

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKETED 5/25/00

COMMISSIONERS:

SERVED 5/25/00

Richard A. Meserve, Chairman  
Greta Joy Dicus  
Nils J. Diaz  
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In the Matter of )  
 )  
HYDRO RESOURCES, INC. )  
 )  
(2929 Coors Road Suite 101, )  
Albuquerque, NM 87120 )  
\_\_\_\_\_)

Docket No. 40-8968-ML

CLI-00-08

**MEMORANDUM AND ORDER**

This complex adjudicatory proceeding concerns a Part 40 source and byproduct materials license (SUA-1508) that the NRC staff issued to Hydro Resources, Inc. ("HRI") on January 5, 1998. The license authorizes HRI to construct and operate in situ leach ("ISL") mining facilities<sup>(1)</sup> for a five-year period at certain sites in Church Rock and Crownpoint, New Mexico, after meeting certain license conditions.<sup>(2)</sup> This project (known as the "Crownpoint Uranium Project") involves uranium mining and processing activities at four sites -- Church Rock Section 8, Church Rock Section 17, Unit 1, and Crownpoint. In the course of this adjudicatory proceeding, HRI has indicated that in the foreseeable future it plans to operate only at the Section 8 site. Due to current conditions in the uranium market, HRI thus far has undertaken no activities even at Section 8.

The Eastern Navajo Diné Against Uranium Mining ("ENDAUM"), the Southwest Research and Information Center ("SRIC"), Marilyn Morris, and Grace Sam sought and were granted intervenor status to oppose the grant of HRI's license. See LBP-98-9, 47 NRC 261 (1998), rev'd in part on other grounds, CLI-98-16, 48 NRC 119 (1998). During the course of this adjudication, the Presiding Officer has issued seven partial initial decisions.<sup>(3)</sup> Each has led to a petition for review before the Commission.<sup>(4)</sup>

The March 9, 1999, partial initial decision which we review here (LBP-99-13, 49 NRC 233 (1999)) resolved decommissioning financial assurance questions in favor of HRI. The Presiding Officer rejected SRIC's and ENDAUM's argument that HRI had failed to comply with the decommissioning financial assurance requirements of 10 C.F.R. § 40.36 and Part 40, Appendix A, Criterion 9. On July 23, 1999, the Commission issued a decision that, inter alia, agreed with the Presiding Officer "that the surety requirement in 10 C.F.R. § 40.36 does not apply to this license," and pointed out that "by its own wording" the rule that is applicable, Criterion 9 of Appendix A to Part 40, requires no surety arrangement "until operations begin." CLI-99-22, 50 NRC 3, 18 (1999). The Commission found the agency's "rules on financial assurance plans much less clear" and called for further briefs "to clarify whether and when HRI submitted a plan in this case and the extent to which Intervenor may contest that plan." Id. at 18-20.

Based on our review of LBP-99-13, the briefs filed in response to CLI-99-22, and other germane portions of the record, we conclude that HRI has failed thus far to submit an adequate financial assurance plan and that, until it does, it cannot use the license it has received from the NRC. We therefore add an additional condition to HRI's license prohibiting use of the license until an NRC-approved financial assurance plan is in place.

**I. BACKGROUND**

**A. The Regulatory Requirements Governing Financial Assurance for Decommissioning**

Part 40 of 10 C.F.R. governs the domestic licensing of source material such as uranium. Part 40 addresses decommissioning financial assurance in two places. The first is section 40.36 which provides, in relevant part, that:

Except for licenses authorizing the receipt, possession, and use of source material for uranium or thorium milling, or byproduct material at sites formerly associated with such milling, for which financial assurance requirements are set forth in appendix A of this part, criteria for providing financial assurance for decommissioning are as follows:

(a) Each applicant for a specific license authorizing the possession and use of more than 100 mCi of source material in a readily dispersible form shall submit a decommissioning plan as described in paragraph (d) of this section.

\* \* \* \* \*

(d) Each decommissioning funding plan must contain a cost estimate for decommissioning and a description of the method of assuring funds for decommissioning from paragraph (e) of this section, including means for adjusting cost estimates and associated funding over the life of the facility. The decommissioning funding plan must also contain a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning and a signed original of the financial instrument obtained to satisfy the requirements of paragraph (e) of this section.

\* \* \* \* \*

(e) Financial assurance for decommissioning must be provided by one or more of the following methods:

\* \* \* \* \*

(2) A surety method, insurance or other guarantee method....

