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# U.S. NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

*Protecting People and the Environment*

NRCR00104

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## **Eagle Rock Enrichment Facility Mandatory Hearing**

January 25 -27, 2011

**NRC Staff Presentation Topic 3  
License Conditions/Exemptions**



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# Overview of License Conditions, Exemptions and Authorizations

## License Conditions:

- During the review, 10 license conditions were identified as listed in the SER (NRC000032)
- 4 “standard” license conditions will be imposed

## Exemptions:

- AES requested 1 exemption and 1 special authorization in license application
- AES submitted 2 additional exemption requests

# License Conditions in the SER

## Financial Qualifications:

- *Construction of each incremental phase of the EREF shall not commence before funding for that increment is available or committed. Of this funding, AES must have in place before constructing such increments, commitments for one or more of the following: [....] AES shall make available for NRC inspection, documentation of both the budgeted costs for each incremental phase and the source of funds available or committed to pay those costs (SER, Section 1.2.3.3.1)) (NRC000032).*
- The license condition requires AES to obtain suitable funding in advance to ensure they have the financial capability to incrementally fund and operate the EREF.
- LES did not have a similar license condition.
  - LES made commitments that construction of the National Enrichment Facility (NEF) would not begin before funding was fully committed.

# License Conditions in the SER

## Liability Insurance:

- *The licensee shall provide proof of full liability insurance of \$300 million, as required under 10 CFR 140.13(b), at least 30 days prior to the planned date for obtaining licensed material (SER, Section 1.2.3.4) (NRC000032).*
- Because the full liability insurance coverage will not be provided until AES takes possession of licensed material, this license condition is needed to allow NRC to confirm proof of liability insurance in accordance with 10 CFR 140.13(b).
- Similar to license condition # 15 in the LES license (NRC000060).

# License Conditions in the SER

## Information Security:

- *The licensee shall not use, process, store, reproduce, transmit, handle, or allow access to classified matter except as provided by applicable personnel and facility clearances required under 10 CFR Part 95 (SER, Section 1.2.4.3.4) (NRC000032).*
- This license condition is needed to ensure that the clearances required under 10 CFR Part 95 are obtained before classified matter is processed, handled, or accessed.
- Same as license condition # 26 in the LES license (NRC000060).

# License Conditions in the SER

## Information Security Cont.:

- *Prior to designating areas where the use and handling of classified information will routinely occur, NRC will be notified to determine if additional security measures are required. If NRC does determine the need for additional security measures, an amendment request must be submitted, and approved, prior to establishment and use of the area(s) (SER, Section 1.2.4.3.4) (NRC000032).*
- Because AES has not yet designated the areas where the use and handling of classified information will routinely occur, the license condition is needed to allow NRC to ensure that areas used for handling classified information are properly protected.
- Same as license condition # 31 in the LES license (NRC000114).

# License Conditions in the SER

## Decommissioning Activities:

- *Prior to the commencement of construction, AES shall collect additional surface soil samples and analyze them for radiological constituents. The site property will be divided into four survey units, and 15 surface soil samples shall be taken per survey unit (i.e., 60 additional soil samples). The sample collections shall be taken from areas ... (SER, Section 10.3.2) (NRC000032).*
- This license condition formalizes AES's commitment to collect and analyze samples to determine the initial background levels for the site (NRC000043).
- No similar condition in the LES license.



# License Conditions in the SER

## Financial Assurance for Decommissioning:

- *The licensee shall provide financial assurance (FA) on the schedule described in the license condition (this schedule covers the period prior to delivery of natural UF<sub>6</sub> as testing material through full capacity operations) (SER, Section 10.3.3.1.1) (NRC000032).*
- This license condition is needed to ensure AES's compliance with the proposed methodology of providing financial assurance on an incremental, forward-looking basis.
- Similar to license conditions # 16, 17, 18 and 23 in the LES license (NRC000060, NRC000114).

# License Conditions in the SER

## Items Relied on For Safety (IROFS):

- *To define the boundaries of each IROFS, the licensee shall comply with Appendix B to Chapter 3 of NUREG 1520, Revision 1 (NRC, 2010) “Qualitative Criteria for Evaluation of Likelihood” (NRC000070) and utilize the licensee’s guideline “Guidelines for Development of Boundary Definitions for IROFS [items relied on for safety],” Appendix A of the ISA Summary, Revision 2, dated April 30, 2010 (NRC000046). Completed IROFS boundaries for all IROFS shall be available for inspection prior to the operational readiness review (SER, Appendix A) (NRC000033).*
- This license condition is needed to ensure that the final design is adequate and acceptable to the staff.
- Similar to license condition # 19 in the LES license (NRC000060).

# License Conditions in the SER

## IROFS:

- *For those IROFS requiring operator actions, a human factors engineering review of the human-system interfaces shall be conducted using the applicable guidance in NUREG- 0700, "Human-System Interface Design Review Guidelines," Revision 2, dated May 2002 (NRC000075); NUREG-0711, "Human Factors Engineering Program Review Model," Revision 2, dated February 2004 (NRC000074); and as described in Section 3.3.8 of the Safety Analysis Report, "Human System Interface Design" (SER, Appendix D) (NRC000079).*
- This license condition formalizes AES's commitments to the NUREGs and associated implementation.
- LES committed to using the same NUREGs.

# License Conditions in the SER

## IROFS:

- *Currently, the design information concerning any IROFS that may use software, firmware, microcode, programmable logic controllers, and/or any digital device, including hardware devices which implement data communication protocols (for example, Fieldbus devices and Local Area Network controllers) is preliminary and not complete. Should the completed design of any IROFS (including every component within an IROFS boundary) include any of the preceding features, the licensee shall obtain Commission approval prior to implementing the IROFS” (SER, Appendix E) (NRC000080).*
- This license condition is needed to ensure that prior NRC approval is sought for any completed IROFS design that will use digital controls as listed in the license condition.
- Similar to license condition # 20 in the LES license (NRC000060).

