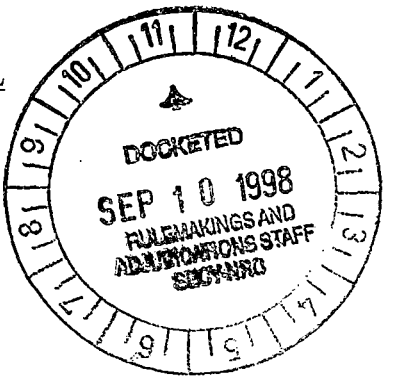
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judge
Peter Bloch, Presiding Officer

Administrative Judge
Thomas D. Murphy, Special Assistant



In the Matter of	
HYDRO RESOURCES, INC. 2929 Coors Road, Suite 101 Albuquerque, NM 87120	Docket No. 40-8968-ML ASLBP No. 95-706-01-ML

HRI's RESPONSE TO SCHEDULING CONFERENCE BRIEFS OF ALL PETITIONERS

I. INTRODUCTION

On July 14, 1998, the Presiding Officer issued an Order (the Order) mandating a scheduling conference to consider HRI's Bifurcation Request and to address other procedural issues. The Order also required the parties to file briefs on the scheduling conference which is currently scheduled for September 15-17, 1998. In accordance with your Order, both HRI and Petitioners filed their respective briefs on September 3, 1998. HRI responds to Petitioners' briefs as follows:

II. ARGUMENT

Petitioners' briefs rehash, at excruciating length, a series of arguments which have been trotted out before for why this proceeding should not be bifurcated as requested by HRI and NRC

U.S. NUCLEAR REGULATORY COMMISSION
RULEMAKINGS & ADJUDICATIONS STAFF
OFFICE OF THE SECRETARY
OF THE COMMISSION

Document Statistics

Postmark Date Certified 9/9/98 (fax)
Copies Received 1
Add'l Copies Reproduced 1
Special Distribution
RIDS

Staff. In summary, Petitioners' arguments are that bifurcation of the hearing: violates NEPA; would somehow deprive Petitioners of their right to a meaningful hearing; and does not promote the efficient use of judicial resources and those of the parties. These arguments are utterly without merit. Petitioners should state their case more forthrightly: notwithstanding the fact that they are unable to point to a single instance of an adverse environmental impact in the 25 year history of ISL mining in the United States, Petitioners' objective is, at any cost, to prevent HRI from ever conducting any ISL mining activity in New Mexico.

A. The Proposed Bifurcation of the Hearing Is Fully Consistent With NEPA.

Petitioners contend that HRI's bifurcation proposal would result in "unlawful segmentation" violative of the National Environmental Policy Act (NEPA or the Act). Petitioners' Brief at 19-25. They argue that bifurcation would result in the "disregard or inadequate consideration of the regional and cumulative effects of the project." Id. at 22.

Petitioners fundamentally misunderstand NEPA and its requirements. Preparation and review of an EIS is governed by a "rule of reason"[1/] and "the nature and form of environmental analysis required in any given case are matters left to the discretion of the agency involved. (citation omitted). . . the judgment of the NRC as the agency with the requisite technical expertise should govern."[2/] Petitioners acknowledge that the Commission already has issued a detailed EIS for the entire Project.[3/] NRC Staff also have issued a Safety Evaluation Report (SER),

---

[1/] See Natural Resources Defense Council v. Morton, 458 F. 2d 827, 837-38 (D.C. Cir. 1972); State of Alaska v. Andrus, 580 F. 2d 465, at 472-73 (D.C. Cir. 1978).

[2/] 49 Fed. Reg. 9356 (March 12, 1984); citing Alaska v. Andrus, supra., 580 F. 2d at 480.

[3/] See Petitioners' Brief at 20-21.

comprehensively addressing the range of potential cumulative impacts of mining at Crownpoint, Unit 1, and Church Rock sites. The EIS, the SER, and the license itself, contemplate the Project proceeding in phases.[4/] Evaluating the license application's proposed phased approach, the Staff concluded that the Project poses no cumulative impacts so long as all license conditions are satisfied.[5/]

NEPA does not prohibit any federal agency that has already complied with the Act by preparing an EIS from bifurcating or segmenting any subsequent hearing procedures as proposed by HRI. NRC staff correctly observed, "once an adequate EIS covering an entire project is issued . . . the project may be completed in stages."[6/]

B. The Proposed Bifurcation Would Afford the Petitioners a Meaningful Hearing on HRI's License; Would Not Infringe Upon the Petitioners' Constitutional Rights; and Would Conserve Judicial Resources.

1. The Proposed Bifurcation Would Provide the Petitioners with a Meaningful Opportunity to Contest the Merits of the License.

Petitioners contend that the proposed bifurcation would "completely" deprive them of a hearing on significant and material licensing issues that they have raised.[7/] They also argue that they are "unlikely" to learn of later developments on which they must seek a second, third, or

---

[4/] The record reflects that NRC has long recognized and approved of HRI's phased approach to this Project. See, e.g., Memorandum and Order Denying Motion for Stay and Request for Prior Hearing, at 14 (April 2, 1998, Cotter, J.).

