

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

**DOCKETED 7/23/99**

Greta Joy Dicus, Chairman  
Nils J. Diaz  
Edward McGaffigan, Jr.  
Jeffrey S. Merrifield

**SERVED 7/23/99**

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In the Matter of )  
 )  
HYDRO RESOURCES, INC. ) Docket No. 40-8968-ML  
 )  
(2929 Coors Road Suite 101, ) )  
Albuquerque, NM 87120 )  

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CLI-99-22

**MEMORANDUM and ORDER**

**Introduction**

This decision stems from petitions for review of four partial initial decisions by the Presiding Officer in this subpart L proceeding. Intervenors Eastern Navajo Dine Against Uranium Mining ("ENDAUM"), Southwest Research and Information Center ("SRIC"), Marilyn Morris and Grace Sam have jointly petitioned the Commission for review of the Presiding Officer's decision on waste disposal issues in LBP-99-1 (February 3, 1999). ENDAUM and SRIC have petitioned for review of LBP-99-9 (Historic Preservation) (February 19, 1999), LBP-99-10 (Performance Based Licensing) (February 19, 1999), and LBP-99-13 (Financial Assurance) (March 9, 1999). Finally, Intervenors Sam and Morris have also petitioned the Commission for review of LBP-99-10 (Performance Based Licensing) (February 19, 1999).

The NRC staff and Hydro Resources, Inc. (HRI) oppose Commission review of these decisions.<sup>1</sup>

The Commission has considered the petitions for review, and their attendant responses and replies, as well as the record developed before the Presiding Officer. For the reasons given by the Presiding Officer, and for the reasons given below, the Commission partially affirms LBP-99-1, LBP-99-09, and LBP-99-10.<sup>2</sup> The Commission requests that the parties submit briefs on LBP-99-13 in accordance with Commission direction provided in this decision.

### **Background**

This proceeding concerns a materials license that authorizes Hydro Resources, Inc. (“HRI”), to conduct an *in situ* leach uranium mining and milling operation in Church Rock and Crownpoint, New Mexico, pursuant to 10 C.F.R. Part 40. The license (SUA-1508), which was issued by the NRC staff on January 5, 1998, authorizes HRI to construct and operate ISL uranium mining facilities for a five year period on the Church Rock, Unit 1, and Crownpoint sites. HRI’s planned ISL uranium recovery process involves two primary operations. The first

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<sup>1</sup>In addition to their petitions for Commission review of the Presiding Officer’s decisions, Intervenor’s have filed four petitions in the United States Court of Appeals for the District of Columbia seeking judicial review of the same decisions. Twice in recent months we faced similar situations and went on to decide pending appeals on the ground that “simultaneous appeals to the Commission and to the court of appeals are impermissible.” Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 186 n.1 (1999). Accord, Baltimore Gas & Elec. Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 336 n.1 (1998). In both cases, the court of appeals agreed with our view and issued orders dismissing, as premature, petitions for judicial review filed in advance of not-yet-issued Commission appellate decisions. See Dienethal v. NRC, No. 99-1001(D.C. Cir., Mar. 31, 1999); National Whistleblower Center v. NRC, No. 98-1581 (D.C. Cir., Mar. 31, 1999).

<sup>2</sup> See 10 C.F.R. § 2.1253. As discussed in more detail at Section I.A., infra, the Commission will address in a later decision the “bifurcation” concerns raised by Intervenor’s. Thus, our action to uphold the Presiding Officer’s decisions here does not extend to those portions of the partial initial decisions that relate to bifurcation. In addition, as explained at footnote 28, the Commission denies review of one particular issue involving waste disposal.

occurs in the well fields where a mining solution containing mixture of groundwater, oxygen, and bicarbonate known as lixiviant is injected through wells into an ore zone. The mining solution, in turn, oxidizes and dissolves uranium in the ground. The solution is then withdrawn via production wells. During the second operation, the pregnant lixiviant (i.e., the uranium bearing mining solution) is processed to extract the mined uranium.<sup>3</sup> To date, HRI has not begun licensed activities at the sites.

The Intervenors have raised a number of legal and factual challenges to HRI's license, many of which the Presiding Officer found germane to this proceeding and litigable under Subpart L. See LBP-98-9, 47 NRC 261 (1998). In this opinion, the Commission reviews the first four partial initial decisions the Presiding Officer has issued (LBP-99-1, LBP-99-09, LBP-99-10, and LBP-99-13), resolving questions of waste disposal, historic preservation, performance based licensing, and financial assurance. The Presiding Officer expects to issue additional partial initial decisions by July 23.

### **Discussion**

For the most part, this Commission opinion does not revisit Presiding Officer determinations with which we agree or have no reason to second guess. Because the Presiding Officer has reviewed the extensive record in detail, with the assistance of a technical advisor, the Commission is generally disinclined to upset his findings and conclusions, particularly on matters involving fact-specific issues or where the affidavits or submissions of experts must be weighed.<sup>4</sup> Unless otherwise stated herein, the Commission agrees with the results reached by the Presiding Officer. However, since the petitions for review raise a

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<sup>3</sup> See "Final Environmental Impact Statement: To Construct and Operate the Crownpoint Uranium Solution Mining Project," NUREG-1508 (February 1997) (FEIS) at 2-2.

<sup>4</sup> See, e.g., Louisiana Energy Services (Clairborne Enrichment Center) 47 NRC 77, 93 (1998).

number of issues that call for further review and elaboration, the Commission has considered several matters in some detail.

In considering this first round of Presiding Officer decisions, the Commission has decided not to request plenary appellate briefs from the parties, except on one issue, financial assurance, where we find the current record and briefs inadequate to complete our review. Given the petitions for review, the responses and replies, and the voluminous pleadings and submissions filed with the Presiding Officer, the Commission does not believe additional briefs are necessary or would enhance its ability to decide these issues. The Presiding Officer is in the process of issuing decisions on the remaining issues in the proceeding. In accordance with its May 3, 1999, Order in this proceeding, the Commission will consider petitions for review of these remaining decisions after all of them have been issued by the Presiding Officer.

