

efficiency bulletin

July 12, 2016

Efficiency Bulletin: 16–15b Utilizing Minor Maintenance

A substantial amount of work is performed using an extensive work management process requiring detailed instructions, scheduling and coordination. All work activities that are minor in scope and complexity, do not require detailed work package planning, and do not increase the risk of a plant transient or other consequential event should be planned as minor maintenance. Minor maintenance is predominately performed by the fix-it-now (FIN) team and can be performed by the maintenance shops as part of the cycle schedule. It is acceptable to have maintenance shops and FIN teams schedule minor maintenance work orders.

Addressees: Chief nuclear officers, NEI APCs and INPO APCs

Issue: WM-P-01, Utilizing Minor Maintenance

Summary of Efficiency Opportunity

- Desired end-state—New equipment deficiencies are reviewed and classified as minor maintenance by the work screening team and either assigned to FIN or maintenance shops. This will allow planning, tagging and scheduling resources to focus on more important activities that require a higher level of preparation and oversight.
- Value proposition (vision of excellence)—Minor maintenance should be used when work is minor in scope and complexity, does not require detailed work order planning, and does not increase the risk of a plant transient or other consequential event. Currently, the resolution of simple deficiencies is unnecessarily delayed by requiring all work to route through the work management process, which requires detailed planning. Station supervisors are distracted from focusing on activities that are more important by reviewing and approving detailed work instructions that the scope and risk of the work do not warrant. Maximize efficiency and effectiveness by performing as much work as practical as minor maintenance assigned to the FIN team or maintenance shops.

Color Code: Blue
Due: December 2016



NUCLEAR ENERGY INSTITUTE

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

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- 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 16-15c, "FIN Team Efficiency" (WM-P-02).
- Why it is important?—Minor maintenance is not being leveraged to its full potential, resulting in station resources being applied unnecessarily to extensive planning that the scope and risk of the work does not warrant. Additionally, fully utilizing minor maintenance management will enable limited station resources to be applied to the more important aspects of plant operation and maintenance.
- Industry benchmark value(s)—Critical and noncritical maintenance backlogs should be reduced or be maintained at industry best performance levels. Planner efficiency and productivity are improved as most work order planning will not require detailed instructions, enabling a greater emphasis on improving corrective work orders on critical and important equipment.
- Measure of effectiveness—An increase in work activities assigned and performed as minor maintenance compared to current baseline number of minor maintenance activities at the time this bulletin is implemented. Stations should progress toward or achieve a target value of 60 to 65 percent minor maintenance.

Relevant Standards

- Performance Objectives and Criteria (INPO) WM.1-16, the level of detail in work planning and instructions is based on the safety significance and complexity of the activity and considers the training, experience and skills of the workers and supervisory oversight.

Relevant Regulatory Requirements

- None

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.
- AP-928, Work Management Process Description, Revision 4, defines and re-emphasizes the need to perform minor maintenance. See Appendix B (located on the INPO Work Management webpage) for examples of minor maintenance work activities.
- EPRI document 3002007020, Nuclear Maintenance Applications Center: Maintenance Work Package Planning Guidance, see Table 4.1 for more details.

Recommend Industry Actions

- Develop guidance on the use of minor maintenance as identified in short term actions for WM-5 in the Cumulative Impact Short-Term Actions, dated November 2013, and AP-928, Work Management Process, Revision 4 Appendix B. The work screening committee typically makes the determination of minor maintenance.

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

Other Actions for Consideration (as required)

- None

Change Management Considerations

Industry Activities

- Industry webinar to provide background for initiative, INPO discussion, and provide 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 and operations manager and corporate functional area manager (CFAM) meetings.

Company Actions

- Implement guidance on the use of minor maintenance as identified in short term actions for WM-5 in the Cumulative Impact Short-Term Actions, dated November 2013, and AP-928, Work Management Process, Revision 4. Develop a change management plan that communicates the desired outcome and purpose of the initiative.
- Share findings with the industry maintenance, work management and operations working groups for broader industry analysis and awareness.

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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