside and outside the perimeter monitoring well ring. The Staff clearly explains Drs. Abitz's and Larson's error as there is only a need to fill those drillholes inside the perimeter monitoring well ring.

Dr. Abitz also mischaracterizes the requirement for Strata to attempt to locate and abandon the drillholes within the perimeter monitoring well ring by claiming that it is "little more than a promise [that will be] left unfulfilled."<sup>49</sup> While Strata initially committed to attempt to locate and abandon drillholes within the perimeter monitoring well ring, the Staff incorporated that commitment into Strata's license as License Condition 10.12.<sup>50</sup> Strata is required to conform to the conditions of its license, or be subject to NRC enforcement action.<sup>51</sup> While Dr. Abitz provides examples of excursions at ISR operations where a licensee did not act in accordance with license conditions, the Staff does not assume that a licensee will violate its obligations, including the conditions of its license.<sup>52</sup> Dr. Abitz further claims there is no

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<sup>47</sup> See Exs. JTI001-[R](#) at A.41; JTI003-[R](#) at A.73-A.74.

<sup>48</sup> Ex. NRC044 at A.3.6.

<sup>49</sup> Ex. JTI001-[R](#) at A.41.

<sup>50</sup> Ex. NRC044 at A.3.7 (citing Ex. SEI015).

<sup>51</sup> Ex. NRC001 at A.3.1.7.

<sup>52</sup> See *Private Fuel Storage* (Independent Spent Fuel Storage Installation), CLI-01-9, 53 NRC 232, 235 (2001) ("[T]he NRC does not presume that a licensee will violate agency regulations wherever the opportunity arises"); *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 207 (2000) ("NIRS also fails to offer documentary support for its argument that AmerGen is likely to violate our safety regulations. Absent such support, this agency has declined to assume that licensees will contravene our regulations).

assurance that any of the drillholes will be properly abandoned because License Condition 10.12 only requires an *attempt* by Strata to locate and abandon drillholes.<sup>53</sup> As discussed in more detail in A.3.1.8 and A.3.1.9 of the Staff's initial testimony, License Condition 10.12 was crafted as part of a risk-informed, performance-based licensing strategy.<sup>54</sup> Implicit in License Condition 10.12 is that Strata will make a good faith effort to abandoned all drillholes and report this effort in the wellfield data package, and the Staff will not concur on the wellfield package if insufficient efforts were made.<sup>55</sup>

In an attempt to provide additional support for Intervenor's arguments, Dr. Larson presents "storymaps" through which he provides information on past ISR sites.<sup>56</sup> While the storymaps may provide an attractive presentation, they are irrelevant to the current proceeding because they focus on unrelated sites in different geographical units and hydrological settings from the Ross projects.<sup>57</sup> Furthermore, the licenses for the sites presented in the storymaps were issued in the 1980s and do not reflect the additional experience gained and more stringent conditions imposed on licensees since that time.<sup>58</sup>

Dr. Abitz's claims regarding the insufficiency of Strata's pump tests are similarly incorrect as they misstate the facts and ignore Strata's use of NUREG-1569 in formulating and administering the tests. The Staff thoroughly refuted Dr. Abitz's claims in A.3.2.4 and A.3.2.5 of its initial testimony, and explained that they reviewed the pump test data in accordance with NUREG-1569 and found it to be acceptable.<sup>59</sup> Additionally, contrary to Dr. Abitz's claims, the

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<sup>53</sup> Ex. JTI001-[R](#) at A.41.

<sup>54</sup> Ex. NRC044 at A.3.7.

<sup>55</sup> *Id.*

<sup>56</sup> Ex. JTI003-[R](#) at A.77-A.85.

<sup>57</sup> Ex. NRC044 at A.3.8.

<sup>58</sup> *Id.*

<sup>59</sup> *Id.* at A.3.11.

pump test data was a 72-hour test, and Dr. Abitz presented no data to establish that the water quality naturally occurring in the OZ and shallow monitoring aquifers are completely distinct.<sup>60</sup>

Finally, Dr. Abitz is incorrect in his claim that the FSEIS is silent on the operation of high-yield industrial wells. As discussed in A.3.2.9 of its initial testimony, the Staff explained that the construction and potential for operation of industrial water-supply wells, including Well No. 22x-19, were considered in the Staff's analysis.<sup>61</sup> To address this issue, the Staff included License Condition 10.19, which places restrictions on wellfield operations in areas influenced by continued pumping from the industrial water-supply wells.

In conclusion, the Staff adequately addressed and refuted all of Drs. Abitz's and Larson's concerns, and established that it had adequate hydrological information to demonstrate Strata's ability to contain groundwater migration. For these reasons, the Board should find in favor of the Staff and Strata and dismiss Contention 3.

#### IV. Conclusion

The Board should dismiss each of the Intervenor's' admitted contentions and affirm that the Staff's environmental review of the Ross Project application complied with applicable law.

Respectfully submitted,

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

Emily Monteith  
Richard S. Harper  
Counsel for NRC Staff

Dated at Rockville, Maryland  
this 12th day of September, 2014.

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<sup>60</sup> *Id.* at A.3.11-A.3.12.

<sup>61</sup> *Id.* at A.3.13.