### **Bifurcation Issues**

In the fall of 1998, the Presiding Officer issued orders<sup>5</sup> “bifurcating” the proceeding and limiting the current phase to questions concerning the only parcel of property (the so-called “Church Rock Section 8” property) where HRI has indicated that mining activity may begin soon. In issuing these orders, the Presiding Officer reserved until later the consideration of issues pertinent solely to the remaining three properties (i.e., Church Rock Section 17, Unit 1, and Crownpoint sites). Subsequently, the Commission denied Intervenors’ petition for interlocutory review of the Presiding Officer’s bifurcation decision.<sup>6</sup>

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<sup>5</sup> Memorandum and Order (Scheduling and Partial Grant of Motion for Bifurcation) (September 22, 1999); Memorandum and Order (Reconsideration of the Schedule for the Proceeding) (October 13, 1999).

<sup>6</sup> Hydro Resources, Inc., CLI-98-22, 48 NRC 215 (1998).

In a footnote to their petition for review of the partial initial decision on Historic Preservation (LBP-99-9), Intervenors ENDAUM and SRIC have raised the bifurcation question anew and claim that the Presiding Officer's action has resulted in impermissible segmentation under the National Environmental Policy Act (NEPA).<sup>7</sup> In their petition on the Financial Assurance partial decision (LBP-99-13), Intervenors again have attacked the Presiding Officer's bifurcation decision and argued that the financial assurance requirements must be met for the entire project at the time of licensing. To ensure a unified review of all bifurcation issues raised by the Intervenors, the Commission will address these matters, and any bifurcation issues raised on appeals from subsequent final initial decisions, later, after the Presiding Officer completes his current series of decisions on the "Section 8" property.

#### **LBP-99-1: Waste Disposal Issues**

*In situ* leach (ISL) or "solution" mining produces two categories of waste: 1) gaseous emissions and airborne particulates resulting from drying of yellow cake and the injection of groundwater with "lixiviant," a mixture of water, dissolved oxygen and bicarbonate ions, and (2) liquid waste associated with operations including well field processing and aquifer restoration.<sup>8</sup> A variety of methods exist to address liquid waste disposal and storage at ISL facilities, including the use of evaporation ponds, deep-well injection, land application, and surface discharge under a National Pollution Elimination System (NPDES) permit. In the present case, the license limits HRI to the use of lined evaporation ponds for the storage of liquid waste. Once water in the ponds is lost to the atmosphere through surface evaporation, the licensee

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<sup>7</sup> Intervenors' Petition for Review of Presiding Officer's Partial Initial Decision LBP-99-9 at 7, n. 11 (March 11, 1999).

<sup>8</sup> FEIS at 2-5, 6, 14, and 16.

must send the resulting sludge to a licensed disposal facility. Currently, the license does not authorize HRI to dispose of material on site. If HRI seeks to employ one or more on-site disposal techniques in the future, it will have to receive approval from NRC and, depending on the method used, other appropriate regulatory bodies.<sup>9</sup>

Intervenors ENDAUM, SRIC, Grace Sam, and Marilyn Morris raised a variety of waste disposal issues before the Presiding Officer and now have raised many of same matters before the Commission in their petition for review. Their principal concern is that the NRC Staff and the Presiding Officer failed to apply the appropriate regulatory requirements to HRI's application. Specifically, they believe that the Presiding Officer erroneously refused to apply 10 C.F.R. § 40.31(h) and Part 40, Appendix A, in their entirety to *in situ* leach (ISL) mining. According to the Intervenors, this reading of NRC rules frees HRI from complying with a large number of relevant requirements.

The Presiding Officer emphasized that Appendix A was specifically promulgated to address the problems related to mill tailings from conventional milling activities and not those stemming from solution (ISL) mining. Nevertheless, while he found that the criteria in Appendix A do not apply wholesale to the HRI license, he agreed with the NRC Staff that "[s]pecific criteria within Appendix A are applicable to this license only when they explicitly apply to ISL mining."<sup>10</sup> We agree with the Presiding Officer's general conclusion that 10 C.F.R. § 40.31(h) and 10 C.F.R. Part 40, Appendix A, "were designed to address the problems related to mill tailings and not problems related to injection mining."<sup>11</sup> In passing the Uranium Mill

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<sup>9</sup> See SUA-1508, License Condition 11.8. "Prior to land application of waste water, the licensee shall submit and receive from NRC acceptance of a plan outlining how the licensee will monitor constituent buildup in soils resulting from the land application."

<sup>10</sup> Hydro Resources, Inc., LBP-99-1, 49 NRC 29, 33 (1999).

<sup>11</sup> Hydro Resources, Inc., LBP-99-1, 49 NRC 29, 33 (1999)

Tailings Radiation Control Act, Congress sought to address the potential harm arising from unregulated uranium tailings piles left at milling sites.<sup>12</sup> Likewise, when the NRC promulgated regulations to implement UMTRCA, it did so with the primary focus of ensuring the control of tailings at sites involving conventional mining and milling.<sup>13</sup> While, as a general matter, Part 40 applies to ISL mining,<sup>14</sup> some of the specific requirements in Part 40, such as many of those found in Appendix A, address hazards posed only by conventional uranium milling operations, and do not carry over to ISL mining. In amending the requirements in Part 40 over the years, NRC has refrained from addressing issues specific to ISL mining and, instead, has generally addressed tailings from conventional operations.<sup>15</sup>

In issuing the HRI license, the Staff appropriately did not insist that HRI meet Part 40 requirements across-the-board. We agree that those requirements in Part 40, such as many of the provisions in Appendix A, that, by their own terms, apply only to conventional uranium milling activities, cannot sensibly govern ISL mining. At the same time, there are a number of general safety provisions in Part 40, Appendix A, such as Criteria 2, 5A, and 9,<sup>16</sup> that are

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<sup>12</sup> See 42 U.S.C. § 7901(a).

