

RAS 10106

DOCKETED
USNRC

June 28, 2005 (3:11pm)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
E. Roy Hawken, Presiding Officer
Richard F. Cole, Special Assistant
Robin Brett, Special Assistant

In the Matter of)

HYDRO RESOURCES, INC.)

PO Box 777)

Crownpoint, New Mexico 87313)

Docket No. 40-8968-ML

ASLBP No. 95-706-01-ML

**INTERVENORS EASTERN NAVAJO DINÉ AGAINST URANIUM MINING'S,
SOUTHWEST RESEARCH AND INFORMATION CENTER'S, GRACE SAM'S
AND MARILYN MORRIS' WRITTEN PRESENTATION IN OPPOSITION TO
HYDRO RESOURCES, INC.'S APPLICATION FOR A MATERIALS LICENSE
WITH RESPECT TO:**

**NEPA ISSUES FOR CHURCH ROCK SECTION 17, UNIT 1 AND
CROWNPOINT**

June 24, 2005

Template=SECY-021

SECY-02

TABLE OF CONTENTS

I.	INTRODUCTION	2
II.	REGULATORY FRAMEWORK.....	3
A.	National Environmental Policy Act (NEPA).....	3
B.	Council on Environmental Quality Regulations	5
C.	Nuclear Regulatory Commission's NEPA Regulations.....	6
1.	Environmental Impact Statement Requirements	6
2.	Record of Decision	8
3.	Burden of Proof.....	9
D.	Case law interpreting NEPA, CEQ regulations and NRC regulations	9
1.	EIS must be based on complete and accurate information	9
2.	EIS must analyze cumulative impacts	10
3.	EIS must contain an accurate statement of purpose and need.	11
4.	EIS must examine and adequately evaluate alternatives.	12
5.	Supplementation of the EIS	13
6.	Mitigation measures.....	14
III.	FACTUAL AND PROCEDURAL BACKGROUND	15
A.	Factual Background	15
1.	Draft Environmental Impact Statement	15
2.	Final Environmental Impact Statement	15
3.	ENDAUM's and SRIC's Concerns	16
4.	HRI's Application and License.....	17
B.	Procedural Background	17

1.	Intervenors' Hearing Request and Evidentiary Presentations for Regarding NEPA	17
2.	Intervenors' Joint Motion for Change in Schedule of Written Presentations (January 18, 2005)	20
IV.	ARGUMENT	20
A.	The FEIS Violates NEPA Because It Fails To Adequately Analyze Environmental Impacts	20
1.	The Cumulative Environmental Impacts of the Proposed Crownpoint Project on Radioactive Air Emissions Are Not Adequately Analyzed in the FEIS.	22
a.	Existing Radiation Levels at Crownpoint Section 17 Are Misrepresented in the FEIS.....	22
b.	The FEIS Inaccurately Analyzes Radiological Air Impacts From the Proposed CUP.	25
c.	The FEIS air quality cumulative impacts analysis is incorrect and inadequate.	26
2.	The Cumulative Impacts of the Proposed Crownpoint Project on Ground Water Resources are Not Adequately Analyzed in the FEIS.	27
a.	The FEIS does Not Accurately Represent Existing Water Quality	27
b.	The FEIS Does Not Accurately Portray the Cumulative Effects of the Proposed CUP with Past Uranium Mining....	28
3.	The Cumulative Environmental Impacts of the Proposed Crownpoint Project on Radiological and Health Effects Are Not Analyzed Adequately in the FEIS.....	30
4.	The Cumulative Impacts of the Proposed Crownpoint Project on Land Use Are Not Adequately Analyzed in the FEIS.	32
B.	The FEIS Violates NEPA Because the Statement of Purpose and Need is Incorrect and Inadequate.....	33
C.	The FEIS Inadequately Identified and Analyzed Alternatives	36

1.	The FEIS Statement of Purpose and Need Resulted in a Flawed Alternatives Analysis and a Predetermined Decision by the NRC.....	37
2.	The FEIS Fails to Explain Why Alternatives to the Preferred Alternative are Rejected	38
3.	The FEIS Fails to Adequately Address the No Action Alternative	39
4.	The FEIS Does Not Perform an Ultimate Cost-Benefit Analysis Among Alternatives	39
D.	The FEIS Does Not Evaluate or Discuss the Impact and Consequences of Its Proposed Mitigation Measures	40
1.	Moving the Crownpoint Water Supply to Mitigate the Threat to Groundwater is Not Evaluated in Sufficient Detail	41
2.	Other Mitigative Measures Defer Analysis of the Project Until After Licensing.....	41
3.	The Mitigation Measures Proposed for Land Use Impacts in the FEIS have Negative Socioeconomic Impacts	42
E.	The NRC Staff Violated NEPA by Failing to Supplement the DEIS and FEIS and Recirculate them for Public Comment.....	42
1.	Performance-Based Licensing Requires Supplementation.....	44
2.	The Action Alternatives Change from the DEIS to the FEIS and Therefore Supplementation is Required.....	45
3.	The Sequence of Mining at Church Rock Has Been Switched Between Section 8 and 17, Warranting Supplementation	46
4.	Other Factual Changes Since the FEIS Merit Supplementation.....	47
a.	The proposed Springstead Estates Project merits FEIS supplementation	47
b.	The passage of the Diné Natural Resources Protection Act in 2005 merits FEIS supplementation as it bans uranium mining within Navajo Indian Country	50
F.	Evidence Submitted By Intervenors Regarding NEPA	51

1. Intervenor's Evidence Regarding NEPA	51
2. Intervenor's Evidence Regarding Cumulative Impacts	53
3. Intervenor's Evidence Regarding Radioactive Air Emissions at Section 8.....	53
4. Intervenor's Evidence Regarding Section 8 Groundwater	57
5. Intervenor's Evidence Regarding Groundwater (2005).....	60
6. Intervenor's Evidence Regarding Environmental Justice Issues	61
7. Intervenor's Evidence Regarding Supplementation of the FEIS	63
G. Summary of Licensing Board's and Commission's Decisions Regarding NEPA	64
1. <u>In the Matter of Hydro Resources, Inc.</u> , Memorandum and Order (Questions) (April 21, 1999) (unpublished).	64
2. LBP 99-30, 50 NRC 77 (1999)	65
3. CLI-00-12, 52 NRC 1 (2000).....	66
4. CLI 01-04, 53 NRC 31 (2001).....	66
5. LBP 99-15, 49 NRC 261 (1999)	66
6. LBP-99-19, 49 NRC 421 (1999).....	67
7. LBP 04-23, 2004 NRC LEXIS 230	67
8. CLI 04-39, 2004 NRC LEXIS 259 (NRC, 2004)	67
V. CONCLUSION.....	67

TABLE OF AUTHORITIES

Code of Federal Regulations

40 C.F.R. § 1500.1	3
40 C.F.R. Parts 1500-1517 (1998)	5
40 C.F.R. §1507.2	5
40 C.F.R. § 1507.3(a)	5
40 CFR §§1508.7	6, 10
40 CFR §§1508.8	6, 10
40 C.F.R. § 1508.25	6, 10
40 C.F.R. § 1502.3	12, 34
40 C.F.R. §1502.14	12, 36, 39
40 C.F.R. § 1502.9	8, 50
10 C.F.R. § 51.10(a)	6
10 C.F.R. § 51.10(b)	6
10 C.F.R. §§51.14(a)(3)	6
10 C.F.R. §§ 51.27	7
10 C.F.R. §§ 51.29	7
10 C.F.R. §§ 51.70 <i>et seq.</i>	6, 7
10 C.F.R. § 51.71(b)	7
10 C.F.R. § 51.71(c)	7
10 C.F.R. § 51.71(d)	7, 39, 50
10 C.F.R. § 51.71 (e)	7
10 C.F.R. § 51.80	7

10 C.F.R. §§ 51.73	8, 43
10 C.F.R. §§ 51.74	8
10 C.F.R. §51.91(a)1	7, 8
10 C.F.R. §51.91(a)-(d)	8
10 C.F.R. §§ 51.72	8, 43, 48, 49, 50
10 C.F.R. §§ 51.92	8, 43, 48, 50
10 C.F.R. § 51.94	9
10 C.F.R. § 51.102	9
10 CFR Part 51, Appendix A to Subpart A, §7	21
10 C.F.R. Part 51, Appendix A Section 4	34
United States Code	
42 U.S.C. § 4332	2, 3, 4, 14, 40
42 U.S.C. § 4321	4
42 U.S.C. § 4334	4
42 U.S.C. § 4335	4
42 U.S.C. §4342	5
National Environmental Policy Act (NEPA) and Atomic Energy Act	
NEPA § 102(2)	4
NEPA § 105	4
NEPA § 104	4
NEPA § 202	5
Atomic Energy Act of 1954 as amended	34

Nuclear Regulatory Cases

<u>In the Matter of Hydro Resources, Inc.</u> , LBP-04-3, 59 NRC 84,109 (2004).....	2
<u>In the Matter of Hydro Resources, Inc.</u> , LPB-99-30, 50 NRC (1999).....	6, 19
<u>In the Matter of Hydro Resources, Inc.</u> , LPB-98-9, 47 NRC (1998).....	15, 17
<u>In the Matter of Hydro Resources, Inc.</u> , LBP-04-23, 2004 NRC LEXIS 230 (2004)	19
<u>In the Matter of Hydro Resources, Inc.</u> , LPB-99-15, 49 NRC 261 (1999).....	67
<u>In the Matter of Hydro Resources, Inc.</u> , CLI-00-12, 52 NRC (2000).....	19
<u>In the Matter of Hydro Resources, Inc.</u> , CLI 01-04, 53 NRC (2001).....	13, 19
<u>In the Matter of Hydro Resources, Inc.</u> , CLI 04-39, 2004 NRC LEXIS 259 (NRC, 2004)	20
<u>In the Matter of Hydro Resources, Inc.</u> , Memorandum and Order (Questions) (April 21, 1999) (unpublished).....	64, 65
<u>In the Matter of Hydro Resources, Inc.</u> , CLI-99-22, 50 NRC 3, 14 (1999).....	14
<u>In the Matter of Hydro Resources, Inc.</u> , Intervenor's Joint Motion for Change in Schedule of Written Presentations (January 18, 2005).....	2
<u>In the Matter of Hydro Resources, Inc.</u> , Order (Revised Schedule for Written Presentations) at 2 (Feb. 3, 2005) (unpublished)	2
<u>Duke Power Company</u> (Catawba Nuclear Station, Units 1 and 2), CLI 83-19, 17 NRC (1983).....	9
<u>Louisiana Energy Services (Claiborne Enrichment Center)</u> , CLI-98-3, 47 NRC (1998) ("LES 2")	4, 12, 34
<u>Louisiana Energy Services</u> (Claiborne Enrichment Center), LBP 96-25, 44 NRC (1996) ("LES 1")	9, 12, 34, 39
<u>Public Service Company of New Hampshire</u> (Seabrook Station, Units 1 and 2), ALAB- 471, 7 NRC n.8 (1978).....	9
<u>Northern States Power Co.</u> (Prairie Island Nuclear Generating Plant Units 1 and 2, ALAB-455, 7 NRC (1978)	14

<u>Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1,2 and 3),</u> <u>LBP-82-117A, 16 NRC 1964, 1992 (1982)</u>	14
---	----

Federal Cases

<u>Baltimore Gas and Electric Co. v. Natural Resources Defense Council, Inc.,</u> 462 U.S. 87 (1983).....	3, 5
<u>Citizens Awareness Network v. U.S. Nuclear Regulatory Commission,</u> 59 F.3d 284 (1st Cir. 1995).....	3
<u>Calvert Cliffs Coordinating Committee v. U.S. Atomic Energy Commission,</u> 449 F.2d 1109 (D.C. Cir. 1971)	3, 4, 10
<u>Montgomery v. Ellis,</u> 364 F.Supp.517, 521 (N.D. Ala. 1973).....	4
<u>Robertson v. Methow Valley Citizens Council,</u> 490 U.S. 332, 348 (1989).....	4, 5
<u>Sierra Club v. U.S. Army Corps of Engineers,</u> 701 F.2d 1011, 1029 (2d Cir. 1983).....	5
<u>Andrus v. Sierra Club,</u> 442 U.S. 347, 356-58 (1979)	5
<u>Sierra Club v. Siegler,</u> 695 F.2d at 964, 972.....	5
<u>Natural Resources Defense Council v. Morton,</u> 458 F.2d 827 (D.C. Cir. 1972).....	5
<u>Hughes River Watershed Conservancy v. Glickman,</u> 81 F.3d 437, 446 (4th Cir. 1996).....	9, 10, 32
<u>Hughes River Watershed Conservancy v. Johnson,</u> 165 F.3d 283, 1999 U.S. App. LEXIS 397, (4th Cir. W. Va. 1999)	9, 10
<u>South Louisiana Environmental Council, Inc. v. Sand,</u> 629 F.2d 1005, 1011-12 (5th Cir. 1980)	10
<u>City of Tenakee Springs v. Clough,</u> 915 F.2d 1308, 1312 (9th Cir. 1990).....	10, 11
<u>Tenakee Springs v. Franzel,</u> 1992 U.S. App. LEXIS 12156 (9 th Cir. Cal. June 2, 1992)..	10
<u>LaFlamme v. Federal Energy Regulatory Commission,</u> 852 F.2d 389, 401 (9th Cir. 1988)	10, 29
<u>Johnston v. Davis,</u> 698 F.2d 1088, 1094-95 (10th Cir. 1983).....	10
<u>Fritofson v. Alexander,</u> 772 F.2d 1225, 1245 (5th Cir. 1985),.....	11, 29, 31

<u>Neighbors of Cuddy Mt. v. United States Forest Service</u> , 137 F.3d 1372, 1379 (9th Cir., 1998).....	11, 14-15, 40
<u>Sabine River Authority v. U.S. Department of the Interior</u> , 951 F.2d 669 (5th Cir.1992).....	11
<u>Sierra Club v. Froehlke</u> , 816 F.2d 205, 210 (5 th Cir. 1987).....	14
<u>City of Carmel-by-the-Sea v. United States DOT</u> , 123 F.3d 1142, 1155 (9 th Cir. 1997).....	12
<u>Citizens Against Burlington, Inc. v. Busey</u> , 938 F.2d 190, 196 (D.C. Cir. 1991).....	12, 37
<u>Simmons v. United States Army Corps of Eng'rs</u> , 120 F.3d 664, 666 (7th Cir. 1997).....	12, 36, 37, 38
<u>DuBois v. United States Department of Agriculture</u> , 102 F.3d 1273, 1286 (1 st Cir. 1996), <i>cert. den.</i> 117 S. Ct. 2510 (1997).....	12, 36, 45
<u>Warm Springs Dam Task Force v. Gribble</u> , 417 U.S. 1301 (1974).....	12
<u>Utahans for Better Transport v. U.S. Department of Transportation</u> , 305 F.3d 1152 (10 th Cir. 2002).....	13
<u>Marsh v. Oregon Natural Resources Council</u> , 490 U.S. 360, 373 (1989)	13, 43
<u>Davis v. Latschar</u> , 202 F.3d 359, 369 (D.C. Cir. 2000).....	13
<u>Laguna Greenbelt, Inc. v. U.S. Dept. of Transp.</u> , 42 F.3d 517 (1994)	14
<u>Methow Valley</u> , 490 U.S. 332, 352-353 (1989)	14, 40
<u>Okanogan Highlands Alliance v. Williams</u> , 236 F.3d 468 (2000).....	14
<u>Citizen's Committee to Save Our Canyons v. U.S. Forest Service</u> , 297 F.3d 1012, 1030 (10 th Cir. 2002).....	35
<u>Davis v. Mineta</u> , 302 F.3d 1104, 1119 (10 th Cir. 2002).....	35
<u>Van Abbema v. Fornell</u> , 807 F.2d 633, 638-639 (7 th Cir. 1986)	38

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD .

Before Administrative Judges:
E. Roy Hawken, Presiding Officer
Richard F. Cole, Special Assistant
Robin Brett, Special Assistant

In the Matter of)	
)	
HYDRO RESOURCES, INC.)	Docket No. 40-8968-ML
PO Box 777)	ASLBP No. 95-706-01-ML
Crownpoint, New Mexico 87313)	
_____)	

**INTERVENORS EASTERN NAVAJO DINÉ AGAINST URANIUM MINING'S,
SOUTHWEST RESEARCH AND INFORMATION CENTER'S, GRACE SAM'S
AND MARILYN MORRIS' WRITTEN PRESENTATION IN OPPOSITION TO
HYDRO RESOURCES, INC.'S APPLICATION FOR A MATERIALS LICENSE
WITH RESPECT TO:**

**NEPA ISSUES FOR CHURCH ROCK SECTION 17, UNIT 1 AND
CROWNPOINT**

June 24, 2005

I. INTRODUCTION

As part of their presentations pursuant to 10 C.F.R. §2.1233, Intervenor Eastern Navajo Diné Against Uranium Mining ("ENDAUM"), Southwest Research and Information Center ("SRIC"), Grace Sam and Marilyn Morris (collectively "Intervenors") hereby submit the following legal brief in support of their opposition to Hydro Resources, Inc.'s ("HRI's") April 13, 1988 materials license application ("Application") (ACN 8805200332), as amended, and its license, SUA-1508, issued by the United States Nuclear Regulatory Commission ("NRC") on January 5, 1998 (hereinafter "License") (ACN 980116066, Hearing Notebook ("NB") 11). Intervenor oppose HRI's Application and License because HRI's Application and License fail to satisfy the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4332, *et seq.*, and related federal agency regulations as well as other standards protecting human health and safety.

Litigation on all issues relevant to HRI's proposed operations at Section 8 in Church Rock concluded in December 2004. In the Matter of Hydro Resources, Inc., LBP-04-3, 59 NRC 84,109 (2004). The Presiding Officer limited Intervenor's filing on the adequacy of the EIS (cumulative impacts, mitigation actions) for the three remaining mining sites (Church Rock Section 17, Unit 1, and Crownpoint) to a pleading incorporating by reference Intervenor's arguments raised with respect to the adequacy of the EIS for Section 8 based on a joint motion from Intervenor, HRI and the NRC Staff ("Staff"). Intervenor's Joint Motion for Change in Schedule of Written Presentations (January 18, 2005) (CAN ML 050350263); Order (Revised Schedule for Written Presentations) at 2 (Feb. 3, 2005) (unpublished) (ACN ML 050410382). Thus,

Intervenors' presentation regarding the adequacy of the EIS for Church Rock Section 17, Unit 1, and Crownpoint hereby incorporates by reference Intervenors' arguments raised with respect to the adequacy of the EIS for Section 8.

HRI's materials license should be revoked because NEPA requirements, Council on Environmental Quality ("CEQ") regulations and Nuclear Regulatory Commission ("NRC") regulations for the preparation and adequacy of a Draft Environmental Impact Statement ("DEIS") and Final Environmental Impact Statement ("FEIS") were violated in that the cumulative environmental impacts of the Crownpoint Uranium Project ("CUP") and mitigation measures were not adequately evaluated, the purpose and need statement for the project as described in the FEIS is invalid, and the FEIS alternatives analysis is insufficient. In addition, the FEIS should have been supplemented as circumstances have changed since it was issued.

II. REGULATORY FRAMEWORK

A. National Environmental Policy Act (NEPA)

The National Environmental Policy Act ("NEPA") is the nation's "basic national charter for protection of the environment." 40 C.F.R. § 1500.1. Language used by Congress in NEPA indicates explicitly that the statute applies to the consideration of all major actions by all federal agencies. 42 U.S.C. § 4332 (1994). The courts have confirmed that NEPA applies to major action by all federal agencies, including the NRC. *See, e.g. Baltimore Gas and Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87 (1983); Citizens Awareness Network v. U.S. Nuclear Regulatory Commission, 59 F.3d 284 (1st Cir. 1995); Calvert Cliffs Coordinating Committee v. U.S. Atomic Energy Commission, 449 F.2d 1109 (D.C. Cir. 1971).

NEPA requires federal agencies to follow certain "action-forcing procedures". These procedures include the requirement that for every major federal action significantly affecting the quality of the human environment, agencies must prepare a detailed environmental impact statement ("EIS"), addressing any adverse environmental effects which cannot be avoided, alternatives to the proposed action, the relationship between local short-term uses and the maintenance and enhancement of long-term productivity of the environment, and "any irreversible and irretrievable commitments of resources that would be involved in the proposed action." NEPA § 102(2), 42 U.S.C. § 4321, 4332 (2).¹ (1994) See also Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989); Louisiana Energy Services (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87 (1998) ("LES 2").

A NEPA analysis involves a "finely tuned and systematic" balancing of "[e]nvironmental amenities" against "economic and technical considerations." Calvert Cliffs Coordinating Committee v. AEC, 449 F.2d 1109, 1113 (D.C. Cir. 1971). To "ensure that the balancing analysis is carried out and given full effect," an environmental impact statement must be "detailed" and the analysis carried out "fully and in good faith." Id., 1114-1115; 42 U.S.C. § 4332(2)(C). An environmental impact statement must evaluate the environmental impacts of a project in sufficient detail to permit a meaningful analysis. Montgomery v. Ellis, 364 F.Supp.517, 521 (N.D. Ala. 1973) (rejecting environmental impact statement for insufficient project description).

¹ NEPA Section 105 states that NEPA's policies and goals are to supplement those in existing authorizations for federal agencies. NEPA, § 105, 42 U.S.C. § 4335. Section 104 states that nothing in the purpose, policies or goals sections affect an agency's statutory obligations to comply with environmental quality standards or criteria or to coordinate or consult with other agencies, or to base action on recommendations or certifications of other agencies. NEPA § 104, 42 U.S.C. § 4334.

Moreover, the Courts have held that through the EIS process federal agencies are mandated to take a "hard look" at all of the significant consequences of their actions.

Baltimore Gas & Electric Company v. Natural Resources Defense Council, 462 U.S. 87 (1983)); Robertson v. Methow Valley Citizens Council, 490 U.S. 350; Natural Resources Defense Council v. Morton, 458 F.2d 827 (D.C. Cir. 1972).

The EIS must set forth sufficient information for the general public to make an informed evaluation and for the decision maker to "consider fully the environmental factors involved and to make a reasoned decision after balancing the risks of harm to the environment against the benefits to be derived from the proposed action." Sierra Club v. U.S. Army Corps of Engineers, 701 F.2d 1011, 1029 (2d Cir. 1983) (holding invalid as violating NEPA the Corps' reliance on an EIS whose conclusions lacked a substantial basis).

B. Council on Environmental Quality Regulations

NEPA created the Council on Environmental Quality ("CEQ"). NEPA § 202, 42 U.S.C. §4342. The CEQ issued regulations implementing NEPA's requirement that federal agencies prepare an EIS. 40 C.F.R. Parts 1500-1517 (1998).

Each federal agency must comply with the CEQ regulations. 40 C.F.R. §1507.2; Andrus v. Sierra Club, 442 U.S. 347, 356-58 (1979); Baltimore Gas & Electric v. NRDC, 462 U.S. 87, 100 n.12 (1983); Sierra Club v. Siegler, 695 F.2d at 964, 972. The CEQ regulations direct agencies to establish their own procedures to supplement, as necessary, the CEQ regulations. 40 C.F.R. § 1507.3(a).

The regulations adopted by the CEQ to implement NEPA require that environmental impact statements include consideration of direct impacts, indirect impacts

and cumulative environmental impacts of proposed federal actions such as the Crownpoint Project. See 40 CFR §§1508.7, 1508.8, 1508.25. The CEQ regulations define cumulative impact as:

the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 CFR §1508.7.

C. Nuclear Regulatory Commission's NEPA Regulations

The NRC has adopted regulations to implement NEPA Section 102(2), consistent with the NRC's other governing statutes, "and which reflect the Commission's announced policy to take account of the [1978 CEQ regulations]." 10 C.F.R. § 51.10(a). The statement of purpose in the NRC regulations implementing NEPA (10 C.F.R. Part 51) indicates that NRC licensing functions shall be conducted in a manner that is "both receptive to environmental concerns and consistent with the Commission's responsibility ... for protecting the radiological health and safety of the public." 10 CFR §51.10(b).

1. Environmental Impact Statement Requirements

The NRC regulations provide for preparation of environmental impact statements, defined as "detailed written statement[s] as required by section 102(2)(C) of NEPA." 10 C.F.R. §§51.14(a)(3); 51.70 *et seq.* When an EIS will be prepared, the NRC must publish a notice of intent to prepare an EIS and conduct a scoping process.

² Despite these regulatory requirements, HRI had argued that an EIS was not required in this case. HRI NEPA Response at 6-7. The Presiding Officer, in LBP 99-30, determined that in fact an EIS was appropriately prepared here: "the Staff's decision to prepare an EIS was consistent with its responsibility under 10 C.F.R. § 51.20." 50 N.R.C. at 75.

10 C.F.R. §§ 51.27, 51.29. The NRC Staff then prepares a draft EIS, which should be prepared concurrently or integrated with environmental impact analysis and related surveys or studies required by federal law. 10 C.F.R. §§ 51.70(a).³ The NRC articulates the requirements for both the draft EIS and the final EIS in the draft EIS regulations. 10 C.F.R. § 51.91(a)(1). The EIS includes consideration of major points of view concerning the environmental impacts of the proposed action and alternatives, and analyzes the significant problems and objections raised by other agencies, affected Indian tribes, and individuals. 10 C.F.R. §§ 51.71(b). The EIS lists all federal permits, licenses, approvals, and other entitlements necessary for the proposed action, and indicates if it is uncertain whether a particular approval is necessary. 10 C.F.R. §§ 51.71(c).

The EIS “should also include consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives and indicate what other interests and consideration of federal policy, including factors not related to environmental quality if applicable, are relevant to the consideration of environmental effects of the proposed action.” 10 C.F.R. §51.71(d). The analysis must quantify the factors considered “to the fullest extent practicable,” and discuss important factors that cannot be quantified in qualitative terms. Id.

The EIS must give “due consideration to compliance with environmental quality standards and requirements,” such as zoning and land use regulations, thermal or water pollution limitations, or requirements imposed by federal, state, and local agencies responsible for environmental protection. 10 C.F.R. § 51.71(d). Finally, the draft EIS includes a preliminary recommendation by the Staff. 10 C.F.R. § 51.71(e).

³ For a materials license application, “except as the context may otherwise require, procedures and measures similar to those described in §§ 51.70, 51.71, 51.72, and 51.73 will be followed.” 10 C.F.R. § 51.80(a).

Notice of the publication of the draft EIS is published and the NRC Staff requests comments on the proposed action and the draft within a period of at least 45 days. 10 C.F.R. §§ 51.73, 51.74. After consideration of the comments received on the draft EIS, the NRC Staff prepares a final EIS, following the same format as the draft EIS. 10 C.F.R. §51.91(a)(1). The final EIS will include responses to any comments on the draft EIS, discuss any relevant responsible opposing view not adequately discussed in the draft and respond to the issues raised, state how the alternatives considered and the decisions based on the final EIS will or will not achieve the requirements of sections 101 and 102(1) of NEPA and other environmental laws and policies, and a final analysis and action recommendation. 10 C.F.R. § 51.91(a)-(d).

Under NRC regulations, a supplement to either a draft EIS or a final EIS will be prepared if (1) there are substantial changes in the proposed action relevant to environmental concerns, or (2) significant new circumstances or information relevant to environmental concerns and bearing on the proposed action arise. 10 C.F.R. §§ 51.72(a), 51.92(a). A notice of availability and a comment period will accompany release of a supplement. 10 C.F.R. §§ 51.72(c), 51.92(d)(1). *See also* CEQ requirements for supplementation of EIS at 40 C.F.R. § 1502.9.

By preparing the DEIS and the FEIS, the NRC Staff has recognized that NEPA, the CEQ regulations, and the NRC regulations implementing NEPA apply to the NRC's consideration of the Crownpoint Uranium Project.

2. Record of Decision

The final EIS accompanies the decision making process and is considered by the

Commission in its decision making. 10 C.F.R. § 51.94. A Commission decision on a proposed action shall be accompanied by a "concise public record of decision". 10 C.F.R. § 51.102(a). Until the record of decision is issued, the Commission cannot take action concerning the proposal that would have an adverse environmental impact or limit the choice of reasonable alternatives. 10 C.F.R. § 51.102(b).

3. Burden of Proof

The NRC staff generally has the burden of proof in complying with NEPA. Duke Power Company (Catawba Nuclear Station, Units 1 and 2), CLI 83-19, 17 NRC 1041, 1049 (1983); Louisiana Energy Services (Claiborne Enrichment Center), LBP 96-25, 44 NRC 331, 338 (1996) ("LES 1"). The applicant, however, has the burden on issues that assert deficiencies in the environmental report, or "if the applicant becomes a proponent of a particular challenged position set forth in the EIS." Louisiana Energy Services, 44 NRC at 338-39, citing Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-471, 7 NRC 477, 489 n.8 (1978).

D. Case law interpreting NEPA, CEQ regulations and NRC regulations

1. EIS must be based on complete and accurate information.

In order for an environmental impact statement to serve its functions of informing decision makers and the public, it is "essential" that the EIS not be based on "misleading" data. Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 446 (4th Cir. 1996) *appeal after remand at*, Hughes River Watershed Conservancy v. Johnson, 165 F.3d 283, 1999 U.S. App. LEXIS 397, (4th Cir. W. Va. 1999) (rejecting EIS that contained misleading projections of a project's economic benefits). Misleading assumptions "can defeat the first function of an EIS by impairing the agency's

consideration of the adverse environmental effects of a proposed project," and by "skewing the public's evaluation of a project." Id., citing South Louisiana Environmental Council, Inc. v. Sand, 629 F.2d 1005, 1011-12 (5th Cir. 1980). See also Johnston v. Davis, 698 F.2d 1088, 1094-95 (10th Cir. 1983) (rejecting EIS where "artificially" and "unrealistically" low discount rate, used to calculate benefits of the water project, was "misleading" and resulted in "an unreasonable comparison of alternatives to the proposed project"); Calvert Cliffs Coordinating Committee v. AEC, 449 F.2d 1109, 1115 (D.C. Cir. 1971) (if a decision "was reached procedurally without individualized consideration and balancing of environmental factors-conducted fully and in good faith-it is the responsibility of the courts to reverse").

2. EIS must analyze cumulative impacts

In accord with NEPA, a federal agency prepared EIS must "consider" cumulative impacts. 40 C.F.R. § 1508.25(c). NEPA requires that where "several actions have a cumulative . . . environmental effect, this consequence must be considered in an EIS." City of Tenakee Springs v. Clough, 915 F.2d 1308, 1312 (9th Cir. 1990), later proceeding at Tenakee Springs v. Franzel, 1992 U.S. App. LEXIS 12156 (9th Cir. Cal. June 2, 1992). See also CEQ regulations at 40 C.F.R. §§ 1508.7, 1508.8, 1508.25. An EIS must provide an analysis of the cumulative effects of a proposed project together with other past, present, and reasonably foreseeable future actions. It is not sufficient to review the proposed project and only other proposed activities. Rather, the EIS must address all other projects whether they are pending or not. LaFlamme v. Federal Energy Regulatory Commission, 852 F.2d 389, 401 (9th Cir. 1988) (holding inadequate an

environmental impact statement that did not analyze cumulative effects of the proposed project and other projects, pending or otherwise, in the project's area).

To "consider" cumulative effects, some quantified or detailed information is required. Without such detailed information, neither the courts nor the public, in reviewing the NRC's decisions, can be assured that the NRC provided the hard look that it is required to provide. Neighbors of Cuddy Mt. v. United States Forest Serv., 137 F.3d 1372, 1379 (9th Cir., 1998). NEPA requires that an analysis of cumulative effects be provided; it is not sufficient merely to summarize impacts or to present them in conclusory form. As the Fifth Circuit Court of Appeals has pointed out:

[A] meaningful cumulative-effects study must identify: (1) the area in which effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions -- past, proposed, and reasonably foreseeable -- that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate.

Fritofson v. Alexander, 772 F.2d 1225, 1245 (5th Cir. 1985), *overruled on other grounds*,

Sabine River Authority v. U.S. Department of the Interior, 951 F.2d 669 (5th Cir. 1992).⁴

It is not appropriate to defer consideration of cumulative impacts to a future date. "NEPA requires consideration of the potential impact of an action *before* the action takes place." City of Tenakee Springs v. Clough, 915 F.2d 1308, 1313 (9th Cir. 1990). (emphasis in original).