The second portion of Part 40 addressing decommissioning financial assurance is comprised of Criteria 9 and 10 in Appendix A, "Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material from Ores Processed Primarily for Their Source Material Content."<sup>(5)</sup> Criterion 9 provides, in relevant part, that:

Financial surety arrangements must be established by each mill operator prior to the commencement of operations to assure that sufficient funds will be available to carry out the decontamination and decommissioning of the mill and site and for the reclamation of any tailings or waste disposal areas. The amount of funds to be ensured by such surety arrangements must be based on Commission-approved cost estimates in a Commission-approved plan for (1) decontamination and decommissioning of mill buildings and the milling site to levels which allow unrestricted use of these areas upon decommissioning, and (2) the reclamation of tailings and/or waste areas in accordance with technical criteria delineated in Section I of this appendix, The licensee shall submit this plan in conjunction with an environmental report....

(When the parties or this Memorandum and Order refer to the "financial assurance plan" we understand the phrase to mean the financial portion of the referenced decontamination, decommissioning and reclamation plan.)

Finally, a third regulatory provision in Part 40 tracks the language of the Atomic Energy Act ("AEA") by providing generally that a license application cannot be approved if it is inimical to the public health and safety. See 10 C.F.R. § 40.32(d), implementing section 69 of the AEA, 42 U.S.C. § 2099.<sup>(6)</sup>

**B. LBP-99-13**

In LBP-99-13, the Presiding Officer issued five rulings relevant to this appeal. First, he ruled that the substances at issue (pregnant lixiviant and the yellowcake extracted from it) fall under an exception to 10 C.F.R. § 40.36 covering "the receipt, possession, and use of source material for uranium ... milling," and that HRI's operation therefore did not fall within section 40.36's detailed financial assurance requirements. See 49 NRC at 235.

Second, the Presiding Officer rejected intervenors' argument that the issuance of the HRI license without a demonstration of financial assurance is inimical to the public health and safety under 10 C.F.R. § 40.32. He reasoned that this argument was undermined by both the inapplicability of section 40.36 and also the fact that HRI will not be permitted to commence operations until it has complied with 10 C.F.R. Part 40, Appendix A, Criterion 9. See 49 NRC at 235 (apparently alluding to License Condition 9.5, supra).

Third, he rejected intervenors' argument that HRI must not be permitted to defer the establishment of its surety until after completion of the Church Rock restoration demonstration project. He concluded that the license already expressly prohibits such delay and that the record supports the conclusion that HRI intends to comply with the license requirement. See 49 NRC at 236.

Fourth, the Presiding Officer rejected intervenors' argument that the application of the informal hearing rules of 10 C.F.R. Part 2, Subpart L, deprived intervenors of a fair hearing. He concluded that 10 C.F.R. § 2.1239(a) precluded him from considering a challenge to the validity of the Commission's regulations. See 49 NRC at 236.

Fifth, the Presiding Officer rejected intervenors' challenge to the NRC staff's determination that proper restoration of groundwater will require only nine pore volumes<sup>(7)</sup> -- a determination that affects the amount of surety funds HRI will be required to set aside. He found nothing in the record that would support the intervenors' position, and he also noted that the surety amount can be increased at any time if the NRC staff determines that well-field restoration requires greater pore volumes or a higher cost. See 49 NRC at 236-37.

## C. CLI-99-22

In CLI-99-22, we resolved a number of then-pending challenges to HRI's license, including waste disposal, historic preservation and performance-based licensing claims. On financial assurance we agreed with the Presiding Officer that section 40.36 by its terms does not apply to licenses for in situ mining. See 50 NRC at 18. We then turned to the rule that *does* apply -- Criterion 9 of Appendix A<sup>(8)</sup> -- and found that while it does not require license applicants to provide an actual surety arrangement prior to licensing, it does call for a financial assurance "plan" based on NRC-approved cost estimates. See id.

Commenting that "[c]onfusion ... permeates th[e] issue" of financial assurance, we requested all parties to file briefs on the questions (1) whether the financial assurance information submitted by HRI adequately met the requirements for licensing, and (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?'" 50 NRC at 18-20. We also indicated that "[f]urther proceedings are necessary to clarify whether and when HRI submitted a [financial assurance] plan in this case [as required by Criterion 9] and the extent to which intervenors may contest that plan." See 50 NRC at 18. Finally, we asked the parties to address the issues raised in the intervenors' petition for review.<sup>(9)</sup>

## II. DISCUSSION

Intervenors, in their briefs before the Commission, advance three interrelated lines of argument. First, they claim that HRI's failure to submit a financial assurance plan with cost estimates renders its application in violation of Criterion 9, sections 40.36 and 40.32 of our regulations, and section 69 of the AEA. Second, they argue that both the scope and content of the financial information HRI has submitted fail to satisfy the requirements of Criterion 9. Third, they maintain that the adequacy of HRI's plan is ripe for litigation now because a later hearing for resolution of the financial assurance question would violate their statutory hearing rights.

