efficiency bulletin

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FIN Team Efficiency

The effectiveness and composition of fix-it-now (FIN) teams have challenged the industry's ability to manage incoming work, protect the schedule and provide timely resolution of high-priority work. In many cases, administrative, oversight and resource requirements placed on FIN teams limit the potential to improve equipment reliability.

Addressees: Chief nuclear officers, NEI APCs and INPO APCs

Issue: **WM-P-02, FIN Team Efficiency**

Summary of Efficiency Opportunity

- Desired end-state—FIN teams effectively manage incoming work, protect the schedule and provide timely resolution to high priority work. The majority of FIN work is accomplished using tool-pouch, minor maintenance and single person tasks that do not require detailed work package planning and do not increase the risk of a plant transient or other consequential event.

- Value proposition (vision of excellence)—A special cross-functional work team is assembled as an autonomous work group capable of performing work with minimal additional resources and support. This team accomplishes work outside the normal cycle schedule on a real-time and immediate basis. This will result in shorter cycle times for fixing degraded equipment and will free up planning, scheduling, tagging and major maintenance resources.

- Maximum benefit is obtained when this efficiency opportunity is implemented in conjunction with efficiency bulletins EB 16-15a, "Work Screening Process" (WM-P-06) and EB 16-15b, "Utilizing Minor Maintenance" (WM-P-01).

NUCLEAR ENERGY INSTITUTE

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This bulletin and additional information about nuclear energy are available at nei.org.

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- Why it is important?—Many FIN teams are not fully staffed, organized and maintained as an autonomous cross-functional team, limiting their ability to protect the schedule and perform the majority of emergent work. The resolution thereby of simple equipment deficiencies is unnecessarily delayed by requiring all work to be routed through the work management process, requiring detailed planning. Efficiency and effectiveness will be maximized by performing as much work as practical as minor maintenance work orders assigned to the FIN team.

- Industry benchmark value(s)—Weekly schedule completion is maintained at current performance. The FIN team effectively manages high-priority work activities such that the scheduled and planned work is protected and normal maintenance resources are not distracted from their assigned tasks. Additionally, new work is investigated and managed primarily through FIN teams to minimize additions to station maintenance backlogs.

- Measure of effectiveness—Progressing toward or achieving target values of 75 percent of all new incoming work and 90 percent of all new high-priority work completed by the FIN team as identified in the document "Industry Cumulative Impact Short-Term Actions," November 2013. Additionally, high levels of weekly schedule completion are maintained or achieved. Control room deficiencies, operator work-arounds and burdens, and lit annunciators are maintained at current performance levels, and maintenance critical and noncritical backlogs should be reduced or maintained at industry best performance levels.

Relevant Standards

- Performance Objectives and Criteria (INPO) WM.1, Work activities are managed during on line and outage periods to support safe and reliable operation, and MA.1, Maintenance personnel apply the essential knowledge, skills, behaviors, and practices to improve equipment performance, contributing to safe and reliable operation.

Guidance

- INPO–Industry Cumulative Impact Short-Term Actions, November 2013, WM-5. This document recommends the industry take the first step to optimizing the use of FIN teams and minor maintenance. It also provides guidance on what attributes the FIN team charter should contain and on effective FIN team organizational structures.
- AP-928, "Work Management Process Description", Revision 4, re-emphasizes the need for effective FIN teams.
- INPO 05-004, "Guidelines for the Conduct of Maintenance at Nuclear Power Stations."
- EPRI "Work Package Planning Guidance" 3002007020, defines the makeup and functions of the FIN team.

Recommend Industry Actions

- Review station guidance and/or FIN team charters and make the necessary changes to strengthen and improve FIN team effectiveness and overall performance. Refer to Industry Cumulative Impact Short-Term Actions, November 2013, (WM-5); AP-928, Work Management Process Description, Revision 4; INPO 05-004, Guidelines for the Conduct of Maintenance at Nuclear Power Stations; and EPRI Work Package Planning Guidance 3002007020.

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

- Specific actions that can be taken include:
  - Ensure FIN team leaders are included in the work screening process and perform the investigation of deficiencies when an underlying equipment problem is not clear. The use of the FIN team to screen work will place deficiencies in the appropriate work management process in a timely manner.

  - Effective FIN team priorities include the immediate response to high priority work, management of control room deficiencies, operator work-arounds and burdens, and lit control room annunciators. FIN teams manage maintenance backlogs by investigating and correcting new work; minimizing additions to the station maintenance backlogs.

  - Key positions on FIN teams are established and maintained, such as senior reactor operators, non-licensed operators, maintenance supervisor(s) and maintenance craft. Radiation protection personnel, planners and supply chain personnel are assigned based on plant needs and effectiveness. When key members are absent (training or vacation, etc.), the positions are backfilled by their respective organizations.

  - The majority of work should be performed as minor maintenance, tool-pouch and single person tasks on both safety- and non-safety-related components, as appropriate.

Change Management Considerations

Industry Activities
- Industry webinar to provide background for initiative, INPO discussion, and an open forum to clarify expectations and ask questions. Information on the webinar is available at https://web.inpo.org/Pages/Nuclear-Promise-Issues.aspx
- Discuss at regional maintenance and work management meetings and routine industry conference calls.
- Discuss at regional operations meetings.
- Update and discuss during the summer 2016 maintenance, work management, operations manager and corporate functional area manager meetings.

Company Actions
- Review station FIN team charter and guidance on FIN team organizational structure as compared to the guidance identified in short term actions for WM-5 in the Cumulative Impact Short-Term Actions, dated November 2013; AP-928, Work Management Process Description, Revision 4; INPO 05-004, Guidelines for the Conduct of Maintenance at Nuclear Power Stations; and Work Package Planning Guidance 3002007020, which defines the makeup and functions of the FIN team.
- Revise guidance and develop a change management plan that communicates the desired outcome and purpose of the initiative.
- Share findings with the industry maintenance, work management, operations working groups for broader industry analysis and awareness.
- Resource the FIN team organization for maximum efficiency and production.
- Periodically assess the station's ability to maintain an effective FIN organizational structure and resources.

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
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Industry Approval:

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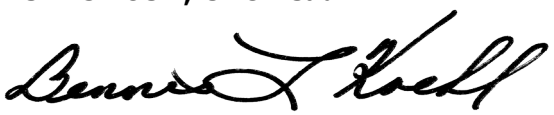

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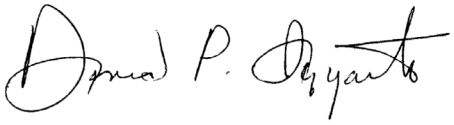

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