3. EIS must contain an accurate statement of purpose and need.

An environmental impact statement must address the "underlying purpose and

⁴ The Fritofson court affirmed an injunction prohibiting Army Corps of Engineers' project work because of an inadequate environmental assessment and failure to prepare a cumulative impacts study. The Sabine River court overruled the Fritofson decision on the standard for review of an agency decision concerning whether to prepare an environmental impact statement.

need to which the agency is responding.” 40 C.F.R. § 1502.3. *See also* 10 C.F.R. Part 51, App. A Section 4. The EIS examines the need for a facility and the benefits it will create to assist the NEPA cost-benefit analysis. LES 2, 47 NRC at 89.

The need for the proposed facility is merely a shorthand expression to describe the principal beneficial factor that is to be weighed against the various costs of the proposal in striking the cost-benefit balance required by NEPA and the Commission’s implementing regulations.

LES 1, 44 NRC at 349.

Courts evaluate an agency’s statement of purpose and need under a reasonableness standard. City of Carmel-by-the-Sea v. United States DOT, 123 F.3d 1142, 1155 (9th Cir. 1997). Courts caution that an agency may not manipulate the purpose statement to bring about a desired outcome. Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991).

4. EIS must examine and adequately evaluate alternatives.

In order to fulfill the requirements of NEPA, an EIS must “[r]igorously explore and objectively evaluate all reasonable alternatives.” 40 C.F.R. §1502.14(a); Simmons v. United States Army Corps of Eng’rs, 120 F.3d 664, 666 (7th Cir., 1997) (holding the Corps failed to examine full range of alternatives and the Court vitiated the EIS). “No decision is more important than delimiting what these ‘reasonable alternatives’ are.” Simmons, 120 F.3d at 666. The CEQ mandates that the alternatives analysis is the heart of the environmental impact statement. 40 C.F.R. §1502.14; DuBois v. United States Department of Agriculture, 102 F.3d 1273, 1286 (1st Cir. 1996), *cert. den.* 117 S. Ct. 2510 (1997).

An EIS must sufficiently examine alternatives to the proposed action, including a no-action alternative. *See* Warm Springs Dam Task Force v. Gribble, 417 U.S. 1301

(1974) (granting a stay on construction of a dam pending appeal on grounds that the EIS filed by the Army Corps of Engineers did not adequately address the environmental impacts of the project or discuss reasonable alternatives to the project); Utahans for Better Transport v. U.S. Department of Transportation, 305 F.3d 1152 (10th Cir. 2002) (FEIS submitted by DOT was inadequate as failed to consider reasonable alternatives identified by appellants). The NRC, in In the Matter of Louisiana Energy Services, (Claiborne Enrichment Center), CLI-98-3, 1998 NRC LEXIS 7, found a lack of detail and a “lack of evenhandedness” in an FEIS “no-action” section. The NRC agreed with the Board’s analysis that this no-action alternative analysis was inadequate where it discussed only the benefits of the project but did not address the benefits of not building it.

5. Supplementation of the EIS

An agency’s obligation to consider the environmental consequences of its action does not end with the publication of a final EIS. Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 373 (1989). Federal agencies must still take a “hard look” at the environmental effects of their planned action, even after the proposal has received initial approval. Id. It would be inconsistent with NEPA’s manifest concern with preventing uninformed action “for the blinders to adverse environmental effects, once unequivocally removed, to be restored prior to completion of an agency action simply because the relevant proposal has received initial approval.” Id. at 371.

Not every new circumstance requires supplementation of a final EIS. In the Matter of HRI, CLI-01-4, 53 NRC 31, 52 (2001) citing Davis v. Latschar, 202 F.3d 359, 369 (D.C. Cir. 2000). In order for a new circumstance to warrant supplementation of an

FEIS, it must reveal a “seriously different picture of the environmental impact of the proposed project from what was previously envisioned.” In the Matter of HRI, CLI-99-22, 50 NRC 3, 14 (1999) quoting Sierra Club v. Froehlke, 816 F.2d 205, 210 (5th Cir. 1987). The significance of the impacts on the new circumstance must be evaluated subject to a “rule of reason”, limiting review to environmental effects that can be reasonably forecast or have some likelihood of occurring. Northern States Power Co. (Prairie Island Nuclear Generating Plant Units 1 and 2, ALAB-455, 7 NRC 41,48 (1978); Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1,2 and 3), LBP-82-117A, 16 NRC 1964, 1992 (1982).

6. Mitigation measures

NEPA requires the EIS to discuss the extent to which adverse effects can be avoided. 42 U.S.C § 4332 (C)(ii). Implicit in this requirement is the

...understanding that EIS will discuss extent to which steps can be taken to mitigate adverse environmental consequences; omission of reasonably complete discussion of possible mitigation measures would undermine action-forcing function of NEPA and prevent agency and interested parties from properly evaluating severity of adverse effects.

Laguna Greenbelt, Inc. v. U.S. Dept. of Transp., 42 F.3d 517 (1994).

The Supreme Court has interpreted this NEPA provision to require “a reasonably complete discussion of possible mitigation measures...in sufficient detail to ensure that environmental consequences have been fairly evaluated.” Methow Valley, 490 U.S. 332, 352-353 (1989). *See also* Okanogan Highlands Alliance v. Williams, 236 F.3d 468 (2000) (EIS is not complete unless it contains reasonably complete discussion of possible mitigation measures). A mere listing of mitigation measures in an EIS is insufficient to qualify as reasoned discussion required by NEPA. Neighbors of Cuddy

Mountain v. U.S. Forest Service, 137 F.3d 1372, 1380 (9th Cir. 1998) (EIS description of mitigating measures was insufficient under NEPA where possible negative environmental effects were known to Forest Service).

III. FACTUAL AND PROCEDURAL BACKGROUND

A. Factual Background

1. Draft Environmental Impact Statement

On November 14, 1994, the NRC published a "Notice of Availability of Draft Environmental Impact Statement: Notice of Opportunity for Hearing," for the Crownpoint Project, in the Federal Register. Hydro Resources, Inc., LBP 98-9, 47 NRC 261, 264 (1998) ("LBP 98-9"). The Draft Environmental Impact Statement to Construct and Operate the Crownpoint Uranium Solution Mining Project, Crownpoint, New Mexico was issued October 1994. (NUREG-1508) (ACN 9705220214).

The DEIS section entitled "Need for the Action" states that the purpose and need to which the agency is responding by evaluating the alternatives is "licensing a uranium solution mine." DEIS at 1-7.

The DEIS evaluates four alternatives: (1) mining at Crownpoint and Church Rock, as proposed by HRI, (2) mining at Crownpoint and Church Rock, with modifications to alleviate minor deficiencies in the application, (3) mining at Crownpoint and Church Rock using underground mining, and (4) no action. DEIS at 2-1-2-3. The Staff recommends Alternative 2 and concludes that HRI should be issued a combined source materials license. Id. at xv-xvi.

2. Final Environmental Impact Statement

On February 28, 1997, the NRC staff issued the Final Environmental Impact

Statement to Construct and Operate the Crownpoint Uranium Solution Mining Project, Crownpoint, New Mexico, ("FEIS"), NUREG-1508 (ACN 9703200270) (NB 10). The FEIS section entitled "Purpose of and Need for the Proposed Action" states that the purpose of the action is to license and regulate HRI's proposal. FEIS at 1-3. The NRC determined the need to be its need to act on the license application. Id.

The FEIS lists four alternatives, which are different than those in the DEIS: 1) the action as proposed by HRI, 2) the action as proposed by HRI, "but at alternative sites and/or using alternative liquid waste disposal methods", 3) the action as proposed by HRI, "but with additional measures required and recommended by the NRC Staff to protect public health and safety and the environment," and 4) no action. FEIS at 2-1. The FEIS recommends alternative 3, and recommends that HRI receive a source materials license. Id. at xxi, 2-1.

3. ENDAUM's and SRIC's Concerns

In their Second Amended Request for Hearing, Petition to Intervene, and Statement of Concerns (August 15, 1997) (ACN 9709080068) ("Second Amended Petition to Intervene"), ENDAUM and SRIC argued that the FEIS contains inadequate statements of purpose and need, and that the FEIS fails to adequately quantify, qualitatively describe, or weigh the costs and benefits of license issuance. Id. at 150. The FEIS and ERs also fail to evaluate the costs and benefits of alternatives in the cost-benefit analysis. Id. ENDAUM and SRIC further explained that the FEIS inadequately evaluates the no action alternative and the action alternatives. Id. at 159-163. ENDAUM and SRIC stated their concern that the FEIS does not adequately consider mitigation for the

significant adverse impacts of the project. Id. at 139-140. Lastly, ENDAUM and SRIC allege that significant new information and substantial changes in the proposed action warrant supplementation of the DEIS and the FEIS. Id. at 178-183. The Presiding Officer admitted the following concerns as germane: incomplete information in EIS on risk of adversely affecting drinking water, incompleteness of EIS because of the lack of detailed design information, failure of the EIS to consider the risk of adverse impacts on the project from a downturn in market for uranium, failure to complete an adequate cost/benefit analysis, and miscellaneous matters. LBP 98-9, 47 NRC 261, 281-282 and notes 62, 63, 64 (1998).

4. HRI's Application and License

HRI has applied for and received materials license SUA-1508 to conduct in situ leach ("ISL") mining at Sections 8 and 17 in Church Rock, Navajo Nation, New Mexico, and at two sites in Crownpoint, Navajo Nation, New Mexico, "Unit 1" and "Crownpoint". License (ACN 980116066, Hearing Notebook 11).

B. **Procedural Background**

1. Intervenors' Hearing Request and Evidentiary Presentations for Regarding NEPA

Intervenors requested a hearing on HRI's license application in December 1994 and amended their request after the FEIS was issued on February 29, 1997. ENDAUM's and SRIC's Second Amended Petition to Intervene (August 15, 1997). On January 5, 1998, Staff issued license SUA-1508. The Presiding Officer granted ENDAUM, SRIC, Grace Sam, and Marilyn Morris standing as parties and admitted a number of their concerns for adjudication. In the Matter of Hydro Resources, Inc., LPB-98-9, 47 NRC 261, 266 (1998).

Intervenors' prior pleadings regarding NEPA are as follows⁵: Eastern Navajo Diné Against Uranium Mining's and Southwest Research and Information Center's Brief With Respect To: NEPA Issues Concerning Project Purpose and Need, Cost/Benefit Analysis, Action Alternatives, No Action Alternative, Failure to Supplement EIS, and Lack of Mitigation (February 19, 1999) (ACN 9902240094) ("Intervenors' NEPA Presentation"); ENDAUM and SRIC's Motion for Leave to Reply to the Response Filed by the NRC Staff to ENDAUM's and SRIC's Presentations on NEPA Issues (Purpose, Need, Cost/Benefit, Alternatives, and Supplementation) (April 12, 1999) (ACN 9904160058); ENDAUM's and SRIC's Motion for Reconsideration of the April 22, 1999 Memorandum and Order (Questions) (May 3, 1999) (ACN 9905100002); Intervenors' Joint Response to HRI's and the NRC Staff's Response to the Presiding Officer's April 21, 1999 Memorandum and Order (Questions) (May 25, 1999) (ACN 9905280111). Both HRI and the NRC filed responses to Intervenors' NEPA Presentation, answers to Judge Bloch's questions posed in LBP-99-30 and responses to Intervenors' Petition for review of LBP 99-30.

Intervenors filed ENDAUM's and SRIC's Brief in Opposition to HRI's

⁵ NEPA issues have been addressed by Intervenors in virtually every brief submitted, see briefs listed in Section B.1. as well as: ENDAUM's and SRIC's Brief Regarding Radioactive Air Emissions At the Crownpoint Project (January 11, 1999) ("Intervenors' Section 8 Air Brief") (ACN 9901130019); Intervenors' Amended Written Presentation in Opposition to HRI's Application for a Materials License with Respect to: Groundwater Protection (January 18, 1999) ("Intervenors' Section 8 Groundwater Presentation") (ACN 9901210089); Intervenors' Brief in Opposition to HRI's Application for a Materials License with Respect to: Environmental Justice Issues (February 19, 1999) (ACN 9902240037) ("Intervenors' Environmental Justice Brief"); Intervenors' Written Presentation in Opposition to HRI's Application for a Materials License with Respect to: Groundwater Protection, Groundwater Restoration and Surety Estimates (March 7, 2005) ("Intervenors' 2005 Groundwater Presentation"); ENDAUM's and SRIC's Written Presentation in Opposition to HRI's Application for a Materials License with Respect to: Radiological Air Emissions for Church Rock Section 17 (June 13, 2005) (ACN ML 051660423) ("Intervenors' Section 17 Air Brief")

Application for a Materials License with Respect to: Cumulative Impacts and Segmentation of Consideration of Impacts (February 19, 1999) ("Intervenors' Cumulative Impacts Presentation") (ACN 9902240069). NRC Staff responded to Intervenors' Cumulative Impacts Presentation on April 1, 1999.

The Presiding Officer upheld HRI's License for Section 8 in LBP-99-30. Id. at 50 NRC 77 (1999). LBP 99-30 addressed several issues including those raised in Intervenors' NEPA and Cumulative Impacts Presentations. Intervenors filed "Intervenors' Petition for Review of Partial Initial Decisions LBP-18, LBP-19, LBP-30" (Sept 3, 1999) (ACN 9909090060). Both HRI and the NRC filed responses to Intervenors' Petition for Review. The Commission denied Intervenors' petition for review of the technical matters in LBP-99-30. In the Matter of Hydro Resources, Inc., CLI-00-12, 52 NRC 1 (2000). The Commission granted review of, and affirmed National Environmental Policy Act (NEPA) and environmental justice rulings in LBP-99-30. In the Matter of Hydro Resources, Inc., CLI 01-04, 53 NRC 31 (2001)

Intervenors filed Intervenors' Motion to Supplement the Final Environmental Impact Statement for the Crownpoint Uranium Project Church Rock Section 8 (May 14, 2004) ("Intervenors' Section 8 Motion to Supplement FEIS") and Intervenors' Motion to Supplement the Final Environmental Impact Statement for the Crownpoint Uranium Project Church Rock Section 17 (May 14, 2004) (ACN ML 041450289) ("Intervenors' Section 17 Motion to Supplement FEIS"). HRI and Staff responded to these Motions. The Presiding Officer ruled on the issue of supplementation in LBP 04-23, finding that no EIS supplementation was required. LBP 04-23, 2004 NRC LEXIS 230 (2004).

Intervenors requested Commission review of LBP 04-23, which was denied by the Commission in CLI 04-39, 2004 NRC LEXIS 259 (NRC , 2004).⁶

2. Intervenors' Joint Motion for Change in Schedule of Written Presentations (January 18, 2005)

ENDAUM, SRIC, Grace Sam, Marilyn Morris and HRI filed Intervenors' Joint Motion for Change in Schedule of Written Presentations (January 18, 2005) (ACN ML 050350263). The Presiding Officer issued an Order (Revised Schedule for Written Presentations) on February 3, 2005 (ACN ML 050410382). The order described the agreement by the parties in which Intervenors waived their right to litigate particular remaining issues. The order also set out a briefing schedule. Intervenors agreed, in the Joint Motion, to forego presenting any new evidence with respect to the sixth area of concern (i.e., adequacy of EIS (cumulative impacts, mitigation actions)) and to submit a pleading which incorporates by reference Intervenors' arguments raised with respect to the adequacy of the EIS for Section 8, thereby preserving those arguments with respect to Section 17, Unit 1, and Crownpoint.

IV. ARGUMENT

A. The FEIS Violates NEPA Because It Fails To Adequately Analyze Environmental Impacts

This section incorporates by reference arguments previously made regarding the Crownpoint Uranium Project FEIS in Intervenors' NEPA Presentation and Intervenors'

⁶ There were two motions to supplement the FEIS, one regarding the potential impacts of mining in Church Rock Section 8 and the other regarding Section 17. The Presiding Officer instructed Intervenors to file a separate motion on Section 8 to the Commission asserting that he no longer had jurisdiction over Section 8 related issues. Intervenors filed a motion on Section 8 before the Commission and the Section 17 motion to the Presiding Officer. The Commission then referred the motion on Section 8 to the Presiding Officer as they contained similar issues. On appeal to the Commission Intervenors filed separate petitions for review, for interlocutory review of LBP 04-23 as it pertained to Section 17 and review of LBP 04-23 as a partial initial decision on Section 8. The Commission denied both petitions.