[5/] EIS at Section 4.13.

[6/] NRC Staff's Response to HRI's Motions for Reconsideration and Bifurcation at 14. See also Cronin v. U.S. Department of Agriculture, 919 F.2d 439, 447 (7th Cir. 1990); Headwaters, Inc. v. BLM, Medford District, 914 F.2d 1174 (9th Cir. 1990); Marsh v. Oregon Natural Resources Council, 490 U.S. 360 (1990).

[7/] Petitioners' Brief at 10.

fourth hearing,[8/] and that their right to a "reasonably prompt hearing" would be abridged by any bifurcation.[9/]

These allegations are not only false but patently disingenuous. As emphasized in its Bifurcation Request, HRI's proposal would not deprive Petitioners of any hearing rights but would merely allow the hearings to proceed in a logical and efficient manner. As detailed in the attached Affidavit of Mark S. Pelizza, Petitioners' concerns relevant to the Project generally, or to Section 8, specifically, could be litigated fully at the current hearing, while concerns relating only to Section 17, Crownpoint or Unit 1 could be addressed *if and when* HRI decides to develop those sites. The claim that Petitioners are "unlikely" to learn of any subsequent developments is particularly outrageous given the fact that HRI repeatedly has informed Petitioners of its intent to keep the public fully informed of all such developments and has even proposed the establishment of a public document room for this purpose.[10/] In any case, the proposed bifurcation is likely to benefit Petitioners since they will then have more information that will be relevant to those later sections with which to evaluate their concerns, if, in fact, they are interested in information that might allay these alleged concerns.

2. Petitioners' Claim That The Proposed Bifurcation Would Deprive Them of Due Process of Law is Baseless.

Contrary to Petitioners' gossamer argument, the right to participate in an unbifurcated NRC licensing hearing is not a liberty interest protected by the Constitution.

[8/] Id. at 11.

[9/] Id. at 13.

[10/] It is also apparent that a reasonable procedure for notification could be incorporated into an Order of the Presiding Officer. In fact, HRI previously has suggested such a notice provision. HRI's Brief on Suggested Scheduling at 3.

Constitutionally-protected liberty interests arise from the Due Process Clause of the Fourteenth Amendment. [11/] Petitioners attempt to argue, instead, that liberty interests arise from a claim to entitlement created by a state or federal statute. In making that argument, however, they point only to case law that analyzes state laws governing parole of prisoners. Parole, freedom from bodily restraint, is a quintessential liberty interest protected by the Consitution. Petitioners' leap of reasoning to the proposition that *any* state or federal statute (including the Atomic Energy Act) placing substantive limits on agency discretion creates a consitutionally-protected liberty interest is a bridge too far. Petitioners' inability to cite any other statutory regime that creates such a consitutionally-protected *liberty* interest underscores the fallaciousness of this argument. All parties contemplate a meaningful hearing on all relevant issues. Surely, Petitioners do not mean to suggest that bifurcating such a hearing somehow violates the United States Constitution.

3. The Proposed Bifurcation Would Promote Judicial Economy.

The proposed bifurcation would promote judicial economy and conserve the resources of all parties by limiting the initial hearing to those issues currently ripe for review and saving other issues for hearing when, and *if,* they arise. It is completely pointless to conduct a full-blown hearing on environmental issues raised by the planned development of Crownpoint, Unit 1, or Section 17 when much of the information needed for such an evaluation is yet to be completed, fundamental license conditions precedent to proceeding with those Project phases have not yet been met, and and it is unclear that HRI would in fact proceed to develop those sites.

[11/] *See Board of Regents v. Roth*, 408 U.S. 564, 572 (1971). Property interests, not liberty interests, arise from and "are defined by existing rules or understandings that stem from an independent source such as state law." *Board of Regents* at 577.

Petitioners' argument that their "limited resources" and their clients' limited mobility necessitates the immediate hearing of all conceivable issues is belied by Petitioners' long-winded filings and a proposed hearing schedule that extends well into the year 2000.

III. CONCLUSION

For the aforementioned reasons, HRI respectfully requests that the Presiding Officer grant HRI's Request for Bifurcation and HRI's proposed Hearing Schedule.[12/]

Respectfully submitted the 9th day of September, 1998.

Anthony J. Thompson
Frederick S. Phillips
David Kim
SHAW, PITTMAN, POTTS & TROWBRIDGE
2300 N Street, N.W.
Washington, D.C. 20037-1128
Tel: (202) 663-8000
Fax: (202) 663-8007

Jeptha P. Hill
LAW OFFICE OF JEP HILL
816 Congress Avenue, Suite 1100
Austin, Texas 78701-2443

ON BEHALF OF HYDRO RESOURCES, INC.
2929 Coors Road, Suite 101
Albuquerque, New Mexico 87120

642510-01 / DOCSDC1

[12/]HRI recognizes that the Order of the Presiding Officer limits this Response to five pages and acknowledges that this Response slightly exceeds that limit. HRI asks that the Presiding Officer excuse this exceedance, however, inasmuch as HRI responds by this single filing to exceedingly lengthy briefs filed by each of the other two groups of Petitioners.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judge
Peter Bloch, Presiding Officer