As we stated in CLI-99-22, questions have arisen here because "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." 50 NRC at 18. Criterion 9 is clear enough on what the applicant must *ultimately* provide to demonstrate financial assurance -- i.e., a financial assurance plan, including NRC-approved cost estimates, and "prior to the commencement of operations," an actual surety arrangement based on the cost estimates. Where Criterion 9 is unclear is on timing questions surrounding the financial assurance plan: (1) when must the license applicant submit the plan, (2) when must our staff review and approve it, and (3) when may intervenors raise, and obtain a hearing on, alleged deficiencies in the plan?

Given that this is the agency's first in situ uranium leach mining case, it is perhaps not surprising that some confusion has developed. The confusion arises in part because our general regulatory scheme governing uranium milling, Part 40, "specifically addresses ISL mining only to a limited extent," leaving us "no choice but to follow the case-by-case approach taken by our Staff in issuing HRI's license." CLI-99-22, 50 NRC at 9. The Commission today provides clarifications that should allow this and future proceedings to reach an orderly conclusion.

As we explain in detail below, we conclude that the NRC staff's review and approval of the financial assurance plan and its cost estimates most logically should come prior to, or be part of, the issuance of a license. This was not done here. Nonetheless, given the current posture of this adjudication, we see no need to set aside HRI's already-granted license. Instead, we have decided to impose an additional condition on the license, in order to correct the effects of HRI's failure to submit, and obtain NRC staff review of, the required financial information. The new condition prohibits *use* of the license until the required information is submitted and a financial assurance plan approved by the NRC staff is in place. We also lay out the framework for intervenors' pursuit of a hearing on financial assurance plan issues and address a number of miscellaneous matters.

### A. Sufficiency of Application

According to intervenors, the absence of an NRC-approved cost estimate for the decommissioning of the Crownpoint uranium project precludes the requisite findings that HRI's license application both satisfies the requirements of Criterion 9 and section 40.36 and provides reasonable assurance of public health and safety as required by the AEA and section 40.32. Consequently, argue intervenors, the NRC staff should not have issued HRI a license. See Intervenor Brief at 8. We find the Criterion 9 argument decisive and concentrate our discussion on it.<sup>(10)</sup>

Intervenors assert that the Presiding Officer's ruling ignores the language of Criterion 9, the regulatory history underlying that criterion, and the NRC staff's established practice of requiring approval of cost estimates as part of its licensing review. See Intervenor Brief at 8. Intervenors argue that Criterion 9 establishes a two-step process for ensuring adequate surety for milling operations: first, at the time when a license applicant submits an environmental report, the applicant also must file "Commission-approved cost estimates in a Commission-approved [decontamination, decommissioning and reclamation] plan;" and second, surety arrangements consistent with the approved plan must be in place prior to commencement of the facility's operation. See Intervenor Brief at 9. Intervenors assert that HRI filed neither the requisite cost estimates nor a financial assurance plan along with its environmental report, that none of HRI's environmental filings has contained such a plan or cost estimates, and that the few financial documents HRI has submitted into the record have likewise failed to provide the requisite information. See Intervenor Brief at 10.

We agree with intervenors' general argument that a plan for decommissioning including cost estimates should have been

submitted prior to issuance of the license;<sup>(11)</sup> we also conclude that NRC staff should have reviewed and approved the plan as part of the license-issuance process. While we recognize that Criterion 9 is not without ambiguity, it does clearly require submission of a financial assurance plan that includes cost estimates, and most significantly, it explicitly provides that this submission must be made "in conjunction with" an environmental report.<sup>(12)</sup> Under our regulatory scheme, environmental reports are to be filed prior to issuance of a materials license (and, indeed, are to be filed with the license application itself).<sup>(13)</sup> Beyond the wording of Criterion 9, it makes a good deal of policy sense, in the context of in situ mining, for the NRC to consider a license applicant's cost estimates for cleaning up the mining site, and its plan to pay for cleanup, prior to issuing a license.

As intervenors argue, the rulemaking history of Appendix A, Criterion 9, supports our conclusion that Criterion 9 is best interpreted as requiring submission and approval of a financial assurance plan and cost estimates prior to licensing. See Intervenor Brief at 9. Our "Final Generic Environmental Impact Statement on Uranium Milling," which was issued in conjunction with the promulgation of Appendix A, offered the following explanation of Criterion 9: "A plan for decommissioning of the mill buildings and site, and for disposing of the tailings, in accordance with requirements delineated above, must be proposed by applicants, and approved by appropriate agencies, before issuance or renewal of licenses." See NUREG-0706, at p. 12-5 (1979) (emphasis added).<sup>(14)</sup>

In addition, we note that 10 C.F.R. § 40.31(h) places heavy emphasis on the requirement that license applicants show how the requirements and objectives of Appendix A, which includes Criterion 9, will be achieved. Indeed, "[f]ailure to clearly demonstrate how the requirements and objectives in appendix A have been addressed shall be grounds for [even] refusing to accept an application." We, therefore, believe that the most reasonable interpretation of Criterion 9 is that an applicant must submit the plan for the NRC staff's review prior to the license's issuance.

