

## Kahler, Carolyn

---

**From:** Kahler, Carolyn  
**Sent:** Monday, September 08, 2014 3:08 PM  
**To:** 'DLY@nei.org'  
**Cc:** Anderson, Joseph; Kahler, Robert; Tailleart, Don; Johnson, Don; Norris, Michael  
**Subject:** RE: Response from "Submit a Question about Emergency Preparedness" (EPFAQ 2014-010)

Mr. Young:

Thank you for your submission of EPFAQ No. 2014-010 regarding NEI 99-01. NSIR/DPR has performed an acceptability review of proposed EPFAQ No. 2014-010, based on the applicability and screening criteria in NSIR Office Instruction EP-100 (ADAMS Accession No. ML12201A946). The results of this review are as follows:

Rejected: (1) Guidance is already provided in NSIR/DPR-ISG-01; and (2) specific discussion and responses to NRC inspection findings is outside the scope of the EPFAQ process.

Section IV.H of NSIR/DPR-ISG-01 acknowledges that information enabling plant operators to recognize an off normal plant condition may become available from a variety of sources, such as indications on plant instrumentation, reports from other plant personnel, or from persons outside of the plant. Reports of a parameter value from outside the Control Room would be included. Section IV.H further states that "plant operators assess the validity of these indications or reports by checking instruments, comparing indications on redundant instruments, or dispatching personnel to confirm reports. After validating the indication or report, the plant operators then compare the off normal condition to the EAL thresholds in the emergency classification scheme."

The proposed FAQ concerns any limitations or constraints that exist for using a parameter value that is manually obtained from a location outside the Control Room, in accordance with an AOP/EOP, as an EAL threshold. Section IV.H states that the "applicant or nuclear power reactor licensee is expected to provide the resources necessary to accomplish the declaration without interfering with plant operation including, but not limited to, adequate qualified personnel on shift, an emergency classification scheme based on clearly defined and observable thresholds (emphasis added), and adequate supporting procedures, assessment tools, and evaluation aids." Therefore, a parameter value relied upon as an EAL threshold should be observable (i.e., available) during off-normal plant conditions in which the value may be germane.

The use of a parameter of this type as an EAL threshold would be treated the same as information relied upon for other EAL thresholds. The relevant guidance in Section IV.H addressing this issue states that the "NRC considers the 15 minute criterion to commence when plant instrumentation, plant alarms, computer displays, or incoming verbal reports that correspond to an EAL (emphasis added) first become available to any plant operator."

If you have any questions regarding submitting an EPFAQ, please feel free to contact me at carolyn.kahler@nrc.gov or 301-287-3722.

Sincerely,

**Carolyn J. Kahler**

EP Specialist

NSIR/DPR/ORLOB

U.S. Nuclear Regulatory Commission

Location: 3WFN- 9A31

Phone: 301-287-3722  
Email: [Carolyn.Kahler@nrc.gov](mailto:Carolyn.Kahler@nrc.gov)

-----Original Message-----

From: DLY@nei.org [mailto:DLY@nei.org]  
Sent: Monday, July 14, 2014 3:49 PM  
To: EPFAQ Resource  
Subject: Response from "Submit a Question about Emergency Preparedness"

Below is the result of your feedback form. It was submitted by

(DLY@nei.org) on Monday, July 14, 2014 at 15:48:53

through the IP 209.170.118.134

using the form at <http://www.nrc.gov/about-nrc/emerg-preparedness/faq/faq-contactus.html>

and resulted in this email to [epfaq.resource@nrc.gov](mailto:epfaq.resource@nrc.gov)

-----  
relevant-guidance: NEI 99-01

revision-number: 4, 5 and 6

applicable-sections:

comments: What are the limitations or constraints, if any, of using a parameter value that is manually obtained from a location outside the Control Room, in accordance with an AOP/EOP, as an EAL threshold?

