

Date: Mon, 26 Jan 1998 16:28:05 -0700
From: Meredith Brown <racer@lanl.gov>
Subject: Blue Alert: Readiness Reviews

[Note: This lessons learned alert contains summary information from the full report (23 pages) which may be obtained from the contact identified below.]

Title: **Lessons Learned from Operational Readiness Reviews at INEEL**

Identifier: DOE-ID Lessons Learned #98-001

Lessons Learned Statement: Recent plant turnaround and readiness preparations for nuclear operations at the Idaho National Engineering and Environmental Laboratory (INEEL) have provided an opportunity for identification of lessons learned for achieving and assessing operational readiness. DOE-ID assessments, oversight by DOE HQ/EH and the Defense Nuclear Facility Safety Board (DNFSB) all confirmed a need to improve management capabilities in planning and implementation of operational readiness.

The intent of this report is to disseminate those aspects of operational readiness (planning, implementation, assessment), whether good points of practice or pitfalls to be avoided, which can be applied elsewhere to improve sitewide operations and avoid the difficulties encountered recently at the INEEL.

Discussion: It is expected that this Lessons Learned Report will serve to guide line managers in achieving operations improvements across the INEEL; whether dealing with ongoing operations or facility new starts and restarts. Furthermore, DOE, as the program customer, can apply the points from this report; ensuring improved communication of operations standards and more effective oversight of contractor performance.

The following key points and themes summarize the input derived from the Operational Readiness Lessons Learned Workshop of June 1997. It is in these areas where improvements can be made in sustaining of operational excellence at the INEEL.

Management Involvement - Management must be actively engaged in line operations to reinforce compliance with expectations. This commitment to excellence must be continuously reinforced to ensure personnel attitude and resultant performance remain consistently above expectations. This communication and commitment to appropriately high operations standards can not be delegated.

Organizational ownership and accountability of all plant systems is also a key factor to ensuring successful operations. Senior management walkthroughs of operations contribute to clarification of expectations and defining what is important to the overall mission of each facility. Clearly defining roles and responsibilities for line and support organizations will help to create the environment that aligns all personnel with the goals and expectations for plant operation. A weakly enforced alignment of operations management and institutional, support organizations

such as radiological protection and environmental management was felt to be contributory to operational readiness difficulties.

Setting Expectations - Line management, at all levels, within both DOE and the M&O contractor, must communicate in word and action, the expectation for operations excellence. It is particularly important that DOE, as the program customer, communicate and reinforce through effective oversight, the standard of performance. Recent experience at the INEEL, as brought out in the Lessons Learned Workshop, indicated that line management for both DOE and the contractor were less than adequately engaged with setting and reinforcing acceptable standards of operational performance.

Of all the topical areas addressed in the workshop, identification of expectations between DOE and the contractor were the most prevalent. The participants believed that open, straight-forward relations with all levels of management in identifying requirements and performance expectations are fundamental to the success of operational readiness. Participants also suggested that setting expectations for performance is an evolving process consisting of up-front requirements identification, reinforced by on-going assessment and oversight.

Planning for facility restarts or new starts must build in from the beginning the expectation for achieving and sustaining a routine level of comprehensive operational readiness. Whether characterized as fully compliant, safe, excellent, or crisp, comprehensive readiness must be deliberately implemented, institutionalized, and sustained in all elements of the plant organization. Day-to-day plant practice must represent the long term character of operational excellence. Last minute cramming or tutoring of plant personnel in preparation for an ORR/RA should, ideally, be unnecessary in an environment of operational excellence.

Finally, management assessments (e.g. Management Self-Assessment - MSA) must be calibrated at the same level of rigor and performance expectation as the confirmatory Operational Readiness Review.

Systems Approach - Non-routine plant operations such as startup and restart activities present unique risks that require a systematic approach to planning and execution. Planning for restart of facilities should begin very early, even prior to the shutdown of the plant and be conducted in an orderly, systematic manner, considering all elements of plant operation.

Plant shut-down and restart activities should involve multi-discipline teams that enlist support organizations in the identification of hazards. Importantly, a systems understanding should include all aspects of plant, personnel, and paper (documentation and procedures) and how each piece integrates into achieving complete operational readiness.

Effective plant turnarounds must also encompass an organizational systems perspective and look beyond the line management organization. Effective use of support organizations and multi-disciplined teams contribute to a comprehensive understanding of all elements of plant operations improves success in achieving and sustaining plant operations. The alignment of institutional support organizations with line management was felt to contribute significantly to

managements understanding of issues and execution of corrective actions and thereby ensure readiness of all aspects of plant operation.

Similarly, assessments of readiness and subsequent management response must focus beyond individual findings; seeking instead to resolve the underlying management systems weaknesses in preparation for operational readiness. Initial readiness preparation efforts at the ICPP were often activity or finding based rather than addressing underlying management systems as was typified during the follow-on phase of achieving readiness for the NWCF.

The planning for readiness must also include development of a detailed, logic sequenced operations plan for demonstrating system readiness. This final AStart-up Plan@ must include activities of equivalent complexity and reflect, to the degree possible, identical evolutions as will be executed under full operation of plant systems.

Recommended Actions: A process inadequately measured is often a process not achieved. The standard of operational excellence must be predetermined by DOE and understood by the contractor up front in the readiness preparation process. The DOE directed performance standards should derive from applicable operational requirements as defined by statutes, DOE Directives, and Standards as implemented by Plant or Facility Conformance Matrices. The measuring processes, whether ongoing line management assessments, external audits, or final confirmation by an independent readiness verification team should all apply the same standard of operational excellence. An ongoing 'working consensus' among all organizations and external oversight groups must be achieved to avoid last minute disconnects (surprises) regarding the objective and measures of operational readiness.

Originating Organization: US DOE Idaho Operations Office, Office of Program Execution

Contact: Brian Edgerton, 208-526-1081, e-mail edgertbg@inel.gov

Priority Descriptor: BLUE

Keywords: Operational Readiness, Startup, Assessment, Conduct of Operations Functional Category: Management

Follow-up Action: As a means to assess effectiveness of this alert, please let us know If you have found this information useful, or have applied any of the lessons learned from this report to your own operations. Please contact Bill McQuiston at 208-526-7373, or e-mail at mcw@tis.eh.doe.gov. Your feedback is important.