Not only is our interpretation sensible from the perspective of sound regulatory policy, but also it ensures a meaningful hearing opportunity on all substantive issues material to the agency's licensing decision. Under 10 C.F.R. Part 2, Subpart L, a hearing may, and frequently does, take place *after* the license is issued, as in fact is the case here. See 10 C.F.R. § 2.1205(m). In such situations, intervenors are logically entitled to *pre-hearing* receipt of all information critical to the license, including the full terms of the license itself and its associated financial assurance plan. This does not mean that some matters may not be left for post-licensing action, particularly activities that are simply ministerial or by their very nature require post-licensing verification by our staff, but we do not consider the financial assurance plan among them.

We simply do not agree with the Presiding Officer (or with HRI and the NRC staff) that questions about the financial assurance plan can be left for later resolution or for a second round of hearings closer to the time of operation. A sensible and efficient process requires us to insist that those questions be addressed in connection with the initial application and license.<sup>(15)</sup>

The NRC staff, although stating that HRI submitted sufficient information to issue a license, has continued to request and receive extensive information related to cost estimates. As a result, intervenors cannot be said to have had an opportunity to address the adequacy of the final cost estimates and financial assurance plan. We cannot agree with HRI's argument that information it has already provided to the NRC staff amounts to the requisite financial assurance plan, with cost estimates.<sup>(16)</sup> As suggested in the staff's August 31, 1999, Request for Additional Information ("RAI"), much information required by Criterion 9 is simply missing. The staff specifically indicates in the RAI that it needs further cost information on the "restoration and decommissioning efforts associated with the Crownpoint processing facility [and] the proposed evaporation ponds in Section 8" of Church Rock (RAI, item 7) and, more generally, that it expects to receive from HRI further information on restoration and reclamation costs (RAI, items 1 and 6).<sup>(17)</sup>

The long and short of the matter is that, at this writing, the record before us reveals no final estimates, no final plan, and no final NRC staff review. The NRC staff's suggestion that the intervenors will have the opportunity to contest the issues associated with the financial assurance plan in "an adjudicatory hearing" at some ill-defined future time amounts, in effect, to an acknowledgment that (a) an adequate financial assurance plan is material to licensing (as, in our view, it assuredly is), and (b) the NRC staff itself has not yet resolved all issues material to licensing. See Staff Brief at 20.

In these circumstances, we could, in theory, simply invalidate HRI's license, and call upon our staff to reissue the license only after it has obtained, and is satisfied with, the requested cost-estimate information. However, as a matter of our equitable discretion to fashion sensible remedies, we decline to impose a draconian remedy when less drastic relief will suffice.<sup>(18)</sup> We choose instead to impose the following condition on HRI's license: the company is prohibited from using its license until the NRC staff has approved its decontamination, decommissioning and reclamation plan, including the requisite financial-assurance plan and cost estimate. This condition will protect intervenors' interest by placing them in the same position they would have been in if the staff had approved the financial assurance plan, including cost estimates, prior to issuing the license.<sup>(19)</sup>

We next turn to the case-management question of how best to proceed with the adjudication on financial assurance plan questions. Keeping both expedition and fairness in mind, we provide the following schedule: within 180 days after service of this order, HRI must submit a decontamination, decommissioning and reclamation plan with cost estimates on which a surety will be based. The plan in the first instance need only address the Section 8 site where HRI plans to begin operations first.<sup>(20)</sup> In the meantime, consistent with the Commission-imposed license condition, HRI is prohibited from using its license until the cost estimates are approved by the staff. Within 30 days of service of HRI's financial assurance plan, intervenors must submit a written presentation, pursuant to 10 C.F.R. § 2.1233, pointing out any deficiencies that they see in HRI's submittal. The NRC staff and HRI shall respond within 30 days after service of the intervenors' presentation. The intervenors' presentation shall

not exceed 45 pages and the responses shall not exceed 30 pages.

This matter will be remanded to the Presiding Officer for further proceedings on financial assurance issues. Intervenor's presentation and the responses by the NRC staff and by HRI should be filed before the Presiding Officer.