<sup>13</sup> See, e.g., 44 Fed. Reg. 50015 (August 24, 1979); Uranium Mill Licensing Requirements (10 C.F.R. Parts 30, 40, 70 & 150), CLI-81-9, 13 NRC 460, 462 (1981); and NUREG-0706, Final Generic Environmental Impact Statement on Uranium Milling (GEIS), dated September 1980.

<sup>14</sup> See 10 C.F.R. §40.4 (definitions of “byproduct material” and “uranium milling”).

<sup>15</sup> See, e.g., 50 Fed. Reg. 41852 (October 16, 1985); 52 Fed. Reg. 43553, (November 13, 1987); 55 Fed. Reg. 45591 (October 30, 1990); and 59 Fed. Reg. 28220 (June 1, 1994).

<sup>16</sup> Criterion 2 indicates that, in most cases, waste from in situ extraction operations should be disposed of at existing large mill tailings disposal sites. Criterion 5A applies to the construction of surface impoundments. Criterion 9 applies to financial surety arrangements.

relevant to ISL mining and, as such, have been appropriately reflected in the license.<sup>17</sup> The current version of Part 40 specifically addresses ISL mining only to a limited extent. In a recent rulemaking proposal (SECY-99-011),<sup>18</sup> the Staff provided some background information on its current approach to ISL mining:

The current Part 40 regulatory framework for uranium and thorium recovery is difficult to administer. The staff's most significant concern with the current requirements is that they primarily address the regulation of conventional uranium mills, the prevailing method when Part 40 was originally promulgated, not ISL facilities. However, ISL facilities have become the source of most of the uranium production in the United States, which is expected to continue into the foreseeable future. Regulating the ISL facilities in the absence of specific regulatory requirements for ISL recovery activities has become increasingly problematic and more complicated for the staff, which has relied heavily on guidance documents and license conditions in this area, as the recovering uranium production industry seeks to expand ISL facility production and submits new applications for additional facilities.

Until the Commission develops regulatory requirements specifically dedicated to the particular issues raised by ISL mining, we will have no choice but to follow the case-by-case approach taken by our Staff in issuing HRI's license. As the Presiding Officer concluded, the "principal regulatory standards governing this application for a license are 10 C.F.R. § 40.32(c) and (d), which mandate protection of the public health and safety."<sup>19</sup> For the purposes of waste disposal issues, we agree with the Presiding Officer that the license in this case ensures

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<sup>17</sup> See, e.g., License Conditions 10.26 (referring to Criterion 5A) and 9.5 (referring to criterion 9).

<sup>18</sup>On June 17, 1999, the Commission held a public meeting on SECY-99-011 (and on two other NRC staff papers), at which numerous "stakeholders," including counsel for SRIC and ENDAUM, spoke. After the meeting, the Secretary of the Commission offered all parties to this and other pending proceedings related to uranium recovery an opportunity to submit comments on the meeting discussions to the Commission by July 23. The Commission understands that any comments it receives will discuss generic uranium recovery issues only, not case-specific issues.

<sup>19</sup> LBP-99-1, 49 NRC at 32.

compliance with these general requirements. While Intervenor's disagree with the choices made by the Staff (and approved by the Presiding Officer), we believe that the requirements imposed on HRI's operations are reasonable and appropriate.

Intervenor's petition for review raises a variety of additional arguments related to waste. None is persuasive. They claim, for example, that HRI has not obtained the necessary approvals under 10 C.F.R. §20.2002<sup>20</sup> for the disposal of waste through land application. In rejecting this claim, the Presiding Officer relied on a statement in the Safety Evaluation Report (SER) that says "[c]urrently, HRI would be limited to using either surface discharge (with appropriate State or Federal permits/licenses), brine concentration, waste retention ponds, or a combination of these three options to dispose of [restoration] waste."<sup>21</sup> The Presiding Officer concluded that HRI need not satisfy §20.2002 at this time because it has not submitted an application to the Commission for deep-well injection, surface water discharge, or land application. In its reply to Intervenor's petition for review, the Staff clarifies that License Condition (LC) 11.8 specifically requires HRI to submit "and receive NRC acceptance of" a plan prior to land application of waste water.<sup>22</sup> In addition, License Condition 9.6 specifically requires HRI to dispose of 11e.(2) byproduct material from the project at a waste disposal site licensed by the NRC or an Agreement State to receive such material. Accordingly, HRI is not required to submit a §20.2002 request at this time because the license does not authorize

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<sup>20</sup> Section 20.2002 requires licensees to "apply to the Commission for approval of proposed procedures, not otherwise authorized in the regulations in this chapter, to dispose of licensed materials generated in the licensee's activities."

<sup>21</sup> LBP-99-1, 49 NRC at 35 (citing SER at 26).

<sup>22</sup> See NRC Staff's Response to Petition for Review of LBP 99-1 (Staff's Response to Waste Petition) at 7-8 (March 5, 1999).

disposal of material at the site. HRI must receive prior NRC approval before it can conduct waste disposal through land application.

