

**Enclosure 3**

**Reactor Oversight Process Task Force FAQ Log - February 21, 2013**

**FAQ Log Entering February 21, 2013 Public Meeting**

<b>FAQ No.</b>	<b>PI</b>	<b>Topic</b>	<b>Status</b>	<b>Plant/Co.</b>	<b>Point of Contact</b>
12-04	OR01	HRA Related Occurrences	<b>Introduced 8/29/2012. Text revised and resubmitted, discussed 10/17/2012; 11/29/2012; 01/17/2013.</b>	Generic	John Pelcic/ Robin Ritzman (FENOC)  Mark Marshfield (NRC)
12-05	MS05	Safety System Functional Failures	<b>Introduced 10/17/2012; discussed 11/29/2012, 01/17/2013. Discussed and withdrawn at TVA's request at 01/17/2013 meeting.</b>	Generic	James Emens (TVA)  Dave Dumbacher (NRC)
12-06	EP02	DEP Opportunities	<b>Introduced 10/17/2012; discussed at separate public meeting 01/15/2013. NRC draft response to be discussed 02/21/2013.</b>	Generic	Marty Hug (NEI)  Eric Schrader (NRC)

NEI Contact: James E. Slider, 202-739-8015, [jes@nei.org](mailto:jes@nei.org)

## FAQ 12-04, High Rad Area-Related Occurrences

**Plant:** Perry

**Date of Event:** June 2, 2012

**Submittal Date:** August 16, 2012

**Contact:** John Pelcic

**Tel/email:** 440-280-5824 [jfpelcic@firstenergycorp.com](mailto:jfpelcic@firstenergycorp.com)

**NRC Contact:** Mark Marshfield

**Tel/email:** 440-280-5822 [mark.marshfield@nrc.gov](mailto:mark.marshfield@nrc.gov)

Performance Indicator: OR01 Occupational Exposure Control Effectiveness

Site-Specific FAQ (Appendix D)? No

FAQ requested to become effective when approved.

### Question Section

#### **NEI 99-02 Guidance needing interpretation (include page and line citation):**

Page 62, Lines 16 - 22, and associated footnote

#### *Technical Specification High Radiation Area (>1 rem per hour) Occurrence –*

A nonconformance (or concurrent nonconformances) with technical specifications or comparable requirements in 10 CFR 20 applicable to technical specification high radiation areas (>1 rem per hour) that results in the loss of radiological control over access or work activities within the respective high-radiation area (>1 rem per hour). For high radiation areas (>1 rem per hour), this PI does not include nonconformance with licensee-initiated controls that are beyond what is required by technical specifications and the comparable provisions in 10 CFR Part 20.

A footnote states that “Concurrent” means that the nonconformances occur as a result of the same cause and in a common timeframe.

#### **Event or circumstances requiring guidance interpretation:**

On June 2, 2012, an equipment failure resulted in resin/water slurry flow under a locked door into the general area hallway of the Radwaste Building El. 574. Indications of changing plant conditions were evident at this time from water being on the floor and having to be controlled by radiation protection. The Station management team and the Radiation Protection staff did not recognize the need to comprehensively investigate the source of the spill and conduct a radiological survey of the area based on historical assumptions of expected radiological and system events creating the water on the floor. This mindset was flawed and propagated an extended delay prior to identifying the actual conditions. During the period prior to final discovery, the area was posted and controlled as a High Radiation Area (HRA). During a review of the timeline for this issue, gaps were identified with regards to posting, management controls, and surveys.

Following the equipment failure, the station had an opportunity to identify and control the area as a locked high radiation area shortly after the 6/3/2012 0400 identification by Rad Waste Operations. Radiation Protection made the wrong assumptions that room conditions were bounded by historical data and the existing high radiation area posting and as such did not perform a prompt survey which could have identified the change in radiological conditions.

During the time frame of this event, there were two instances of individuals entering this area without Radiation Protection coverage and one instance where an individual was provided a HRA key but did not enter the area. These entries were made based on the assumptions made by the RP department based on historical conditions of similar plant issues. The workers were briefed to a high radiation area RWP and on conditions that were accurate for the work areas they actually worked in. They did not enter the east hallway where the radiological conditions had actually changed.