Cumulative Impacts Presentation.⁷ These arguments are hereby preserved as regards the three remaining sections: Church Rock Section 17, Unit 1, and Crownpoint.

The proposed CUP poses serious cumulative impacts to air, groundwater, radiological levels, health and land use on Section 17, Unit 1, and Crownpoint which were not adequately analyzed in the FEIS. As in Neighbors of Cuddy Mt. v. United States Forest Serv., 137 F.3d 1372 (9th Cir., 1998), where the Forest Service prepared an FEIS and a supplemental EIS which addressed cumulative impacts in several paragraphs with little to no detail regarding effects on old-growth habitat, here the cursory analysis of cumulative impacts by the NRC staff in the FEIS is inadequate under NEPA.⁸ For this and reasons found below, HRI's materials license should be revoked for Section 17, Unit 1, and Crownpoint.

1. The Cumulative Environmental Impacts of the Proposed Crownpoint Project on Radioactive Air Emissions Are Not Adequately Analyzed in the FEIS.

⁷ Intervenor's preserve all prior arguments made with regard to NEPA. Pleadings in which NEPA has been raised are listed above in section III B, Procedural Background and include but are not limited to: Intervenor's NEPA Presentation, Intervenor's Cumulative Impacts Presentation; Intervenor's Section 8 Groundwater Presentation, Intervenor's 2005 Groundwater Presentation, Intervenor's Section 8 Air Brief, Intervenor's Section 17 Air Brief, Intervenor's Environmental Justice Brief, Intervenor's Section 8 Motion to Supplement FEIS, and Intervenor's Section 17 Motion to Supplement FEIS.

⁸ NRC regulations implementing NEPA state that environmental impact statements on proposed projects shall contain discussions of direct effects and their significance and indirect effects and their significance. 10 CFR Part 51, Appendix A to Subpart A, §7. Since the terms "direct effects" and "indirect effects" relate to environmental impact statements as required by NEPA, those terms should be interpreted to include cumulative impacts. The Staff recognized the legal duty to address cumulative impacts in the DEIS and FEIS, but the Staff's treatment of the cumulative impacts of the Crownpoint Project is inadequate. DEIS, 4-30 - 4-33; FEIS, 4-120 - 4-127.

The NRC Staff's environmental review of the Crownpoint Uranium Project ("CUP") is reported in the FEIS. The portions of the FEIS that are relevant to radioactive air emissions from HRI's operations are: § 2.1.2.1, which describes the gaseous effluents and airborne particulates associated with the CUP; § 4.1 *et. seq.*, which describe the environmental consequences, monitoring, and mitigation issues associated with HRI's radioactive air emissions; § 4.6 which describes the health physics and radiological impacts of the CUP15, and § 4.13.1, which describes cumulative impacts on air quality.⁹

In violation of NEPA, the FEIS significantly misrepresents the existing levels of radiation in the Crownpoint and Church Rock areas and inadequately analyzes cumulative impacts on air quality. For the FEIS to provide an accurate description of the cumulative impacts of the Project on radioactive air emission levels, it must set forth complete and accurate information and analysis about existing levels of radiation, levels that would result from the proposed Project, and HRI's plans for reduction of these emissions. The FEIS, however, provides incomplete information and misleading analysis.¹⁰

a. Existing Radiation Levels at Crownpoint Section 17 Are Misrepresented in the FEIS.

The history of uranium mining in the Church Rock area has left a legacy of high levels of radon and gamma radiation. Bernd Franke Testimony attached to Intervenor's Section 8 Air Brief. The DEIS states that the ambient levels of radon near Section 17

⁹ Section 4.6.1.1 analyzes the health physics and radiological impacts for Crownpoint and Unit 1; however, section 4.6.1.2, which analyzes health physics and radiological air impacts for Church Rock, repeatedly and incorrectly applies the Crownpoint and Unit 1 data in section 4.6.1.1 to Church Rock. FEIS at 4-82 – 4-86.

¹⁰ For further argument see Intervenor's Section 8 Air Brief and Intervenor's Section 17 Air Brief.

exceed regulatory limits. DEIS, Table 3.2 at 3-19, attached to Intervenor's Section 17 Air Brief.¹¹ Additionally, the DEIS states that HRI also measured elevated levels of gamma radiation at Section 17. Id. at 3-19 - 3-20, attached to Intervenor's Section 17 Air Brief. See also, Franke Testimony attached to Intervenor's Section 17 Air Brief, Exhibit 2, Fig. 2.9-1.¹² With respect to elevated radon levels at Church Rock, the NRC Staff stated in the DEIS, "The elevated values measured at the site likely reflect the influences of previous mining and milling activities in the area." Id. at 3-19 to 3-20. The Staff also noted that elevated gamma levels recorded at Section 17 represented "pre-existing site contamination from other mining activity." Id. at 3-20.

Radiation level data are set forth in the DEIS and in the Crownpoint and Church Rock Environmental Reports and are then misrepresented in the FEIS. Intervenor's Section 8 Air Brief Franke Testimony at 4-5, n.6, 7, 12. The FEIS also misrepresents the sources of existing radiation levels. The FEIS wrongly lumps Church Rock and Crownpoint together in characterizing general background radon levels as averaging 150 mrem/year for "this part of New Mexico." FEIS at 4-72. As reported in the DEIS, background radon levels at Crownpoint are close to typical outdoor background levels of radon in the continental U.S., which range from 0.1 to 0.2 pCi/l (equivalent to 50 to 100 mrem/years). DEIS 3-19.¹³ However, for Church Rock, the DEIS reports average airborne

¹¹ The data presented in the DEIS were taken from monitors on the boundary of Sections 8 and 9. No radon data on or next to Section 17 was provided in the Hearing Record.

¹² See also Declaration of Melinda Ronca-Battista (June 10, 2005) ("Ronca-Battista Declaration"), attached to Intervenor's Section 17 Air Brief.

¹³ The DEIS reports average airborne radon concentrations at two stations in Crownpoint as 0.22 pCi/l and 0.26 pCi/l, with a range of 0.20 pCi/l to 0.6 pCi/l. DEIS at 3-19. Relatively low radon concentrations of between 0.10 and 0.17 pCi/l at Crownpoint are also reported in the "Buhl Study", a 1985 report published by the New Mexico Environmental Improvement Division. Franke Report 1999 Air Presentation at 5.

radon concentrations of 3.06, 1.19 and 2.22 pCi/l for each of three stations, with an overall average concentration of 2.16 pCi/l and a range of 0.10 pCi/l to 13.4 pCi/l.

DEIS at 3-19.¹⁴ Existing radon levels at Church Rock are ten times those reported at Crownpoint. This was not accurately reported in the FEIS. The FEIS also ignores the history of the area, particularly that Church Rock was heavily mined, where Crownpoint had less past mining activity. Franke Testimony attached to Intervenor's Section 8 Brief. The distinction between existing levels of radiation at Church Rock and Crownpoint is necessary for both the decision maker and the public in evaluating the safety of the CUP. This was not adequately addressed in the FEIS.

The FEIS also does not adequately address the distinction between background radiation levels and the radiation caused by uranium mining and milling. Radiation caused by prior uranium mining and milling, which under NRC regulations must be included in the total effective dose equivalent ("TEDE") calculation, is dismissed as naturally occurring background radiation in the FEIS. Ronca-Battista Declaration attached to Intervenor's Section 17 Air Brief. *See also* Franke Testimony attached to Intervenor's Section 8 Air Brief.

The FEIS's treatment of existing gamma radiation is similarly deficient. Although the DEIS acknowledges that elevated gamma radiation levels were recorded "near the old Church Rock mine shaft and ore storage areas, and represent pre-existing site contamination from other mining activity" (DEIS, 3-20), the FEIS contains no

¹⁴ Franke testifies that the poor correlation between these outdoor levels at Church Rock shows a significant variability between the monitored locations not explainable as normal background variation. Franke Testimony attached to Intervenor's Section 8 Air Brief.

discussion of gamma radiation. The FEIS includes only the vague and uninformative statement that "[r]adiological effects during project construction would include natural background plus remnant radiation stemming from previous mining and milling activities near the Church Rock site." FEIS, 4-73. Elevated levels of radon and gamma radiation in the Church Rock area are the result of previous mining activities, not from natural background as is incorrectly represented in the FEIS. *See* Intervenor's Section 17 Air Brief.

Radiation from source and byproduct material exceeds regulatory exposure limits in unrestricted areas at and near Section 17. Ronca-Battista Declaration attached to Intervenor's Section 17 Air Brief. The FEIS's failure to set forth these existing levels of radiation constitutes a major misrepresentation, for purposes of calculating the total dose equivalent ("TEDE") as well as for analyzing the additional impacts that the proposed Crownpoint Project will have on radiation levels in the area.

b. The FEIS Inaccurately Analyzes Radiological Air Impacts From the Proposed CUP.

Not only does the FEIS not accurately address existing radiation levels from previous mining at Church Rock, the FEIS incorrectly concludes that radiation from the CUP will be under regulatory limits. This conclusion is based on MILDOS modeling which used inaccurate source terms provided by HRI. Franke Testimony attached to Intervenor's Section 8 Air Brief. The FEIS fails to address significant uncertainties inherent in HRI's calculation of doses to the public from the CUP itself, independent of existing radiation levels. Franke Testimony attached to Intervenor's Section 8 Air Brief. This failure by the FEIS applies equally to Section 17, Unit 1, and Crownpoint.

The NRC Staff's decision is flawed as HRI presented no technical schematics, engineering diagrams, or operational history for its air effluent control system. Any conclusions in the FEIS regarding HRI's proposed air effluent control system are therefore based on assumptions. Intervenor's Section 8 and 17 Air Briefs. HRI's failure to provide complete and adequate information regarding radioactive air effluents from the CUP and proposed control methods resulted in an insufficient FEIS analysis of the proposed CUP's radioactive air impacts.

c. The FEIS air quality cumulative impacts analysis is incorrect and inadequate.

The cumulative impacts section of the FEIS perpetuates misinformation provided earlier in the FEIS. The cumulative impacts section states that the total population dose from "background sources" for the population of 76,500 people within a 50 mile radius of the Project is about 17,000 mrem/yr. FEIS, 4-124. This is equivalent to about 222 mrem/yr. per individual. The FEIS's cumulative impacts section provides no information about the much higher non-background levels in the Church Rock area. This is highly misleading. The data reviewed by Mr. Franke demonstrate that the combined background and non-background radiation levels from both radon and gamma radiation in Church Rock are on the order of 1,400 mrem/yr. per individual, more than six times the levels represented in the FEIS. Franke Testimony attached to Intervenor's Section 8 Air Brief.

The cumulative impacts section of the FEIS seriously distorts the radiological impacts on the Church Rock community by conveying the false impression that there are no existing health impacts from prior human activities that could contribute to cumulative radiological and health impacts of the proposed Crownpoint Project.

2. The Cumulative Impacts of the Proposed Crownpoint Project on Ground Water Resources are Not Adequately Analyzed in the FEIS.

The portions of the FEIS that are relevant to the effect of the proposed CUP on groundwater are: § 2.1 *et. seq.*, which describe the proposed ISL process and facilities; § 3.2 *et. seq.*, which describes regional geology and the geology at the proposed mine sites; § 3.3. *et. seq.*, which describe the groundwater hydrology regionally and at the proposed mine sites; § 4.3 *et. seq.*, which describe the environmental consequences, monitoring, and mitigation issues with respect to groundwater at the proposed mine sites; and § 4.13, which describes the cumulative impacts to the groundwater.

a. **The FEIS does Not Accurately Represent Existing Water Quality**

Although there has been extensive uranium mining in the Crownpoint and Church Rock area in the past, the FEIS does not address the impacts of this mining on ground water resources. Michael Wallace testified that "dozens of abandoned uranium mines in the Church Rock, Mariano Lake and Smith Lake areas are likely sources of localized contamination in the [Westwater Canyon Member]". Wallace Testimony attached to Intervenor's Section 8 Groundwater Presentation (ACN 9902240081). In addition, the United Nuclear Corporation's mine and milling facilities at Church Rock has been declared a federal Superfund site because of the extensive ground water contamination there. Testimony of Robert D. Bullard attached to Intervenor's Environmental Justice Brief (ACN 9902240051).

HRI calculated the baseline water quality by including the water from the mineralized ore zones as well as the high quality groundwater in the surrounding area, distorting the true quality of the groundwater. Intervenor's Section 8 Groundwater

Presentation at 47. Water quality in the mineralized ore zones has a much greater concentration of radium-226 (400 times greater) than does water in the non-ore bearing zones. Abitz Testimony attached to Intervenor's Section 8 Groundwater Brief. Uranium levels in the Westwater Canyon aquifer at Crownpoint and Unit 1 are less than the detection limit of 0.001 mg/L and 0.002 at Church Rock. Abitz Testimony attached to Intervenor's Section 8 Groundwater Brief (ACN 9902240074), Table 6 at 26

b. The FEIS Does Not Accurately Portray the Cumulative Effects of the Proposed CUP with Past Uranium Mining.

The FEIS does not analyze the cumulative effects of the proposed Project with the impacts of past mining on ground water. The quality of this ground water is important as it is a primary source of drinking water for people in the region. The FEIS also does not adequately deal with and misrepresents the hydrogeology and geochemistry of the CUP (Westwater Canyon Member aquifer) and its suitability for ISL mining; the true quality of the existing groundwater, and the appropriate bleed rate used for controlling excursions. *See* Intervenor's Section 8 Groundwater Presentation, Intervenor's 2005 Groundwater Presentation, Intervenor's Cumulative Impacts Brief.

The FEIS does not adequately analyze the combined effect of past and proposed activities on ground water in the Project region. The FEIS mentions the cumulative impacts of previous mining on groundwater in merely one paragraph at FEIS 4-123. That paragraph states that past actions that have contributed to ground water impacts "include" underground mining. FEIS, 4-123. This statement implies that there are other past actions that could have contributed to cumulative impacts of the proposed Project on ground water, but the FEIS does not indicate what those other past actions are. The remainder of the paragraph is no more specific. The FEIS suggests that underground

mining "would have dewatered" the Westwater and the Brushy Basin "B" Sand aquifers and "may have had some dewatering effects" on the Dakota Sandstone aquifer. The FEIS also asserts that dewatering effects "would have lowered water levels" in the aquifers and "may have" oxidized some of the rock around the workings, and hypothesizes that when mining ceased the workings flooded and ground water returned to pre-mining levels after several years. The FEIS concludes by proposing that water in the workings "was probably" degraded but that ground water outside the workings "does not appear" to have been affected. FEIS, 4-123.

These "vague and conclusory" statements do not meet the requirements of NEPA. See Fritofson v. Alexander, 772 F.2d 1245. One vague paragraph is not the "meaningful cumulative-effects study" called for by the Fifth Circuit Court of Appeals in Fritofson. Wallace and Staub Testimony (ACN 9902240087) attached to Intervenor's Section 8 Groundwater Brief (1999). The FEIS paragraph indicates several possible impacts but does not provide any research or data to determine which impacts actually have occurred or will occur if the proposed Project proceeds.

Dr. Staub and Mr. Wallace have testified that the FEIS also fails to address the impacts of past mining on the proposed restoration of Section 17. Wallace and Staub Affidavits attached to Intervenor's Section 8 Groundwater Presentation. Restoration of water quality at Church Rock Section 17 will be very complicated due to the old mine workings that exist there. Wallace Testimony at 68-74 and Staub Testimony at 16, 26-27 attached to Intervenor's Section 8 Groundwater Presentation. HRI's modeling used inappropriate analysis for Section 17. Wallace at 69-70. HRI has failed to determine whether abandoned mine tunnels have collapsed in Section 17. Staub Testimony at 27.

This determination is important because collapsed tunnels may cause overlying strata to collapse, creating fractures that can transport contaminants. Staub Testimony at 27. Mr. Wallace concludes that the area will need to be completely dewatered to effect restoration. Id at 73-74.

To provide an adequate analysis of the cumulative impacts of the Project, the FEIS must address the cumulative impacts of the Project on this important regional resource. Because it does not do so, the FEIS violates NEPA. *See LaFlamme v. Federal Energy Regulatory Commission*, 852 F.2d 401 (9th Cir. 1988).

