

NRC Responses to Public Comments

Japan Lessons-Learned Project Directorate Interim Staff Guidance JLD-ISG-2013-02: Compliance with Order EA-13-109, Order Modifying Licenses with Regard to Reliable hardened Containment Vents Capable of Operation under Severe Accident Conditions

(Docket ID NRC-2013-0215)

I. Introduction

This document presents the U.S. Nuclear Regulatory Commission (NRC) staff's responses to comments received on the Draft interim staff guidance (ISG) document, "JLD-ISG-2013-02: Compliance with Order EA-13-109, Order Modifying Licenses with Regard to Reliable hardened Containment Vents Capable of Operation under Severe Accident Conditions." The Draft ISG was published in the *Federal Register* on September 18, 2013 (78 FR 57418). The public comment period closed on October 18, 2013; there were no late comments received.

Comment submissions on the draft document are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this page, the public can gain entry into the Agencywide Documents Access and Management System (ADAMS), which provides text and image files of NRC's public documents.

This comment resolution document is also available electronically at the NRC's Electronic Reading Room under ADAMS Accession No. ML13310B299.

The final ISG can be found in ADAMS at Accession No. ML13304B836.

II. Comment Submissions

The NRC received three (3) comment submissions. The NRC-designated identifier for the comment submissions, the name of the submitters, the submitters' affiliation, and the ADAMS Accession Numbers are provided below.

Summary Table		
Name	Affiliation	ADAMS Accession No.
1. Ms. Mary Lampert Director, Pilgrim Watch	Pilgrim Watch, 148 Washington Street, Duxbury, MA 02332	ML13294A461
2. Mr. Paul Gunther Director, Reactor Oversight Project, Beyond Nuclear	Beyond Nuclear, 6930 Carroll Avenue, Takoma park, MD 20912	ML13295A225
3. Mr. Steven Kraft, Senior Technical Advisor	Nuclear Energy Institute, 1201 F Street, N. W., Washington, DC	ML13295A494

III. Public Comments and NRC Response

General Comments on ISG		
Comment No.	Comment	NRC Response
1a	Implementation of the Order should be no more than 2 years, not six years. In the interim, the Order EA-13-109 clearly indicates that prior to implementation of the Order public health and safety is not assured.	Order EA-13-109 was issued as a result of staff requirements memorandum (SRM) for SECY-12-0157. The public was given the opportunity to present their views and comments during the development of SECY-12-0157 and the requirements for Order EA-13-109. The interim staff guidance (ISG) JLD-ISG-2013-02 provides requirements for compliance with the order, by endorsing to the extent necessary, NEI 13-02 "Industry Guidance for Compliance with Order EA-13-109." The comment is not within the bounds of the ISG. However, please be advised that a similar comment by Pilgrim Watch in letter dated June 14, 2013, as supplemented on July 26, 2013, submitted in a petition pursuant to 10 CFR Section 2.206, "Requests For Action Under This Subpart," was addressed by the NRC in a reply dated September 15, 2013 (ML13263A006).

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1b	The Order wrongly provides an "escape hatch" so that licensees will not have to install a dry well vent if, they can come up with a "good enough story."	As stated in Order EA-13-109, the installation of a drywell vent or alternate venting strategy that obviates the need for a drywell vent is a Phase 2 activity. The Phase 2 activity will proceed concurrently with the filtering strategy rulemaking. The NRC staff has begun holding public meetings on both those activities, during which the stakeholders can provide input and comments.
1c	The order does not protect public health and safety because there is no requirement for filters or rupture discs. Unless filters and rupture discs are required at the same time hardening of the vent(s) for post-accident conditions are required, it is very unlikely those measures never will ever be required. Industry will argue that it is overburdened by implementing fixes to the vents piecemeal. The Commission kicked the "filter" can down the calendar road .	May be partially true. The commissioners determined an external filter was not needed for adequate protection of the public health and safety (evacuation and relocation would be effective). Filters and rupture disks are associated with potential cost beneficial safety improvement where industry thought they could innovate a much less costly but comparably beneficial filtration strategy that did not use external filters or rupture disks. In a Phase 1 vent industry envisions rupture disks as only being an option to avoid inadvertent actuation of the vent, not as means to nearly eliminate the potential inability of operators to put the vent in service.
2a	The ISG for EA-13-109 does not address the egregious violations and current non-compliance of the operating	In the context of GDC 16 "postulated accident conditions" are a specified set and the events being