Intervenors also renew their claim that the HRI project's FEIS fails to provide a full discussion of the impacts of evaporation ponds and, instead, only covers the impacts from retention ponds. Intervenors apparently believe that these are different types of structures. The Staff, however, has explained that the terms "retention pond" and "evaporation pond" are used interchangeably in the FEIS. We find the Staff's explanation is supported by the FEIS, which specifically indicates that a purpose of "retention ponds" is to promote loss of water through "evaporation."<sup>23</sup>

Intervenors also take issue with the characterization of the "bleed rate" in the technical documents supporting the license. The "production bleed" refers to the amount of water that is withdrawn from production wells in excess of that which is injected into the ground. This practice creates negative pressure which causes uranium rich lixiviant to flow toward the production wells and prevents lixiviant in the ground from migrating outward.<sup>24</sup> The bleed rate is a percentage of the total amount of the production from the mine zone. Intervenors believe that the FEIS provides inconsistent descriptions of the bleed rate, ranging from 40 gallons per minute (gpm) to 1 gpm. We disagree. The planned bleed rate for HRI's project is 1 percent. The maximum flow rate allowed in the license is 4000 gpm. As such, the maximum bleed rate that can be expected is 40 gpm.<sup>25</sup> After extraction, the licensee concentrates the waste from

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<sup>23</sup> See FEIS at 2-12. "The purpose of retention ponds is to store wastewater until treatment, promote evaporative loss of water which cannot be discharged to the environment, and maintain control of source and 11e(2) by-product material found in the liquid effluents from solution mining."

<sup>24</sup> See FEIS at 2-6 and 2-7.

<sup>25</sup> See FEIS, §4.3.1, at 4-26.

the production bleed. Depending on the treatment technique used, the final waste stream resulting from a 40 gpm bleed rate could be either 1 gpm or 10 gpm. The clean water from this treatment (i.e., the portion of the production bleed that is not waste) will be reinjected elsewhere.<sup>26</sup> These various figures account for the different waste streams rates identified by the Intervenor. We are unconvinced by Intervenor's arguments regarding the absence of data for manganese, molybdenum, and selenium in the water quality data. As both HRI and the Staff have pointed out,<sup>27</sup> these elements have been measured and are either present only in insignificant amounts or absent altogether.<sup>28</sup>

Intervenor also argue that the Presiding Officer ignored their claims that HRI has violated 10 C.F.R. Part 40, Appendix A, by failing to accommodate foreseeable operations expansions. The language in Appendix A cited by Intervenor refers to "the amenability of the disposal system" to accommodate future expansion.<sup>29</sup> As stated above, HRI is not currently authorized to dispose of waste at the site. Any disposal or subsequent expansion of disposal

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<sup>26</sup> See NRC's Staff Response to Intervenor Presentations on Liquid Waste Disposal Issues at 30, December 16, 1998. "[C]lean water from reverse osmosis or brine concentration will be reinjected in to the Westwater Canyon Formation where individual constituent concentrations are less than those found in the native ground water, and that aquifer recharge will be performed pursuant to 40 C.F.R. §§ 144-148 of EPA's regulations." Id.

<sup>27</sup> See HRI's Response to Intervenor's November 9, 1998 Briefs in Opposition to Application for a Materials License with Respect to Liquid Waste Disposal Issues at 51 (December 9, 1998); NRC Staff's Response to Intervenor Presentations on Liquid Waste Disposal Issues at 35 (December 16, 1998).

<sup>28</sup> Intervenor have also raised concerns regarding the Presiding Officer's treatment of "two restoration flow descriptions" in the FEIS. However, the concern, which includes a claim that the Presiding Officer adopted a staff position regarding restoration flow information, is too vague to justify merits review under the Commission's standards. See 10 C.F.R. §2.786(b). In addition, it does not contain a reference to the Presiding Officer's decision. Therefore, we do not take review of this particular matter.

<sup>29</sup> See 10 C.F.R. Part 40, Appendix A (Introduction).

capacity would require HRI to obtain approval from the NRC.<sup>30</sup> The NRC would consider any consequences arising from such approvals at that time and, thus, detailed examination of the impact from these speculative actions is not necessary or warranted here.<sup>31</sup>

Intervenors believe that the FEIS fails to include an adequate discussion of retention ponds.<sup>32</sup> However, impacts to soils from evaporation pond construction are described on pages 4-6 through 4-14 of the FEIS, along with estimates of disturbed acreage of various alternatives.<sup>33</sup> See Staff's Response to Waste Petition, at 31. Intervenors also claim that the Presiding Officer neglected their concern regarding the adequacy of pond liners. The Presiding Officer, however, specifically addressed this argument at pages 11 through 13 of his decision.<sup>34</sup>

For the preceding reasons, the Commission declines to overturn the Presiding Officer's conclusions regarding waste disposal issues in LBP-99-1.

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<sup>30</sup> See License Condition 11.8, SER at 7.0, and FEIS at 2.1.2.

<sup>31</sup> These potential future authorizations also fall outside of the scope of this limited proceeding. Intervenors' Petition for Review of Presiding Officer's Partial Initial Decision (Waste Petition) 26 (December 16, 1998). Similarly, Intervenors' concerns about land application data do not appear germane to this proceeding given that the HRI license at issue here does not authorize such activities.

<sup>32</sup> See Waste Petition at 9.

<sup>33</sup> Similarly, Intervenors incorrectly state that the FEIS fails to address the adequacy of pond liners. See FEIS at 4-25 to 4-26; see also HRI License Condition 10.5 (providing additional safeguards). In addition, contrary to Intervenors' assertion, the FEIS does discuss of evaporation ponds in the land use section. See FEIS 3-53 to 3-55.

<sup>34</sup> Intervenors also argue that the "FEIS does not address the impacts of HRI's plan to use existing ponds." Waste Petition at 9. As HRI indicated before the Presiding Officer, however, HRI does not plan to use any of the existing ponds for operations related to Section 8. See HRI's Response to Intervenors' November 9, 1998 Briefs (Waste) at 48 (December 9, 1998).