On June 7, 2012, a Radiation Protection technician made the first entry into the east hallway and performed a radiological survey of the area in preparation for radiological recovery of this area. The survey identified a floor area where dose rates met the Technical Specification criteria for classification as a Locked High Radiation Area (LHRA). Promptly after the survey, the Radwaste Building El. 574 area was posted and controlled as a LHRA. During the course of this event there were no electronic dose or dose rate alarms and no individual or individuals exceeded any dose limits associated with this performance indicator. Additionally due to the delay in performing dose rate surveys in the area, the exact time for determining when the area became a high radiation area > 1000 mr/hr could not definitively be determined.

The NEI 99-02 Performance indicator evaluation counts nonconformances, or “concurrent nonconformances,” with technical specifications. “Concurrent nonconformances” are defined as those that “occur as a result of the same cause and in a common timeframe.” In this case, individuals were allowed to enter the room because Radiation Protection failed to control access into the area. Access to the area was not controlled because of the failure of Radiation Protection personnel to recognize the need to perform a new radiological survey.

The common time frame for these events is believed to be driven from the initiating event of the failure of the plant equipment followed by the assumptions by Radiation Protection that delayed prompt surveys and identification. Due to the long duration of this event, individuals were allowed to enter the area because of incorrect assumptions and lack of survey analysis. Though there were multiple personal and programmatic breakdowns, the licensee believes that this constitutes one performance indicator occurrence due to the same cause – failure to recognize the need to perform a new survey – and within a common timeframe.

The failure to recognize the need to perform a radiological survey prior to June 7, 2012, was reported as a PI occurrence. Additionally, the three instances of individuals entering the area, or having access without Radiation Protection coverage as a result of the single performance deficiency of not performing the timely survey were conservatively reported pending the outcome of this FAQ.

Based on the timeline of this event and final discovery of the actual high radiation area >1000 mr/hr it is reasonable to assess that each of the breakdowns in radiological controls occurred within a common time frame. Each held contributors to the overwhelming gap in organization radiological assumptions and timeliness in performing the comprehensive radiological survey. Following the failure of the plant equipment and once the actual dose rates were established, the station took prompt action to control the area within the technical specifications and station procedures. This FAQ seeks to clarify that the 4 occurrences that were reported occurred within a common timeframe and were due to a common cause.

### **What is the NRC resident inspector's position?**

The resident inspector believes that an FAQ is appropriate to address the question.

### **Potentially relevant existing FAQ numbers**

FAQ 203 addresses the footnote in question. However, in FAQ 203, the causes of the two entries were different; therefore, both occurrences counted. FAQ 203 did not address "common timeframe."

### **Response Section**

#### Proposed Resolution of FAQ

The utilization of Radiation Protection historical assumptions and the failure to perform a prompt radiological survey to identify the area > 1000 mr/hr represents a loss of control over access into a LHRA. However, the subsequent gaps in RP high radiation area controls were a direct result of the failure to perform the initial radiological survey, and as such should be considered concurrent to the initiating event. Entries allowed into the room, but not in the area that had elevated dose rates should also be considered concurrent independently of the initiating event. Therefore, although there may be multiple violations, the PI should count one occurrence, because the issues all occurred within a common timeframe and are attributable to the same cause.

If appropriate, provide proposed rewording of guidance for inclusion in next revision.

None. Similar occurrences should be evaluated on a case-by-case basis.

### **NRC Response**

The proposed FAQ correctly quotes the applicable guidance in NEI 99-02 for this event. The performance indicator identifies an occurrence of non-conformance (or concurrent non-conformances) with technical specifications involving a loss of radiological controls over entries to (or work within) a Technical Specification High Radiation Area (TSLHRA, > 1 rem per hour). The FAQ discussion notes that there were three subsequent instances where entries were made without Radiation Protection controls.

A common timeframe as used in the Occupational Radiation Safety guidance in NEI 99-02, is not a fixed period of time. It is the elapsed time in which a number of events or occurrences that are associated with each other happen. The events described in this FAQ are all within a common timeframe. However, the issue demonstrated by this example is not whether the subsequent non-conformances resulting from an ongoing failure to properly control a TSLHRA are within the same (or common) timeframe. The pertinent issue in this example is whether all of the subsequent non-conformances resulted from the same cause.

