

**REQUEST FOR SUPPLEMENTAL INFORMATION:  
AREVA INC. RESPONSE TO GENERIC LETTER 2015-01**

Regulatory Basis

The regulatory basis for each of the following information requests is as follows:

Title 10 of the *Code of Federal Regulations* (10 CFR) Paragraph 70.62(c)(1)(iv) requires a licensee to conduct and maintain an integrated safety analysis, that is of appropriate detail for the complexity of the process, that identifies potential accident sequences caused by process deviations or other events internal to the facility and credible external events, including natural phenomena.

Paragraph 70.62(c)(1)(v) of 10 CFR requires a licensee to conduct and maintain an integrated safety analysis, that is of appropriate detail for the complexity of the process, that identifies the consequence and the likelihood of occurrence of each potential accident sequence identified pursuant to paragraph (c)(1)(iv) of this section, and the methods used to determine the consequences and likelihoods.

Supplemental Information Request

1. Regarding AREVA, Inc. (AREVA) response to Generic Letter request (1) b.i.
  - 1.1. AREVA stated in its response that the site buildings were constructed to UBC/IBC criteria for the year of construction. Provide a description that includes (1) identification of the building, the building code, and year of construction; and (2) a description of the methodology used for design calculations for seismic and high winds events for each of the process buildings where potential accident sequences may exceed the performance requirements of 10 CFR Section 70.61.
  - 1.2. AREVA stated in its response that the building analyses were performed using a combination of building code provisions. As requested in question 1.1, each building code defines the characteristics and seismic hazard information used for the design of structures systems and components and requires consideration of soil characteristics to determine its effect on the amplification to ground motions. Provide the bases for concluding that an earthquake at the site has an annual probability of  $4 \times 10^{-4}$  using Figures 1 and 2 (Ref.1).
  - 1.3. AREVA states that it used Appendix C to U.S. Department of Energy (DOE) Standard 1020-2002, "Natural Phenomena Hazards Design and Evaluation Criteria for Department of Energy Facilities," to obtain a risk reduction factor of 4 to calculate a likelihood of significant damage from an earthquake from  $4 \times 10^{-4}$  to  $10^{-4}$  per year or less. A risk reduction factor of 4 in Appendix C is for structures designed or evaluated using the methodology in DOE 1020 for Performance Category 3. Risk Reduction factor for structures design or evaluated using building codes are not defined in DOE Standard 1020. Provide the basis for obtaining a risk reduction factor of 4 to obtain a likelihood of significant damage from an earthquake of  $10^{-4}$  per year or less.

2. Regarding AREVA response to Generic Letter request (1) b.ii and (1) b.iii.
  - 2.1. AREVA stated that no consequences of concern due to highly unlikely or unlikely natural phenomena initiating events were identified. The statement assumes that all systems structures and component at the site can perform their intended safety function under the design basis loads. Provide a description of the safety assessments for natural phenomena event describing the capacity of internal systems structures and components to withstand the design basis loads, or the safety assessments of the potential consequences as a result of failures of internal components. This assessment should demonstrate that the consequences of failures of internal components do not exceed the performance requirements of 10 CFR 70.61.
3. Regarding AREVA response to Generic Letter request (1) d.
  - 3.1. Provide a summary of the walk downs performed in 2012 at the facility and a description of the recommendations along with the disposition of those recommendations.

#### References

1. Letter from T.J. Tate, AREVA INC., "Response to NRC Generic Letter 2015-01 "Treatment Of Natural Phenomena Hazards In Fuel Cycle Facilities" (Docket 70-1257)", September 11, 2015. ADAMS accession number ML15258A682.
2. U.S. Nuclear Regulatory Commission, "NRC Generic Letter 2015-01: Treatment Of Natural Phenomena Hazards In Fuel Cycle Facilities", June 22, 2015. ADAMS accession number ML14328A029.