Administrative Judge
Thomas D. Murphy, Special Assistant

In the Matter of	)	
HYDRO RESOURCES, INC. 2929 Coors Road, Suite 101 Albuquerque, NM 87120	)	Docket No. 40-8968-ML ASLBP No. 95-706-01-ML

AFFIDAVIT OF MARK S. PELIZZA

I, Mark S. Pelizza being duly sworn, declare as follows:

1. My name is Mark S. Pelizza. I am of sound mind and body and competent to make this affidavit. The factual statements herein are true and correct to the best of my knowledge, and the opinions expressed herein are based on my best professional judgment.

PROFESSIONAL QUALIFICATIONS

2. I am Vice President of Health, Safety and Environmental Affairs with Uranium Resources, Inc., parent company to HRI, Inc. (HRI) and URI, Inc (URI). I have served in this position for two years. Prior to being named Vice President, I served as Environmental Manager with similar corporate environmental responsibilities. I have been employed with Uranium Resources, Inc. for 18 years. I have worked as a health, safety and environmental professional in

the in situ leach uranium industry for 20 years. I have been actively involved with professional trade organizations in developing the current in situ leach uranium industry rules, regulations and policies, and have worked with federal and state regulatory agencies for this purpose.

3. During my employment with Uranium Resources, Inc., I have personally supervised all radiological and non-radiological occupational health and safety and environmental programs for operations conducted by URI in Texas. This includes radiological and non-radiological occupational and environmental baseline data collection, operational programs, restoration/reclamation programs and regulatory liaison. I have been the primary managerial support representative for all environmental litigation involving Uranium Resources, Inc.

4. I have personally supervised all radiological and non-radiological health, safety and environmental permitting activities associated with HRI since the company and the Crownpoint Uranium Project (CUP) were conceived. In this capacity, all environmental studies, reports, papers, permit and license applications and regulatory requirements have either been completed by me or under my supervision. I have been HRI's representative at numerous public presentations regarding the project over the past decade. I have also been HRI's regulatory liaison throughout the project. Given this background, I have a first hand knowledge of the CUP developmental history and the general environmental framework under which HRI will be required to operate.

MATERIALS PREPARED

5. The following documents were prepared by me or under my direct supervision:

- May 8, 1989 (Crownpoint Facility Supplemental Environmental Report)
- July 13, 1989 (Crownpoint Cultural Resources Survey)
- January 6, 1992 (Unit 1 Allotted Lease Program Environmental Assessment (EA))
- July 31, 1992 (Unit 1 and Crownpoint Project Environmental Reports)
- October 9, 1992 (Unit 1 Underground Injection Control (UIC) Application)
- October 30, 1992 (Cultural Resources-Environmental Assessment and Management Plan for Crownpoint, NM)
- March 16, 1993 (Church Rock Project Revised Environmental Report)
- March 16, 1993 (Section 9 Pilot Summary Report)
- April 5, 1993 (page changes)
- April 6, 1993 (page changes)
- July 26, 1993 (page changes)
- October 11, 1993 (page changes)
- October 18, 1993 (Analysis of Hydrodynamic Control at Crownpoint and Church Rock)
- October 19, 1993 (Church Rock Surface Hydrology Analysis)
- October 19, 1993 (Church Rock and Crownpoint Aquifer Modeling Supplement)
- November 11, 1993 (page changes)
- January 24, 1994 (page changes)
- November 20, 1993 (Response to NRC Request for Additional Information)
- February 23, 1994 (Description of Radon Emission Controls)
- January 6, 1995 (EA Allotted Lease Program Unit 1)
- October 9, 1995 (Unit 1 UIC Application)
- February 20, 1996 (Response to NRC Comments)

- April 10, 1996 (Response to NRC Comments)
- May 3,1996 (Response to NRC Comments)
- June 18, 1996 (Unit 1 Water Quality Information)
- August 15, 1996 (Response to NRC Comments)
- August 16, 1996 (Response to NRC Comments)
- August 21, 1996 (page changes)
- August 30, 1996 (Response to NRC Comments)
- September 5, 1996 (Surface Water Drainage Analysis at Church Rock)
- September 6, 1996 (page changes)
- September 13, 1996 (Response to NRC Comments)
- September 27, 1996 (Response to NRC Comments)
- September 30, 1996 (Crownpoint Uranium Project COP, Rev. 0.0)
- October 15, 1996 (Response to NRC Comments)
- October 18, 1996 (Restoration Standards Commitment)
- October 20, 1996 (Response to NRC Comments)
- October 29, 1996 (Response to NRC Comments)
- November 18, 1996 (Response to NRC Comments)
- November 26, 1996 (Response to NRC Comments)
- December 20,1996 (NRC Proposed Requirements and Recommendations)
- December 26, 1996 (HRI Acceptance Letter to NRC Proposed Requirements and Recommendations)
- April 1, 1997 (NRC Proposed Requirements)
- April 25, 1997 (HRI Acceptance Letter to NRC Proposed Requirements)