In those cases where a licensee, for whatever reason (e.g., failure to survey, failure to lock the area, etc.), fails to provide adequate physical controls around a TSLHRA for an extended time, all of the subsequent non-conformances would be "concurrent non-conformances" as defined in NEI 99-02 if they were the result of the same cause. For example, an operational occurrence that created an unrecognized TSLHRA, the subsequent failure to post the area, failure to prevent unauthorized access (possible several entries), entry not controlled per an RWP, etc., are all concurrent non-conformances if they are directly attributable to the original failure to survey. However, if during the time that this TSLHRA is unidentified (or uncontrolled) new information is identified (e.g., a survey measures the TSLHRA dose rates, or a condition is recognized that indicates the potential for the TSLHRA), that if reasonably acted upon would have ended the TS violation, and that information is not acted upon, then

any subsequent non-conformances are considered a separate PI occurrence based on the failure to reasonably act on the new information and correct the condition. In such a case the non-conformances that occurred before the new information would be concurrent non-conformances (i.e., one PI occurrence) with the initial TS violation. Any non-conformances following the failure to act on the new information would be concurrent with this failure to act (i.e., a separate PI occurrence). Once this new information is obtained, subsequent sharing of this new information with other staff, or validation of this new information would be concurrent with the separate PI occurrence. The NRC response to FAQ 203 is a specific example of this general staff position.

The proposed FAQ guidance states that the non-conformances noted were the “result of the same cause – the failure of the Radiation Protection personnel to recognize” the need to perform a survey. However, at least once during the course of this resin spill event, it was recognized, and brought to the RP management’s attention, that the magnitude of the spilled resin was significantly more than previously experienced. The failure to act on new information such as this (e.g., the extent of the radiological conditions) constitute a separate cause of the subsequent non-conformance, and a separate reportable PI occurrence.

## FAQ 12-05, Safety System Functional Failures

**Plant:** Browns Ferry Nuclear Plant

**Date of Event:** July 11, 2012

**Submittal Date:** October 16, 2012

**Contact:** James Emens

**Tel/email:** (256) 729-2636/jeemens@tva.gov

**NRC Contact:** Dave Dumbacher

**Tel/email:** (256) 729-2573/david.dumbacher@nrc.gov

Performance Indicator: MS05, Mitigating System Functional Failures

Site-Specific FAQ (Appendix D)? No, FAQ is generic.

FAQ requested to become effective: when approved.

### Question Section

**NEI 99-02 Guidance needing interpretation (include page and line citation):**

Page 29, Lines 22-25:

*Additional failures:* a failure leading to an evaluation in which additional failures are found is only counted as one failure; new problems found during the evaluation are not counted, even if the causes or failure modes are different. The intent is to not count additional events when problems are discovered while resolving the original problem.

**Event or circumstances requiring guidance interpretation:**

While reviewing design input calculations in support of the NFPA 805 transition from the 10CFR 50, Appendix R licensing basis for Browns Ferry Nuclear (BFN) plant, TVA has discovered several deficiencies related to equipment and procedures that potentially could affect the ability of the Browns Ferry plant to cope with certain postulated Appendix R fires. As examples, these deficiencies have included omissions in Safe Shutdown Instructions (SSIs), and cable routings that violated train separation requirements. These discoveries have been reported as Licensee Event Reports (LER) submitted in accordance with 10CFR 50.73(a)(2)(ii)(B), as an event or condition that resulted in the nuclear plant being in an unanalyzed condition that significantly degraded plant safety. Some of these discoveries were also reported under 10 CFR 50.73(a)(2)(v)(B), as an event or condition that could have prevented the fulfillment of a safety function. Following is a list of LERs submitted that are related to BFN Appendix R program deficiencies that were reported under 10 CFR 50.73(a)(2)(v)(A):

