

# efficiency bulletin

March 17, 2016

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Efficiency Bulletin: 16-10

## Reduce Cumulative Impact From the Corrective Action Program

Station leaders fully leverage efficiency practices to reduce administrative burden in the corrective action program

**Addressees: Chief nuclear officers and site vice presidents**

**Issue: CAP-001, Reducing Cumulative Impact From the Corrective Action Program**

### Background

The accumulation of process controls and administrative requirements placed on corrective action programs over the years is impacting the effectiveness of plant supervisors and managers and challenging sustained high levels of plant performance. This burden has been created in several ways, including:

- Station leaders moved away from managing conditions not adverse to quality at a department level through individual coaching and other programs. Instead, they came to rely on the corrective action program (CAP) as the sole means to address issues. As a result, corrective action programs have come to be used as a tool for departmental work tracking or to manage a range of low-level issues.
- A philosophy of trending all performance issues through the CAP was embraced instead of looking at available alternatives.
- Causal evaluations routinely have been applied to conditions outside of those required by regulation. In most cases, a more practical and less resource-intensive approach could have been employed to determine the cause and the corrective actions.
- In the interest of risk-avoidance, there has been a tendency to “layer on” corrective actions and establish additional reviews or committees to address issues of relatively low significance.



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## Summary of Efficiency Opportunity

- Desired end-state—Condition reports serve as the primary tool to raise issues, and those issues that affect quality are promptly documented in a CAP. Most issues screened as a condition adverse to quality (CAQ) are addressed without requiring a causal evaluation; causal evaluations, when performed, are completed more efficiently. A CAQ issue is assigned an action to correct the problem. An issue screened as a significant condition adverse to quality (SCAQ) undergoes a cause evaluation and is then assigned a corrective action to preclude repetition (CAPR). Condition reports for issues that do not meet the criteria established by 10 CFR 50, Appendix B, Criterion XVI, the station's quality assurance program requirements, or other regulatory standards, are closed to other management systems and processes. Station leaders are empowered to direct actions for preventing events and improving station performance without the unnecessary expenditure of resources related to CAP compliance.
- Value proposition (vision of excellence)—Station leaders and workers spend less time processing issue evaluations and corrective actions, including time spent in committee meetings (screening, management review, etc.), and have greater focus on conditions adverse to quality and other items of significance. Department managers and direct reports move into higher levels of performance accountability.
- Why it is important?—This improvement opportunity does not change the current expectations involving issue identification; therefore, employees will continue to be encouraged and expected to maintain a low threshold for condition reporting. Supervisors, managers and executives will ensure that a workplace environment supportive of problem identification, consistent with a healthy nuclear safety culture, is maintained.

## Relevant Standards

- Implementation of CAP requirements is discussed in numerous NRC documents, including regulatory guides, manual chapters and inspection procedures.
- INPO Performance Objectives and Criteria (PO&C):
  - PI.1, Performance monitoring activities are used to identify gaps between current levels of performance and desired management and industry standards.
  - PI.2, A consistent and deliberate approach is used to investigate problems and plan actions to improve performance.
  - PI.3, Actions to address identified gaps are specific, actionable, measurable and timely to improve performance.

## Guidance

- INPO 14-004, "Conduct of Performance Improvement," Revision 0, October 2014.

### 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

## Recommend Industry Actions

Revise CAP processes and procedures to fully align with the guidance provided in INPO 14-004, "Conduct of Performance Improvement." Specific actions that can be taken include:

- Communicate to station employees that issues may be raised at any time and through various methods. The different methods should be clearly defined and the associated means for each readily accessible. Provide concrete examples for use of the various reporting methods. The benefits of reporting issues directly to leaders should be stressed; this approach puts a focus on action rather than process to address low-level issues, builds trust in leaders and improves teamwork.
- Evaluate administrative requirements that mandate the use of the CAP to address low-level conditions that are not adverse to quality, such as administrative procedure changes, training requests, tracking of assessments, and unacceptable business practices—for example, the cancellation of a meeting or a late arrival to training. Generation of condition reports for these types of low-level issues should not be discouraged because it is essential to maintain a strong culture of reporting. Procedures may allow entering a low-level condition into either the CAP or another tracking system. However, if entered into the CAP, the screening team may convert the condition report to another tracking system activity and subsequently close it.
- Assess the requirements for the generation of a condition report related to a behavior observation in cases where the observed act does not result in a condition adverse to quality. These types of observations may be better addressed through on-the-spot correction and coaching and handled in another management system if station leaders choose to do so. Cognitive trending of behaviors may be done using programmatic assessments and tools, or in a more informal manner such as discussing trends during station or department meetings.
- Evaluate screening processes to improve efficiency. Responsibilities of CAP screeners should include classifying condition reports as CAP or non-CAP issues, identifying CAQ and SCAQ issues, and determining the functional area or department owner for the issue. Industry experience has shown that approximately 20 percent of condition reports are CAQ and less than 1 percent are SCAQ. By closely adhering to procedural definitions and examples of a CAQ and SCAQ when assigning a significance level to a condition report, a screening team should be able to direct about 80 percent of issues to other management processes and reduce the duplication and "double-tracking" of issues. A screening meeting may be combined with another station meeting such as the "Plan of the Day," operational focus, or work management to gain additional efficiencies.
- Consider revising the CAP process work flow to allow closing a CAQ condition report through another management system such as work management, engineering change request, commitment tracking program, etc. Effective use of these tools can reduce the need for assigning and tracking corrective actions within the CAP.
- Evaluate whether determinations associated with other program requirements such as industrial safety, operating experience, maintenance rule, human performance, or event reporting may be made outside of the screening meeting by the applicable program owner or station leadership. Removing this activity from screening meetings frees personnel for other work.