- May 15, 1997 (Crownpoint Uranium Project COP, Rev 1.0)
- June 16, 1997 (Church Rock Design Specifications for Surface Water Diversion Channel)
- July 9, 1997 (HRI Electric Power Supply Commitment)
- August 15, 1997 (Crownpoint Uranium Project COP, Rev 2.0)
- August 18, 1997 (Response to NRC Comments)
- October 24, 1997 (HRI Commitment on Groundwater Baseline Sampling)

MATERIALS REVIEWED

6. To prepare this affidavit, I reviewed the documents listed below:

- October, 1994 (Crownpoint Uranium Solution Mining Project Draft Environmental Impact Statement)
- February, 1997 (Crownpoint Uranium Solution Mining Project Final Environmental Impact Statement)
- December 4, 1997 (Safety Evaluation Report for the Crownpoint Uranium Mining Project)
- January 5, 1998 (U.S. Nuclear Regulatory Commission Source Material License SUA-1508)
- January 9, 1998 (Affidavit of William A. Dodge)
- January 8, 1998 (Affidavit of Klara B. Kelly, Ph.D.)
- January 9, 1998 (Affidavit of Richard J. Abitz)
- January 13, 1998 (Affidavit of Michael G. Wallace)
- January 13, 1998 (Affidavit of Marvin Resnikoff)
- March 2, 1998 (Affidavit of Richard J. Abitz)
- March 4, 1998 (Affidavit of Michael G. Wallace)

- September 1, 1998 (Affidavit of Michael G. Wallace)

EXPERT OPINION

7. This declaration will present my expert understanding of health, safety and environmental effects of in situ leach (ISL) uranium mining based on my 20 years of experience with the ISL uranium recovery industry where I have been involved in all phases of the developmental cycle including licensing, operations, restoration and decommissioning. I will take the opportunity to correct the misrepresentations made in the September 1, 1998, affidavit of Michael Wallace. Many of the statements set forth in Wallace's affidavit are misleading. Furthermore, in stating his concerns associated with the CUP or ISL technology in general, he overlooks the ISL operational mitigation measures or special provisions that have been included in the Crownpoint project license or Operations Plan to assure that these potential concerns are mitigated. In doing so, I believe his affidavit is deceiving.

8. Mr. Wallace fails to recognize significant naturally occurring environmental contamination in uranium mineralized zones and the surrounding groundwater and claims that pristine waters will be changed by HRI's activities. He also fails to recognize the benign nature of the proposed leach solution, describing such solution as "polluted." However, the proposed leach solution is not significantly different from native ground water present in the ore body. It is well documented that radionuclides limit the use of water (RA-226, RN-222 and U3O8) before mining in uranium-bearing aquifers. These are also the primary parameters that are elevated and limit water use after restoration. Currently, the high concentrations of naturally occurring radionuclides at the CUP properties do not affect surrounding water supply wells (even at

Crownpoint where the city has created a cone of depression due to groundwater extraction). The mining process does not introduce new chemical species to the ground water system but does elevate certain species that are native to the host aquifer.

9. The leaching solution utilized by HRI is simply ground water fortified with oxygen, and is benign compared to the acidic, or ammonia bicarbonate leaching solutions that were used in earlier in-situ leach operations. Early leach solutions had the common trait of introducing foreign substances to ground water during mining, which ultimately caused restoration difficulties. The proposed leaching solution for this project simply changes the oxidation state of the ground water and utilizes natural ionic materials within the water as complexing agents. The pH remains neutral, and restoration focuses on reducing naturally occurring constituents in ground water which become elevated as a result of the leaching process. Naturally occurring radioactive materials, in particular uranium, are the most significant parameters limiting pre-mining use of the water and will be subject to close scrutiny during restoration.

10. Wallace claims that the bifurcation is simply a geographic break in properties. The mines are not only separated by geography but are wholly independent operations. The only feature shared by the mines is the roadways on which resin is transported and the "back end" of the process where uranium is removed from the resin, filtered, dried and packaged.

11. In stating his concerns, Wallace mixes what he perceives as common hydrologic issues of concern with what should more properly be labeled as general ISL evaluation criteria. HRI believes that general evaluation criteria that may be relevant to Section 8, or CUP, or any ISL site generally, should be reviewed in the bifurcated proceeding. To assist the Presiding

Officer in this task, I have prepared a table that categorizes various technical issues that I believe are ripe for hearing and have included it as Attachment A. In general, those items that are listed in Column 1 "Site Specific" and Column 2 "General ISL" are ripe for hearing. Those items in Column 3 "CR Only" are site specific Churchrock issues that would be subject to the proposed bifurcated process. Those items in Column 4 "U1 Only" and Column 5 "CP Only" would be placed in abeyance.

