

March 4, 2015

Mr. Joseph E. Pollock, Vice President  
Nuclear Operations  
Nuclear Energy Institute  
1201 F Street NW, Suite 1100  
Washington, DC 20004

Dear Mr. Pollock:

The U.S. Nuclear Regulatory Commission (NRC) staff has considered a request from the Nuclear Energy Institute (NEI), on behalf of the nuclear industry, to endorse the NEI white paper dated October 22, 2014, entitled "HCVS-WP-03, Hydrogen/Carbon Monoxide Control Measures, Revision 1, October 22, 2014" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14302A066).

The purpose of the white paper is to further develop and clarify the guidance provided in NEI 13-02 (ADAMS Accession No. ML14349A369) related to industry's ability to meet the requirements of Order EA-13-109, "Order Modifying Licenses With Regard To Reliable Hardened Containment Vents Capable of Performing under Severe Accident Conditions" (ADAMS Accession No. ML13130A067). The NRC staff has interacted with your staff and external stakeholders during the development of the white paper.

The NRC staff agrees that the white paper provides a series of acceptable options for licensees to use in determining methods to comply with requirements related to hydrogen/carbon monoxide control measures noted in elements A.1.2.10 and A.1.2.11 of Order EA-13-109. Section 6 of the white paper provides general guidance on five options, which licensees may use to comply with the cited order requirements. Options 1 and 2 use the passive system design philosophy where the system design will accommodate the expected loadings produced by the ignition of a combustible gas mixture. Options 3, 4, and 5 are based on the philosophy that the system design is such that a combustible gas mixture is not reasonably expected during severe accident conditions. There are several variations in active systems under options 3, 4, or 5. The NRC staff agrees with the recommendations and, as stated in the white paper, any licensee utilizing any of these options is required to submit information to the NRC documenting the actual application of the option selected and the system design details. The NRC staff will evaluate a licensee's application of the guidance in its development of the final safety evaluation documenting compliance with NRC Order EA-13-109.

Individual licensees should inform the NRC of their plans to abide by this generic interpretation and implementation approach, and their plans to address potential plant specific issues associated with implementing the cited order requirements. Licensees are strongly encouraged to follow the guidance in the NEI white paper, "HCVS-WP-03, Hydrogen/Carbon Monoxide Control Measures, Revision 1, October 22, 2014," in order to improve efficiency of the NRC's review and to avoid further requests for information.

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If a licensee deviates from the guidance, the licensee should justify the deviations and provide information that demonstrates how associated requirements in NRC Order EA-13-109 will be met. This information should be summarized as part of each licensee's 6 month updates to the overall integrated plan and detailed analysis available at site for staff audit.

If you have any questions, please contact Dr. Rajender Auluck of my staff at (301) 415-1025, or via email at [Rajender.Auluck@nrc.gov](mailto:Rajender.Auluck@nrc.gov).

Sincerely,

*/RA/*

Jack R. Davis, Director  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

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If you have any questions, please contact Dr. Rajender Auluck of my staff at (301) 415-1025, or via email at [Rajender.Auluck@nrc.gov](mailto:Rajender.Auluck@nrc.gov).

Sincerely,

*/RA/*

Jack R. Davis, Director  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

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**\*via email**

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