# License Conditions in the SER

## Material Control and Accounting:

- *The licensee shall maintain and follow the Fundamental Nuclear Material Control Program for control and accounting and measurement control of uranium source material and special nuclear material; make no change that would decrease the effectiveness of the program without prior approval of the Commission; and maintain records of changes (Non-public SER Appendix H) (NRC000081).*
- This license condition is required pursuant to 10 CFR 70.32(c)(1) to ensure AES obtains NRC approval for MC&A.
- Similar to license condition # 24 in the LES license (NRC000060).

# Standard License Conditions

## “Tie-Down” Condition:

- *The licensee shall conduct authorized activities at the EREF in accordance with the statements, representations, and conditions, or as revised in accordance with Section 19 of the QAPD, 10 CFR 40.35(f), 10 CFR 51.22, 10CFR 70.72, or 10 CFR 95.19 in: [list of licensing basis documents]*
- This tie-down condition will incorporate the license application documents by reference into the license to ensure that the applicant’s commitments are enforceable.
- Similar to license condition #10 in the LES license (NRC000060).

# Standard License Conditions

## Requirement for Operational Readiness Review:

- *Introduction of uranium hexafluoride ( $UF_6$ ) into any module of the EREF shall not occur until the Commission completes a construction inspection in accordance with 10 CFR 40.41(g) and 10 CFR 70.32(k) and an operational readiness and management measures verification review to verify that management measures that ensure compliance with the performance requirements of 10 CFR 70.61 have been implemented and confirms that the facility has been constructed and will be operated safely and in accordance with the requirements of the license. The licensee shall provide the Commission with 120 days advance notice of its plan to introduce  $UF_6$  into any module of the EREF.*
- This license condition is needed to verify readiness prior to operation.
- Similar to license condition # 11 in the LES license (NRC000060).

# Standard License Conditions

Exemption requests from license application:

- *The licensee is hereby granted the exemption requests from certain provisions of 10 CFR 40.36 and 10 CFR 70.25, as identified in Section 1.2.5 “Special Exemptions and Special Authorizations” of the Eagle Rock Enrichment Facility Safety Analysis Report, Revision 2, dated April 30, 2010 (AES000037).*
- This license condition is needed to formalize NRC’s approval of the exemption from decommissioning funding requirements.
- Same as license condition # 12 in the LES license (NRC000060).



# Standard License Conditions

## Request for 30 year license:

- *This license will expire 30 years after the date of license issuance.*
- 10 CFR 70.22 (a) (3) requires that an applicant state the period of time for which a license is requested. This license condition specifies the expiration date of the license based on AES's request.
- This license condition is included in all Part 70 licenses, although the actual license period may vary.
- Same as license condition # 13 in the LES license (NRC000060).

# Exemptions

## Preconstruction Exemption Request:

- On March 17, 2010, NRC staff granted AES an exemption from the requirements of 10 CFR 30.4, 30.33(a)(5), 40.4, 40.32(e), 70.4, and 70.23(a)(7) which govern the commencement of construction (NRC000082).
- The exemption allows AES to begin certain construction of the EREF before NRC's environmental review is complete, provided that none of the facilities or activities will be a component of the EREF Physical Security Plan or Standard Practice Procedures Plan for the Protection of Classified Matter or otherwise subject to NRC review or approval.
- LES did not request a similar exemption for the NEF.

# Exemptions

## Forward-looking, Incremental Funding:

- AES requested an exemption to provide forward-looking incremental funding for decommissioning (AES000037).
- The staff will include a license condition granting this exemption. In addition, the staff would impose a license condition addressing AES's commitments for updating the decommissioning funding plan.
- LES requested an exemption for the NEF to provide incremental funding for decommissioning. Staff granted the exemption and imposed license conditions #16, 17 and 18 to address LES's commitments for updating the decommissioning funding plan over time (NRC000060, NRC000114).

# Exemptions

## Part 21 Exemption Request:

- On July 28, 2010, NRC staff granted AES an exemption from the 10 CFR 21.3 definitions for commercial grade item, basic component, critical characteristic, dedication, and dedicating entity (NRC000041), in response to a January 29, 2010 request from AES (NRC000040).
- The approval of the exemption will be captured in the list of licensing documents associated with the standard “tie-down” license condition.
- On February 11, 2009, NRC staff granted LES an exemption from the 10 CFR 21.3 definitions in response to August 27, 2008 and November 21, 2008 requests from LES (NRC000115). This exemption was incorporated into the NEF license as license condition # 28 (NRC000114).

# Special Authorization

## Special Authorization for Changes:

- AES requested an authorization to make certain license application changes without prior NRC approval (NRC000064).
- The staff evaluated this request and granted the authorization (SER, Section 1.2.4.2.2) (NRC000032). The staff will impose the authorization as a license condition.
- LES did not request a similar authorization for the NEF.

# Summary of License Conditions, Exemptions and Authorizations

Currently 16 license conditions for AES:

- License conditions identified in the SER (10)
- Standard license conditions (4)
- Initial exemption and authorization request:
  - Exemption for incremental, forward-looking decommissioning funding
  - Special authorization for making changes to the LA
- Additional exemptions requested:
  - Preconstruction (prior to NRC Environmental Review)
  - Part 21 definitions, such as “commercial grade item”

These compare to 15 similar license conditions for LES



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