Performance Indicator
FAQ and White Paper Log May 2018

FAQ/WP No.	PI	Topic	Status	Plant/Co.	Point of Contact
FAQ 18-02	IE01 IE03	Watts Bar 2 IE01 and IE03 Effectiveness Date	Introduced March 1 Proposed Response Discussed April 5 Revision 1 submitted April 11 Revision 2 submitted April 13 Tentatively Approved May 24	Watts Bar Unit 2	Kim Hulvey (TVA) Alex Garmoe (NRC)
WP 18-01	EP03	Alert and Notification System Update	Introduced April 5	Generic	David Young (NEI) Joylynn Quiñones-Navarro (NRC)
WP 18-02	EP01	DEP Form Accuracy	Introduced April 5	Generic	David Young (NEI) Joylynn Quiñones-Navarro (NRC)
WP 18-03	EP02	ERO PI Credit for BDB Drills	Introduced April 5	Generic	David Young (NEI) Joylynn Quiñones-Navarro (NRC)

For more information, contact: James Slider, (202) 739-8015, jes@nei.org

NEI 99-02 FAQ 18-02 Rev. 2
Watts Bar Critical Hours – Tentatively Approved

Plant: **Watts Bar Nuclear Plant, Unit 2 (WBN 2)**

Date of Event: 12/31/2017
Submittal Date: 2/21/2018; Rev. 4/13/18
Engineer/Licensee Contact: Kim Hulvey/Beth Wetzel
Tel/email: (423) 365-7720/(423)751-2403
NRC Contact Jared Nadel Watts Bar Tel/email: (423) 365-1776

Performance Indicators:
IE01 WBNU2 Unplanned Scrams per 7000 Critical Hours (automatic and manual scrams during the previous four quarters)
IE03 WBNU2 Unplanned Power Changes per 7000 Critical Hours (over previous four quarters)

Site-Specific FAQ (Appendix D)? - Yes

FAQ to become effective when approved.

Question Section:

TVA requests either:

- The effective date of Watts Bar Unit 2 Unplanned Scrams per 7000 Critical Hours (IE01) and (IE03) Unplanned Power Changes per 7000 Critical Hours be extended until 3Q18 (through Jun 30, 2018) to allow sufficient data for an accurate assessment value, or
- Review the nature of the outage relative to new plant start-up in addition to the nature of the scrams to either:
    - The Watts Bar Unit 2 Unplanned Scrams per 7000 Critical Hours (IE01) and (IE03) Unplanned Power Changes per 7000 Critical Hours be revised to include the missing critical hours from the 2017 Watts Bar Unit 2 Main Condenser outage, or
    - The effective date of Watts Bar Unit 2 Unplanned Scrams per 7000 Critical Hours (IE01) and (IE03) Unplanned Power Changes per 7000 Critical Hours be extended until 2Q18 (through March 31, 2018).

This request is based upon a October 22, 2015 NRC letter to TVA stating "If, as the licensee approaches four quarters after either the IE or MS cornerstones become monitored, new information shows that a PI may still not provide accurate assessment value, the Frequently Asked Questions process will be utilized in accordance with NEI 99-02 to reach a conclusion on how to proceed."

NEI 99-02 Guidance needing interpretation:

NRC Letters to TVA dated November 21, 2016 (ML16326A210) and October 22, 2015 (ML15295A253).

NEI 99-02 Page 10 line 25
The number of unplanned scrams during the previous four quarters, both manual and automatic, while critical per 7,000 hours.

NEI 99-02 Page 14 line 9
The number of unplanned changes in reactor power of greater than 20% of full-power, per 7,000 hours of critical operation excluding manual and automatic scrams.

NEI 99-02 Page E-1 line 12
There are several reasons for submitting an FAQ:

NEI 99-02 Page E-1 line18
3. To request an exemption from the guidance for plant-specific circumstances, such as design features, procedures, or unique conditions.