12. Under heading I, Wallace states that the same hydrological issues of concern are common to all sites. Wallace states that all sites have common limiting hydrologic criteria and should be evaluated in a single hearing. (Wallace Affid., ¶ 6). While I believe that the regional geology in the San Juan Basin of New Mexico may be somewhat predictable and all CUP sites are located within this region, it is unreasonable to evaluate sites located miles apart based on a general set of regional assumptions. While HRI agrees that information that is learned at one site may be useful in evaluating another, HRI emphasizes that each site is different (as is each wellfield at a given mine site) and should be evaluated individually. Precisely for this reason, development of an ISL facility proceeds in a phased manner, with testing of each wellfield as that wellfield is developed.

13. Wallace states that all CUP sites share a similar water quality, being located within the Westwater and Dakota aquifers. (Wallace Affid., ¶ 7). He also states that these aquifers are regional domestic supplies. While I agree that these aquifers cover a good portion of Arizona, Colorado, New Mexico and Utah, such factors as the density of use, prior use, and degree of mineralization that would limit future use and local environmental sensitivity to future

uses such as ISL mining vary drastically from site to site. For example, in the Ambrosia Lake area, conventional mining has largely dewatered and physically removed the Westwater aquifer. This is also true at the Church Rock area, although water levels have returned and the area is no longer dewatered. These activities have had no adverse impact on the groundwater resources near Crownpoint. ISL mining, with far less impact on water tables than conventional mining, will not have a regional impact that can be described in generalities.

14. Wallace states that "[t]he quality of the groundwater in both the Westwater and Dakota aquifers is excellent to very good at all three sites and that in all locations the water meets U.S. Environmental Protection Agency criteria as an underground source of drinking water (USDW)." (Affid., ¶ 7). This statement requires some clarification. All groundwater that has a concentration of total dissolved solids below 10,000 part per million (ppm) is an USDW -- an exceedingly broad criteria -- so that all ISL mining facilities in the United States are presumably located within USDWs. To receive a state, tribal or EPA underground injection control (UIC) permit (a permit that is needed for ISL mining), EPA must issue an aquifer exemption at ISL mines that are located in USDWs. This has been done at Church Rock Section 8. Such an exemption has also been issued for all of URI's Texas facilities. EPA has justified its decision by pointing out that in the portions of the aquifer where mining will occur, the water is *naturally* mineralized. This mineralization, usually by uranium and associated radioactive daughter products, severely limits the use of the water. This is the case at every uranium mine that I have studied. Therefore, the proper analysis with regard to water quality should be based on site-specific information such as current water quality and uses and other factors. A mine plan that may be reasonable for one location may not be for another.

15. Wallace expresses the concern that the Westwater formation is fluvial in origin and therefore heterogeneous. (Affid., ¶ 8). I agree with his textbook geologic description of the Westwater but disagree with his concerns. Wallace does state a strong case for hydrological analysis on a mine area by mine area basis as is proposed in the Consolidated Operations Plan and required in License Condition 10.23. This review is performed not by a theoretical analysis based on models, but by pump tests which can only be performed after the production well field has been installed and is available for testing. Then, and only then, can the functionality of the monitoring system be tested. If, because of local heterogeneity in geology or because of mechanical problems a well does not respond, it is replaced or repaired. If an overlying or underlying well does respond, operational adjustments such as extraction well placement are implemented. However, Wallace's concerns cannot addressed by a regional analysis but rather by implementation of a well conceived, production scale pump test. This is a standard operating procedure for all of the ISL facilities nationwide and has worked well.

16. Wallace expresses his concern that the proper analysis was not done for faulting. (Affid., ¶ 8). What Wallace does not understand is that HRI's properties have been drilled for uranium exploration purposes at very high density (100 to 200 foot) centers and that the drill data has been thoroughly evaluated by teams of uranium geologists. Mine area faulting at HRI's properties simply does not exist. If faulting did exist and it were to pose a problem in the mining process (i.e., leakage or flow boundaries), it would only be a concern at the scale of the production wellfield (i.e., over a few tens of acres) and would be disclosed and remedied during the production scale pump tests.

17. I am familiar with Dr. Newman's comment and understand that his concerns are more regional in nature. I see no relationship between his statements and the bifurcation issue.

18. Wallace expresses concern that the Crownpoint pump test showed leakage. (Wallace Affid., ¶ 8). HRI disagrees. However, this concern does not apply to to ISL mining at Churchrock Section 8. This is a Crownpoint site issue that HRI proposes to defer until such time as HRI decides to proceed with mining at Crownpoint.

19. In summary, I do not believe that any of the hydrologic issues stated in Wallace Affidavit paragraphs 12-18 justify a hearing on all three proposed mine sites at this time. Rather, the hearing should be bifurcated such that only issues specifically relevant to Section 8 or generally relevant to the entire proposed project are considered at this time.

20. Wallace expresses concerns about HRI's ability to protect groundwater (Wallace Affid., Section II). He expresses doubt about whether HRI will be able to contain pregnant lixiviant within the mine zone, detect excursions, and restore the aquifer. His concerns, however, have no bearing on the merits of a bifurcated hearing.

