September 1, 2015

MEMORANDUM TO: Mark A. Satorius
                   Executive Director for Operations

FROM: Stephen D. Dingbaum */RA/*
                   Assistant Inspector General for Audits

SUBJECT: AUDIT OF NRC'S MANAGEMENT OF CHANGE
                   (OIG-15-A-19)

The Office of the Inspector General (OIG) conducted this audit to assess the efficiency and effectiveness of the U.S. Nuclear Regulatory Commission's (NRC) management of change. Change management is essential for maximizing change success, but NRC does not have a comprehensive process to manage change because efforts to provide an agencywide change management process are incomplete. Consequently, NRC has missed opportunities to implement change more efficiently and effectively, and will continue to do so without a comprehensive, scalable, agencywide change management process. Therefore, OIG makes recommendations to enhance NRC's process for management of change.

Please provide information on actions taken or planned within 30 days of this report. Actions taken or planned are subject to OIG followup as stated in Management Directive 6.1.

BACKGROUND

Change and the NRC

As Federal budgets grow and shrink, as economic and environmental forces shape energy policy, and as legislative requirements wax and wane, the NRC's regulatory responsibilities—and the way it implements that oversight—will be subject to change. In just the past 5 years, NRC has undertaken several significant change initiatives. For example, in 2010, NRC initiated a "Transforming Assets into Business Solutions" effort with the goal of making NRC more effective and efficient by consolidating and improving business practices. In 2012, NRC moved some of its headquarters staff into a new building, and in 2014 merged two offices into one. Additional expected change awaits NRC as the result of "Project AIM 2020," which analyzes potential organizational changes to enhance NRC's ability to perform its mission in the future.

Managing Change

Change management research and best practices demonstrate that many change initiatives fail because managers often skip steps needed to implement change or they make critical mistakes while implementing change. Change management literature also points to the importance of organizations to manage change efficiently and effectively to increase the likelihood that change occurs as intended. This research has given rise to various change management models, such as Kotter[1] and ADKAR,[2] to provide structure for managing change.

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[1] The Kotter model, developed by John Kotter, is a change management methodology based on success factors identified in organizations and leaders undertaking transformations or executing change.

[2] The ADKAR model was developed by the Change Management Learning Center of Prosci as a tool to consolidate and interpret the vast array of change management approaches and guidance into a simple, effective model and tool. Prosci focuses on offering change management products and training programs.

While there is no one-size-fits-all process or absolute guarantee that change occurs as intended, an orderly approach to managing change increases the likely success of the intended change. Moreover, a good change management process is scalable, meaning that it takes a graded approach to each change. A scalable process encourages organizations to apply more structure, oversight, and effort to more significant and potentially difficult changes, while allowing flexibility to use a less rigorous approach for less significant changes.

OBJECTIVE

The audit objective was to assess the efficiency and effectiveness of NRC's management of change.

AUDIT RESULTS

Change management is essential for maximizing change success. However, NRC does not have a comprehensive change management process available for use agencywide. There are some efforts to provide an agencywide change management process, but these efforts are incomplete. Consequently, NRC missed opportunities to implement change more efficiently and effectively, and will continue to do so without a comprehensive, scalable agencywide change management process.

What Is Required

Need for a Change Management Process

Change management is essential for maximizing change success and NRC is cognizant of that need. In fact, NRC has officially extolled the virtues of a change management process via official agency documents and an independent contractor report.

In 2010, NRC developed an Open Government Plan in response to a White House initiative to make Government more open and transparent to the public. NRC's Open Government Plan describes a framework to make the agency more open and accessible. An entire subsection of NRC's Open Government Plan is devoted to managing change, and commences with the recognition that "The NRC recognizes that without a change management process, systemic change will not happen." The Open Government Plan concludes that a concerted focus on change management will help the agency achieve the goal of increased openness.

More recently, the NRC Executive Director for Operations announced to agency staff the results of an independent contractor's effort to review ways in which NRC could reduce corporate support requirements and

improve the efficiency of internal processes. The contractor reported its findings in April 2015. The report provides a number of critical success factors associated with more efficient operations. One such critical success factor relates to change management. The report emphasizes the importance of being thoughtful and intentional about change management to help overcome cultural resistance and expedite change adoption.

What We Found

No Comprehensive Agencywide Change Management Process

NRC does not have a comprehensive change management process available for use agencywide. To ascertain the extent to which NRC has an agencywide change management process, auditors met with more than 30 key agency executives—to include a wide assortment of office directors and regional administrators—as well as selected branch chiefs and internal change management specialists. These officials agree that NRC does not have a comprehensive, actionable agencywide process to use as a roadmap to manage change.

Nonetheless, agency officials indicated that they take steps to manage change, primarily embodied through NRC leaders' experience, skills, and qualifications. These steps include a manager's personal experience and training, as well as the "Leading Change" qualification skill that Senior Executive Service members are expected to demonstrate. Some agency managers noted that personal experience with managing change has been variably successful and unsuccessful, at times describing the current approach to managing change as "situational" and "fly by the seat of your pants" without the support of procedures.

OIG also reviewed some elements of a change management process within agency offices. These include an Office of Information Services (OIS) change management process and an Office of New Reactors effort to develop a change management process for the construction inspection program. Neither of these approaches are designed for agencywide use. Furthermore, when asked about using a change management process, one director did not recall an office change management procedure.

