

### EMERGENCY RESPONSE ORGANIZATION, DRILL/EXERCISE PERFORMANCE INDICATOR, PROGRAM REVIEW

CORNERSTONE: Emergency Preparedness

#### 2515/175-01 OBJECTIVE

The objective of this Temporary Instruction (TI) is to gather information to support the program office assessment of the drill/exercise performance indicator (DEP PI) data.

#### 2515/175-02 APPLICABILITY

This TI applies to all holders of operating licenses for nuclear power reactors, except nuclear power reactors that have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

#### 2515/175-03 BACKGROUND

The program office is conducting an assessment of the DEP PI at this time. The calculated DEP PI value may not reflect the licensee's performance in each of the three DEP PI performance categories of classifications, notifications, and PARs. Satisfactory performance in all three areas of the DEP PI provides the NRC with additional confidence that licensees are capable of implementing adequate measures to protect the public. As the DEP PI is currently structured, it may not provide indication of the licensee's ability in each of the individual areas. Since the licensee is only required to submit the eight-quarter, site average DEP PI data, the NRC does not have the information/data to assess the individual components of the DEP PI. Accordingly, the staff has prepared this TI to collect data on the number of successful opportunities for each of the three response actions separately, during currently scheduled program inspections.

The objective of the Emergency Preparedness (EP) cornerstone is to ensure that the licensee is capable of implementing adequate measures to protect the public health and safety during a radiological emergency. Licensees maintain this capability through Emergency Response Organization (ERO) participation in drills, exercises, actual events, training, and subsequent problem identification and resolution. The licensee-reported EP PIs are used to assess licensee performance in each cornerstone and provide a quantitative indication of the licensee's ability to implement adequate measures to protect the public health and safety.

The purpose of the DEP PI is to monitor the timeliness and accuracy of licensee's performance in drills and exercises, when presented with opportunities for classification of emergencies, notification of offsite authorities, and development of protective action recommendations (PARs).

The DEP PI is defined as the percentage of all drill, exercise, and actual opportunities that were performed timely and accurately by Key Positions, and is calculated on a quarterly basis. The quarterly value is then used for calculating each licensee's site average value, which utilizes DEP PI data from the previous eight quarters. That site average value is then reported to the NRC on a quarterly basis.

The methodology of its calculation is:

$$\frac{\text{\# of timely \& accurate classifications, notifications, \& PARs from DE \& AE * during the previous 8 quarters}}{\text{The total opportunities to perform classifications, notifications \& PARs during the previous 8 quarters}} \times 100$$

\*DE & AE = Drills, Exercises, and Actual Events

As a minimum, actual emergency declarations and evaluated exercises are to be included in this PI. In addition, other simulated emergency events that the licensee formally assesses for performance of classification, notification or PAR development may be included in this PI. It should be noted that licensees cannot remove opportunities from the reported PI, due to poor performance.

In section 0608-08.08.01 of Inspection Manual Chapter (IMC) 0608, "Performance Indicator Program," it states the following:

Because of the importance of PIs in the ROP as a source of information regarding performance upon which agency actions will be based, PI data must be reported accurately. Inspection Procedure 71151, "Performance Indicator Verification," shall be conducted to review licensees' PI data collection and reporting activities for adherence to pertinent guidance. It is expected that licensees will make reasonable, good faith efforts to comply

with the guidance in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline" (i.e., a document which was jointly produced by the NRC and the Nuclear Energy Institute (NEI)). This includes taking appropriate and timely action to identify and report performance issues captured by the indicators. It may be necessary for inspectors to exercise some judgment on the adequacy of licensee actions to make a reasonable, good faith effort to comply with the guidance.