3. The Cumulative Environmental Impacts of the Proposed Crownpoint Project on Radiological and Health Effects Are Not Analyzed Adequately in the FEIS.

The FEIS does not adequately address one of the most critical issues related to the Crownpoint Project - the cumulative levels of radiation that will result if the Project proceeds. The FEIS's analysis of the current levels of radiation in the communities of Church Rock and Crownpoint is inaccurate, and its analysis of the levels that will result from the Project is not realistic. *See* arguments above. *See also* Intervenor's Section 8 Air Brief and Intervenor's Section 17 Air Brief.

There are three basic deficiencies in the FEIS's treatment of health conditions in the communities that are most likely to be affected by the Project. First, the data provided for Church Rock and Crownpoint are very general, even though specific data are available. Second, the FEIS fails to take into account the vulnerability of the population in those communities. Third, the FEIS also fails to assess the combined effects of several health and socioeconomic conditions with significant adverse effects of

past uranium mining on Navajo workers. Dr. Christine Benally's Testimony attached to Environmental Justice Brief (ACN 9902240054).

Evaluation of the health impacts of past uranium mining is critical to a determination of the cumulative effects that the proposed Project would have since the cumulative effects of the Project cannot be determined without knowing those past impacts. See Fritofson v. Alexander, 772 F.2d 1245 (5th Cir. 1985). Despite that, the FEIS addresses those impacts only in a " cursory and nonanalytical way." Benally Testimony attached to Intervenor's Environmental Justice Brief, 29. The FEIS makes only general references to the effects on the health of Navajos throughout the area of earlier mining and milling operations, but ignores the substantial information that is available on those impacts. The FEIS's treatment of specific impacts in the Church Rock area is similar; the FEIS makes general and unquantified statements but fails to provide specific information. *Id.*, 29-30.

A long history of past uranium mining caused large exposures to radioactive materials to local workers resulting in a high incidence of cancer. FEIS 3-87, 4-124. The NRC must make a complete evaluation of past and ongoing impacts to public health and the environment in order to make an informed determination regarding the overall cumulative effects of past, present and future actions. See Benally Testimony attached to Intervenor's Environmental Justice Brief.

The FEIS makes no attempt to consider the cumulative effects of past mining and the proposed Project, therefore violating NEPA requirements. As Dr. Benally testified:

When taken as a whole, it is my professional opinion that the current environmental situation in Church Rock, and perhaps also in the Mariano Lake-Smith Lake area, represents an urgent public health problem that the NRC Staff

all but ignored in the FEIS. The NRC's description of the existing impacts of previous mining was superficial and void of any quantitative, cumulative analysis.

Benally Environmental Justice Brief Testimony, 46-47.

The FEIS's conclusions about radioactive air emissions and health consequences violate NEPA because they are based on incorrect and misleading data and are the result of incomplete analysis. Hughes River Watershed Conservancy v. Glickman, 81 F.3d 446 (4th Cir.1996). They also skew the public's evaluation of the proposed Project by indicating that the Project will not have significant effects on radiation levels in the community. *Id.* Moreover, the FEIS presents no cumulative impacts analysis like that called for by the Fifth Circuit in Fritofson v. Alexander, 772 F.2d 1245.

4. The Cumulative Impacts of the Proposed Crownpoint Project on Land Use Are Not Adequately Analyzed in the FEIS.

The FEIS acknowledges the project would have adverse impacts on land use: site disturbance, disruption of livestock grazing, and relocation of residents. FEIS at 4-93, 4-94. The cumulative impacts on land use are not included in the FEIS.

The proposed mitigation for the relocation of residents – monetary compensation – is inadequate. FEIS at 4-118. Nearly all Church Rock residents who participated in Dr. Bullard's land use survey, including the Kings living on Section 17, stated they have lived in the area all their lives, and the land has been in their families for generations. Bullard Testimony attached to Intervenors' Environmental Justice Presentation at 20-21, 37. Generally, this population is less mobile. "Because of deep cultural beliefs and practice that tie Navajo people to the place of their birth, as well as the high level of poverty in the area, Church Rock and Crownpoint residents are unlikely to be willing or able to flee from any contamination that may be caused by the Crownpoint Project." *Id.*

at 36-38. The cumulative impact of contamination to air and groundwater from the CUP with this traditional tie to the land is not examined in the FEIS.

Moreover, the FEIS ignores the tremendous importance of livestock to local subsistence and culture and the project's potential to contaminate land and water necessary for raising livestock. The FEIS asserts that the "land affected has only a very small value for grazing". Livestock is an important part of Navajo culture, and Larry King and Mitchell Capitan both testify in support of ENDAUM's and SRIC's environmental justice brief that livestock stewardship is an integral part of Navajo culture and they would not feel complete or free without livestock. See Testimony of Larry King (ACN 9902240060) attached to Intervenor's Environmental Justice Brief as Exhibit 4 and Testimony of Mitchell Capitan (ACN 9902240060) attached to Intervenor's Environmental Justice Brief as Exhibit 5. The FEIS fails to evaluate the cumulative impacts to local residents of displaced land uses during the life of the project, or the risk that lands would be permanently closed to grazing due to the project's contamination of land or water. This constitutes a violation of NEPA requirements to consider cumulative impacts.

B. The FEIS Violates NEPA Because the Statement of Purpose and Need is Incorrect and Inadequate.

This section incorporates by reference arguments previously made regarding the Crownpoint Uranium Project FEIS in Intervenor's NEPA Presentation and Intervenor's Cumulative Impacts Presentation.¹⁵ These arguments are hereby preserved as regards the three remaining sections: Church Rock Section 17, Unit 1 and Crownpoint.

¹⁵ Intervenor's preserve all prior arguments made with regard to NEPA.

An environmental impact statement must address the “underlying purpose and need to which the agency is responding.” 40 C.F.R. § 1502.3. *See also* 10 C.F.R. Part 51, App. A Section 4. The EIS examines the need for a facility and the benefits it will create to assist the NEPA cost-benefit analysis. LES 2, 47 NRC at 89.

The need for the proposed facility is merely a shorthand expression to describe the principal beneficial factor that is to be weighed against the various costs of the proposal in striking the cost-benefit balance required by NEPA and the Commission’s implementing regulations.

LES 1, 44 NRC at 349.

If, as the NRC has held, the “need” statement is to describe the principal beneficial factor that is to be weighed against the various costs of the proposal, then the statement of the purpose and need in the DEIS and FEIS is entirely inadequate. At 1-7, the DEIS states that NEPA requires the DEIS “briefly specify the underlying purpose and need to which the reviewing agencies are responding in evaluating the alternatives, that is licensing a uranium solution mine.” The DEIS states that “Because this project is neither sponsored nor funded by the Federal government, the purpose of this DEIS is neither to justify nor establish an economic need for the project.” DEIS at 1-7. The NRC determined that economic considerations would dictate whether the mine is constructed or operated after it is licensed. Id.

The FEIS section entitled “Purpose of and Need for the Proposed Action” states¹⁶:

The purpose of the proposed action is to license and regulate HRI’s proposal to construct and operate facilities for ISL uranium mining and processing. The

¹⁶ Both Section 1.3 and Chapter 1 are entitled “Purpose of and Need for the Purposed Action.” However, only section 1.3 relates to purpose and need. The remaining sections in Chapter 1 consist of an introduction, a short description of the proposed action, a statement of the scope of the FEIS, and descriptions of the scoping process and roles of cooperating agencies and other federal agencies. FEIS at 1-1 to 1-5.

NRC's need for action is to fulfill its statutory responsibility to protect public health and safety and the environment in matters related to source nuclear material. (Atomic Energy Act of 1954 as amended). The BLM and BIA's need for action is to fulfill their statutory responsibilities to regulate mining activities on Federal and Indian lands (Mining Law of 1872, Allotted Lands Mineral Leasing Act of 1920, National Historic Preservation Act of 1966, Endangered Species Act of 1973, Federal Land Policy and Management Act of 1976).

FEIS at 1-3.

Courts are wary of agency efforts to define the purpose of the project very narrowly, in order to reduce the availability of reasonable alternatives, "courts will not allow an agency to define the objectives so narrowly as to preclude a reasonable consideration of alternatives." Citizen's Committee to Save Our Canyons v. U.S. Forest Service, 297 F.3d 1012, 1030 (10th Cir. 2002). See also Davis v. Mineta, 302 F.3d 1104, 1119 (10th Cir. 2002) (the FHA had failed to adequately consider alternatives to proposed project in environmental assessment/ 4(f) report). Here the FEIS begins its analysis based on the false and narrow assumption the purpose and need for the project is for the NRC to issue a license to HRI. This fault originates in the DEIS. DEIS at 1-7. In fact the DEIS rejects the no-action alternative because NRC would not be able to license the project under that alternative. DEIS at 2-3 ("The No Action alternative also conflicts with NRC's regulations requiring license issuance if [health and safety related criteria are met]").

An EIS bases its analysis of alternatives and cost-benefits on the purpose and need for the project. This is the point from which alternatives are identified and the cost-benefit analysis begins. The FEIS here provides an inadequate statement of purpose and need which distorts the entire FEIS. The statement of purpose and need does not describe the true purpose and need for the CUP, but rather describes the purpose and need for the proposed action as the NRC's duty to license and regulate the proposal. This is clearly

not a conceivable purpose and need for the proposed Crownpoint Uranium Project and completely fails to identify any need or benefit that will be filled by the proposed action.

From the beginning of its environmental review, the NRC's decision making has been distorted by an incorrect statement of purpose and need, a "need" to issue HRI a license. This distortion has skewed the entire review process and represents a fundamental flaw in the EIS. As the FEIS, the basis of the NRC's licensing decision, does not meet NEPA requirements, HRI's materials license should be revoked for Section 17, Unit 1 and Crownpoint.

C. The FEIS Inadequately Identified and Analyzed Alternatives

This section incorporates by reference arguments previously made regarding the Crownpoint Uranium Project FEIS in Intervenors' NEPA Presentation and Intervenors' Cumulative Impacts Presentation.¹⁷ These arguments are hereby preserved as regards the three remaining sections: Church Rock Section 17, Unit 1 and Crownpoint.

An agency must consider all reasonable alternatives in depth in the EIS. 40 C.F.R. 1502.14; Simmons, 120 F.3d at 666 (holding the Corps failed to examine full range of alternatives and vitiated the EIS). "No decision is more important than delimiting what these 'reasonable alternatives' are." Simmons, 120 F.3d at 666. The CEQ mandates that the alternatives analysis is the heart of the environmental impact statement. 40 C.F.R. §1502.14; DuBois v. United States Department of Agriculture, 102 F.3d 1273, 1286 (1st Cir. 1996), cert. den. 117 S. Ct. 2510 (1997). The DEIS and FEIS pertaining to the CUP are handicapped by inadequate statements of purpose, and therefore neglect to properly examine reasonable alternatives. The FEIS also fails to explain why alternatives are rejected and performs an inadequate evaluation of the no-action alternative. HRI's

¹⁷ Intervenors preserve all prior arguments made with regard to NEPA.

materials license should be revoked for Section 17, Unit 1, and Crownpoint, as the FEIS, the basis of the NRC's licensing decision, violates NEPA requirements.

1. The FEIS Statement of Purpose and Need Resulted in a Flawed Alternatives Analysis and a Predetermined Decision by the NRC

In order to properly identify alternatives, an agency must first define the project's purpose. Id.; Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 195-196(D.C. Cir. 1991), cert. den., 502 U.S. 994 (1991). As the Court in Simmons points out:

One obvious way for an agency to slip past the strictures of NEPA is to contrive purpose so slender as to define competing "reasonable alternatives" out of consideration (and even out of existence). The federal courts cannot condone an agency's frustration of Congressional will. If the agency constricts the definition of the project's purpose and thereby excludes what truly are reasonable alternatives, the EIS cannot fulfill its role. Nor can the Agency satisfy the Act.

Simmons, 120 F.3d at 666.

As discussed in Section B.1 above, the statement of purpose and need in the DEIS and FEIS is useless for the purposes of NEPA, when it describes an artificial "need to license." An example of a reasonable statement of purpose for HRI's project, however, would be to provide fuel for production of electricity by nuclear power plants.¹⁸ If this is the true purpose of the project, there are reasonable alternatives to HRI's project which were not analyzed in the FEIS. Blending down HEU is a reasonable alternative. See Makhijani Testimony (ACN 9902240098) attached to Intervenor's Section 8 NEPA Presentation. Blending down HEU for use as reactor fuel has fewer environmental effects, because it recycles depleted uranium. Id. at 8. Moreover, the use of blended down HEU has the secondary benefit for promoting global nuclear security. Id. at 9. These benefits to the no-action alternative were not adequately addressed in the FEIS. By

¹⁸ Intervenor's do not suggest here that they would agree with the CUP's licensing for such a purpose.

describing the purpose and need as it did in the FEIS, only particular alternatives were considered to fulfill the purpose and need to license the facility. The NRC therefore effectively made its decision to license the CUP prior to weighing the alternatives.

An agency must consider alternatives to the “general goal of the action” and not just consider the alternatives by which a particular applicant can reach its goals.

Simmons, 120 F.3d at 669, citing Van Abbema v. Fornell, 807 F.2d 633, 638-639 (7th Cir. 1986). The alternatives chosen and considered in the FEIS clearly go to the articulated purpose and need to grant HRI the license and therefore HRI’s goal to build and operate the CUP. Alternatives 1 and 3 are the same, but Alternative 3 contains conditions which make the action legal under the Atomic Energy Act. FEIS 2-1. Alternative 4 is the no action alternative. Alternative 2 is vague and does not describe any specific project alternative. Other alternatives should have been considered in the FEIS.

2. The FEIS Fails to Explain Why Alternatives to the Preferred Alternative are Rejected

In Simmons, the Corps was asked to issue a Section 404 permit under the Clean Water Act to allow a dam and reservoir to supply water to two users from the resulting lake. The Court found the EIS to be insufficient because the Corps did not consider other alternatives to supply the two users, “At no time has the Corps studied whether this single-source idea is the best one –or even a good one.” Simmons, 120 F.3d at 666-667, 669. Likewise, the NRC does not provide a reason why HRI’s proposed CUP is the best way to produce reactor fuel. At no point does the FEIS explain why alternatives other than the recommended action are not preferable. The Summary and Conclusions section does not do so. The cost-benefit discussion only discusses the recommended alternative. Thus, the FEIS fails to properly conduct an analysis to any reasonable degree.

3. The FEIS Fails to Adequately Address the No Action Alternative

The NRC, in In the Matter of Louisiana Energy Services, (Claiborne Enrichment Center), CLI-98-3, 1998 NRC LEXIS 7, found a lack of detail and a "lack of evenhandedness" in an FEIS "no-action" section. The NRC agreed with the Board's analysis that this no-action alternative analysis was inadequate where it discussed only the benefits of the project but did not address the benefits of not building it. Here, the FEIS fails to adequately analyze the environmental benefits of the no-action alternative. The FEIS could not evaluate the no-action alternative in an evenhanded manner since the articulated purpose and need for the project was to grant HRI a materials license.

The no action alternative will provide a substantial benefit by avoiding the environmental impacts of ISL mining. LES 1, 44 NRC at 372. For example, the no-action alternative serves the federal national security goal as it would encourage blending down of weapons grade materials from the former Soviet Union. *See* Makhijani Testimony attached to Intervenors' NEPA Presentation.

4. The FEIS Does Not Perform an Ultimate Cost-Benefit Analysis Among Alternatives

NRC regulations require that an EIS must contain an "analysis which considers and balances the environmental and other effects of the proposed action and the alternatives available for reducing or avoiding adverse environmental and other effects. " 10 C.F.R. §51.71(d). CEQ regulations also require an EIS to present the discussion of alternatives "in comparative form, thus sharply defining issues and providing a clear basis for choice among options by the decision maker and the public." 40 C.F.R. §1502.14.

The FEIS does not comply with these requirements. In Chapter 5, the FEIS lists cost and benefits of the proposed project, but it fails to make a comparison of the costs against the benefits. The FEIS does not draw any conclusion about whether the benefits of the proposed project outweigh or justify its environmental risks and harms. It also utterly fails to make any analysis of the comparative costs and benefits of the various alternatives considered elsewhere in the FEIS. HRI's materials license for Section 17, Crownpoint and Unit 1 should therefore be revoked. Alternatively, the Staff should be required to re-draft and re-circulate the FEIS for public comment.