**LBP-99-09: Historic Preservation**

In their petition for review, Intervenors ENDAUM and SRIC assert that NRC has failed to comply with Section 106 of the National Historic Preservation Act (NHPA) and applicable regulatory provisions such as 36 C.F.R. § 800.3(c). In particular, they argue that the Staff has inappropriately “phased” its historic preservation compliance process. Intervenors acknowledge that the regulations allow for phased NHPA compliance but argue that the Staff has not completed the necessary Section 106 review for any part of the project. In addition, they claim that the Staff has failed to make a reasonable and good faith effort to identify historic properties and has not applied the appropriate criteria to determine any adverse effect on identified properties.

The Presiding Officer considered the range of arguments and testimony regarding NHPA compliance and concluded that Intervenors had failed to demonstrate any violation of the Act.<sup>35</sup> We see no reason to revisit the Presiding Officer’s conclusions in detail. Intervenors have offered no compelling argument against the type of phased compliance utilized by the Staff and have failed to identify any significant defect in the Staff’s NHPA compliance. Both the Presiding Officer and the Commission have already addressed the issue of phased compliance in decision issued at earlier stages in this proceeding.<sup>36</sup> While the previous adjudicatory decisions concerned a stay motion, we see no reason to depart from our fundamental conclusion that phased compliance is acceptable under applicable law.<sup>37</sup> In their

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<sup>35</sup> Hydro Resources, Inc., LBP-99-09, 49 NRC 136 (1999).

<sup>36</sup> See Hydro Resources, Inc., LBP-98-5, 47 NRC 119, 125 (1998); Hydro Resources, Inc., CLI-98-8, 47 NRC 314, 323-324 (1998).

<sup>37</sup> “[W]e are not convinced by Petitioners’ argument that the NRC and HRI are prohibited from taking a ‘phased review’ approach to complying with the NHPA -- the legal position that forms the foundation of Petitioners’ NHPA arguments regarding severe, immediate, and irreparable injury. The statute itself contains no such prohibition, federal case

petition, Intervenors offer a vague argument that the Presiding Officer has impermissibly shifted the “burden of proof” on this issue. However, in challenging the license, it is incumbent upon the Intervenors to identify, with some specificity, what the alleged deficiencies are. Based on his review of the arguments made by Intervenors and the responses from HRI and the Staff, the Presiding Officer reasonably found that Intervenors had failed to identify deficiencies with the Staff’s compliance.<sup>38</sup>

Intervenors also present the Commission with a variety of alleged National Environmental Policy Act (NEPA) violations and factual errors on cultural and historical issues. In particular, they argue that the FEIS sets out a plan for identifying cultural resource impacts but does not contain a complete evaluation of the proposed action’s impacts on cultural resources. The Presiding Officer found that the treatment of cultural resources in the FEIS was acceptable because both the FEIS and the license require that “... if unidentified cultural resources or human remains are found during the project activities, the activity would cease, protective action and consultation would occur, and artifacts and human remains would be evaluated for their significance.”<sup>39</sup> Intervenors claim that since the FEIS was completed before the Staff had finished its Section 106 compliance for Section 8, the FEIS does not contain a description of the actual cultural resource impacts on Section 8 but instead simply lays out a plan to consider those impacts.<sup>40</sup> The Staff, in its response, essentially argues that any

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law suggests none, and the supporting regulations are ambiguous on the matter, even when read in the light most favorable to Petitioners.” 47 NRC at 323-324 (footnotes omitted).

<sup>38</sup> The Commission notes that both the New Mexico State Historic Preservation Department and the Navajo National Historic Preservation Department responded to NRC Staff consultation requests with letters concurring with the conclusion that there would be “no effect” on all cultural resources within the parcel . See LBP-99-09, 49 NRC at 142.

<sup>39</sup> LBP-99-09, 49 NRC at 143.

<sup>40</sup> See FEIS at 3-73 through 3-77.

concern with the information published in the FEIS has been cured because the studies conducted for the 106 process were completed and released before NRC issued the license in January 1998.<sup>41</sup>

The Staff has completed its review of the cultural resource impacts that will result from the conduct of licensed activities on Section 8. The FEIS contains much of this information. However, some of the supporting documents were completed after the FEIS was published. Even if one assumes that the FEIS did not contain all the information considered by the staff in its decision, the overall record for the licensing action includes a complete analysis of the cultural resources for Section 8. Cf. Claiborne Enrichment Center, 47 NRC at 94 (adding post-FEIS Board findings to “environmental record”). We find the Staff’s approach here acceptable. A Supplemental Environmental Impact Statement is not necessary “every time new information comes to light after the EIS is finalized.”<sup>42</sup> As a general matter, the agency must consider whether the new information is significant enough to require preparation of a supplement. The new information must present a “a seriously different picture of the environmental impact of the proposed project from what was previously envisioned.”<sup>43</sup> In this case, the public had access

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<sup>41</sup> After publication of the FEIS in February 1997, the Staff received a report prepared by the Museum of New Mexico’s Officer of Archaeological Studies (Blinman, “Cultural Resources Inventory of Proposed Uranium Solution Extraction and Monitoring Facilities at the Church Rock Site and Proposed Surface Irrigation Facilities North of the Crownpoint Site, McKinley County, New Mexico”). This report was entered into the hearing record. See Hearing Record ACN 9704140140 (April 4, 1997). On June 19, 1997, the Staff provided copies of the report for review and comment to (1) the New Mexico State Historic Preservation Officer; (2) the Navajo Nation Historic Preservation Department (NNHPD); (3) Roger Anyon, Director of the Pueblo of Zuni Heritage and Historic Preservation Officer; and (4) Leigh Jenkins, Director of the Hopi Cultural Preservation Office. NRC Staff’s Response to Petition for Review of LBP 99-9 at 6 (March 22, 1999).

<sup>42</sup> Marsh v. Oregon, 490 U.S. 360, 373, 109 S.Ct. 1851, 1859 (1989).