21. Wallace claims that the characterization of the Westwater hydrology at the sites is wrong; that the pump tests are poorly designed and implemented; that the wrong model was chosen; and that lack of confinement was not demonstrated at Crownpoint. (Wallace Affid., ¶13). I believe that he is incorrect. I do agree that additional production wellfield testing is required and HRI is required by license condition to do so. As shown in the Attachment to my Affidavit, HRI

also agrees that the general criteria for this testing be considered in the initial phase of this hearing.

22. Wallace complains that the pump test has not been conducted on Section 17 of Church Rock. (Wallace Affid., ¶13). HRI agrees. However, if the proceeding is bifurcated, the testing can be phased and reviewed in the future. There is no reason to perform this pump test until a decision is made to proceed with the development of Section 17.

23. Wallace asserts that groundwater velocities calculated for Crownpoint are incorrect. I strongly disagree. In any event, it is irrelevant to Section 8.

24. Wallace criticizes monitor well spacing and excursion parameters (Wallace Affid., ¶3). HRI's proposals are consistent with widely accepted methods. However, HRI believes that the proposed methods apply generally to all sites and should be addressed in the first phase of a bifurcated hearing.

25. Wallace complains (Wallace Affid., ¶13) that HRI cannot restore groundwater and that the Church Rock site demonstration will not be applicable to other sites. I strongly disagree with the contention that restoration cannot be done. It is a routine part of ISL operations nationwide. However, if Wallace wants further proof of the level of effort that is required for restoration, at a site within the Westwater Formation (an aquifer that he claims is very similar from place to place in previous contentions), then his objection, if upheld, will cause the information never to be available. Applicability of the Church Rock Section 8 demonstration to other CUP sites will be demonstrated at such time as HRI decides to proceed with ISL mining at those sites.

26. Wallace expresses the concern (Wallace Affid., ¶14) that pump tests should be performed as part of a license condition. In fact they have to be. Proper wellfield scale pump tests can be conducted only after the wellfield is installed and observation points are available. The pump tests rely on actual field measurements of drawdown, not models or calculations, and may result in additional corrective action, installation of additional monitoring wells or operations controls during mining.

27. Wallace states that additional pump tests will not provide more information. (Wallace Affid., ¶15). In expressing this opinion, he shows a lack of an understanding of the granularity of the data collected during ISL operations and the types of operational controls that are used to assure compliance with the regulations. The number of observation points taken during production scale pump tests, compared to the regional license type tests, increases by several orders of magnitude. The availability of subsurface hydrologic information imposes with increased numbers of wells providing increased data point density. Wallace's conclusion that more refined pump tests will provide nothing, is clearly erroneous.

28. I agree with Wallace's assertion that Section 8 is downgradient of Section 17. However, his assertion that mining in Section 17 after mining and restoration is completed in Section 8 may cause fluid to migrate into Section 8 and cause HRI to perform additional restoration is erroneous for several reasons. First, the probability of groundwater flow with the regional grade (i.e., from Section 17 away from Section 8) is the same next to a restored mine as anywhere else. HRI's plans require an adequate bleed to prevent migration out of the mine area and monitoring to demonstrate that the bleed is working. The monitoring wells between Sections 8

and 17 will demonstrate compliance. Finally, HRI will have a strong incentive not to allow previously restored areas to become "re-mined," because HRI will have to perform costly restoration once more. NRC will require an adequate surety bond until restoration is completed.

29. Wallace also states (Wallace Affid., ¶17) that the mine workings in Section 17 will pose different restoration problems and that more water will be required. Additionally, Wallace claims (Wallace Affid., ¶16) that the mine workings in Section 17 would affect his modeling of Section 8. I do not agree. It is our intent to have the Section 17 mine workings outside of the monitor well ring on Section 8. Therefore, the production scale hydrological tests for Section 8 would not be influenced by the Section 17 workings, and Section 8 could be operated as a separate unit as proposed by HRI.

30. In summary, I have indicated on the attached Table concerns that pertain specifically to Section 8 and those that pertain to the CUP as a whole. These concerns should be addressed in the present phase of the hearing. All other concerns that pertain to aspects of the project which may never be undertaken should be deferred since their consideration at this time is pointless and wasteful.

642174-01 / DOCSDC1

I declare that on the 8th Day of September 1998, in Dallas, Texas, under the penalty of perjury that this Affidavit is true and correct.

By: _____

State of Texas

County of DALLAS

This instrument was acknowledged before me on the 8th of SEPTEMBER, 1998, by MARK PELIZZA