Event or circumstances requiring guidance interpretation:

This FAQ concerns the Watts Bar Unit 2 new plant startup and subsequent March 23, 2017 Main Condenser failure that resulted in an estimated loss of 3100 critical hours for repair. The reactor was shut down from March 23, 2017 until July 30, 2017 while extensive repairs were completed to the Main Condenser. The cause of the failure was inadequate vendor design (1970's vintage) of the condenser wall support structure leading to support and wall failure. In addition, an extended 39 day refueling outage was completed in the fourth Quarter of 2017. This resulted in an additional estimated loss of 930 critical hours. Being the first refueling outage following WBN Unit 2 commercial operation, many additional tests were required to meet commitments as dictated by the operating license. This resulted in a longer than baseline outage.

The main condenser repairs coupled with the extended refueling outage has resulted in a low number of critical hours (approximately 4588) for the period defined in the Oct 22, 2015 letter. For related background, WBN Unit 2 experienced two scrams and one unplanned power change for the previous 4 quarters. Details are as follows:

- A 1Q17 scram was caused when workers inadvertently depressed a local trip pushbutton on a Hotwell Pump. The pump trip resulted in a secondary plant transient and subsequent reactor scram. The event was attributed to human performance in that workers failed to practice situational awareness around scram sensitive equipment. Corrective actions included coaching Operations personnel on the need to control work activities near operating equipment and installation of bump guard covers on local pushbuttons for a number of Unit 2 secondary pumps.
- A 4Q17 scram was caused by an intermittent circuit card connection in the 2AC Rod Control Power Cabinet. The equipment malfunction resulted in 4 dropped control rods and a subsequent manual reactor scram by control room operators. Corrective actions included a 100% inspection of circuit card connections in the Rod Control Power Cabinets and replacement of suspect cards. No common cause was assessed to exist between the two scrams.
- A 3Q17 unplanned power change was caused by a Main Turbine steam leak.

Per the October 22, 2015 letter from NRC to TVA, the NRC stated that the "transition of WBN Unit 2 to the full oversight of the ROP will be a phased approach on an individualized cornerstone basis." One of the objectives of the letter was to "determine the validity of performance indicators upon transition and provide an augmented inspection plan for PIs that will not be immediately valid."

Additionally, the letter states "the transfer to full ROP oversight will occur while recognizing that not all PI's will be immediately valid at the time of transition and thus would likely not provide an accurate indicator of plant performance. PI's will be declared valid once sufficient time has passed to accumulate enough representative data to provide a reasonable assessment result."

The plan for the IE01, IE03, and MSPI were not to be "considered as valid inputs into the Action Matrix until a minimum of four quarters of information had been provided." For IE01 and IE03, the NRC stated "in order to establish the necessary baseline of critical hours to prevent falsely inflating the data, these indicators will become valid after four full calendar quarters have passed following transition of the cornerstone." The NRC went on to say that if "new information shows that a PI may still not provide accurate assessment value, the FAQ process will be utilized in accordance with NEI 99-02 to reach a conclusion on how to proceed." It is TVA's position that the 4th quarter 2017 PI value for IE01 does not provide an accurate assessment value of plant performance. The indicator value has over one quarter (3100 hours) of missing critical hours for the initial four full calendar quarters as desired in NRC's 2015 letter (which produced a PI value marginally over 3, at the hundredths place). At the end of the 1st quarter 2018, the IE01 PI value immediately returned to a green value in the middle of the band and provides an accurate assessment value of the PI.

While TVA acknowledges the foundational aspect of the NEI 99-02 document relative to 2400 critical hours and IMC 0608 relative to extended shutdowns, the 2015 letter supersedes it qualitatively for transitioning Watts Bar Unit 2 into the ROP, and TVA views the letter's silence on the 2400 critical hours and extended shutdown wording as intentional. The Watts Bar Unit 2 ROP Transition Plan meeting history and context supporting the 2015 letter made clear the NRC cognizance of Watts Bar Unit 2 being a new plant with awareness of the challenges of a plant in its first year of operation. TVA's view is the appropriate review standard should reflect new plant challenges in the first year of life and whether these challenges influenced the numerator and/or denominator per the 2015 letter with specific values purposely omitted (i.e., a qualitative standard relative to the plant challenges). TVA's position is that the denominator was dramatically influenced with over a full quarter of missing data, and falsely inflated the data and did not provide the necessary baseline of critical hours. The existing plant precedent and review standard the NRC is utilizing in the proposed response is not applicable in this situation because it is based on existing plants with extended plant shutdowns, not a plant in the first year of life..