<sup>43</sup> Sierra Club v. Froehlke, 816 F.2d 205, 210 (5<sup>th</sup> Cir. 1987); see also, South Trenton Residents Against 29 v. Federal Highway Administration, No. 98-5226, 1999 WL 294717, at 4 (3<sup>rd</sup> Cir. May 5, 1999).

to the relevant information and the agency decision makers considered that information before a final decision on the matter was reached.<sup>44</sup> The new information did not present a “seriously different” view of the environmental impacts. We do not find any legal flaw with its later release and consideration and, therefore, decline to alter the Presiding Officer’s decision.

Finally, Intervenor’s have raised a Native American Graves Protection and Repatriation Act (NAGPRA) issue that they believe was not adequately addressed by the Presiding Officer. In LBP-99-9, the Presiding Officer dismissed Intervenor’s NAGPRA claims with regard to the Church Rock Section 8 property because the Act only applies to the disposition of Native American cultural items excavated or discovered on federal or tribal lands. According to the Presiding Officer, Section 8 does not consist of such lands. In its petition for review, Intervenor’s take issue with this finding, claiming that portions of sites in question are federal or tribal land. While we defer to the Presiding Officer’s factual finding on this matter, we note that the Staff appears to have complied with NAGPRA whether or not federal or tribal land exists at the site. Under NAGPRA, consultation and concurrence of the affected tribe take place prior to the “intentional removal from or excavation of Native American cultural items from Federal or tribal lands.” 25 U.S.C. § 3002(c) (emphasis added). However, HRI does not plan any the intentional removal or excavation of cultural items. The applicable regulatory provision in this instance is 43 C.F.R. §10.4, which applies to inadvertent discoveries of “human remains, funerary objects, sacred objects, or objects of cultural patrimony.”<sup>45</sup> The regulations generally do not require prior consultation or concurrence with the affected tribe for these kinds of “unintentional” activities.

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<sup>44</sup> See, e.g., Friends of the River v. Federal Energy Regulatory Commission, 720 F.2d 93, 106-107 (D.C. Cir. 1983).

<sup>45</sup> 43 C.F.R. §10.4(b).

**LBP-99-10: Performance-Based Licensing**

The Presiding Officer's decision in LBP-99-10 addresses a series of Intervenor concerns with the incorporation of "performance based licensing" concepts into the HRI license, and upheld the license's performance based approach. The Commission received two separate petitions for review of this decision, one from ENDAUM and SRIC and the other from Grace Sam and Marilyn Morris. The primary concern raised by both sets of Intervenors is that the license permits HRI to make certain changes to its operations without prior approval by the NRC. In particular, License Condition 9.4 allows the licensee to make changes to its facilities or processes, alter its standard operating procedures, and conduct tests or experiments, without NRC approval, so long as such actions do not conflict with the requirements of the license, do not cause degradation in the safety or environmental commitments made by HRI, and are consistent with NRC's findings in NUREG-1508, and the FEIS and SER for the project. If these conditions are not met, HRI must seek a license amendment. Determinations to make changes under License Condition 9.4 must be made by HRI's Safety and Environmental Review Panel (SERP) and reported to the NRC annually. The decisions of the panel must be submitted to NRC.

Intervenors claim that this license condition impermissibly delegates threshold safety determinations from the NRC to HRI and gives the licensee unilateral discretion in these matters. According to Intervenors, neither the Atomic Energy Act, the Administrative Procedure Act, nor 10 C.F.R. Part 40 allows for such "performance-based licensing." Citing Citizens Awareness Network v. NRC,<sup>46</sup> Intervenors ENDAUM and SRIC also claim that the Staff's decision to apply performance-based licensing in the Part 40 context is impermissible because it was accomplished without issuance of any Commission regulations or policy.

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<sup>46</sup> 59 F.3d 284 (1<sup>st</sup> Cir. 1995).

In rejecting these arguments, the Presiding Officer found that the license condition in question “demonstrates that the license has been carefully thought through so that HRI might make low-risk changes in its mode of operation without advance approval but may not alter its license or make high risk changes in its operations.”<sup>47</sup> In addition, he disagreed with Intervenor’s arguments regarding the authority of the NRC to apply performance-based licensing in the Part 40 context, finding that they had failed to identify any rule or statute prohibiting it. The Presiding Officer also pointed favorably to an analogous practice that has been followed for years in the reactor context under 10 C.F.R. § 50.59.

The Commission sees no reason to reverse the Presiding Officer’s conclusion. License condition 9.4 simply identifies types of minor operational modifications, without significant safety or environmental impact, that HRI may make without obtaining a license amendment from NRC. The use of this licensing concept in HRI’s license is consistent with well-publicized Commission direction to the Staff to employ risk informed and performance based concepts in NRC regulatory activities.<sup>48</sup> The Commission has also repeatedly and clearly called for use of probabilistic risk assessment concepts, whenever possible, in nuclear regulatory matters.<sup>49</sup> We believe that the license condition in question here is consistent with the Commission’s overall direction to the Staff. It is sensible regulatory policy to allow licensees on their own to make minor adjustments and modifications that have little safety or environmental impact. To

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<sup>47</sup> Hydro Resources, Inc., LBP-99-10, 49 NRC 145, 147 (1999).

<sup>48</sup> See, e.g., Staff Requirements - COMSECY-96-061 - Risk Informed, Performance-Based Regulation (DSI-12), April 15, 1997; “Use of Probabilistic Risk Assessment Methods in Nuclear Regulatory Activities; Final Policy Statement,” 60 Fed. Reg. 42622 (August 16, 1995).

<sup>49</sup> See id. at 42628-42629.

require license amendments for all changes, no matter how inconsequential, would burden both licensees and the NRC, to no good end.