- LER 50-259/2010-001-00 - Units 1, 2, and 3 Appendix R Safe Shutdown Instruction Procedures Contain Incorrect Operator Manual Actions,
- LER 50-259/2012-001-00 - Unanalyzed Conditions Discovered During NFPA 805 Transition Review,
- LER 50-259/2012-002-00 - Fault Propagation During A Postulated Appendix R Event Could Result In An Inability To Close Motor Operated Valves,
- LER 50-259/2012-003-00 - Reactor Protection System Circuit Could Potentially Remain Energized During An Appendix R Fire,
- LER 50-259/2012-004-00 - Fire Damage to Cables in Fire Areas Could Cause a Residual Heat Removal Service Water Pump to Spuriously Start,

- LER 50-259/2012-007-00 - Cable Routing Error Would Result in Failure of Direct Current Control Power to Credited 4kV Shutdown Board 3EA during an Appendix R Event, and
- LER 50-259/2012-007-01 - Cable Routing Error Found in the Appendix R Separation Analysis.

For Reactor Oversight Process (ROP) Performance Indicator (PI) purposes, The Tennessee Valley Authority (TVA) counted the six discoveries in 2012 as one instance under the Safety System Functional Failure (SSFF) (MS05) PI input for 2Q2012. This decision was based on TVA's interpretation of the guidance in NEI 99-02, Section 2.2, page 29, lines 22-25. These lines indicate that when an evaluation leads to finding additional failures, the original and subsequent failures are counted as one.

The evaluation in this instance is the ongoing examination of the BFN Fire Protection program (plant equipment, procedures and design) to support the transition to NFPA-805. This examination began in 2012 and will continue until TVA submits the License Amendment Request associated with NFPA-805, currently projected for March 2013. This examination appears to align with the intent of the phrase on Lines 22-23, "...an evaluation in which additional failures are found...."

The TVA submitted a letter of intent to the NRC on March 4, 2009 for BFN to adopt NFPA 805 in accordance with 10 CFR 50.48(c). By letter dated September 17, 2009, the NRC granted a three year enforcement discretion period. By letter dated January 13, 2012, TVA informed the NRC that the schedule for submitting the license amendment request to adopt NFPA 805 had been revised to no later than March 29, 2013. By letter dated March 20, 2012, TVA requested an extension of the enforcement discretion period. By letter dated May 18, 2012, the NRC issued a Confirmatory Order to revise the date for the submittal of an acceptable license amendment request to transition BFN to March 29, 2013. In accordance with the Enforcement Policy, the enforcement discretion period would continue until the NRC issues a License Amendment.

#### **What is the NRC resident inspector's position?**

The NRC resident inspector agrees with the facts as presented, but questions whether the additional examples should be considered as "Additional failures" under the NEI 99-02 definition. The NRC has also raised the question as to when it would no longer be appropriate to count additional examples as "Additional failures" and therefore a single PI count. The inspector recommended that the FAQ process be followed for resolution.

#### **Potentially relevant existing FAQ numbers**

None.

#### Response Section

##### Proposed Resolution of FAQ

The proposed resolution is to clarify that additional examples of SSFFs associated with a situation governed by enforcement discretion are to be considered part of the first reported instance, as described in "Additional failures."

Additionally, if it is appropriate to count the additional examples of SSFFs as "Additional failures" and a single count against the PI, is there an amount of time or a pertinent milestone after which it becomes no longer appropriate to count additional examples as "Additional failures."

If appropriate, provide proposed rewording of guidance for inclusion in next revision.

Page 29, Lines 22-25:

*Additional failures:* a failure leading to an evaluation in which additional failures are found is only counted as one failure; new problems found during the evaluation are not counted, even if the causes or failure modes are different. The intent is to not count additional events when problems are discovered while resolving the original problem. **Related failures found in a situation in which enforcement discretion applies (e.g., transition to NFPA-805) are considered “Additional failures” under this definition and are therefore only counted as one failure. Once the enforcement discretion is lifted or a subsequent action to close the enforcement discretion is completed (e.g., license amendment approval, etc.), any additional examples of similar issues are no longer counted as “Additional failures” under this definition.**

### Final Resolution: Withdrawn

In December 2012, TVA revised the LERs listed above to remove the previously referenced 10 CFR 50.73(a)(2)(v) criterion (safety system functional failures) since the reported conditions did not adversely impact structures, systems or components credited in the plant’s safety analyses. This obviated the need for this FAQ. At the January 17, 2013 ROP public meeting, the licensee asked that this FAQ be withdrawn.