We now turn to one final point. This case involves an unusual license that covers four separate sites even though the licensee, HRI, has acknowledged that it has no immediate intent to develop any of them other than the Section 8 site. Indeed, at HRI's request, the Presiding Officer issued an order holding the adjudication in abeyance with respect to all sites except Section 8. See Hydro Resources, Inc., LBP-99-40, 50 NRC 273 (1999). His abeyance order, as well as his related decision to "bifurcate" litigation of site-specific issues (including financial assurance issues) between the Section 8 site and the other sites, remains before the Commission on petitions for review, as does intervenor's claim that the Presiding Officer improperly allowed "segmented" review of their NEPA claims. "To ensure a unified review" of these complex and interrelated matters, we intend to address them together in a subsequent opinion. See Hydro Resources, Inc., CLI-99-22, 50 NRC 3, 7 (1999). Nothing, however, forces the Commission and the parties to continue down the somewhat tortured path created by addressing a multi-site license in a single proceeding, if HRI itself intends to use just one site. Therefore, if HRI requests, we specifically authorize the Presiding Officer on remand to allow a reduction in the scope of the license to less than the four sites currently included.

## **B. Miscellaneous Matters**

### **1. HRI's First Motion to Strike**

On September 3, 1999, HRI moved to strike a portion of Intervenor's Brief (pages 11-13) and seven of the twelve attachments to that brief. See HRI's Response Brief, dated Sept. 3, 1999, at 9-12.<sup>(21)</sup> In the offending portion of their brief and supporting documents, intervenors argue that the staff applied a less rigid standard when reviewing and approving HRI's application than when reviewing and approving other ISL uranium mining applications. In support, intervenors cite three in situ licenses issued in 1987, 1989 and 1990.

We grant the motion to strike. Intervenor failed to raise this issue before the Presiding Officer and are precluded from supplementing the record as of right before us. See, e.g., Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 260 and n.19 (1996) (and authority cited). Moreover, the staff issued the three cited licenses before the NRC's 1994 adoption of a performance-based licensing approach for ISL sites. This change in practice undermines the three licenses' relevance to the issues in this proceeding.

### **2. HRI's Second Motion to Strike, and Motion to Impose Sanctions**

On September 14, 1999, HRI moved to strike intervenor's September 13<sup>th</sup> Reply Brief on the ground that it had exceeded by six pages the page limit imposed by the Commission in CLI-99-22. HRI also moved for sanctions against both the intervenors and their counsel in the amount of HRI's costs to prepare its motion to strike. On September 15<sup>th</sup>, intervenors withdrew the September 13<sup>th</sup> version of their Reply Brief and substituted in its stead a Reply Brief that presented shorter versions of the same arguments proffered in the September 13<sup>th</sup> Reply Brief. Intervenor's September 15<sup>th</sup> filing complied with the Commission's page limit. On September 29<sup>th</sup>, the NRC staff filed a brief stating that it considered HRI's September 14<sup>th</sup> motion to strike moot and recommended against imposing sanctions.

We agree with the staff that intervenor's withdrawal of the offending brief rendered moot HRI's motion to strike, and we deny the motion on that ground. We also deny HRI's motion for sanctions. The Commission has never ruled on its authority to assess costs against a party under these circumstances. However, even assuming that we have such authority, we hardly consider the exceeding of a page limit to be an error so great as to merit such a sanction -- especially when the offending counsel immediately corrected the error once attention was brought to it.

### **3. Request for Oral Argument**

Intervenor asserts that oral argument would assist the Commission in understanding the complex procedural history of this case and the voluminous hearing record. See Intervenor Brief at 30. Although we acknowledge that the record in this Subpart L proceeding is indeed voluminous (nearly 500 documents, excluding attachments), our resolution of this petition for review -- essentially a postponement of the merits-related financial assurance questions -- renders an oral argument unnecessary.

### **4. Board's Ruling regarding Groundwater Restoration**

Intervenor contends that LBP-99-13 incorrectly chastises intervenors for failing to provide analysis or expert testimony casting doubt on the NRC staff's estimate that groundwater could be restored by using nine pore volumes. Intervenor points to their expert Dr. Sheehan's testimony that nine pore volumes seriously underestimates the number of pore volumes required for restoration. See Intervenor Brief at 22-23, quoting Sheehan Direct Testimony at 15 n.6, appended to ENDAUM's and SRIC's Brief in Opposition to HRI's Application for a Materials License with Respect to: Financial Assurance for Decommissioning, dated Jan. 11, 1999.

We interpret the Presiding Officer's language not as chastisement, but merely as a finding that intervenor's analysis and expert testimony were not as convincing as those of the staff on the issue of groundwater restoration. We agree with the Presiding Officer that Dr. Sheehan's testimony is unconvincing. Dr. Sheehan's attempt to establish the insufficiency of nine

pore volumes is comprised of nothing more than a brief footnote alluding summarily to the fact that two other ISL projects required significantly more pore volumes. Dr. Sheehan does not indicate why the two other ISL projects were geologically analogous to the Crownpoint Uranium Project, nor does he address the pore volumes needed to restore the aquifers at any other ISL projects. (There are currently six ISL projects: Crow Butte, Cogema, Pathfinder North Butte, HRI, PRI, and Rio Algom Smith Ranch.) Finally, we note that the Presiding Officer pointed out that the staff could, prior to HRI's beginning operations, increase the required number of pore volumes and the surety amount. See LBP-99-13, 49 NRC at 236-37, citing License Condition 9.5.

