

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman  
Dr. Kaye D. Lathrop  
Dr. Craig M. White

In the Matter of

AREVA ENRICHMENT SERVICES, LLC

(Eagle Rock Enrichment Facility)

Docket No. 70-7015-ML

ASLBP No. 10-899-02-ML-BD01

April 22, 2011

MEMORANDUM AND ORDER

(Second Set of Board Questions Regarding Environmental-Related Matters)

In the Licensing Board's March 30, 2011 updated general schedule, we established a schedule for the National Environmental Policy Act (NEPA)/environmental-related portion of this mandatory/uncontested hearing under which, on or before April 22, 2010, the Board is to provide questions for the NRC staff and applicant AREVA Enrichment Services, LLC, (AES) to answer. See Licensing Board Memorandum and Order (Updated General Schedule) (Mar. 30, 2011) app. A at 2 (unpublished). Finding, however, that it had already generated a set of inquiries that it was prepared to issue, on April 15, 2011, the Board provided the parties with an initial round of questions. See Licensing Board Memorandum and Order (Initial Board Questions Regarding Environmental-Related Matters and Associated Administrative Directives) (Apr. 15, 2011) at 1 (unpublished). In that issuance, the Board also indicated that it might provide an additional set of questions by the April 22 deadline. See id. at 3. That second set of questions is included as Attachment A to this issuance.

The staff and AES responses to the Board's questions being issued this date should be filed on or before Monday, May 9, 2011,\* and are subject to the administrative directives provided in the Board's April 15, 2011 memorandum and order. See id. at 1-2.

After reviewing the answers to these questions, the Board will decide whether any additional questions on these or any other relevant subjects are appropriate.

It is so ORDERED.

FOR THE ATOMIC SAFETY  
AND LICENSING BOARD

/RA/

G. Paul Bollwerk, III  
Chairman

Rockville, Maryland

April 22, 2011

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\* Although all of the questions can be answered by both the staff and AES if they so choose, they may wish to consult if either believes one party is in a better position to respond to the particular question. The Board anticipates that at least one party will respond to each question.

Also, to the degree a party believes that a question in the initial set of inquiries can best be answered in conjunction with one of the questions in this second set, the party should advise the Board promptly by seeking an extension of time permitting a response to the question in the first set at the same time a response is filed for the second set.

**ATTACHMENT A**

Attachment A: Eagle Rock Enrichment Facility Environmental Inquiries

#	Document	Document Section(s)	Document Page(s)	Inquiry
13	Final Environmental Impact Statement (FEIS)	2.1.4.2	2-21	The FEIS describes a number of possible low-level radioactive waste (LLRW) facilities that might be utilized for Eagle Rock Enrichment Facility (EREF)-generated LLRW. Recently, the State of Texas has indicated it may open the compact disposal site it operates with the State of Vermont to permit the receipt of LLRW generated in non-compact states. <u>See 36 Tex. Reg. 571, 571 (Feb. 4, 2011).</u> Is this a facility that might be utilized for LLRW from the EREF and, if so, what environmental impacts would that have?
14	FEIS	2.3.1.1	2-28 to -30	From Figure 2-8, it appears the EREF site lies within about ten miles of a designated seismic avoidance area and approximately 100 miles from a designated winter weather avoidance area. What gives AES and/or the staff confidence that these avoidance areas have been accurately mapped such that the proposed EREF falls outside their boundaries?
15	FEIS	2.3.1.2	2-29, 2-31 (Table 2-3)	<p>(a) The FEIS describes a number of Phase I candidate site screening criteria that were considered disqualifying, including threatened or endangered species near or onsite or the presence of sensitive properties, such as national parks. In this vein, why wasn't having a National Register of Historic Places-eligible structure onsite considered to be a disqualifying screening criterion?</p> <p>(b) Relative to the Phase I candidate site screening criterion regarding the presence of sensitive properties, Table 2-3 indicates that several sites (i.e., Power County-1 in Power, ID; Blackfoot in Bingham, ID; Copeland Stone, in Laurens, SC) were excluded based, at least in part, on this criterion. Please explain the basis for these exclusions and why/how these sites differ from the EREF, which has the Hell's Half Acre Wilderness Study Area located immediately to its south.</p>

#	Document Section(s)	Document Page(s)	Inquiry
16	FEIS	4.2.8.2	4-62 to -63  The FEIS discusses noise level impacts in terms of decibels (dB) above ambient levels, i.e., "loudness." Is any of the machinery used during the construction or operation of the EREF, including the centrifuges, likely to produce an impact because of sound in frequencies outside the range of human hearing such that it would cause discomfort/disruption for humans or, alternatively, any of the wildlife species described in section 4.2.7 as utilizing the habitat near the EREF?
17	FEIS	4.2.10.2	4-81 and E-14 (Table E-8 note a)  The estimated annual exposure to construction workers completing the last 20 percent of the cylinder storage pad is 1.96 times the 10 C.F.R. § 20.1301 dose limit, so that these workers should be classified (and paid) as radiation workers.  (a) What measures will be taken to ensure either that worker exposure will not exceed the 10 C.F.R. § 20.1301 dose limit or that the workers involved are treated as radiation workers?  (b) The dose to construction workers was not calculated for the construction of the second to last 20 percent of the cylinder storage pad. Is it known whether this dose does or does not exceed the 10 C.F.R. § 20.1301 dose limit? If that dose is known, what is that dose and does that dose exceed the section 20.1301 limit? If that dose isn't known, why hasn't it been calculated?
18	FEIS	D.3.1.2	D-11  The population densities used to calculate radioactive exposures along truck routes used during the shipping of radioactive materials to and from the EREF are based on U. S. Census 2000 data. What are the estimated exposure increases based on 2010 census data? Do these increases change the conclusions reached using the 2000 census data?

#	Document Section(s)	Document Page(s)	Inquiry
19	FEIS	E.2.5 E-6	Please describe the use of the atmospheric transport model set forth as Equation (1). In particular explain how the various parameters are selected for the EREF site. Explain also which of those parameters depends on the downwind distance and how that parameter depends on that distance. Also describe how this model was calibrated (if it was) and verified for the EREF site.

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Licensing Board "**MEMORANDUM AND ORDER (Second Set of Board Questions Regarding Environmental-Related Matters)**", dated April 22, 2011, have been served upon the following persons by Electronic Information Exchange.

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AREVA ENRICHMENT SERVICES, LLC (Eagle Rock Enrichment Facility) – 70-7015-ML  
**MEMORANDUM AND ORDER (Second Set of Board Questions Regarding  
Environmental-Related Matters)**

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[Original signed by Linda D. Lewis]  
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Office of the Secretary of the Commission

Dated at Rockville, Maryland  
this 22<sup>nd</sup> day of April 2011