D. The FEIS Does Not Evaluate or Discuss the Impact and Consequences of Its Proposed Mitigation Measures

This section incorporates by reference arguments previously made regarding the Crownpoint Uranium Project FEIS in Intervenors' NEPA Presentation and Intervenors' Cumulative Impacts Presentation.¹⁹ These arguments are hereby preserved as regards the three remaining sections: Church Rock Section 17, Unit 1, and Crownpoint.

NEPA requires the EIS to discuss the extent to which adverse effects can be avoided. 42 U.S.C § 4332 (C)(ii). The Supreme Court interprets this provision to require "a reasonably complete discussion of possible mitigation measures...in sufficient detail to ensure that environmental consequences have been fairly evaluated." Methow Valley, 490 U.S. At 352-353. A mere listing of mitigation measures is insufficient under NEPA. Neighbors of Cuddy Mt. v. United States Forest Serv., 137 F.3d 1372 (9th Cir., 1998).

The FEIS fails to adequately analyze the impacts of its suggested mitigation measures on the environment and the local community. For this reason and others, the FEIS was insufficient to support the Staff's decision to grant HRI's license and

¹⁹ Intervenors preserve all prior arguments made with regard to NEPA.

HRI's materials license should be revoked for Section 17, Unit 1 and Crownpoint.

1. Moving the Crownpoint Water Supply to Mitigate the Threat to Groundwater is Not Evaluated in Sufficient Detail

The FEIS recommends relocation of the Crownpoint drinking water wells before mining can begin at the Crownpoint mine site. This mitigation measure is not adequately addressed in the FEIS. First, the FEIS does not describe whether there are any suitable locations for replacement wells or nor does it describe the impacts of losing the current wells to contamination. Second, although Crownpoint doubled in size between 1980 and 1993, the FEIS does not discuss how abandoning the water supply system to industrial contamination will not impair the future drinking water supply needs of this growing community. FEIS at 3-56.

2. Other Mitigative Measures Defer Analysis of the Project Until After Licensing

Many of the other mitigative measures discussed in the FEIS just require HRI to submit additional tests or information that would normally be required in the license application. See Wallace Testimony attached to Intervenors' Section 8 Groundwater Presentation at 26,53-55, 60, 78-79. In fact, these measures degrade the level of safety provided by a typical NRC license, because they allow HRI to postpone the safety demonstrations until after licensing, rather than prior to licensing when they are subject to more rigorous mandatory review and licensing hearings. For example, the license does not require HRI to submit a surety estimate or plan for the proposed mines and mill until after licensing, even though a surety is already required by NRC regulations prior to licensing of a source materials mining facility. See ENDAUM's and SRIC's Written Presentation on Financial Assurances for Decommissioning. (January 11, 1999).

3. The Mitigation Measures Proposed for Land Use Impacts in the FEIS have Negative Socioeconomic Impacts

The FEIS admits that construction and operation of the project would have adverse impacts on land use at each of the three mining sites, but concludes that the impacts are not significant because HRI proposes to compensate residents required to relocate and to compensate grazing rights permittees, along with performing site restoration and reclamation. FEIS at 4-118, 4-125, 4-126.

The Church Rock land use surveys demonstrate that most homes in this area have been passed down for several generations, and monetary compensation will not replace the social fabric torn by relocation. Additionally, as Larry J. King and Mitchell Capitan testify, grazing livestock is an important element of Navajo culture. They both state that their lives would not be complete or “free” without owning livestock. Testimony of Larry J. King attached as Exhibit 4 to Intervenor’s Environmental Justice Brief; Testimony of Mitchell Capitan, attached as Exhibit 5 to Intervenor’s Environmental Justice Brief. This land is not a vast desert in which individuals can live and graze their livestock wherever they choose. Because monetary compensation cannot mitigate the damage done by forced relocation of families and livestock, the measure is ineffective to mitigate the land use impacts of the project.

In conclusion, the FEIS inadequately evaluates mitigative measures for the environmental impacts of the proposed CUP.

E. The NRC Staff Violated NEPA by Failing to Supplement the DEIS and FEIS and Recirculate them for Public Comment

This section incorporates by reference arguments previously made regarding the Crownpoint Uranium Project FEIS in Intervenor’s NEPA Presentation and Intervenor’s

Cumulative Impacts Presentation.²⁰ These arguments are hereby preserved as regards the three remaining sections: Church Rock Section 17, Unit 1 and Crownpoint.

The requirement to publish and disseminate NEPA-mandated information survives the initial publication of a DEIS or FEIS. Even after a proposed action has been initially approved, a federal agency may not put on “blindness” to the action’s impacts.

Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371 (1989). The CEQ requires the preparation of a supplemental EIS where there “are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” Marsh 490 U.S. at 372, citing 40 C.F.R. § 1509 (c). NRC regulations require supplementation of a DEIS or FEIS if: “(1) [t]here are substantial changes in the proposed action that are relevant to environmental concerns; or (2) [t]here are significant new circumstance or information relevant to environmental concerns and bearing on the proposed action or its impacts.”

10 C.F.R. §§ 51.72(a); 51.92(a). In addition to those situations where a supplemental DEIS or FEIS is mandatory, the regulations give the NRC staff the discretion to prepare a supplemental DEIS when, in its opinion, preparation of a supplement will further the purposes of NEPA. 10 C.F.R. §§ 51.72(b); 51.92(b). The regulations further require that the supplemental DEIS or FEIS be circulated for public comment. 10 C.F.R. §§ 51.73; 51.92(d). The standard for interpreting the supplementation requirement is a “rule of reason.” Marsh, 490 U.S. at 373.

Here the NRC erroneously failed to supplement either the DEIS or the FEIS in several significant respects.²¹ HRI’s materials license should be revoked for Section 17,

²⁰ Intervenor preserve all prior arguments made with regard to NEPA.

Unit 1, and Crownpoint, and in the alternative, a supplemental EIS should be issued and circulated for public comment.

1. Performance-Based Licensing Requires Supplementation

No mention is made, either in the DEIS or the FEIS, of the fact that the HRI CUP license is to be a performance based license. As it is a performance-based license, this constitutes a substantial change in the proposed licensing action, such that the DEIS and FEIS must be revised and reissued for public comment.

As discussed in ENDAUM's and SRIC's Brief in Opposition to HRI's Application for a Materials License with Respect to Performance Based Licensing Issues (December 7, 1998) (ACN 9812110021), the PBL licensing scheme violates both the Atomic Energy Act and the National Environmental Policy Act.

Even if the PBL scheme is found to be consistent with the AEA and NEPA, it should nevertheless be discussed in a supplemental DEIS or FEIS because it substantially diminishes the degree of safety and environmental protection offered by a typical Part 40 license. Ordinarily, the NRC Staff must review and approve all proposed changes to a license operation before the change can be allowed. Under the PBL scheme in HRI's license, HRI is permitted to unilaterally alter safety and environmental provisions in its license, without providing prior notice to the NRC or the public or obtaining the NRC's prior authorization. Although the HRI license prohibits HRI from making such changes without first obtaining a license amendment if the changes would materially affect safety

²¹ Intervenor note that they first raised the supplementation issue in 1996 when they requested a Supplemental DEIS to reflect substantial new information received from HRI in response to the Staff's Request for Additional Information as well as comments. The NRC denied this request. Intervenor also filed Intervenor's Section 8 Motion to Supplement FEIS and Intervenor's Section 17 Motion to Supplement FEIS in 2004.

or degrade the environment, HRI alone makes that determination. The only Staff review provided by the license is a post hoc review of a summary provided by HRI at the end of the year. As a result, there is a substantially heightened risk that HRI will make changes to its operation that significantly and adversely affect human health and the environment.

2. The Action Alternatives Change from the DEIS to the FEIS and Therefore Supplementation is Required

“[A]n additional alternative that has not been disseminated previously in a draft EIS may be adopted in a final EIS, without further public comment, only if it is ‘qualitatively within the spectrum of alternatives that were discussed’ in the prior draft; otherwise a supplemental draft is needed.” DuBois v. United States Department of Agriculture, 102 F.3d 1273,1292 (1st Cir. 1996). In this case the FEIS presents a set of alternatives that are substantively different than the alternatives presented in the DEIS. The public has not had the opportunity to comment on these new alternatives. Accordingly, as required by NRC and CEQ regulations and case law interpreting NEPA, a supplemental draft is required and must be reissued for public comment.

The DEIS proposes four alternatives for the Crownpoint Project. DEIS at 2-1. In the FEIS, only the first and fourth alternatives are substantially the same as the alternatives proposed in the DEIS. The second alternative described in the FEIS is completely new. It proposes various arrays of alternative mining sites, alternative sites for yellowcake drying and packaging, and alternative liquid waste disposal methods. FEIS at 2-1. None of these options were presented for consideration in the DEIS.

Alternative 3 of the FEIS is likewise different from Alternative 2 of the DEIS. FEIS Alternative 3 is different than DEIS Alternative 2 in that it proposes certain very specific measures purported to reduce the adverse environmental impacts of the proposed

project. For instance, it proposes to require that HRI replace the town of Crownpoint's drinking water wells before injecting lixiviant at Crownpoint. See Appendix B at 2. It also proposes that surety bonding for the initial well fields should be based on nine pore volume estimates unless the applicant demonstrates that another pore volume is appropriate. Id. The FEIS also requires demonstration projects to show integrity of aquifers, after licensing. As noted in Intervenor's Groundwater Presentations, these license provisions are significant to the adequacy of the surety bond and thus require careful analysis in the context of NEPA.

None of these proposed requirements was included in the DEIS, and therefore none was circulated for public comment. The introduction into the FEIS of alternatives sites and liquid waste disposal options, as well as Appendix B's array of elements favored by the NRC staff for mitigating the acknowledged adverse impacts of the CUP, constitute substantial changes in the proposal for licensing of the Crownpoint Project. Not until the FEIS was issued and the public comment period was long closed, did the NRC reveal any real action alternatives to the proposed project, or give any detailed consideration to mitigation measures.

3. The Sequence of Mining at Church Rock Has Been Switched Between Section 8 and 17, Warranting Supplementation

The FEIS should be supplemented and circulated for public comment because the NRC Staff has permitted a substantial change to the sequence of mining at Church Rock, which affects the public in that it threatens the quality of the groundwater and HRI's ability to restore it after mining. The Church Rock site is located on two sections, 8 and 17. The DEIS assumes that HRI will conduct mining operations at Church Rock beginning in Section 17 and progressing to Section 8. The plan for mining Church Rock

beginning in Section 17 changed some time after publication of the DEIS in 1994. In Fall of 1996, HRI submitted Revision 0.0 of its Consolidated Operations Plan ("COP") which reversed the direction of mining to now begin in Section 8 and proceed southward to Section 17.²² Most recently, in September 1998, HRI described its "vision" for beginning development at each site as follows: Church Rock Section 8 in 2000, Church Rock Section 17 and Unit 1, 2002, and Crownpoint, 2004. Affidavit of Mark S. Pelizza, Attachment A at 3. Affidavit in Support of HRI's Response to Scheduling Conference Briefs of All Petitioners (September 9, 1998)(ACN 9809110066).

The change of progression of mining at Church Rock constitutes a substantial change in the proposed mining operation, requiring supplementation of the FEIS. As demonstrated in the DEIS, the south to north original mining plan for Church Rock was one of the assumptions relied on by HRI's consultants to conclude that lixiviant and groundwater migration at Church Rock could be controlled. This conclusion is no longer valid if the direction of mining has changed. The FEIS contains no acknowledgement of the change, let alone any analysis of the safety and environmental risks to the public of the change. To satisfy NEPA, the Staff must revise the FEIS and recirculate it for public comment.

4. Other Factual Changes Since the FEIS Merit Supplementation

a. The proposed Springstead Estates Project merits FEIS supplementation

Other factual changes since the FEIS merit supplementation and recirculation for public comment. Intervenors argued in Intervenors' Motion to Supplement Section 8 (May 14, 2004) and Intervenors' Motion to Supplement Section 17 (May 14, 2004) that

²² The reversed direction, beginning in Section 8 and continuing to Section 17 appeared in later revisions to the COP: Rev. 1 (May 12, 1997) and Rev. 2 (August 15, 1997)(ACN 9708210179).

as a result of the proposal by the Ft. Defiance Housing Corporation ("FDHC") to construct a 1,000 unit housing development, called the Springstead Estates Project ("Springstead Estates"), within two miles of Section 8 and Section 17 in Church Rock, the 1997 FEIS should be supplemented and recirculated for public comment.

The FEIS must be supplemented under NEPA itself, under CEQ regulations governing supplementation of a final EIS, which require supplementation when new circumstances arise that are relevant to a project's environmental impacts (40 C.F.R. § 1502.9(c)(1)(ii)) as well as under NRC's regulations governing supplementation of a final EIS, which are essentially identical to those of the CEQ. 10 C.F.R. § 51.92(a)(2).

In this case, a supplement is required as the development of Springstead Estates is a significant new circumstance which is relevant to environmental concerns and bears on the proposed action. *See* NRC regulations regarding supplementation at 10 C.F.R. §§ 51.72(a), 51.92(a). HRI's groundwater pumping for its Church Rock Section 17 operations will likely affect the groundwater gradient when combined with groundwater pumping for drinking water from Springstead Estates. Affidavit of Michael G. Wallace ("Wallace") at ¶¶ 8, 18, attached to Intervenor's Motion for Supplementation Section 17. This effect on the groundwater gradient may in turn affect HRI's ability to balance its wellfield and control excursions. *Id.* at ¶ 8. Because of the close proximity of HRI's Church Rock Section 17 operations to Springstead Estates, excursions and groundwater gradient reversal could have serious consequences for the development's drinking water supply. *Id.* at ¶ 18.

The combined groundwater pumping from HRI's Section 17 operations and Springstead Estates could also cause vertical excursions. *Id.* at ¶ 19. If the groundwater

flow is affected, groundwater could move away from HRI's well field toward the nearby Pipeline fault, causing a vertical excursion. Id. at ¶¶ 20-21. The combined effects of pumping from Section 17 and Springstead Estates could also change the pressure in the underground mine workings located at Section 17. Id. at ¶ 23. The change in pressure could further complicate HRI's ability to mitigate an underground mine workings collapse, which could create pathways for vertical excursions. Id. at ¶¶ 22-24.

The radiological effects of HRI's Church Rock Section 17 operations on Springstead Estates should also be analyzed. The addition of a housing development was not part of the original receptor inventory considered when the MILDOS for Church Rock was run. Affidavit of Alan Eggleston ("Eggleston") at ¶ 10, attached to Intervenor's Motion to Supplement Section 17. Since the development is proposed in a nearby area, airborne particulate emissions, from each emission point, including the well fields on Section 17, should be modeled for this receptor in all of its proposed stages. Id. Potential impacts from secondary contamination from soils and runoff water at Section 17 should be considered as well as potential impacts from contaminated groundwater. Id.

HRI's Church Rock operations would also have a significant effect on the traffic patterns and accident rates on roads providing access to Springstead Estates. The FEIS' accident rate estimates for New Mexico routes 566 and 11/49 are based on historic usage. FEIS at 3-45. However, the introduction of an additional 4,400 individuals into the area will significantly change the traffic load on these roads and concomitantly affect the likelihood of an accident involving one of HRI's trucks transporting uranium slurry or hazardous materials. Eggleston at ¶¶ 9, 21.

Finally, the FEIS does not take into account the environmental justice implications associated with Springstead Estates. Springstead Estates will provide housing for low-income individuals and families. The housing development will be built in an area populated largely by Native Americans. Because of this new and substantial environmental justice population located in close proximity to HRI's Church Rock Section 8 operations, the FEIS should be supplemented to analyze environmental justice impacts. Eggleston at ¶ 22.

b. The passage of the Diné Natural Resources Protection Act in 2005 merits FEIS supplementation as it bans uranium mining within Navajo Indian Country

Under NRC regulations implementing NEPA, the EIS must give "due consideration to compliance with environmental quality standards and requirements," such as zoning and land use regulations, thermal or water pollution limitations, or requirements imposed by federal, state, and local agencies responsible for environmental protection. 10 C.F.R. § 51.71(d). The passage of the Diné Natural Resources Protection Act ("DNRPA") in 2005 by the Navajo Nation Council is such a requirement imposed by the Navajo Nation, as well as a significant change to the law since the FEIS. Relating to Resources and Diné Fundamental Law; Enacting the Diné Natural Resources Protection Act of 2005; Amending Title 18 of the Navajo Nation Code, CAP-18-05, § 1303 (April 29, 2005) attached as to Intervenor's Section 17 Air Brief as Exhibit O. The DNRPA constitutes a significant new circumstance and bears on the proposed action or its impacts, therefore FEIS supplementation is required under CEQ and NRC regulations. 40 C.F.R. § 1502.9; 10 C.F.R. §§ 51.72(a), 51.92(a).