- Ensure that CAP requirements do not drive investigation of issues with more personnel than is necessary to ensure a thorough analysis and identification of appropriate actions to correct both the condition and the cause(s). In cases where the cause(s) of an event are well understood, cross-functional support from other departments may not be necessary. Each investigation should be supported by a line manager who understands the issue and has accountability for seeing corrective actions through to implementation and closure.
- Incorporate investigation report formats that are short, simple to read and clearly relate the event and consequences to the cause(s) and the corrective actions.
- Assess CAP requirements related to the determination of actions required to correct a condition and cause(s), and add guidance where necessary to drive consideration of efficiency. Issues are to be corrected in the most efficient way possible, and with the least amount of actions and resources necessary. Investigations should adequately consider extent of condition and the acceptance of some residual risk when determining corrective actions. Leaders should be adept at challenging actions that represent enhancements or “good ideas” and are not truly corrective.
- Reduce the volume of CAP and performance improvement products reviewed by management oversight committees. A corrective action review board (CARB), or equivalent, should limit its review to products associated with significant conditions adverse to quality, including the actions being taken to preclude repetition. Oversight of performance improvement programs should focus on timely self-identification and resolution of meaningful performance gaps. Committees should assess line ownership and accountability, and not grade individual products. Oversight committee meetings should not be lengthy and may be combined with other management meetings. Consideration should be given to sunseting oversight committees that were established to address legacy issues with CAP or performance improvement products and are no longer necessary based on current levels of performance in these areas (e.g., a pre-CARB or departmental CARB).

### **Other Actions for Consideration**

The CAP-related practices listed below will improve process efficiency and overall performance but may not be feasible for implementation at all stations given current regulatory commitments and business resources. They are being provided for consideration by station leaders and CAP professionals.

- Focus on closing more condition reports at screening. This can be accomplished through effective coordination between line managers and supervisors and members of the screening team. Screening teams should clearly document the actions taken in the field to resolve the condition, and then close the condition report or transfer it to another process. Organizations employing this approach have seen closure rates at screening of up to 80 percent and instilled a positive mindset of “fixing today’s problems today.”
- Improve sensitivity to the number of corrective actions being generated for conditions adverse to quality, and promote the concept of “fixing only that which is broken.” This helps eliminate the tendency to “over-correct” problems. Ideally, each CAQ condition should require one action to correct it, and the assignment of redundant or unnecessary actions should not be tolerated. Indicators could be developed to help monitor performance in this area.

- Remove administrative closure sign-offs for condition reports not associated with CAQ or SCAQ issues (e.g., supervisor concurrence that a problem was addressed). As station performance and quality expectations have improved over time, this may be an unnecessary administrative burden.
- Reduce corrective action backlogs by moving non-CAP items into other processes. This promotes a CAP focus on the most important station issues: those potentially affecting safety and quality.
- Evaluate the process for requesting an extension of a corrective action due date to ensure that the right level of authority is defined and that the process is not overly burdensome. The approval(s) required for extending a due date should be commensurate with the level of risk associated with delaying implementation of the corrective action. For example, approval by a senior leadership team member should not be necessary for extension requests where delaying the corrective action would have relatively low impact or consequence.
- Adopt a philosophy of accruing a number of low-level issues through trending programs and then conducting common cause analyses on aggregate performance rather than individual event investigations. This will allow better cause identification with less resource expenditure.
- Create a storyboard or one-page summary for important event investigations that presents the event, the causes and contributors, extent of condition and corrective actions. This will reduce the amount of time needed by key stakeholders and executives to review these products.
- Adopt a menu-driven workflow for selecting the most effective cause analysis tool based on the nature of the problem. For example, the menu could direct selection of an equipment reliability checklist, a human performance evaluation or an organizational assessment technique. This will improve the quality of cause evaluations while shortening the amount of time necessary to perform the investigation.