## FAQ 12-06, DEP Opportunities

**Plant:** Generic

**Date of Event:** October 16, 2012

**Submittal Date:** October 16, 2012

**Contact:** Martin Hug

**Tel/email:** (202) 739-8129 [mth@nei.org](mailto:mth@nei.org)

**NRC Contact:** Eric Schrader

**Tel/email:** (301) 415-5627 [eric.schrader@nrc.gov](mailto:eric.schrader@nrc.gov)

Performance Indicator: EP02, Drill/Exercise Participation

Site-Specific FAQ (Appendix D)? No

FAQ requested to become effective ~~when approved~~ beginning Third Quarter 2013, for data to be reported by October 21, 2013.

### Question Section

#### **NEI 99-02 Guidance needing interpretation (include page and line citation):**

Page 51, Lines 31 - 41

The licensee may designate drills as not contributing to DEP and, if the drill provides a performance enhancing experience as described herein, those Key Positions that do not involve classification, notification or PARs may be given credit for ERO Drill Participation. Additionally, the licensee may designate elements of the drills not contributing to DEP (e.g., classifications will not contribute but notifications will contribute to DEP.) In this case, the participation of all Key Positions, except those associated with the non-contributing elements, may contribute to ERO Drill Participation. Participation drill credit before being assigned to the ERO may be counted for the Key Positions not contributing to DEP if the drill provides a performance enhancing experience as described herein. The licensee must document such designations in advance of drill performance and make these records available for NRC inspection.

#### **Event or circumstances requiring guidance interpretation:**

~~Refer to EPFAQ #12-13, previously discussed by the EP Working Group.~~ There are two questions posed by this EPFAQ:

1. Does meeting the timeliness criterion associated with the Notification DEP performance indicator mean the licensee has demonstrated regulatory compliance with the notification requirement (10 CFR 50, Appendix E, Section IV.D.3, "capability to notify [offsite] agencies within 15 minutes")?
2. If demonstration and evaluation of notification ends when the offsite notification is initiated, is this considered a performance enhancing experience for the Key Communicator?

Proposed Solution in the EPFAQ:

1. Meeting the timeliness criterion associated with the Notification DEP performance indicator does not mean the licensee has demonstrated full compliance with the regulatory requirement for notifying offsite agencies. ~~Compliance is demonstrated when all offsite agencies requiring notification are notified of the Emergency Classification Levels within 15 minutes of declaring an emergency.~~
2. If the demonstration and evaluation of notification ends when the first offsite notification is initiated, this opportunity will not be considered a performance enhancing experience for the Key Communicator and hence not a DEP notification PI opportunity.

#### **What is the NRC resident inspector's position?**

Not applicable.

**Potentially relevant existing FAQ numbers**

Not applicable.

**Response Section**

**Proposed Resolution of FAQ**

Revised NEI 99-02 as below.

**Proposed revision to NEI 99-02, Rev. 6, page 51, after line 41:**

In order for an opportunity to be considered a performance enhancing experience for a Key Communicator, the opportunity must include demonstration of the ability to perform a notification of the emergency classification level to required agencies. Documentation of the opportunity and its evaluation/critique is to be comprehensive enough to allow an Inspector to reasonably reach the same conclusion as the licensee as to the adequacy of the performing enhancing experience.

**Page 43, after line 28:**

The notification timeliness criterion for this PI is met when the licensee makes contact with the first responsible State or local governmental agency within 15 minutes. This success criterion normalizes the notification capabilities of licensees, regardless of the number of site specific offsite notification requirements. As such, NRC and licensees can assess a site's specific capability to a common industry baseline to identify the possible need for additional inspection resources. Further, the notification performance enhancement opportunity provides the NRC assurance that a licensee is conducting the notification process in its entirety and evaluating compliance with the regulatory offsite notification requirement of Appendix E.IV.D.3 to 10 CFR Part 50.