If licensee and NRC resident/region do not agree on the facts and circumstances explain:

The NRC Watts Bar Site Resident Inspector was informed of this FAQ.

Potentially relevant FAQ's:

FAQ 13-01 Turkey Point Unplanned Scrams per 7000 Hours Critical
FAQ 17-04 Watts Bar Unit 2 MSPI Effectiveness Date

Similar to this FAQ request, FAQ 17-04, Watts Bar Unit 2 MSPI Effectiveness Date, was recently approved by the NRC to grant an extension for MS01 (Emergency AC Power System), MS07 (High Pressure Injection System), MS08 (Heat Removal System) and MS10 (Cooling Water Systems). The basis for this extension was the loss of critical hours within the first 12 months of operation due to the main condenser repair outage.

Response Section:

Proposed Resolution of FAQ:

Due to the uniqueness of new construction and starting-up a new unit, TVA requests either:

- a two quarter extension to the effective date for WBN Unit 2 IE01 and IE03 indicators (July 1, 2018) due to the loss of a significant number of critical hours. The IE01 indicator objective is to limit the frequency of those events that upset plant stability and challenge critical safety functions during power operations. The IE03 indicator monitors the number of unplanned power changes that could challenge safety functions. NEI 99-02 states that the indicators are based on 7000 critical hours which provides allowance for a routine outage. As of December 31, 2017, the total number of reported critical hours for 2017 was 4588. Extending the effective date to July 1, 2018 will allow four quarters of operation after the extended main condenser repair shutdown to provide a representative assessment result, or
- add the condenser outage time to the denominator of WBN Unit 2 IE01 and IE03 indicators. If the condenser outage is viewed as new plant related, which TVA believes, then TVA views that four full quarters, as per the 2015 letter, would not have occurred until March 31, 2018 at a minimum with the missing quarter (2Q17), or TVA recommends that the condenser outage and related testing time be added back in, so as to not overly penalize new plants due to new plant problems in spirit with the basis behind the 2015 letter. TVA would request the NRC review the nature of the outage relative to new plant start-up, in addition to the nature of the scrams, to keep in concert with what TVA believes to be the supporting basis behind the 2015 letter.

If appropriate, provide proposed rewording of guidance for inclusion in next revision:
None

PRA update required to implement this FAQ? No

MSPI Basis Document update required to implement this FAQ? No

Proposed NRC Response:

Both the IE01 and IE03 PIs are baselined to an occurrence rate per 7,000 critical hours and include a built-in lower limit of 2,400 critical hours, under which the indicator output is “N/A” to preclude misleadingly high values at low critical hours. The ROP transition letter, dated October 22, 2015, noted that, in order to establish the necessary baseline of critical hours to prevent falsely inflating the data, the IE01 and IE03 PIs would become valid after four full calendar quarters have passed following cornerstone transition to the ROP. Since the IE cornerstone was transitioned in November 2016, the IE01 and IE03 PIs became effective when 4Q2017 data was submitted. As of the end of 4Q2017, Watts Bar Unit 2 had accumulated more than 6,200 critical hours since initial startup, almost 2,700 critical hours following the main condenser maintenance outage, and the IE01 and IE03 PI calculations for 4Q2017 included nearly 4,600 critical hours in the prior four quarters. Given that the 2,400 critical hour lower limit to preclude unreasonably high PI values was exceeded by both critical hours accrued since initial startup and the number of critical hours included in the 4Q2017 IE01 and IE03 PI reporting period, the staff views the IE01 and IE03 PIs as providing reasonable assessment values.