#### Background

In accordance with past and current emergency classification scheme development guidance, a licensee may have Emergency Action Levels (EALs) that utilize threshold values derived from plant parameters monitored during implementation of Abnormal Operating Procedures or Emergency Operating Procedures (AOPs/EOPs). In some cases, an AOP/EOP may specify that a manual action is necessary to obtain a particular parameter value from a location outside the Control Room (i.e., the plant does NOT have an installed sensor and/or instrumentation that provides the value within the Control Room). For example, a non-licensed operator may be dispatched to a given plant room to determine ambient temperature and/or area radiation levels to support decision-making during implementation of an EOP. The acceptability of relying upon the performance of a manual action in a remote location to support implementation of a given procedure strategy is assessed in accordance with the licensee's AOP/EOP verification and validation processes.

The regulatory requirement associated with emergency classification timeliness is in 10 CFR 50, Appendix E, C.2, which states, "By June 20, 2012, nuclear power reactor licensees shall establish and maintain the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an emergency action level has been exceeded and shall promptly declare the emergency condition as soon as possible following identification of the appropriate emergency classification level." This requirement is clarified in NSIR/DPR-ISG-01, INTERIM STAFF GUIDANCE, EMERGENCY PLANNING FOR NUCLEAR POWER PLANTS; refer to section IV.H Emergency Declaration Timeliness. For example, this documents states, "The emergency declaration process starts with information being available to plant operators to recognize an off-normal plant condition via indications on plant instrumentation, including alarms, or via reports from other plant personnel (e.g., reports of fire) or from persons outside of the plant (e.g., severe weather warnings)."

proposed-solution: A parameter value that is manually obtained from a location outside the Control Room, in accordance with an AOP/EOP, may be used as an EAL threshold provided that the emergency classification scheme basis document:

- Identifies the parameter values that are manually obtained and the basis for their use as EAL thresholds (i.e., why they are the best available indication that particular EAL threshold has been exceeded).
- Describes the expected means to obtain the values (e.g., the Max Safe Radiation dose rate value for the East LPCI Pump Area is determined by local survey), and the approximate or typical time frame(s) required to do so.
- Discusses other EAL thresholds that utilize Control Room indications which may bound the EAL threshold that relies upon manually-obtained data. For example, a particular set of RPV level and pressure, primary containment pressure and valve position indications may collectively indicate that primary containment has been lost prior to availability of all Max Safe values.

Emergency classification scheme developers should also confirm that personnel can obtain an AOP or EOP-specified parameter value under the ambient/environmental conditions that would likely prevail at the time of the emergency assessment and response. This determination may be made in accordance with an AOP/EOP verification and validation process, or another fleet or site process employing similar rigor. For example, the use of water level markings available on a building wall to support an AOP flooding assessment action may be used as a flooding EAL threshold provided that the ability of a non-licensed operator to periodically obtain the readings during potential flood-related conditions is verified and validated.

Should all or portions of this FAQ response be approved, the industry suggests that the following text also be included in the final NRC-endorsed response:

This EP FAQ is being processed to provide clarity on an issue that has surfaced during recent NRC inspection activities. Licensees should use the information provided in the answer above to inform the content of emergency classification scheme conversion packages being submitted for staff review and approval (e.g., a package for upgrading to NEI 99-01 R6). In cases where such a package has already been submitted, the licensee should discuss this EP FAQ with the staff and determine how to provide the additional information necessary to align with the answer.

As an interim measure during the period prior to the implementation of a NEI 99-01 R6 scheme, the following approach is recommended.

- 1) The site-specific ICs and EALs should be reviewed to identify threshold values that are manually obtained in accordance with an AOP or EOP.
- 2) If manually-derived threshold values are identified, determine if the current scheme basis document describes their use consistent with the answer to this EP FAQ.
- 3) Confirm that personnel can obtain the parameter values under the ambient/environmental conditions that would likely prevail at the time of the emergency assessment and response.
- 4) If the scheme development document does not contain the necessary description, or personnel may not be able to obtain a value, document this determination in the corrective action program and discuss the matter, including a proposed path forward, with the appropriate regional EP inspector.

originator: David Young

organization: Nuclear Energy Institute (NEI)

phone: 202.739.8127

-----