**5. Remaining Proceedings**

We still are considering intervenors' pending petitions for review of four decisions by the Presiding Officer: LBP-99-18, 49 NRC 415 (1999); LBP-99-19, 49 NRC 421 (1999); LBP-99-30, 50 NRC 77 (1999); and LBP-99-40, 50 NRC 273 (1999). See note 4, supra. And, as we indicated above, we are reserving for "unified review" all abeyance, bifurcation and segmentation issues raised by intervenors, and will discuss those issues in a subsequent opinion.

**III. CONCLUSION**

The Commission therefore orders:

- (1) The ruling in LBP-99-13 regarding financial assurance is modified in part; the license is conditioned, as set forth above; and the case is remanded to the Presiding Officer for further proceedings consistent with the findings and conclusions in this order.
- (2) HRI's September 3<sup>rd</sup> Motion to Strike is granted.
- (3) HRI's September 14<sup>th</sup> Motion to Strike is denied as moot.
- (4) HRI's September 14<sup>th</sup> Motion for Sanctions is denied.
- (5) Intervenors' request for oral argument is denied.

IT IS SO ORDERED.

For the Commission<sup>(22)</sup>

**/RA/**

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Annette L. Vietti-Cook  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 25<sup>th</sup> day of May, 2000.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

Docket No. 40-8968-ML

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In the Matter of )  
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HYDRO RESOURCES, INC. )  
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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing COMMISSION MEMORANDUM AND ORDER (CLI-00-08) have been served upon the following persons by U.S. mail, first class, or through NRC internal distribution.

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[Original signed by Adria T. Byrdsong]

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Office of the Secretary of the Commission

Dated at Rockville, Maryland,  
this 25<sup>th</sup> day of May 2000

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1. "In situ leach mining" (also called injection mining or borehole leaching) involves the injection of a leach solution (lixiviant - in HRI's case, local ground water fortified with either oxygen or air and either carbon dioxide or sodium bicarbonate (License Condition 10.1)) through lined wells into a uranium-bearing ore body to form a chemical compound with the uranium; the dissolving of the uranium from the host rock into the lixiviant, forming pregnant lixiviant; the mobilization of the uranium complex formed; and the surface recovery of the solution bearing the uranium complex via production wells. The uranium is then separated from the pregnant leach solution and processed into yellowcake by milling unit operations at the surface. Unlike conventional milling operations, in situ extraction requires no ore mining, transportation, crushing or grinding, and it produces no conventional mill tailings. It does, however, produce solid and liquid wastes similar to those of conventional processes. Generally, the most serious environmental impact associated with this kind of uranium operation is the potential for groundwater contamination -- specifically, elevated levels of trace metals in the groundwater. Following completion of in situ leach mining, licensees are required to restore the affected groundwater to appropriate standards (which, in HRI's case, are set forth in License Condition 10.21). In this "financial assurance" portion of the HRI proceeding, intervenors are particularly concerned about HRI's financial ability to restore the groundwater to the required standards.

2. The license contains Condition 9.5 (regarding financial assurance) requiring HRI to submit an "NRC-approved surety arrangement" for decommissioning, reclamation, and groundwater restoration costs before it can operate under the license. See License No. SUA-1508 at 2.

3. See LBP-99-1, 49 NRC 29 (1999) (waste disposal); LBP-99-9, 49 NRC 136 (1999) (Historic Preservation Act); LBP-99-10, 49 NRC 145 (1999) (performance-based licensing); LBP-99-13, 49 NRC 233 (1999) (financial assurance); LBP-99-18, 49 NRC 415 (1999) (technical qualifications); LBP-99-19, 49 NRC 421 (1999) (radioactive air emissions); and LBP-99-30, 50 NRC 77 (1999) (groundwater, cumulative impacts, NEPA, environmental justice). Separately, the Presiding Officer issued a decision holding in abeyance further proceedings on issues that do not involve the Section 8 site. See LBP-99-40, 50 NRC 273 (1999).