As noted by the licensee in this FAQ, the NRC previously approved an extension request for the MSPIs in FAQ 17-04. The ROP transition letter from October 22, 2015, referred to a sensitivity study on the impact of low critical hours on MSPIs. The study concluded that the MSPIs, which nominally use the prior 36 months of data in the calculations, would produce relatively normal values after 12 months of data. The ROP transition letter used this information in determining that the MSPIs would become valid for Watts Bar Unit 2 after 12 months of operation. Because of the roughly three months of lost critical hours, the licensee requested an extension of the MSPIs by one quarter. The staff approved that request since the plant had not yet accrued the 12 months of minimum critical hours necessary for the MSPIs to provide a reasonably accurate assessment value.

The NRC reviewed FAQ 13-01, in which a similar request was made to extend the effective date of the IE01 PI due to low critical hours following an extended outage. The final NRC response to that FAQ denied the request, noted that the IE01 PI already had a built-in minimum limit before it became effective to preclude misleadingly high values, and concluded that low critical hours does not represent a unique condition that would warrant an exemption. Furthermore, the staff does not view the three month maintenance outage as an outage of sufficient length to reset PI effective dates. Section 07.03 of IMC 0608 discusses that some PIs may not provide valid indications of performance during extended shutdowns. An extended shutdown is defined in IMC 0608 as a condition in which a nuclear power reactor has been subcritical for at least six months. Additionally, the MSPI sensitivity study, while silent on the IE cornerstone, recommended that MSPIs be grayed out after a six month shutdown or greater. The staff also identified a recent three month refueling and maintenance outage (Grand Gulf in fall 2016) in which no PIs were grayed out or otherwise made invalid, and also noted that the 4Q2016 PIs for Grand Gulf were based on 4,602.4 critical hours, a very similar number of critical hours as the Watts Bar 4Q2017 PIs. The NRC has found no basis in this case to deviate from these prior staff positions.

The staff reviewed the two scrams that were included as inputs to the 4Q2017 PI to determine whether they were indicative of issues unique to a new plant. In one instance workers inadvertently depressed a local trip pushbutton on a hotwell pump, with the resulting transient ultimately causing a plant scram. The second instance involved an intermittent circuit card connection that resulted in four dropped rods and a subsequent manual scram. The staff did not find these scrams to be situations unique to a new plant.

Following discussion of the staff's proposed response to FAQ 18-02, Revision 0, at the April 5, 2018, ROP Task Force public meeting, TVA submitted Revisions 1 and 2 of FAQ 18-02 with additional information and proposed resolutions. In addition to the initial request to delay the effective date of the IE01 and IE03 PIs by two quarters, TVA provided two additional options: (1) to include the missing critical hours from the condenser maintenance outage or (2) to extend the effective date of the IE01 and IE03 PIs by one quarter. Additional background information was also included in the revised FAQs. The staff reviewed the additional background information, discussed the information with staff involved in developing the Watts Bar Unit 2 ROP transition plan, and considered the additional resolution options proposed.

The staff does not agree with the first additional option to include the missing critical hours from the condenser maintenance outage in the PI calculation. The existing calculation for the IE01 and IE03 PIs for 4Q2017 used actual scram and critical hours data from the prior four quarters.

If the staff were to artificially adjust the number of critical hours in the PI calculation (the denominator), there is no way to determine how to make a corresponding adjustment to the number of events that might have occurred had the plant been operating (the numerator). In reviewing the second additional option to extend the effective date of the IE01 and IE03 PIs by one quarter, the staff determined that the existing proposed response already addressed why a one quarter delay in the effective date is not necessary for the PIs to provide reasonable assessment values.

In summary, the NRC staff does not support granting Watts Bar Unit 2 an extension to the effective date of the Unplanned Scrams per 7,000 Critical Hours PI or the Unplanned Power Changes per 7,000 Critical Hours PI, nor artificially adjusting the number of critical hours included in the PI calculations.