The FEIS addressed the issue of the Navajo Nation's policy position regarding uranium mining at 3-87, by stating that the Navajo Nation's 1983 moratorium on uranium mining was renewed by tribal executive order in 1992. The FEIS continues: "[t]here are, however, conflicts between the Navajo Nation's position and that of the chapters and individuals involved. Referenda held at the Church Rock and Crownpoint chapters, where the proposed project would be located, supported the HRI proposal despite the moratorium." Most recently the DNRPA was passed, but since the FEIS both Church Rock and Crownpoint have passed resolutions, which have been periodically reaffirmed, opposing uranium mining.

Unlike an executive order or a local referendum, the DNRPA bans all uranium mining and processing, including ISL mining, within Navajo Indian Country. DNRPA at § 1303 ("Prohibition of Uranium Mining. No person shall engage in uranium mining and uranium processing on any sites within Navajo Indian Country."). Navajo Indian Country is defined within the statute as "all lands within the territorial jurisdiction of the Navajo Nation as defined in 7 N.N.C. § 254 and 10 U.S.C. § 1151." CAP-18-05, § 1302(a). This includes trust lands, allotted lands, and dependent Indian communities.

Section 17, Unit 1 and most of Crownpoint fall within the definition of Navajo Indian Country. The FEIS analysis of the Navajo Nation's legal position on uranium mining is now incorrect, as uranium mining is now banned by the DNRPA within Navajo Indian Country. This issue now requires additional analysis. The FEIS must be supplemented and recirculated for public comment.

F. Evidence Submitted By Intervenors Regarding NEPA

1. Intervenors' Evidence Regarding NEPA

Intervenors' Presentation on NEPA Issues filed February 19, 1999 was accompanied by Exhibit A, Written Testimony of Dr. Arjun Makhijani, and attached to Exhibit A was Exhibit 1, Curriculum Vitae of Arjun Makhijani. Also attached was Exhibit B, Written Testimony of David Osterberg, and attached to Exhibit B were Exhibits 1-9. Also attached was Exhibit C, Testimony of Michael F. Sheehan on Behalf of SRIC and ENDAUM on the Cost Benefit Analysis Issue, and attached to Exhibit C were Exhibit 1-7. Also attached was Exhibit D "Chapter 7. Navajo Preference in Employment Act"; Exhibit E, Letter to Shirley Ann Jackson and Joseph Holonich from Susan Jordan dated December 6, 1996; and Exhibit F, Letter to Susan Jordan from Carl Paperiello dated December 24, 1996.

In his testimony, Dr. Makijani analyzes the environmental impacts of producing nuclear power plant fuel from newly mined uranium versus the environmental impacts of producing nuclear fuel by downblending HEU with depleted uranium feedstock.

Intervenor's Joint Response to HRI's and the NRC Staff's Response to the Presiding Officer's April 21, 1999 Memorandum and Order (Questions) (May 25, 1999) was accompanied by Exhibit 1, Affidavit of Dr. Richard Abitz in Response to the Presiding Officer's Questions in the Memorandum and Order of April 21, 1999 and Exhibit 2, Response Affidavit of Michael Wallace. To Exhibit 2 were attached Exhibits 2-A – 2-K. Also attached were Exhibit 3, Response Affidavit of Dr. Spencer Lucas, to which was attached Exhibit A, Curriculum Vitae; Exhibit B, Scientific Bibliography; Exhibit C, "Architecture of the Westwater Canyon Member"; Exhibit 4, Written Testimony of Michael Sheehan to which was attached Exhibit MFS-1, Chart from the Ux Consulting Company; and Exhibit 5, Resolution of the Navajo Nation Council. The Joint

Response Testimony is not explicitly addressed above so Intervenors do not offer a summary of it here, but do incorporate this testimony by reference.

2. Intervenors' Evidence Regarding Cumulative Impacts

Intervenors' Presentation on Cumulative Impacts and Segmentation of Consideration of Impacts filed February 19, 1999 was accompanied by Exhibit 1, Written Testimony of Dr. Richard Abitz; Exhibit 2, Written Testimony of Dr. William Staub; Exhibit 3, Written Testimony of Michael Wallace; Exhibit 4, Written Testimony of William Dodge; and Exhibit 5, Letter to Robert Carlson from Craig Bartels dated July 9, 1997.

In his testimony Dr. Abitz incorporates by reference his testimony filed as Exhibit 1 to ENDAUM's and SRIC's Section 8 Groundwater Presentation.

In his testimony Dr. Staub incorporates by reference his testimony filed as Exhibit 12 to ENDAUM's and SRIC's Section 8 Groundwater Presentation.

In his testimony Mr. Wallace incorporates by reference his testimony filed as Exhibit 1 to ENDAUM's and SRIC's Section 8 Groundwater Presentation.

In his testimony Mr. Dodge addresses cultural resources issues not relevant here.

3. Intervenors' Evidence Regarding Radioactive Air Emissions at Section 8.

Intervenors' Section 8 Air Presentation filed January 11, 1999 was accompanied by Exhibit 1, the Curriculum Vitae of Bernd Franke, and Exhibit 2, a report by Bernd Franke entitled "Crownpoint Uranium Solution Mining Project: Review of Outdoor Radon Levels and External Gamma Radiation" (Jan. 5, 1999) (ACN 9901130025) ("Franke Report"). Attached to the Franke Report as Exhibit A were excerpts from a "Supplementary Environmental Report" prepared by HRI (April 10, 1989). Exhibit B to

the Franke Report was excerpts from a report entitled "Environmental Assessment HRI, Inc. Unit 1 Allotted Lease Program Eastern Navajo District, New Mexico" (January 6, 1992). Exhibit C contained relevant pages from a report entitled "Radon and Radon Decay Product Concentrations in New Mexico's Uranium Mining and Milling District," prepared by Buhl, *et. al.* (March 1985). Exhibit D was an excerpt from HRI's Church Rock Revised Environmental Report (March 1993). Exhibit E was an excerpt from an environmental report for United Nuclear Corporation's Church Rock uranium mill license renewal application.

In his Section 8 Report, Mr. Franke challenged HRI's operations at Section 8 in two respects. First, Mr. Franke noted that there was a wide disparity in the levels of radon at the Crownpoint site and at the Church Rock site.²³ Franke Report at 6. Mr. Franke concluded that the ambient radon concentrations at Crownpoint were consistent with background radiation, as defined by NRC regulations, but that the elevated radon concentrations at Church Rock were likely the result of anthropogenic sources, i.e. source and byproduct material, and thus should not be considered background radiation. *Id.* at 6-7. Mr. Franke also noted that high concentrations of gamma radiation at the Church Rock Section 8 site suggested that pre-existing contamination was present at the site due to previous mining. *Id.* at 7. Thus, HRI was required to take into account these non-background radon and gamma concentrations when modeling the impacts of its Section 8 operations. *Id.* at 12.

²³ Mr. Franke noted that no data on ambient radon concentrations appear in the FEIS. Franke Report at 4. Mr. Franke based his analysis on data from the CUP Draft Environmental Impact Statement and other data that appeared in HRI's application and which are attached to the Franke Report. *Id.* at 4-6, Exhibits A-E.

Second, Mr. Franke challenged HRI's and the Staff's conclusion that radiation doses from HRI's Section 8 operations will be below regulatory limits. Id. at 8. In particular, Mr. Franke argued that HRI inappropriately took the mathematical average of the source terms for its modeling, when the great variability in the source terms demanded that an uncertainty analysis be performed.²⁴ Id. at 8-9. Neither HRI nor the Staff performed an uncertainty analysis. Id. Moreover, the MILDOS model HRI used to model radon effluent dispersion and concentrations was inappropriate given the wide variability in the source terms. Id. at 9.

Intervenors' Response to LBP-99-15 was accompanied by the Declaration of Bernd Franke (April 6, 1999) (ACN 9904090083) ("Franke Section 8 Declaration") and the Affidavit of Dr. Richard J. Abitz (April 7, 1999) (ACN 9904090096) ("Abitz Affidavit"). Mr. Franke's Section 8 Declaration was accompanied by Exhibit 1, Letter from Mark Pelizza to Holland Shepard, New Mexico Energy and Natural Resources Department, regarding source and byproduct material on HRI's Church Rock properties (Aug. 31, 1994). Exhibit 2 is a letter from Edward M. Morales to Ross Scarano, U.S. NRC Region IV, regarding radon monitoring at United Nuclear Corporation's Church Rock site (Dec. 10, 1998).

In his Section 8 Declaration Mr. Franke answered the questions posed by Judge Bloch in LBP-99-15 and addressed some inaccurate characterizations of the Franke Report by HRI and the Staff. In response to Judge Bloch's question regarding what portion of the TEDE from the Church Rock site should not be considered to be background radiation because it is from source or byproduct material, Mr. Franke

²⁴ The source terms HRI used for its radiation dose calculations at Church Rock were based on dissolved radon content in groundwater at HRI's Unit 1 site. Franke Report at 8; see also, Eggleston Affidavit at ¶ 11.

concluded that 50 to 90 percent of the ambient radon concentrations measured around HRI's Church Rock site are attributable to anthropogenic sources, i.e., source and byproduct material. Franke Section 8 Declaration at 2. Mr. Franke based his conclusion on anomalously high ambient radon and gamma concentrations at Church Rock, where prior uranium mining and milling had taken place, both on HRI's Church Rock property as well as nearby, as compared with Crownpoint where no such mining and milling took place. Id. at 3-7.

In response to Judge Bloch's second question, Mr. Franke calculated the TEDE for the individual member of the public likely to receive the highest dose of radiation from HRI's Church Rock operations, including radiation from ISL operations and source and byproduct material inside the geographical area of HRI's operations. Id. at 8-20. Mr. Franke's conclusion regarding the TEDE to individual members of the public was substantially the same as his conclusion in the Franke Report. i.e. that the radiation dose from HRI's operations combined with radiation from existing source and byproduct material is well in excess of the 100 mrem/yr compliance limit in 10 C.F.R. Part 20. Id. at 20.

In response to Judge Bloch's questions regarding the appropriate geographical scope of HRI's operations for the purposes of calculating TEDE, Mr. Franke noted that for the purposes of his analysis, he considered both Church Rock Section 8 and Church Rock Section 17. Id. at 22.

In his Affidavit, Dr. Abitz countered HRI's assertion that elevated levels of radon at Church Rock are due to concentrations of uranium near the surface. As a geologist, Dr. Abitz concluded there were no significant surficial uranium deposits near or at HRI's

Church Rock site. Abitz Affidavit at ¶ 2. Instead, the principal uranium-bearing formations at HRI's Church Rock site are the Dakota formation, located 550 feet below land surface and the Westwater Canyon Member, located 700 feet below land surface. Id. Thus, Dr. Abitz concluded that local rocks contributed very little to the ambient radon concentrations at Church Rock. Id. at ¶ 4.

4. Intervenors' Evidence Regarding Section 8 Groundwater

Intervenors' evidence on groundwater issues for Section 8 appeared in three discrete filings. First, Intervenors filed Intervenors' Written Presentation In Opposition To Hydro Resources, Inc.'s Application For A Materials License With Respect To Groundwater Protection (January 11, 1999) and Intervenors' Amended Written Presentation In Opposition To Hydro Resources, Inc.'s Application For A Materials License With Respect To Groundwater Protection²⁵ (January 18, 1999). Intervenors' second filing was ENDAUM's And SRIC's Reply In Response To HRI's And The NRC Staff's Response Presentations On Groundwater Protection Issues ("Groundwater Reply") (April 8, 1999). Intervenors' final groundwater filing was Intervenors' Joint Response To HRI's And The NRC Staff's Responses To The Presiding Officer's April 21, 1999 Memorandum And Order (Questions) ("Joint Groundwater Response") (May 25, 1999).

Intervenors' Initial Groundwater Presentation consists of five volumes: their legal brief and four volumes of exhibits. As noted, Volume I consists of Intervenors' legal brief on groundwater issues for Section 8.

²⁵ Intervenors' Amended Written Presentation In Opposition To Hydro Resources, Inc.'s Application For A Materials License With Respect To Groundwater Protection amends Intervenors' Initial Groundwater Presentation Brief. None of Intervenors' expert testimony was amended.

Volume II consists of the Written Testimony of Richard J. Abitz (January 8, 1999), labeled Exhibit 1, to which is attached a series of exhibits labeled A through P. In his written testimony Dr. Abitz testified that the water quality at Section 8 was very good. January 8 Abitz Testimony at 14. He then testified that HRI has underestimated the risk to groundwater quality due to excursions, due in large part to its mistaken assumption that the Westwater is a homogeneous aquifer. Id. at 27-37.

Volume III consists of the Written Testimony of William P. Staub (January 9, 1999), labeled Exhibit 2, to which is attached a series of exhibits labeled A through Y. In his written testimony, Dr. Staub testified that HRI's mining sequence at Church Rock was illogical and could result in contamination of an already restored aquifer. January 9 Staub Testimony at 31-34. He also testified that HRI's reinjection of production bleed wastewater and excursion detection criteria are inadequate to prevent excursions from Section 8, and thus jeopardize Church Rock's groundwater. Id. at 34-39.

Volume IV consists of the Written Testimony of Michael G. Wallace (January 8, 1999) (ACN 9904140074) ("January 8 Wallace Testimony"), labeled Exhibit 3, to which is attached a series of exhibits labeled A through P. The main thrust of Mr. Wallace's testimony is that HRI is mistaken about the geology of the Church Rock Section 8 site. January 8 Wallace Testimony at 9. Rather than being homogeneous - as characterized by HRI - the Westwater is instead heterogeneous, consisting of a series of interbraided stream channels that would accelerate the transport of contaminants and render ineffectual HRI's planned monitor well system. January 8 Wallace Testimony at 10-14, 38-42. Additionally, Mr. Wallace testified that HRI's aquifer testing was inadequate to determine whether there is a hydraulic connection between the Westwater and the

overlying and underlying aquifers. Id. at 43-61. Finally, Mr. Wallace testified that the Recapture Shale does not exist at Section 8 and therefore could not act as a confining unit between the Westwater and the underlying Cow Springs aquifer. Id. 62-74.

Volume V consists of seven exhibits labeled 4 through 10 (January 11, 1999).

The seven exhibits are as follows:

4. State of New Mexico Environmental Improvement Division Uranium Mill License Renewal Application – Environmental Report License No. NM-UNC-ML (December, 1981);
5. Navajo Nation/OSE Hearing G-11-A, Simulated Loading Of Existing Wells;
6. HRI Materials License, SUA-1508, and cover letters (January 5, 1998);
7. Letter from Myron O. Knudson to Kathleen Sisneros, United States Environmental Protection Agency (November 23, 1993);
8. Letter from Felicia A. Marcus, Regional Administrator, U.S. EPA to Mark E. Weidler, New Mexico Environment Department (July 14, 1997);
9. United States Court of Appeals for the Tenth Circuit Docketing Statement, HRI, Inc. v. United States Environmental Protection Agency (September 10, 1997); and
10. Excerpt from Navajo Nation Primary Drinking Water Regulations.

Intervenors' Groundwater Reply consists of a legal brief and three expert affidavits labeled Exhibits A, B, and C. Exhibit A is the Written Reply Testimony Of Dr. Richard J. Abitz (April 7, 1999) (ACN 9904140055) ("April 7 Abitz Testimony"). Exhibit B is the Written Testimony Of Dr. William P. Staub (April 6, 1999) (ACN 9904140060) ("April 6 Staub Testimony"). Exhibit C is the Written Testimony Of Michael G. Wallace (April 8, 1999) (ACN 9904140074) ("April 8 Wallace Testimony"). Mr. Wallace's testimony includes six attachments, labeled Exhibits 1-6. The Reply

Testimony is not explicitly addressed above, so Intervenors do not offer a summary of it here, but do incorporate this testimony by reference.