Diana Lee Goodier
Notary Public
My commission expires:
April 8, 1999

ATTACHMENT A

ANALYSIS OF ISSUE RIPENESS FOR ADJUDICATION IN HRI PROPOSED BIFURCATED PROCEEDING

Area of Concern	Site Specific[1]	General ISL[2]	C.R. Only[3]	U1 Only[4]	C.P. Only[5]
Performance Based Licensing		X			
Potential degradation of water supplies at CP threatening public health and violating the SDWA					X*
• Water well replacement criteria					X*
• Hydrogeologic evaluation with regard to water wells					X*
Potential degradation of water supplies at CR threatening public health and violating the SDWA			X		
• Livestock wells are drinking wells			X		
• Underground mine workings issues			X		
Excursions cannot be controlled			X		
Inadequate monitoring for excursions	X				
Improper guidance defining excursions		X			
Inadequate hydrological testing		X			
Inaccurate methods to calculate baseline water quality		X			
Inadequate ground water restoration standards		X			
Failure to demonstrate adequate restoration	X				
Failure to protect ground water from liquid waste disposal					
• Specific wastewater treatment strategy		X			
• Impoundments requirements			X		
• Disposal well requirements	X				
• Surface discharge requirements	X				
• Land application requirements	X				
Improper uranium drinking water standard		X			
Failure to obtain Navajo Nation permits			X		
"Clearly Demonstrate" that ground water will be protected from liquid waste disposal facilities			X		
Adequacy of financial surety for restoration and reclamation			X		X**
HRI is not qualified by Experience of Training		X			
Failure to comply with transportation regulations		X			
Inadequate Air Emission controls					
• Radon Gas			X		
• Yellowcake Dust					X**
Violation of the National Historic Preservation Act			X		X**
Violation of the Native American Graves Protection Act			X		X**
Incomplete EIS information					
• Risk of adversely affecting drinking water			X		
• Discharge of restoration water at Crownpoint & U1				X	X*
• Risk of deep well injection or land application			X		
• Surface water impacts from diversion channels			X		
• Transportation impacts			X		X**
• Risk of uranium market downturn			X		X**
• Residents health impacts			X		X**
• Cultural resources			X		X**
• Housing Values			X		X**
• Mitigation			X		X**
• Adequate cost benefit analysis			X		X**
• No Action Alternative			X		X**
• Environmental Justice			X		X**

ANALYSIS OF ISSUE RIPENESS FOR ADJUDICATION IN HRI PROPOSED BIFURCATED PROCEEDING

FOOTNOTES

[1] Procedures that are dependent on analysis of natural conditions at a given mining location. It may be useful to include the method of evaluation and criteria for acceptance as part of this hearing. Results of the staff evaluation for the Churchrock location are ripe for review. However, the review of specific details pertaining to the Crownpoint and Unit 1 site should be placed in abeyance.

[2] General procedures that are generally applicable to NRC ISL licensees, including any COP project location. They are not influenced by the unique natural conditions at a given site location and are ripe for review at this time.

[3] Operation plans that are or will be dependent on the unique natural conditions found at the Churchrock location and are considered ripe for review in the bifurcated proceeding proposed by HRI.

[4] Operation plans that are or will be dependent on the unique natural conditions found at the Unit 1 location and are not considered ripe for review in the bifurcated proceeding proposed by HRI and should be placed in abeyance.

[5] Operation plans that are or will be dependent on the unique natural conditions found at the Crownpoint location. *"Mining issues" that are not considered ripe for review in the bifurcated proceeding proposed by HRI and should be placed in abeyance. **Issues pertaining to the "back end" of the U_3O_8 processing at the Crownpoint location which are ripe for review.

ANALYSIS OF ISSUE RIPENESS FOR ADJUDICATION IN HRI PROPOSED BIFURCATED PROCEEDING

Vision of the Sequential CUP Development and Opportunity for Participation

STEP 1 – Churchrock Section 8 – Year ~2000

- The plans stated in the COP will be evaluated during operations at Churchrock Section 8. In addition to a commercial scale restoration demonstration that will be conducted, the operation of the Section 8 property will offer evaluation and possible refinement of the plans that were offered in the COP. Baseline water conditions, leach solution control, excursion monitoring, and hydrological results will be evaluated and refined for future operations.
- A commercially representative restoration demonstration will be conducted during the first two years of operation. Future development beyond Step 1 will be contingent on the demonstration.
- All records developed from operations will be available to the public.

STEP 2 – Churchrock Section 17 – Year ~2002

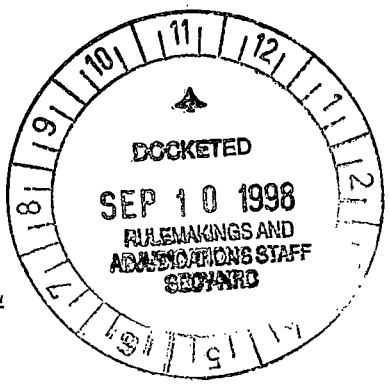
- ISL development of Section 17 will require the results of the restoration demonstration and an additional Underground Injection Control (UIC) permit.
- Section 17 mining will be an extension of the Section 8 development.
- Future potential for public participation: NRC bifurcated issues where Section 8 results can be available for comment. Hearing opportunity on UIC permit.

STEP 3 – Unit 1 Allotted Leases – Year ~2002

- ISL development of Unit 1 will require the results of the restoration demonstration and additional permits including a UIC Permit, Section 106 Archeological clearance, and water rights.
- Operations at Unit 1 will allow engineering evaluation of wellfield equipment operating at greater depth.
- The plans described in the COP and refined at the Churchrock site would be further evaluated at Unit 1. Operation of the Unit 1 property will demonstrate that commercial ISL operations results in the Westwater, in the vicinity of Crownpoint, are as proposed. Baseline water conditions, leach solution control, excursion monitoring, and hydrological results will be demonstrated.
- Potential for public participation: NRC bifurcated issues where Section 8 results can be available for comment. Hearing opportunity on UIC permit. Hearing opportunity on UIC permit. Hearing opportunity on water rights.