Whitepaper to Change Text of NEI 99-02
Reporting ANS Data Following a Transition to IPAWS

Introduction

The U.S. Federal Emergency Management Agency (FEMA) has issued policy guidance indicating that the Integrated Public Alert and Warning System (IPAWS) may be used by a State, Tribal, and Local government as a primary or backup means of public alerting and notification; refer to FEMA memorandum, "IPAWS Implementation Guidance," dated September 13, 2017. A description of IPAWS may be found here and IPAWS testing is discussed here. Some sites, in conjunction with their offsite response organization (ORO) partners, intend to replace their current siren-based prompt public Alert and Notification System (ANS) with IPAWS (i.e., IPAWS would be the primary means of alert and notification). This whitepaper proposes changes to NEI 99-02 that would clarify the applicability of the ANS Reliability performance indicator (EP03) to a site that has implemented IPAWS as a FEMA-approved prompt public ANS.

NEI 99-02 Section Affected

The guidance to be changed is found in the Clarifying Notes section beginning on page 58 at line 2 (in the so-called "Clean Copy" of NEI 99-02, Rev. 7), or page 61 at line 2 (in the line-in/line-out mark-up version of Rev. 7).

Background

Title 10, Code of Federal Regulations, Part 50, Appendix E, Section IV.D.3, states,

> *". . . The design objective of the prompt public alert and notification system shall be to have the capability to essentially complete the initial alerting and initiate notification of the public within the plume exposure pathway EPZ within about 15 minutes."*
>
> *"The alerting and notification capability shall additionally include administrative and physical means for a backup method of public alerting and notification capable of being used in the event the primary method of alerting and notification is unavailable during an emergency to alert or notify all or portions of the plume exposure pathway EPZ population."* [Emphasis added]

Included is a requirement that,

> *"The backup method shall have the capability to alert and notify the public within the plume exposure pathway EPZ, but does not need to meet the 15-minute design objective for the primary prompt public alert and notification system."* [Emphasis added]

In 76 Fed. Reg. 72,560, "Enhancements to Emergency Preparedness Regulations," dated November 23, 2011, the NRC states:

> *"The intent of the final rule is not to have a duplicate primary ANS, but to have a means of backup alerting and notification in place so the public can be alerted in sufficient time to allow offsite officials to consider a range of protective actions for the public to take in the event of a severe accident with potential offsite radiological consequences."*

With respect to the ANS performance indicator, NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, states (top of page 58),

> *"This indicator monitors the reliability of the offsite Alert and Notification System (ANS), a critical link for alerting and notifying the public of the need to take protective actions. It provides the percentage of the sirens that are capable of performing their safety function based on regularly scheduled tests."*

The associated Clarifying Notes include (top of page 59):

> *"For those sites that do not have sirens, the performance of the licensee's alert and notification system will be evaluated through the NRC baseline inspection program. A site that does not have sirens does not report data for this indicator."*

It should also be noted that monitoring of ANS Reliability data formally began with implementation of the Reactor Oversight Process in April, 2000. At that time, there was no regulatory requirement for a backup method of public alerting and notification.

The above discussion makes clear that the ANS Reliability performance indicator applies to sirens comprising a primary prompt public ANS with a design objective to essentially complete the initial alerting of the public within the plume exposure pathway emergency planning zone (EPZ) within about 15 minutes. Upon implementation of a FEMA-approved primary ANS that does not use sirens for prompt public alerting (e.g., one based on IPAWS), the ANS Reliability performance indicator is no longer applicable to the site because sirens, the technology that underlies the indicator, are no longer part of the primary prompt public ANS. The licensee can stop reporting siren test data beginning with the quarter during which IPAWS is implemented as the FEMA-approved primary prompt public ANS. Thereafter, the performance of the licensee's ANS will be evaluated through the NRC baseline inspection program (e.g., NRC Inspection Procedure 71114.02, "Alert and Notification System Evaluation") and/or other methods determined by the NRC in conjunction with FEMA.

Proposed Changes to NEI 99-02

Starting on page 59 ("Clean" version of NEI 99-02), beginning at line 2; or page 61 (line-in/line-out version) also at line 2, replace the existing text with following text.