Despite Intervenor's suggestion to the contrary, there appears to be no similarity between the facts here and those in the Citizens Awareness Network. The Court in that case stated:

The prior Commission policy regarding decommissioning, embodied in 10 C.F.R. §50.59 and explicated in the Commission's published Statement of Consideration, required NRC approval of a decommissioning plan before a licensee undertook any major structural changes to a facility. This policy was developed through a lengthy notice and comment period, with substantial public participation. [Citations omitted.] The Commission adhered to this policy for almost five years, reiterating its position in at least two adjudicatory decisions. Then, rather suddenly, the Commission circulated two internal staff memos that completely reversed this settled policy, without any notice to the affected public. More troubling, however, was the Commission's failure to provide in those memos, or anywhere else, any justification or reasoning whatsoever for the change.<sup>50</sup>

The use of performance based licensing concepts in the HRI license does not reverse any long established Commission policy on the use of such regulatory mechanisms. Indeed, it is consistent with the Commission's approach to reactor licensing in 10 C.F.R. §50.59. It does not run counter to any agency mandate contained in the Atomic Energy Act or any established Commission regulation. If anything, the use of license conditions such as 9.4 is entirely consistent with the Commission's efforts over the years to allow reasonable flexibility in its regulatory framework. It is simply an additional means through which the NRC can decrease the administrative burden of regulation while ensuring the continued protection of public health and safety. In addition, the NRC Staff has provided a clear, reasoned basis for the

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<sup>50</sup> Citizens Awareness Network, 59 F.3d at 291.

employment of this concept in the *in situ* leach mining context,<sup>51</sup> a rationale that we agree with and hereby adopt.

The Intervenors exaggerate the amount of discretion the license affords HRI. License condition 9.4 sets out an organized procedure that informs the licensee of the type of operational changes which require specific approval from the NRC. It does not grant HRI unfettered discretion to make all decisions free of regulatory oversight. Rather, it allows HRI the flexibility to make only those changes that are consistent with existing license conditions and applicable regulations and do not result in any degradation in the licensee's responsibility to conduct its activities in a manner that is protective of public health and safety. Any changes made by the licensee must be fully documented and reported to the NRC annually. HRI will be subject to NRC enforcement action if it takes an action that is inconsistent with License Condition 9.4.

ENDAUM and SRIC also claim that License Condition 9.4 violates NEPA by authorizing actions without any consideration of their environmental impacts. We disagree. The Staff has considered the impacts of HRI's licensed activities in the FEIS published in February 1997. By its own terms, License Condition 9.4 requires HRI to apply for a license amendment if any change, test, or experiment it undertakes is not consistent with the findings in the FEIS. If the action contemplated by HRI does require a license amendment, NRC will have to follow the

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<sup>51</sup>"The performance-based license condition is structured such that uranium recovery licensees are required to submit applications for all license amendments, unless they can demonstrate that the provisions specified in the performance-based license condition have been satisfied. In addition, the performance-based license condition requires that a summary of all changes made under the condition be provided to NRC in an annual report. Therefore, the performance-based license condition provides the same degree of flexibility contained in the regulations and licenses for other nuclear facilities, and is consistent with established NRC policy." See "Staff Efforts to Reduce Regulatory Impact on Uranium Recovery Licensees," Memorandum from James M. Taylor, Executive Director of Operations, to the Commission, August 26, 1994.

necessary NEPA compliance measures consistent with the regulations in 10 C.F.R. Part 51. Accordingly, the condition is fully consistent with the Commission's requirements and sound NEPA practice.

In addition to their specific concerns with License Condition 9.4, Intervenors ENDAUM and SRIC have also raised a variety of alleged inconsistencies and irregularities in the license itself. The Presiding Officer rejected some of these claims as being outside the scope of this particular partial initial decision and called on the Intervenors to raise their claims with respect to specific substantive issues addressed elsewhere in the proceeding. In their April 1, 1999, motion before the Commission for leave to reply to responses from HRI and the Staff, Intervenors attempt to clarify their concerns and argue that "(t)he issue that ENDAUM and SRIC have raised here is that the performance based license issued to HRI (SUA-1508) violates applicable law and regulations because it incorporates the inconsistent and self-contradictory terms of the application."<sup>52</sup> We decline to disturb the Presiding Officer's decision on this point. Intervenors appear to argue that several alleged inconsistencies and confusing items in the license are the direct result of a performance based licensing policy. Like the Presiding Officer, we fail to see the connection. The Presiding Officer appropriately declined to consider these concerns in the context of LBP-99-10.

### **LBP-99-13: Financial Assurance**

In their March 30, 1999, petition for review on LBP-99-13, Intervenors ENDAUM and SRIC take issue with many of the conclusions made by the Presiding Officer regarding HRI's compliance with NRC's financial assurance requirements. In essence, Intervenors believe that

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<sup>52</sup> See ENDAUM's and SRIC's Motion for Leave to Reply to the Responses Filed by HRI and the NRC Staff to ENDAUM's and SRIC's Petition for Review of LBP-99-10 (Performance-Based Licensing) at 4-5 (April 1, 1999).

HRI must comply with the financial requirements contained in both 10 C.F.R. § 40.36 and 10 C.F.R. Part 40, Appendix A. In particular, they insist that the surety requirements in Appendix A must be met before NRC issues a license.

The Staff has acknowledged that the financial assurance requirements in Criterion 9 of Appendix A to Part 40 do in fact apply to HRI. The license itself requires HRI to submit an NRC-approved surety arrangement as a prerequisite to operating under a license.<sup>53</sup> However, it is unlikely that HRI will begin operation in the near future and it has yet to submit final surety arrangements. Thus, the question has arisen whether the surety is due before licensing or only before operation. Similarly, Criterion 9 also requires that the amount of funds to be ensured be “based on Commission-approved cost estimates in a Commission-approved plan.”<sup>54</sup> Pursuant to Criterion 9, this plan must be submitted by the applicant along with its environmental report, prior to licensing. Criterion 9 does not specify what constitutes “a plan” at early stages of licensing or when the licensee must receive NRC approval for its plan.