## **Change Management Considerations**

### *Industry Activities*

- Webinars to provide background on the initiative, INPO discussion and an open forum to clarify expectations and ask questions.
  - 1a: Thursday, March 24, 9:30-11 a.m. EDT (reserved for site vice presidents and plant managers)
  - 1b: Thursday, March 24, 2:30-4 p.m. EDT (open session for ops managers, maintenance managers, engineering managers, PI managers, regulatory affairs managers, NOS managers)
  - 2: Friday, March 25, 10-11:30 a.m. EDT (open session for ops managers, maintenance managers, engineering managers, PI managers, regulatory affairs managers, NOS managers)
  - 3: Tuesday, March 29, 2-3:30 p.m. EDT (open session for ops managers, maintenance managers, engineering managers, PI managers, regulatory affairs managers, NOS managers)
  - 4: Monday, April 4, 1-2:30 p.m. EDT (open session for ops managers, maintenance managers, engineering managers, PI managers, regulatory affairs managers, NOS managers).
- Discussion during Site Vice President, Plant Manager and Engineering Manager meetings in 2016.

- Discussion during two INPO performance improvement manager meetings in 2016.
- Corrective Action Program Owners Group (CAPOG) activities to support this initiative will include:
  - Monthly teleconferences by steering committee members to discuss challenges and lessons-learned associated with changes made to support the Delivering the Nuclear Promise initiatives and to support industry alignment for implementation practices.
  - Annual conference agenda topics devoted to Delivering the Nuclear Promise implementation initiatives in CAP and PI at the August 2016 meeting.

### *Company Actions*

- Review the implementation of INPO 14-004, “Conduct of Performance Improvement” and share findings with the CAPOG for broader industry analysis.
- Brief regional and resident NRC staff on this initiative and its implementation at each station.
- Conduct employee communication activities (all-hands meetings, small group working meetings, station newsletters, etc.) to inform station employees, supervisors and managers about this initiative.
- Continue active participation in industry working groups.
- Report station CAP performance indicators to the CAPOG. Monitor implementation of this initiative at your station to gauge the health and effectiveness of the CAP using these performance metrics. The following quarterly metrics are associated with CAP volume and throughput:
  - Total number of root cause evaluations performed.
  - Total number of low-tier investigations performed, including evaluations such as equipment ACEs, quick evaluations, HU evaluations, etc.).
  - Total number of conditions adverse to quality or CAP condition reports.
  - Total percentage of items closed at screening to trend or other processes.
  - Total number of condition reports generated at the station.
  - Total number of “trend” or aggregate review condition reports.

### *Guidrails*

The efficiency opportunities described in this bulletin are intended to enhance plant safety by providing leaders with a clearer view of issues important to safety. This initiative capitalizes on existing industry guidance and is intended to facilitate consistent implementation of this guidance across the industry. The proposed CAP changes are consistent with existing regulations, NRC guidance and INPO requirements; however, there are some implementation risks. These are discussed below.

- Employees may feel that problem reporting is being discouraged, or that problems will no longer be tracked and addressed. This risk can be addressed through employee communications, monitoring of condition reporting health, and reinforcement by station leaders. Station performance monitoring methods such as trending, management review processes and indicators and metrics can provide confidence that issues, especially aggregated issues, are being addressed. Additionally, employee concerns personnel should be closely

monitoring the environment for raising concerns.

- Stations have cultivated a risk-averse mindset that creates a bias to capture all or most station issues in the CAP, and some personnel may be reluctant to change their mindset. In addition, station leaders have routinely directed application of cause determination processes to issues other than those required by regulation and may be hesitant to change this behavior. New CAP requirements and expectations, including the benefits to safety, will need to be clearly communicated to all station personnel as part an effective change management plan. The change management plan should consider actions to foster and sustain a new cultural attitude that embraces the goal of CAP and problem resolution efficiency. This should include ways to periodically share industry CAP metrics with the organization.
- Station personnel may have concerns that departmental-level tracking processes will not have appropriate management engagement, rigor and oversight to effectively resolve issues (i.e., those not placed into the CAP). This risk can be mitigated by effective leadership communication, use of the company's management model, and periodic review by oversight organizations.
- In order to implement the changes proposed in this document, it may be necessary to revise CAP-related bases documents. These would include, but are not limited to, changes to the quality assurance manual, specific line item commitments within commitment tracking systems, and performance improvement administrative procedures. Quality and oversight personnel will be a key resource to ensure that CAP changes do not conflict with quality assurance program requirements.

### **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](mailto:EfficiencyBulletin@NEI.org).

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