> ~~*For those sites that do not have sirens, the performance of the licensee's alert and notification system will be evaluated through the NRC baseline inspection program. A site that does not have sirens does not report data for this indicator.*~~
> *Sites that do not use sirens in the primary prompt public ANS do not report data for this indicator and may stop reporting data beginning with the quarter that a FEMA-approved primary prompt public ANS without sirens is implemented. The performance of the licensee's alert and notification system will be evaluated through the NRC baseline inspection program and/or other methods determined by the NRC in conjunction with FEMA.*

Whitepaper to Change Text of NEI 99-02
DEP Form Accuracy

Introduction

Industry operating experience has indicated that the information contained on initial notification forms can be bifurcated into entries of greater and lesser risk significance. Form entries that are critical to offsite response organization (ORO) protective action decision-making are in the former category. Other entries not critical to ORO decision-making are in the latter category. The criteria in NEI 99-02, Revision 7[1], for assessing the accuracy of an initial notification form consider all the listed form entries to have equal risk significance. This is based on the presumption that an error in any one of them will result in a missed performance indicator opportunity. Thus, currently, licensees are guided to report as Drill/Exercise Performance (DEP) indicator opportunity failures some incorrect form entries that would not materially impact ORO protective action decision-making (i.e., entries of lesser risk significance).

NEI 99-02 Section Affected

The guidance to be changed involves assessing the accuracy of an initial notification form for alerting an ORO of an emergency. The affected text is found in the following pages and lines of NEI 99-02, Revision 7: page 47, lines 38 through 43; page 48, lines 1 through 5 and lines 19 and 24.

Discussion

The proposed resolution is to revise the guidance for assessing the accuracy of initial notification forms. The revised accuracy criteria identify form entries that are always required for ORO protective action decision-making (more risk significant) and those that may not be critical to such decisions (potentially less risk significant). If inaccurate, a less risk significant form entry could be corrected on the spot during a notification or by a subsequent notification/communication with no impact on the effectiveness of ORO decisions. To implement the revised criteria, a licensee would need concurrence from the appropriate ORO (i.e., the governmental authority responsible for protective action decision-making). The ORO concurrence would indicate that an entry is not critical for protective action decision-making and need not be assessed for DEP indicator accuracy. It should be noted that this change is consistent with the initial notification form content guidance in Section II.E.3 of NUREG-0654/FEMA-REP-1, Revision 1[2] and Draft Revision 2[3].

Related to the above discussion, the term Protective Action Recommendation, or PAR, should be added to the accuracy criteria because it subsumes two of the current initial notification form attributes, “Whether offsite protective measures are necessary” and “Potentially affected population and areas.” In other words, a PAR transmits the protective measures identified as necessary for a given population or area (e.g., evacuate a subarea or shelter a town). It should be noted that the DEP indicator “Clarifying Notes” section already uses the term PAR in a manner consistent with its addition to the form accuracy criteria.

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[1] “Regulatory Assessment Performance Indicator Guideline”, NEI 99-02, Revision 7, August 31, 2013. A line-in/line-out version, showing changes from Revision 6 to Revision 7, is available on the NRC web site at https://www.nrc.gov/docs/ML1326/ML13261A116.pdf.

[2] “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants”, NUREG-0654/FEMA-REP-1, Revision 1, November 1980. Available at https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0654/r1/

[3] NUREG-0654/FEMA-REP-1, Draft Revision 2 is available at https://www.nrc.gov/docs/ML1416/ML14163A605.pdf.

Whitepaper to Change Text of NEI 99-02
DEP Form Accuracy

Proposed Changes to NEI 99-02
Starting on page 47 at line 38, replace existing text with the following new text:

- *Initial notification form completed appropriate to the event to include (see clarifying notes):*
  - *Plant*
  - *Class of emergency*
  - *Whether a release is taking place*
  - *Protective Action Recommendation*
  - *EAL number**
  - *Description of emergency**
  - *Wind direction and speed**
  - *Date and time of declaration of emergency**
  - *Whether the event is a drill or actual event**
  - *Unit as applicable**

Starting on page 48 at line 19, replace existing text with the following new text:

- *It is understood that initial notification forms are negotiated with offsite authorities. At a minimum, the first four form elements listed above should be assessed for accuracy. Any of the six remaining elements, identified with an asterisk, should also be assessed for accuracy if required by an offsite response organization (ORO) to make accurate and timely protective action decisions. To ensure that valid site-specific accuracy criteria are maintained, a licensee should review each of six asterisked form elements with the applicable ORO(s) and determine which need to be assessed for accuracy. The licensee should document ORO concurrence to not assess the accuracy of a form element and retain the documentation for inspection. If the form includes elements in addition to these, those elements need not be assessed for accuracy when determining the DEP PI. It is, however, expected that any errors, whether involving the six asterisked form elements not assessed for DEP PI accuracy or additional elements, would be critiqued and addressed through the plant's corrective action process.*

Whitepaper to Change Text of NEI 99-02
ERO PI Credit for BDB Drills

Introduction

The NRC is expected to issue new drill/exercise requirements in 10 CFR 50.155, *Mitigation of Beyond-Design-Basis Events* (refer to SECY-16-0142[4]). These requirements are separate from the existing drill/exercise requirements in 10 CFR 50, Appendix E, *Emergency Planning and Preparedness for Production and Utilization Facilities*. In anticipation of the issuance of these requirements, the industry has drafted this proposed change to NEI 99-02.

As a method to enhance and assess the effectiveness of training, and an efficiency measure, a licensee may choose to conduct a periodic beyond-design-basis (BDB) event response drill during a regularly scheduled emergency preparedness (EP) drill (i.e., an emergency response organization (DRO) team would be presented with a BDB event scenario). Because of the nature of BDB event response drills (refer to the guidance in NEI 13-06)[5], it may not be possible to grant ERO Participation credit to certain Key Positions under the existing performance indicator guidance because they may not have a DEP opportunity. The inability to grant credit could require the conduct of additional drills to ensure that all ERO Key Position holders have a credited ERO Participation opportunity within the allowed 8-quarter window. Given the training and efficiency value of periodically using a BDB event scenario in EP drills, and recognizing that emergency plan procedures will be implemented during these drills, there should be an allowance for granting ERO Participation credit to all Key Position holders.

NEI 99-02 Section Affected

It is proposed to add new guidance for granting credit for ERO Participation to the Clarifying Notes section; no existing text is being replaced.

Discussion

The Clarifying Notes section should be revised to add guidance for granting ERO Participation credit to all Key Position holders participating in a BDB event response drill, including those responsible for the performance of DEP opportunities outside the Control Room. This change would be similar to an earlier one for granting credit for participation in hostile action-based drills required by 10 CFR 50, Appendix E. This credit provision is discussed NEI 99-02, Revision 7, page 56, lines 28 through 37.

Proposed Changes to NEI 99-02

Insert the following new text on page 56, starting at line 39:

> *"Drills conducted pursuant to the requirements of 10 CFR 50.155 and using a scenario based on a beyond-design-basis (BDB) event may have all DEP indicator opportunities performed solely in the Control Room (e.g., declaration of a General Emergency could occur prior to activation of ERO facilities). In these cases, ERO Participation credit can be granted to Key Position holders performing DEP indicator functions outside the Control Room provided that the following applicable criteria are met:*
>
> - *Emergency Classification – The individual confirms the accuracy of the emergency classification level in effect around the time their facility is*

[4] SECY-16-0142, "Final Rule: Mitigation of Beyond-Design-Basis Events", December 15, 2016, available at the following URL: https://www.nrc.gov/docs/ML1629/ML16291A186.pdf.

[5] NEI 13-06, Revision 1, "Enhancements to Emergency Response Capabilities for Beyond Design Basis Events and Severe Accidents", February 2016, available at URL https://www.nrc.gov/docs/ML1622/ML16224A618.pdf.

activated.

- *Notification – The individual performs at least one update notification to an ORO.*
- *PAR – The individual performs at least one PAR assessment, even if the result does not change the existing PAR (e.g., an assessment to confirm a previously transmitted PAR).*

Objective evidence shall be documented to demonstrate that the above requirements were met.

If an individual participates in at least one BDB event response drill and at least one hostile action-based (HAB) drill within a three-year period, and these drills do not present a DEP opportunity, then only one of the drills can be credited."