In section 03.01.a.8, of Inspection Procedure (IP) 71151, "Performance Indicator Verification", it states, in part, the following (under Verification):

Review the reported PI data. Review actual emergency plan implementation events and evaluated exercise scenarios and a sample of drill and training evolution scenarios to verify the number of opportunities to classify, notify and develop protective action recommendations (PARs). Review licensee critiques for identification of failure to classify, notify or develop PARs in a timely and accurate manner. Review a sample of documentation forms for classification, notification, and PAR activities to verify accuracy. If the sample verifies accuracy, accept critique findings for the bulk of the PI data. It may be noted that, the resident and regional inspectors will periodically observe exercises, drills, and training evolutions under the Drill and Exercise inspectable area to verify licensee identification of timely and accurate performance. Inspection reports documenting these observations should also discuss the PI verification aspects of the inspection.

NEI 99-02, provides guidance necessary for licensee's to collect and report the data elements used to compute the PI, which ties directly into the NRC's ROP. More specifically, the guidance describes licensee quarterly indicators reports that are to be submitted to the NRC for use in assessing licensee performance. Further, demonstration of exercises involving onsite and offsite programs, form the key observational tool used to support, on a continuing basis, the reasonable assurance finding that adequate protective measures can and will be taken in the event of a radiological emergency. The PIs for onsite EP draw significantly from performance during simulated emergencies and actual declared emergencies.

## 2515/175-04 INSPECTION REQUIREMENTS

### General

This TI shall be conducted utilizing regional inspection resources, and is to be applied to all holders of operating licenses for nuclear power reactors, except nuclear power reactors that have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel. The regional inspectors will perform this TI, as part of their routine inspection activities (e.g., when they perform normally scheduled

baseline and PI verification inspections).

Specific

04.01 The inspector shall collect the data necessary to complete Attachment 1 of the TI. The inspector shall ensure that the data collected is from the previous 8 quarters for the following:

- a. Separate number of quarterly opportunities versus the number of quarterly successes, for performance of classification, notification and PAR development.
- b. Percentile result of the separate, quarterly DEP PI data elements.
- c. Reported quarterly DEP PI data (i.e., the site average percentage value, using previous 8 quarters of data).

04.02 The inspector shall report the results of this inspection as described in section 05.

04.03 Inspectors should ensure completion of Attachment 1, "TI 2515/175, Emergency Response Organization, Drill/Exercise Performance Indicator Program Review, Licensee Data Tables." This is a request for data that is not normally requested and/or reported.

04.04 The inspector may provide the licensee's data via electronic means (e.g., fax or email), or it can be mailed in.

2515/175-05 REPORTING REQUIREMENTS

The results of this TI inspection procedure shall be forwarded to the NSIR/DPR group office, Attention: Ronald V. Schmitt. The email address is: [Ronald.Schmitt@nrc.gov](mailto:Ronald.Schmitt@nrc.gov) or [rvs@nrc.gov](mailto:rvs@nrc.gov). The fax number for the office is 301-415-6382. The mailing address is: USNRC, Ronald V. Schmitt, MailStop T03B46M, Washington, D.C. 20555. The inspector performing the TI will note its performance in Section 40A5 (Other Activities) of the applicable inspection report. The report should state "...that the inspector performed TI 2515/175, ensured the completeness of the TI's Attachment 1, and then forwarded the data to NRC, HQ".

2515/175-06 COMPLETION SCHEDULE

This TI will be completed no later than December 31, 2009.

2515/175-07 EXPIRATION

This TI will expire on June 30, 2010.

2515/175-08 CONTACTS

For technical support regarding the performance of this TI and other emergent issues, contact Ronald V. Schmitt via email at [Ronald.Schmitt@nrc.gov](mailto:Ronald.Schmitt@nrc.gov) or [rvs@nrc.gov](mailto:rvs@nrc.gov), or by telephone at 301-415-4082.

2515/175-09 STATISTICAL DATA REPORTING

All direct inspection effort expended on this TI is to be charged to the baseline inspection program (IP 71151) with an IPE code of BI.

2515/175-10 ORIGINATING ORGANIZATION INFORMATION

10.01 Organizational Responsibility

This TI was initiated by the Licensing and Inspection Branch (NSIR/DPR/EP).