Finally, Intervenors presented evidence regarding groundwater issues at Section 8 in Intervenors' Joint Response To HRI's And The NRC Staff's Response To The Presiding Officer's April 21, 1999 Memorandum And Order (Questions) (May 25, 1999), to which are attached five exhibits. The first, labeled Exhibit 1, is the Affidavit Of Dr. Richard J. Abitz In Response To The Presiding Officer's Questions In The Memorandum And Order Of April 21, 1999 (May 21, 1999) (ACN 9905280113) ("May 21 Abitz Testimony"). Attached as Exhibit 2 is the Response Affidavit Of Michael G. Wallace (May 20, 1999) (ACN 9905280117) ("May 20 Wallace Testimony"). Mr. Wallace's affidavit includes eleven exhibits labeled 2-A through 2-K. Attached as Exhibit 3 is the Response Affidavit Of Dr. Spencer G. Lucas (May 20, 1999) (ACN 9905280120) ("May 20 Lucas Testimony"). Dr. Lucas' affidavit includes three exhibits labeled A through C. Attached as Exhibit 4 is the Written Testimony of Michael F. Sheehan, Ph.D (May 20, 1999) (ACN 9905280121) ("May 20 Sheehan Testimony"). Dr. Sheehan's affidavit includes one exhibit labeled MFS-1. Finally, attached as Exhibit 5 is a Resolution of the Navajo Nation Council, CS-79-98, Approving the Fiscal Year 1999 Navajo Nation Operating Budget and Other Related Actions. The Joint Response Testimony is not explicitly addressed above, so Intervenors do not offer a summary of it here, but do incorporate this testimony by reference.

Exhibit 5 was attached to address the alleged economic benefits of the CUP to the Navajo Nation. Joint Response at 40.

5. Intervenors' Evidence Regarding Groundwater (2005)

ENDAUM's and SRIC's Brief in Opposition to HRI's Application for a Materials License with Respect to: Groundwater Protection, Groundwater Restoration and Surety Estimates (March 7, 2005) was accompanied by Exhibits A-LL. The testimony submitted with this filing is not explicitly addressed above so Intervenor's do not offer a summary of it here, but do incorporate this testimony by reference.

6. Intervenor's Evidence Regarding Environmental Justice Issues

ENDAUM's and SRIC's Brief in Opposition to HRI's Application for a Materials License with Respect to: Environmental Justice Issues (February 19, 1999) ("Intervenor's Environmental Justice Presentation") was accompanied by Exhibit 1, Testimony of Dr. Robert Bullard Regarding Environmental Justice Issues at the Crownpoint Uranium Project. Attached to Exhibit 1 was a series of exhibits labeled A-M. Intervenor's Environmental Justice Presentation also included Exhibit 2, Written Testimony of Christine J. Benally, Ph.D., to which were attached Exhibits A through V. Exhibit 3 was Written Testimony of Douglas M. Brugge, Ph.D., M.S.; attached to Exhibit 3 were Exhibits A through F. Exhibit 4 was Written Testimony of Larry J. King, attached to Exhibit 4 were Exhibits A through D. Exhibit 5 was Written Testimony of Mitchell W. Capitan. Exhibit 6 was Written Testimony of Mavis Smith, and attached to Exhibit 6 was Exhibit A, ENDAUM Land Use Survey (January 1999), consisting of completed copies of the survey.

In his testimony, Dr. Robert Bullard discussed his conclusion that the FEIS for the Crownpoint Uranium Project is deficient in its consideration of the environmental justice implications of the proposed project. He concluded that the FEIS is inadequate because it fails to accurately characterize the Native American environmental justice communities

of Church Rock and Crownpoint, to evaluate historic and ongoing patterns of exposure to environmental hazards that make the residents of these communities particularly vulnerable to additional adverse impacts, or to evaluate the disproportionate way in which the adverse impacts of the Crownpoint Project will fall on Church Rock and Crownpoint. He also concluded that the FEIS fails to make a fair or reasonable comparison of the relative costs and benefits of the proposed project, especially as they relate to environmental justice issues. In addition, he found that the mitigative measures proposed by the FEIS are inadequate to effectively protect the community from the hazards of uranium mining. Finally, Dr. Bullard concludes that the manner in which the HRI license was issued, including postponing the evaluation of some important environmental issues until after the FEIS was issued and after the facility was licensed, exemplifies the type of procedural inequity that characterizes environmental discrimination.

Dr. Christine Benally evaluated the adequacy of the FEIS with respect to the cumulative, public health-related environmental impacts of the CUP on the environmental justice communities of Church Rock and Crownpoint, New Mexico.

Douglas M. Brugge testified that the NRC's assessment of the cumulative impacts of the HRI project is deficient because of agency failed to describe and assess the full toxicity of the heavy metal and radiological contaminants found in uranium ore, including in HRI's ores, and that are likely to be in wastes present at abandoned uranium mine sites in the Church Rock area, and because NRC's proposed 0.44 mg/L uranium standard for groundwater restoration is inadequate to protect human health.

Larry J. King testified that his traditional Navajo practices such as grazing livestock would be negatively affected by HRI's proposed project. He testified as to his understanding of the important role of livestock ownership in Navajo culture. He testified that it would not be possible for him to move away to avoid the mining project.

Mitchell W. Capitan testified that his traditional Navajo practices would be negatively affected by HRI's proposed project. He testified as to his understanding of the important role of livestock ownership in Navajo culture. He testified that moving away to avoid the mining project would be a last resort; he would move away only if there were no other way to protect his children's health.

7. Intervenors' Evidence Regarding Supplementation of the FEIS

Intervenors' Motion to Supplement the Final Environmental Impact Statement for the Crownpoint Uranium Project Church Rock Section 8 (May 14, 2004) ("Intervenors' Section 8 Motion to Supplement FEIS") and Intervenors' Motion to Supplement the Final Environmental Impact Statement for the Crownpoint Uranium Project Church Rock Section 17 (May 14, 2004) ("Intervenors' Section 17 Motion to Supplement FEIS") were both accompanied by Exhibit A, Affidavit of Michael G. Wallace. Attached to Exhibit A was Exhibit A-1, Curriculum Vitae of Michael G. Wallace.

Exhibit B was Affidavit of Alan Eggleston. Attached to Exhibit B was Exhibit B-1, Curriculum Vitae of Alan Eggleston

Michael Wallace concluded in his affidavit that the CUP FEIS should be supplemented to analyze the impact that the CUP on Sections 8 and 17 will have on the proposed Springstead Estates development.

Alan Eggleston addressed the potential radiological impacts of HRI's operations on Springstead Estates in his affidavit. He addressed the following issues: previous uranium mining in the area may have adversely affected the environment at the Springstead site; a large human population will be living at Springstead Estates during the operational period of HRI's proposed Section 8 and Section 17 ISL mines; and the radiological assessment for the HRI mines at Church Rock Sections 8 and 17 never took into account the presence of such a large population within a short distance from an NRC licensed facility.

G. Summary of Licensing Board's and Commission's Decisions Regarding NEPA

With respect to NEPA, the Licensing Board and Commission issued the following decisions:

1. In the Matter of Hydro Resources, Inc., Memorandum and Order (Questions) (April 21, 1999) (unpublished).

The Presiding Officer issued Memorandum and Order (Questions) from the Presiding Officer (April 21, 1999) after Intervenor filed their presentation on NEPA and HRI and the Staff filed their responses. In the Matter of Hydro Resources, Inc., Memorandum and Order (Questions) (April 21, 1999) (unpublished).

In this Memorandum and Order, the Presiding Officer directed the parties to answer questions about groundwater, the adequacy of the FEIS, and environmental justice. Answers to all eight questions could be relevant to the adequacy of the FEIS as they all required further analysis of issues addressed in the FEIS.

2. LBP 99-30, 50 NRC 77 (1999)

The Presiding Officer issued LBP 99-30, Partial Initial Decision Concluding Phase 1 (Groundwater, Cumulative Impacts, NEPA and Environmental Justice), after Intervenor filed their presentation on NEPA Issues, HRI and the Staff filed their responses, and parties responded to the questions set forth in In the Matter of Hydro Resources, Inc., Memorandum and Order (Questions) (April 21, 1999) (unpublished) (see above).

In LBP 99-30, the Presiding Officer found that the Staff's decision to prepare an EIS was consistent with its responsibility under 10 C.F.R. § 51.20. Id.

The Presiding Officer concluded that the ISL mining project on Church Rock Section 8, with the license conditions imposed by the Staff of the Commission, does not pose a credible threat to the environment or to human health and safety and further concludes that the FEIS and the findings made in this proceeding, both in prior decisions and in this one, take the "hard look" required for NEPA determinations, for consideration of cumulative impacts, and for environmental justice. Id. The Presiding Officer also found that there is no reason to question the Staff's conclusions in the FEIS with respect to groundwater, concluding that the FEIS is adequate as it is both thorough and correct. Id. The Presiding Officer also found that the FEIS performed an adequate cost/benefit analysis, and gave adequate consideration to cumulative impacts, relocation of individuals, possible radioactive air emissions, secondary benefits, and effects and waste disposal issues. Id. at 120-121. The Presiding Officer found that no supplementation of the FEIS was needed as regards performance-based licensing and alternatives. The Presiding Officer reserved for a subsequent phases of the case questions concerning the

impact of the change in the order of mining and whether the Crownpoint municipal water supply is adequately protected.

3. CLI-00-12, 52 NRC 1 (2000)

In CLI-00-12, the Commission rejected the Intervenor's petition for review of LBP-99-30, regarding the technical issues. In the Matter of Hydro Resources, Inc., CLI-00-12, 52 NRC 1, 3 (2000). The Commission specifically stated that: "[t]he remainder of LBP-99-30 deals with NEPA, environmental justice and other issues that the Commission still is considering and does not resolve here." 52 NRC at 2.

In CLI-00-12, the Commission also denied petitions for review of decisions regarding air emissions, LBP-99-18 and LBP-99-19.

4. CLI 01-04, 53 NRC 31 (2001)

In CLI-01-04, the Commission granted review of, and affirmed, LBP-99-30, which addressed NEPA and environmental justice concerns. The Commission found no material error in LBP-99-30 and affirmed the decision. The Commission observed that it was not inclined to disturb fact-specific findings by the Presiding Officer. The Commission did examine in detail specific issues raised by the briefs regarding NEPA issues.

5. LBP 99-15, 49 NRC 261 (1999)

In LBP 99-15, a decision by the Presiding Officer regarding Radioactive Air Emissions, the Presiding Officer ruled that pursuant to 10 C.F.R. § 40.4, background radiation does not include radiation from source, byproduct or special nuclear materials regulated by the Commission. The Presiding Officer also ordered that parties answer six questions including question 6: "Has the FEIS adequately addressed the combined

impacts of radiation from the project and from elevated levels of radiation in the area of the project?" Id. at 269.

6. LBP-99-19, 49 NRC 421 (1999)

In LBP 99-19, the Presiding Officer ruled that the airborne doses from the proposed operation of the Church Rock site will not exceed regulatory requirements.

7. LBP 04-23, 2004 NRC LEXIS 230

In LBP 04-23, the Presiding Officer ruled that Intervenors have not met the applicable regulatory standard for requiring the FEIS to be supplemented, and denied Intervenors' supplementation motions.

8. CLI 04-39, 2004 NRC LEXIS 259 (NRC , 2004)

In CLI 04-39, the Commission denied Intervenors' Petitions for Review of LBP 04-23.

V. CONCLUSION

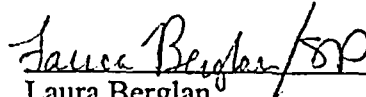
Intervenors hereby preserve the arguments made above for the remaining three sites: Church Rock Section 17, Unit 1, and Crownpoint. For all the foregoing reasons, HRI's materials license should be revoked for Section 17, Unit 1, and Crownpoint. Alternatively, the FEIS should be supplemented and recirculated for public comment. Intervenors should be permitted to challenge any new data and information presented.

Dated: June 27, 2005



Sarah Piltch
Eric D. Jantz
Douglas Meiklejohn
New Mexico Environmental Law Center
1405 Luisa Street, Suite 5
Santa Fe, New Mexico 87505
(505) 989-9022
Fax: (505) 989-3769

Attorneys for ENDAUM and SRIC



Laura Berglan
DNA-People's Legal Services, Inc.
P.O. Box 765
Tuba City, Arizona 86045
(928) 283-3211
Fax: (928) 283-5460

Attorney for Grace Sam and
Marilyn Morris

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
E. Roy Hawken, Presiding Officer
Richard F. Cole, Special Assistant
Robin Brett, Special Assistant

In the Matter of)	
)	
HYDRO RESOURCES, INC.)	Docket No. 40-8968-ML
(P.O. Box 777)	ASLBP No. 95-706-01-ML
Crownpoint, New Mexico 87313))	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Intervenors Eastern Navajo Diné Against Uranium Mining's, Southwest Research And Information Center's, Grace Sam's and Marilyn Morris' Written Presentation In Opposition To Hydro Resources, Inc.'s Application For A Materials License With Respect To: NEPA Issues For Church Rock Section 17, Unit 1 and Crownpoint" in the above-captioned proceeding have been served on the following by U.S. Mail, first class, and via email to those persons indicated by an asterisk, and via federal express to those persons indicated by two asterisks this 27th day of June, 2005:

Administrative Judge, E. Roy Hawken* **
Presiding Officer
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852
Email: erh@nrc.gov

Administrative Judge* **
Richard F. Cole, Special Assistant
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852
Email: rfcl@nrc.gov

Jep Hill, Esq.
Jep Hill and Associates
P.O. Box 30254
Austin, TX 78755

Mark S. Pelizza, President*
Uranium Resources Inc.
650 S. Edmonds Lane
Lewisville, TX 75067
Email: mspelizza@msn.com

Eastern Navajo-Diné Against
Uranium Mining
P.O. Box 150
Crownpoint, New Mexico 87313

John T. Hull*

Tyson R. Smith *
U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop O-15D21
Washington, DC 20555
Fax: 301-415-3725
Email: jth@nrc.gov Email: trs1@nrc.gov

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

Anthony J. Thompson, Esq.*
Christopher Pugsley, Esq.*
Thompson & Simmons, PLLC
1225 19th Street, N.W., Suite 300
Washington, D. C. 20036
Fax: (202) 496-0783
E-mail: ajthompson@athompsonlaw.com
E-mail: cpugsley@athompsonlaw.com

Office of the Secretary* **
Attn: Rulemakings and Adjudications Staff
U.S. Nuclear Regulatory Commission
One White Flint North
11545 Rockville Pike
Rockville, MD 20852
E-mail: hearingdocket@nrc.gov

Administrative Judge, Robin Brett * **
2314 44th Street, N.W.
Washington, D.C. 20007
Fax: (703) 648-4227
E-mail: rbrett@usgs.gov

Louis Denetsosie, Attorney General
Navajo Nation Department of Justice
P.O. Box 2010
Window Rock, AZ 86515

William Zukosky *
DNA-People's Legal Services, Inc.
201 East Birch, Suite 5
Flagstaff, AZ 86001
E-mail: wzukoskv@dnalegalservices.org

Laura Berglan *
DNA-People's Legal Services, Inc.
P.O. Box 765
Tuba City, AZ 86045
E-mail: lberglan@dnalegalservices.org

Office of Commission Appellate
Adjudication
U.S. Nuclear Regulatory Commission
Mail Stop: O-16G15
Washington, D.C. 20555

Adjudicatory File
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Mail Stop: T-3F23
Washington, D.C. 20555

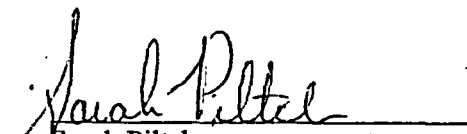
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Mail Stop: T-3 F23
Washington, D. C. 20555

David C. Lashway, Esq. *
Hunton & Williams, LLP
1900 K Street, NW
Washington, D.C. 20006-1109
E-mail: dlashway@hunton.com

Geoffrey H. Fettus *
Natural Resources Defense Counsel
1200 New York Ave, N.W.
Suite 400
Washington, D.C. 20005
E-mail: gfettus@nrdc.org

Susan C. Stevenson-Popp* **
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852
E-mail: scs2@nrc.gov

Karen Valloch*
E-mail: ksv@nrc.gov


Sarah Piltch
Counsel for Intervenors