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	licensing agreements as defined by General Design Criteria, specifically Criterion 16 and Criterion 50 as regards continued operations with the fundamentally flawed design, fabrication and operation of the pressure suppression containment system currently relied upon by the GE Mark I and Mark II boiling water reactors in the event of severe accident.	considered are beyond that which GDC 16 was intended to deal with, such as an ELAP scenario. Similarly with GDC 50 where “and the containment heat removal system” phrase shows that containment decay heat removal function was assumed available along with the containment, that the containment didn’t have to handle decay heat by itself.
2b	The ISG <u>does not</u> provide for the adequate nor timely remediation for the fundamentally flawed GE Mark I and Mark II containments nor does it restore regulatory compliance under the General Design Criteria to the Mark I and Mark II pressure suppression containment systems.	See the GDC 16 & 50 discussions. The GDC’s were not intended to require containments that would remain intact under all scenarios, just the specified spectrum plus some margin. After many Mark I/II containments were placed in service the conclusion became generally accepted that they did not have as much ability to function for an extended period during severe accident conditions as some other containment designs.
3a	Beyond-Design-Basis Approach By its very requirement, the reliable, hardened containment vent systems (HCVS) will be expected to operate during a beyond-design-basis event (BDBE). The approach to BDBEs must take into account the unpredictability of BDBEs as compared to the predicted events covered by the design basis. The design basis involves defined events, design basis systems, structures and components, all safety functions, detailed procedures, rigid validation, and qualified personnel. By comparison, the approach to BDBEs includes defined boundary conditions; use of portable equipment; focus on core cooling, containment, and spent fuel pool cooling; guidelines and playbooks; practical and reasonable	The mitigating strategies order and implementing guidance provide a more appropriate forum for addressing this message. This ISG is intended to provide for the much more limited scope reliable hardened containment vent capable of operation during severe accident conditions. Mark I/II containments are expected to be challenged relatively quickly in the events resulting in severe core damage and requiring installed systems needing very limited operator action for operation is thought essential for reasonable expectation that the containment challenges could be mitigated in those circumstances.

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3b	<p>standards; and capable personnel. The ISG should explicitly recognize this approach to BDBEs.</p> <p>Integrated Consideration of Reliable, Hardened Containment Venting Systems</p> <p>It is important to recognize the integrated nature of the HCVSs and the BDBE response tools licensees are implementing. These tools include the FLEX program (designed to prevent a BDBE from progressing to core damage) and the BWR Owners' Group (BWROG) Emergency Procedure Guidelines/Severe Accident Guidelines (EPG/SAG), recently revised to address the lessons-learned from the accident at Fukushima Daiichi to improve guidance related to prevention of core damage as well as mitigation of the consequences of core damage.</p> <p>NEI 13-02 recognizes the integrated nature of the HCVSs with these response tools in assuring the HCVSs and FLEX capabilities and emergency procedures can be implemented to prevent core damage, as well as how the HCVSs can support mitigating actions following core damage. The ISG needs to explicitly recognize the integrated consideration of HCVSs, especially as it guides NRC staff review of the Overall Integrated Plans required by EA-13-109.</p>	<p>The mitigating strategies order and implementing guidance provide a more appropriate forum for addressing this message. This ISG is intended to provide for the much more limited scope reliable hardened containment vent capable of operation during severe accident conditions.</p>
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