10.02 Resource Estimate

Inspections conducted under this TI are not expected to require staff hour expenditures exceeding those required for inspections of these licensees using the current inspection procedure IP 71151 "Performance Indicator Verification".

10.03 Training

No specialized training is needed to perform inspection requirements in this TI beyond basic training for inspectors (specified in IMC 1245, "Inspector Qualifications"). However, if technical support is needed during the inspection, contact the EP group technical contact stated in section 08.

2515/175-11 REFERENCES

NRC Inspection Manual, Manual Chapter 0608, "Performance Indicator Program" (ADAMS Accession No. ML070360605), dated February 27, 2007

NRC Inspection Manual, Inspection Procedure 71151, "Performance Indicator Verification" ((ADAMS Accession No. ML070720376), dated June 28, 2007

NEI 99-02 (Revision 5), "Regulatory Assessment Performance Indicator Guideline", dated July, 2007

END



**Attachment 1 - TI 2515/175,  
Emergency Response Organization, Drill/Exercise Performance Indicator Program Review  
Licensee Data Tables**

<b>Facility Name:</b>					<b>Docket Number(s): 50-</b>			
<b>CLASSIFICATIONS</b>								
*****	Prev. 8 <sup>th</sup> Qtr.	Prev. 7 <sup>th</sup> Qtr.	Prev. 6 <sup>th</sup> Qtr.	Prev. 5 <sup>th</sup> Qtr.	Prev. 4 <sup>th</sup> Qtr.	Prev. 3 <sup>rd</sup> Qtr.	Prev. 2 <sup>nd</sup> Qtr.	Prev. 1 <sup>st</sup> Qtr.
<i>Number of successes, per quarter</i>								
<i>Planned number of opportunities, per quarter</i>								
<i>Total percentage, per quarter</i>								
<i>Reported DEP PI percentage value, using previous 8 quarters of data</i>								

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<b>Facility Name:</b>					<b>Docket Number(s): 50-</b>			
<b>NOTIFICATIONS</b>								
*****	Prev. 8 <sup>th</sup> Qtr.	Prev. 7 <sup>th</sup> Qtr.	Prev. 6 <sup>th</sup> Qtr.	Prev. 5 <sup>th</sup> Qtr.	Prev. 4 <sup>th</sup> Qtr.	Prev. 3 <sup>rd</sup> Qtr.	Prev. 2 <sup>nd</sup> Qtr.	Prev. 1 <sup>st</sup> Qtr.
<i>Number of successes, per quarter</i>								
<i>Planned number of opportunities, per quarter</i>								
<i>Total percentage, per quarter</i>								
<i>Reported DEP PI percentage value, using previous 8 quarters of data</i>								



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Licensee Data Tables**

<b>Facility Name:</b>					<b>Docket Number(s): 50-</b>			
<b>PROTECTIVE ACTION RECOMMENDATIONS (PARs)</b>								
*****	Prev. 8 <sup>th</sup> Qtr.	Prev. 7 <sup>th</sup> Qtr.	Prev. 6 <sup>th</sup> Qtr.	Prev. 5 <sup>th</sup> Qtr.	Prev. 4 <sup>th</sup> Qtr.	Prev. 3 <sup>rd</sup> Qtr.	Prev. 2 <sup>nd</sup> Qtr.	Prev. 1 <sup>st</sup> Qtr.
<i>Number of successes, per quarter</i>								
<i>Planned number of opportunities, per quarter</i>								
<i>Total percentage, per quarter</i>								
<i>Reported DEP PI percentage value, using previous 8 quarters of data</i>								



**Attachment 2 – Revision History for TI 2515/175**

Commitment Tracking Number	Issue Date	Description of Change	Training Required	Training Completion Date	Comment Resolution Accession Number
N/A	06/05/08 CN-08-017	This Temporary Instruction (TI) is being issued to gather information for support of the programmatic assessment of Drill/ Exercise Performance (DEP) Performance Indicator (PI) data.	None	N/A	ML081020312