4. We addressed petitions for review of LBP-99-1, -9, -10, and part of -13 in CLI-99-22, 50 NRC 3 (1999). Still before the Commission are pending petitions for review of LBP-99-18, -19, -30, and -40. Those petitions remain under active consideration. Cf. 65 Fed. Reg. 7074 (Feb. 11, 2000) (appointing two members of the NRC staff as "Commission adjudicatory employees"). We will address them in a subsequent decision.
5. Criterion 10 is not at issue in this proceeding.
6. "The Commission shall not license any person to transfer or deliver, receive possession of or title to, or import into or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such a person for such purpose would be inimical to the ... health and safety of the public."
7. "Pore volume" (also known as "total porosity") refers to the volume of water that will completely fill all of the void space in a given volume of porous matrix. The rate of decrease in the concentration of contaminants in a given volume of contaminated porous media is directly proportional to the number of pore volumes that are exchanged (i.e., circulated) through the same given volume of porous media. Hence, the phrase "nine pore volumes" refers to the volume of water that the NRC staff would require HRI to circulate through the aquifer in Church Rock Section 8, in order to expel lixiviant from that aquifer.
8. We stated that "[t]he Staff has acknowledged that the financial assurance requirements in Criterion 9 of Appendix A to Part 40 do in fact apply to HRI." 50 NRC at 18. In the NRC staff's brief responding to the questions posed in CLI-99-22, the staff correctly points out that it has gone only so far as to acknowledge the applicability of some portions of Criterion 9, but not all of it. See NRC Staff's Response Brief on Financial Surety Issues, dated Sept. 3, 1999, at 10 n.13. See also NRC Staff's Response to Presentations on Technical Qualification, Financial, and Decommissioning Issues, dated Feb. 18, 1999, at 5.
9. These issues were: did the Presiding Officer err by (1) failing to address intervenors' argument that HRI had failed to submit to the NRC a financial assurance plan that complies with the agency's requirements for decommissioning financial assurance; (2) failing to address intervenors' argument that a surety is required for the entire licensed operation, not just for Section 8; (3) ruling on intervenors' claims without allowing them the opportunity to reply to what intervenors consider late-filed new information submitted by the NRC staff; (4) ruling that, because lixiviant is source material, the entire Crownpoint Project is exempt from section 40.36; (5) concluding that "HRI will not be permitted to commence operations until it has complied with ... Criterion 9;" (6) denying intervenors' claim that the NRC staff's deferral of an evaluation of HRI's financial surety until after licensing violated their right to a hearing; (7) dismissing intervenors' health and safety concerns by determining that section 40.36 does not apply and that HRI will be required to comply with Criterion 9 prior to operations; (8) stating that "[i]ntervenors claim, without citation to the record or to any document, that HRI plans to establish surety only after completion of the Churchrock restoration demonstration project;" and (9) stating that intervenors did not provide any analysis or expert testimony casting doubt on the NRC staff's estimates that it will take 9 pore volumes for proper restoration of groundwater. See Petition for Review at 3-9.
10. Consequently, we need not reach intervenors' arguments regarding 10 C.F.R. § 40.36 and section 69 of the AEA.
11. As the Commission noted in discussing the cost estimates in CLI-99-22, "...this plan must be submitted by the Applicant along with its environmental report, prior to licensing." 50 NRC at 18.
12. Criterion 9's ambiguity comes from its use of the term "licensee" rather than "applicant" in referring to the submission of the environmental report. The staff and HRI argue that the plain language of Criterion 9 requires only "licensees" to submit, and obtain approval for, the required plan and cost estimates. And, according to the staff and HRI, the submission and approval need not take place prior to licensing, but only prior to approval of a surety and commencement of operation. However, we have found, and still find, substantial ambiguity with regard to the requirements of Criterion 9. See CLI-99-22, 50 NRC at 18-19. This is particularly true with regard to "what constitute 'a plan' at early stages of licensing" and when NRC approval of the plan and cost estimates is first required. Id. The parties advance competing theories on the significance of Criterion 9's reference to a "licensee." The NRC staff and HRI observe that the Commission could have expressly referred to "applicant or licensee" as it did elsewhere in Appendix A. See NRC Staff Brief at 7, 10-11; HRI Brief at 5. Intervenors make the point that the reference to "licensee" merely makes clear that existing licensees at the time of promulgation of Appendix A were also required to comply with requirements of Criterion 9. See Intervenor's Aug. 13, 1999, Brief at 9 n.4.
13. 10 C.F.R. § 51.60 Environmental Report--Materials licenses:
  - (a) Each applicant for a license or other form of permission, or an amendment to or renewal of a license or other form of permission issued pursuant to Parts 30, 32, 33, 34, 35, 36, 39, 40, 61, 70 and/or 72 of this chapter, and covered by paragraphs (b)(1) through (b)(5) of this section, shall submit with its application to the Director of Nuclear Material Safety and Safeguards the number of copies, as specified in § 51.66, of a separate document, entitled "Applicant's Environmental Report" or "Supplement to Applicant's Environmental Report," as appropriate.
- (Emphasis added). Cf. 10 C.F.R. §§ 50.30(f), 51.45(a), 51.50, 51.53(b), 51.53(c)(1), 51.54, 51.61, 51.62(a), 52.17(a)(2), 52.79(a)(2), 54.23, 61.10, 61.28(b), 70.21(f), 70.21(h), 72.16(c), 72.34; 10 C.F.R. Part 50, Appendix M, ¶ 3; 10 C.F.R. Part 52, Appendix M, ¶ 3 -- all of which require that an Environmental Report be submitted contemporaneous with an application.
14. The staff and HRI argue against any relevance of NUREG-0706 to the questions before us by emphasizing, in part, the NUREG's focus on mill tailings. See NRC Staff Brief at 6-11; HRI Brief at 6 n.1 But the express inclusion of, and emphasis on, management and disposal of uranium mill tailings does not eliminate the broader scope of Criterion 9 or the NUREG. Although in situ leach mining produces no conventional mill tailings, the scope of the cost-estimates and related plan to be approved by