STEP 4 – Crownpoint – Year ~2004

- Mining at Crownpoint will require the results of the restoration demonstration in Section 8 and additional permits including a UIC Permit, Section 106 archeological clearance, and water rights.
- HRI will have has to satisfy the requirement for relocating the Crownpoint water supply wells before development can begin.
- All the plans stated in the COP will be refined further at Crownpoint. Baseline water conditions, leach solution control, excursion monitoring, and hydrological results will be demonstrated will be evaluated at the Crownpoint site.
- Potential for public participation: NRC bifurcated issues where Churchrock and Unit 1 results can be available for comment. Water well relocation results can be reviewed. Hearing opportunity on UIC permit. Hearing opportunity on water rights.



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judge
Peter Bloch, Presiding Officer

Administrative Judge
Thomas D. Murphy, Special Assistant

In the matter of	)	
	)	
HYDRO RESOURCES, INC.	)	Docket No. 40-8968-ML
2929 Coors Road	)	
Suite 101	)	ASLBP No. 95-706-01-ML
Albuquerque, New Mexico 87120	)	
	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing documents (HRI's Response To Scheduling Conference Briefs Of All Petitioners And Affidavit Of Mark S. Pelizza) in the above-captioned proceeding have been served on the following by Facsimile or as otherwise indicated (or, in the instances where a fax number is not available, as indicated by an asterisk, by Certified Mail, Return Receipt Requested) on this 9th day of September, 1998.

Administrative Judge
Peter B. Bloch, Presiding Officer
Atomic Safety and Licensing Board
Two White Flint North
11545 Rockville Pike
U.S. Nuclear Regulatory Commission
Rockville, Maryland 20852

Adjudicatory File
Atomic Safety and Licensing Board
One White Flint North
11555 Rockville Pike
U.S. Nuclear Regulatory Commission
Rockville, Maryland 20852

Office of the Secretary
Attn: Rulemakings and Adjudications Staff
One White Flint North
11555 Rockville Pike
U.S. Nuclear Regulatory Commission
Rockville, Maryland 20852

Office of Commission Appellate Adjudication
One White Flint North
11555 Rockville Pike
U.S. Nuclear Regulatory Commission
Rockville, Maryland 20852

Administrative Judge
Thomas D. Murphy
Special Assistant
Atomic Safety and Licensing Board
Two White Flint North
11545 Rockville Pike
U.S. Nuclear Regulatory Commission
Rockville, Maryland 20852

Atomic Safety and Licensing Board Panel
One White Flint North
11555 Rockville Pike
U.S. Nuclear Regulatory Commission
Rockville, Maryland 20852

Jep Hill, Esq.
Jep Hill and Associates
816 Congress Avenue, Suite 1100
Austin, Texas 78701

John J. Indall, Esq.
Comeau, Maldegen, Templeman & Indall
141 East Palace Avenue
Sante Fe, New Mexico 87504-0669

Richard F. Clement, Jr., President
Hydro Resources, Inc.
2929 Coors Road, Suite 101
Albuquerque, New Mexico 87120

Mitzi Young
John Hull
Office of the General Counsel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Diane Curran, Esq.
Harmon, Curran, Spielberg & Eisenberg,
L.L.P.
2001 S Street, N.W., Suite 430
Washington, D.C. 20009

Mitchell W. Capitan, President
Eastern Navajo-Diné Against
Uranium Mining
P.O. Box 471
Crownpoint, New Mexico 87313

W. Paul Robinson
Chris Shuey
Southwest Research and Information Center
P.O. Box 4524
Albuquerque, New Mexico 87106

Lori Goodman
Diné CARE Navajo Nation
10 A Town Plaza, S-138
Durango, Colorado 81301

Mary Lou Jones, President*
Zuni Mountain Coalition
P.O. Box 39
San Rafael, New Mexico 87051

Lila Bird, Executive Director*
Water Information Network
P.O. Box 4524
Albuquerque, New Mexico 87106

Bernadine Martin*
P.O. Box 370
Crownpoint, New Mexico 87313

Marilyn Morris
c/o Roderick Ventura
and Samuel D. Gollis
DNA - People's Legal Services, Inc.
P.O. Box 116
Crownpoint, New Mexico 87313

Grace Sam*
c/o Roderick Ventura
and Samuel D. Gollis
DNA - People's Legal Services, Inc.
P.O. Box 116
Crownpoint, New Mexico 87313

Mervyn Tilden*
P.O. Box 457
Church Rock, New Mexico 87311

Frederick S. Phillips
SHAW PITTMAN POTTS &
TROWBRIDGE
2300 N Street, N.W.
Washington, DC 20037
Counsel for Hydro Resources, Inc.

621537-01 / DOCSDC1