The Presiding Officer reasonably concluded that the surety requirement in 10 C.F.R. § 40.36 does not apply to this license. See Hydro Resources Inc. LBP-99-13 slip op. at 3, 49 NRC \_\_ (March 9, 1999). By its own wording, Criterion 9 does not require the creation of a surety arrangement until operations begin. However, our rules on financial assurance plans are much less clear. Further proceedings are necessary to clarify whether and when HRI submitted a plan in this case and the extent to which Intervenors may contest that plan.

In their latest filing, Intervenors claim that “HRI admits that a financial assurance plan does not exist although HRI submitted its ER’s six years ago and a license was issued in

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<sup>53</sup> License Condition 9.5.

<sup>54</sup> 10 C.F.R. Part 40, Appendix A, Criterion 9.

January, 1998.”<sup>55</sup> In addition, in their view, the Staff failed to follow NRC regulations when it did not review and approve the plan prior to granting the license. Before the Presiding Officer, HRI argued that it had in fact submitted information regarding decommissioning costs -- tantamount to a “financial plan” -- in response to an NRC Staff Request for Information (RAI) containing “detailed plans addressing the full cycle economics of the CUP as part of its license application.”<sup>56</sup> The Staff’s views on whether the RAI response meets the provisions of Criterion 9 are unclear. For its part, the Staff has indicated that it:

... is in the process of evaluating this [HRI’s financial assurance] plan, which was recently amended by HRI in response to comments received from the State of New Mexico. [citations omitted] Accordingly, until the Staff completes and documents its evaluation of HRI’s surety arrangements, the record on which the Presiding Officer must base his decisions will be incomplete in this regard, and the issue is thus not yet ripe for his review. In short, there was nothing for the Presiding Officer to analyze in this regard, contrary to the Petitioners’ implication.

NRC Staff’s Response to Petition for Review of LBP 99-13 at 4-5 (April 14, 1999). In its brief before the Presiding Officer, the Staff indicated that it is in the process of reviewing “surety materials” submitted by HRI.<sup>57</sup> In its response to Intervenor’s petition to review, HRI added that “Intervenors’ complaint that the Presiding Officer failed to determine the adequacy of HRI’s

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<sup>55</sup> ENDAUM’s and SRIC’s Reply in Response to HRI’s and the NRC Staff’s Responses to Petitions For Review of LBP-99-10 (Performance Based Licensing Issues) and LBP-99-13 (Financial Assurance for Decommissioning) at 4 (May 10, 1999).

<sup>56</sup> See [HRI’s] Response to Intervenor’s Briefs with Respect to [HRI’s] Technical and Financial Qualifications and Financial Assurance for Decommissioning at 19 (February 11, 1999) citing to RAI. Q1-92.

<sup>57</sup> See NRC Staff’s Response to Intervenor’s Presentations on Technical Qualification, Financial, and Decommissioning Issues at 3, n. 4 (February 18, 1999). The Staff attached two HRI letters to their brief: 1) a June 25, 1997 letter which contained a “Churchrock Section 8 Financial Assurance Plan” that HRI submitted to the State of New Mexico Environment Department, and 2) a December 11, 1998 letter containing draft versions of “Performance Bond, Performance Guarantee Bond and Trust Agreement for the Crownpoint Project.

financial assurance plan is premature; there is, as yet, no approved plan to determine the adequacy of."<sup>58</sup>

Confusion, obviously, permeates this issue. The various statements of the parties raise several unanswered questions. To clarify these positions, the Commission requests that the parties submit briefs addressing the arguments raised in Intervenor's petition for review of LBP-99-13. In doing so, the parties should also address the following questions:

1) Was financial assurance information submitted by HRI adequate to meet the requirements for licensing?,

(2) If HRI is correct in its assertion that an approved financial assurance plan is not a prerequisite to the issuance of a license, what is the meaning of the staff's assertion in its response that "the issue is thus not yet ripe for ... [the Presiding Officer's] ... review?"

### **Conclusion**

For the reasons stated in this decision, the Commission hereby partially affirms LBP-99-1, LBP-99-9, and LBP-99-10. The Commission will address Intervenor's claims regarding bifurcation in a later decision. The Commission requests that the parties submit briefs on LBP-99-13 consistent with the directions set out above. After reviewing these briefs, the Commission will consider whether to hold oral argument. The Commission sets the following briefing schedule:

(1) Intervenor's ENDAUM and SRIC shall file their brief within 21 days of the date of this order. The brief shall not exceed 30 pages.

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<sup>58</sup> [HRI's] Opposition to Intervenor's Petition for Review of Presiding Officer's Partial Initial Decision LBP-99-13 at 3 (April 13, 1999).

(2) The NRC staff and HRI shall file their responsive briefs within 21 days after receipt of Intervenor's' briefs. Their briefs shall be no longer than 30 pages.

(3) Intervenor's may file a reply brief within 10 days of receiving the briefs of the NRC staff and HRI. The reply brief shall be no longer than 10 pages.

All briefs shall be filed and served in a manner that ensures their receipt on their due date. Electronic or facsimile submissions are acceptable, but shall be followed by hard copies within a reasonable time. Briefs in excess of 10 pages must contain a table of contents, with page references, and a table of cases (alphabetically arranged), statutes, regulations, and other authorities cited. Page limitations on briefs are exclusive of pages containing a table of contents and of any addendum containing statutes, rules, regulations, etc.

IT IS SO ORDERED.

For the Commission<sup>59</sup>

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<sup>59</sup>Commissioner Diaz was not available for affirmation of this Memorandum and Order. Had he been present, he would have affirmed the Memorandum and Order.

[Original Signed by  
Annette L. Vietti-Cook

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Annette L. Vietti-Cook  
Secretary of the Commission

Dated at Rockville, Maryland  
this 23rd day of July, 1999.