

Dec. 11, 2018

Efficiency Bulletin: 17-17

Standard Indicator: Central Database

Provide a central database that will allow INPO and the industry to manage standard key performance indicator (KPI) data with the following capabilities: data entry, analysis, reporting, exporting, KPI management and administration. A companion efficiency bulletin will be issued that will identify the common industry indicators and the method to manage them.

Addressees: Chief nuclear officers, NEI APCs and INPO APCs

Issue: OA 2.B.3, Establish a central KPI database to be shared by the industry and INPO.

Summary of Efficiency Opportunity

- Desired end-state—The industry and INPO use a common, central database to manage standard sets of KPIs. The central database resides in the INPO building, and all nuclear power plants will have the ability to upload performance information directly to the database and download standard KPI reports. The central database streamlines the industry's handling of performance data, enabling efficiency improvements in data management and reductions in each station's information technology resource requirements. It will include several levels of industry-standard indicators and support the development and use of utility-specific indicators as needed. The industry will share the costs associated with the development of the central database.

The current state for managing KPI data employs the use of utility-specific software requiring each utility to expend significant resources to upload and analyze performance data and maintain the database infrastructures.

Color Code: Red
Due: January 2020

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- Value proposition (vision of excellence)—Implementing the central data management system will:
 - Reduce or eliminate operating costs associated with maintaining utility-specific software that is used for managing KPI data
 - Establish a cost-effective standard process for managing and comparing key performance data across the nuclear industry.
- Why is it important?—A common database provides the industry with a solid foundation for conducting performance comparisons and benchmarking.
- Measures of effectiveness—
 - Reduction in information technology and data analysis costs.
 - Industry recognition of performance trends are maintained at current or improved performance levels.

Relevant Standards

- INPO 12-013, Performance Objective and Criteria PI.1: "Monitoring" Criteria 8-14

Relevant Regulatory Requirements

- NEI 99-02, Revision 7, Regulatory Assessment Performance Indicator Guideline, Aug. 31, 2013
- NRC Regulatory Issue Summary 2000-08, Revision 1, "Voluntary Submission of Performance Indicator Data"
- NUREG 16491, Reactor Oversight Process
- NRC Monthly Operating Report as defined in Generic Letter 97-02, Revised Contents of the Monthly Operating Report

Guidance

- INPO 04-004, CDE Data Element Manual, Revision 16, dated December 2016
- Companion efficiency bulletin (OA-2B1): Standardized Plant Performance Indicators (under development)
- Industry procedure for managing common performance indicators (under development)

Recommended Industry Actions

- Approve funding for the development of the central database.
- Gain agreement on the indicators to be monitored and identify them prior to database development.
- Provide INPO with resource support during the development, testing, verification and piloting phases of the project. Specific support activities include: identification of specifications, KPI formatting requirements, identification of output format needs and field testing of the new program.
- Select utilities to support data input and output testing (pilot stations).
- Begin preparation to adopt the new central database at the beginning of 2019. Implement change management strategies that support transition of utility-specific KPI management programs to the common industry KPI program.

Key to Color Codes:

Red: NSIAC initiative – full participation required for viability

Blue: Action expected at all sites, but is not needed for broad industry viability

Green: Utility discretion to implement, consistent with its business environment

Change Management Considerations

Industry Activities

- The industry working group is developing a standardized list of indicators that will be common across the industry with a goal of substantially reducing the overall number of indicators. The list of standard KPIs and control process will be issued as a separate efficiency bulletin.
- Support the development and implementation of a 2018 bridging strategy for the new set of common indicators until the new common database is complete in 2019.

Company and INPO Actions

- A detailed change management plan with standards and expectations should be developed and utilized during the transition year of 2018-2019.
- Begin monthly data input to the new common KPI management system in July 2019.
 - Input station performance data into both existing utility systems and the new common system during the three-month trial period (July-September 2019).
- Eliminate the utility-specific database and delete software support contracts if applicable (following successful implementation and testing of the new common system).
- Full implementation and use of the new database for all KPIs and the discontinued use of third party systems is expected to be complete by January 2020.

Guidelines

With common database established, KPI data management proficiency will likely be challenged during the implementation period as resources and methods for monitoring performance will be new. Station leaders need to create monitoring and control actions associated with this change to ensure plant performance and business activities are not adversely affected. Consider implementing the following actions:

- Conduct a trial period with dual systems before eliminating the utility-specific performance monitoring system.
- Implementation team to establish change management metrics for the implementation period that monitor the following:
 - Industry recognition of performance trends remains at the current or improved level.
 - Information technology cost reductions are realized as projected.
 - Resource support reductions are realized as projected.
- Assess effectiveness of new process capability in management review meetings.

Report Your Site's Results

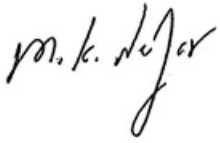
Please report your company's implementation of this improvement opportunity, including the date of completion. Send this information along with your company point of contact to EfficiencyBulletin@NEI.org.

Industry Contacts

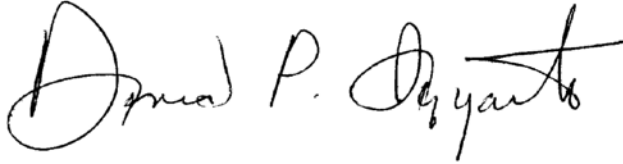
- INPO contact: Randy Tropasso, 770-644-8722 tropassort@inpo.org
- NEI contact: Chris Earls, 202 739-8078 cee@nei.org
- On the web: www.nei.org/bulletin1717Rev1

Industry Approval:

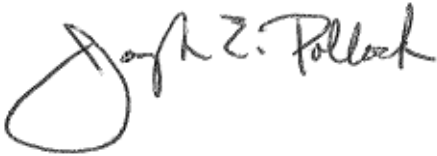
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Industry Approval (EB 17-17, Rev. 1):



Doug True, Nuclear Energy Institute