the Commission under Criterion 9 includes "decontamination and decommissioning of mill buildings and the milling sites to levels which allow unrestricted use of these areas upon decommissioning" as well as "the reclamation of tailings and/or waste areas." Appendix A, Criterion 9 (emphasis added). These latter aspects of decontamination, decommissioning and reclamation are directly applicable to in situ leach mining.

15. As we held in CLI-99-22, however, we do not believe that the staff needed to withhold the license until receiving HRI's actual surety arrangement. See 50 NRC at 18. Surety arrangements are matters appropriately addressed after issuance of the license, and even after completion of a hearing. Criterion 9 makes clear that a surety arrangement is necessary as a prerequisite to *operating*, not as a prerequisite to *licensing*.

16. See HRI Brief at 3-4, 6. The four financial submissions on which HRI relies are: its application package which, according to HRI, included "detailed plans addressing the full cycle economics of the project;" HRI's 1996 response to NRC staff's Request for Additional Information ("RAI-92"); the surety material which HRI submitted to the staff on June 25, 1997; and additional surety material submitted to the staff on December 11, 1998.

17. See Letter from John J. Surmeier, NRC, to Richard F. Clement, Jr., HRI, dated Aug. 31, 1999, attached to Intervenors' Reply Brief, dated Sept. 15, 1999. See also NRC Staff's Response Brief on Financial Surety Issues, dated Sept. 3, 1999, at 20-21:

Since HRI's 1997 financial plan does not form an adequate basis on which to estimate what it would cost a third party to decommission HRI's Section 8, restore the groundwater there, and perform land reclamation efforts, step one of the final approval process has not been completed, and HRI's financial assurance plan has not been approved by the Staff. If adequate cost-estimate information is received from HRI, the Staff would then be able to determine the initial amount of surety which HRI will be required to provide.

(Emphasis added.) As noted earlier in this order, 10 C.F.R. § 40.31 requires that "[e]ach application must clearly demonstrate how the requirements and objectives set forth in appendix A of this part have been addressed," and we have determined that Criterion 9 of that Appendix does apply to this application. This case involves NRC staff requests that HRI provide missing information that is required under our regulations, not simply, as in Duke Power Corp. (Oconee Nuclear Station, Units 1, 2 and 3), CLI-99-11, 49 NRC 328, 341 (1999), an NRC staff request that the license applicant "further describe or explain specific technical issues."

18. HRI has indicated that its purpose in obtaining a license now is not to enable it immediately (or even in the near future) to conduct mining and milling operations, but rather to gain a valuable asset (the license) that would increase the net worth of the company, enable it to attract new capital, and position it to take advantage of future uranium mining opportunities if and when they arise. See HRI's Response to Intervenors' Brief with Respect to HRI's Technical and Financial Qualifications and Financial Assurance for Decommissioning, dated Feb. 11, 1999, at 13-15 and Exh. F at unnumbered page 2.

Invalidating the HRI license would return this protracted proceeding to the beginning and presumably require HRI to start over again. This is unnecessary, given the posture of the case and the nature of the financial assurance issue. The NRC staff's error in issuing HRI a license prematurely was procedural. It is not yet clear whether any substantive defect defeating the license exists. As further explained in the text, therefore, we need not invalidate the license. Conditioning HRI's actual *use* of the license on obtaining NRC staff approval of a financial assurance plan, subject to a subsequent hearing, leaves intact intervenors' ability to demonstrate substantive defects in HRI's financial assurance submission.

19. As noted in note 2, supra, Condition 9.5 of the license already prohibits HRI from actually operating the facility until this agency has approved its surety arrangement.

20. If, as discussed below, the Commission determines in its subsequent opinion that bifurcation is improper, HRI will have to supplement the plan with financial information on the remaining three sites unless HRI chooses to reduce the scope of the license.

21. In that brief, counsel for HRI uniformly failed to include the LBP, ALAB and CLI numbers in the citations to NRC adjudicatory decisions. Counsel is reminded that such references are a necessary part of any such citation.

22. Commissioner Dicus was not available for affirmation to this Memorandum and Order. Had she been present, she would have affirmed the Memorandum and Order.