Why This Occurred

Agencywide Change Management Efforts Are Incomplete

There are some efforts to provide an agencywide change management process, but these efforts are incomplete. These include an Office of the Chief Human Capital Officer (OCHCO) change management framework, and some change management-related training available to agency staff and managers.

In 2013, OCHCO developed a change management framework for use by agency managers. It consists largely of a PDF document depicting phases of change (as shown in enclosure 1) and supporting definitions, as well as a "Change Readiness" checklist. A major shortfall with the framework is that many managers were not even aware that these resources exist. For example, more than half of the agency executives interviewed for this audit did not know that such a framework had been developed. Some managers observed that it is not particularly useful in that the framework is not detailed enough for use as a roadmap for implementing change.

The agency also provides some change management-related training to agency staff and managers. For example, OCHCO provided a senior leadership seminar in 2013 consisting of a broad overview to navigating change. Additionally, the agency's "iLearn" training resource provides self-paced, Web-delivered, non-compulsory courses and supplemental e-books related to understanding, dealing with, and leading change. However, these training resources are largely of a generic, conceptual nature, and do not reference and are not linked to the OCHCO framework.

Why This Is Important

Missed Opportunities To Implement Change More Efficiently and Effectively

NRC has missed opportunities to implement change more efficiently and effectively, and will continue to do so without a comprehensive, scalable, agencywide change management process. Two recent agency assessments—one on a program consolidation effort, the other related to construction inspection—emphasize how a change management process would have likely optimized change success.

In 2010, NRC undertook the Transforming Assets into Business Solutions initiative, which was a long-term plan to make NRC more effective and efficient by consolidating and improving business practices. The implementation of this initiative is widely seen as being less successful than it could have been. A 2015 staff report to the Commission on the Transforming Assets into Business Solutions included lessons learned on the initiative. The report emphasizes the importance of managing change in association with a number of implementation shortcomings. For example, it faulted the use of several different approaches to change because each individual leader had his or her own idea about managing change for an agencywide initiative that should have been managed through a single, agencywide approach to change. The report reasonably concludes at one point that "Agency initiatives should be supported by a change management specialist and reinforce the essential elements of an effective change management process."

In 2012, OIG reported the results of an audit related to the agency's construction inspection program for new reactors.[3] OIG determined that the agency needed to develop and implement a change management process to address communication and coordination challenges that could adversely affect the degree to which new nuclear power plants are safely constructed. Agency officials communicated the intent to develop an

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[3] *Audit of NRC's Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Process*, OIG-12-A-16, July 12, 2012.

agencywide approach to change management. Currently, the agency is developing a program-specific approach.

Conclusions

NRC is likely on the precipice of significant enterprisewide change. This is as much acknowledged by the agency's "Project AIM 2020" initiative, which was established in June 2014 to enhance the agency's ability to plan and execute its mission while adapting in a timely and effective manner to a dynamic environment. To do so, the Project AIM 2020 Team "developed alternative scenarios using foresight methods to assist and inform a gap analysis comparing the current state of the agency and the challenges and trends the agency may need to face between 2014 and 2020." The Project AIM 2020 Team's efforts resulted in a report, submitted to the Commission in January 2015 that offers key overarching strategies for meeting the change-related challenges envisioned for the coming years.

While the Project AIM 2020 Team's report frequently speaks of the importance of managing change, it offers little in the way of ensuring the tools for managing that change are in place. The absence of tools to sustain the change effort was noted in a March 2015 report to NRC by the National Academy of Public Administration (NAPA), which was contracted to provide feedback on the Project AIM 2020 Team's report. The NAPA report emphasizes the importance of sustaining change over the long-term, and notes that systematic steps are needed that can be used to guide agency transformation. It points to NRC's siloed approach to work processes and outputs, and exhorts the agency to embrace a cohesive and integrated approach to change. OIG contends that completing and effectively promoting the change management framework initiated by OCHCO will help the agency meet the challenges noted in NAPA's report.

Recommendations

OIG recommends that the Executive Director for Operations:

1. Complete the agencywide change management framework initiated by OCHCO with actionable steps, guidance, and checklists, as appropriate.

2. Promote the completed framework, agencywide, as a tool available to all managers and staff for guiding change.

3. Provide training and/or training resources to management and staff that is geared specifically to implementing the completed framework.

AGENCY COMMENTS

An exit conference was held with the agency on August 27, 2015. Agency managers reviewed a discussion draft prior to this meeting. During the exit conference, agency managers agreed with the report's findings and recommendations and opted not to provide formal comments for inclusion in this report.

SCOPE AND METHODOLOGY

This audit focused on evaluating the efficiency and effectiveness of NRC's management of change. We conducted this performance audit from March 2015 through June 2015 at NRC headquarters in Rockville, MD, and Regions I, II, III, and IV, through interviews, telephone, and email. Internal controls related to the audit objective were reviewed and analyzed. Throughout the audit, auditors were aware of the possibility of fraud, waste, and abuse in the program.

To address the audit objective within the scope of this audit, OIG auditors reviewed the following Federal and industry documents, key data, and NRC documents:

- Highlights of a GAO Forum: Mergers and Transformation, Lessons Learned for a Department of Homeland Security and

Other Federal Agencies, Government Accountability Office (GAO), GAO-03-293SP, November 2002.
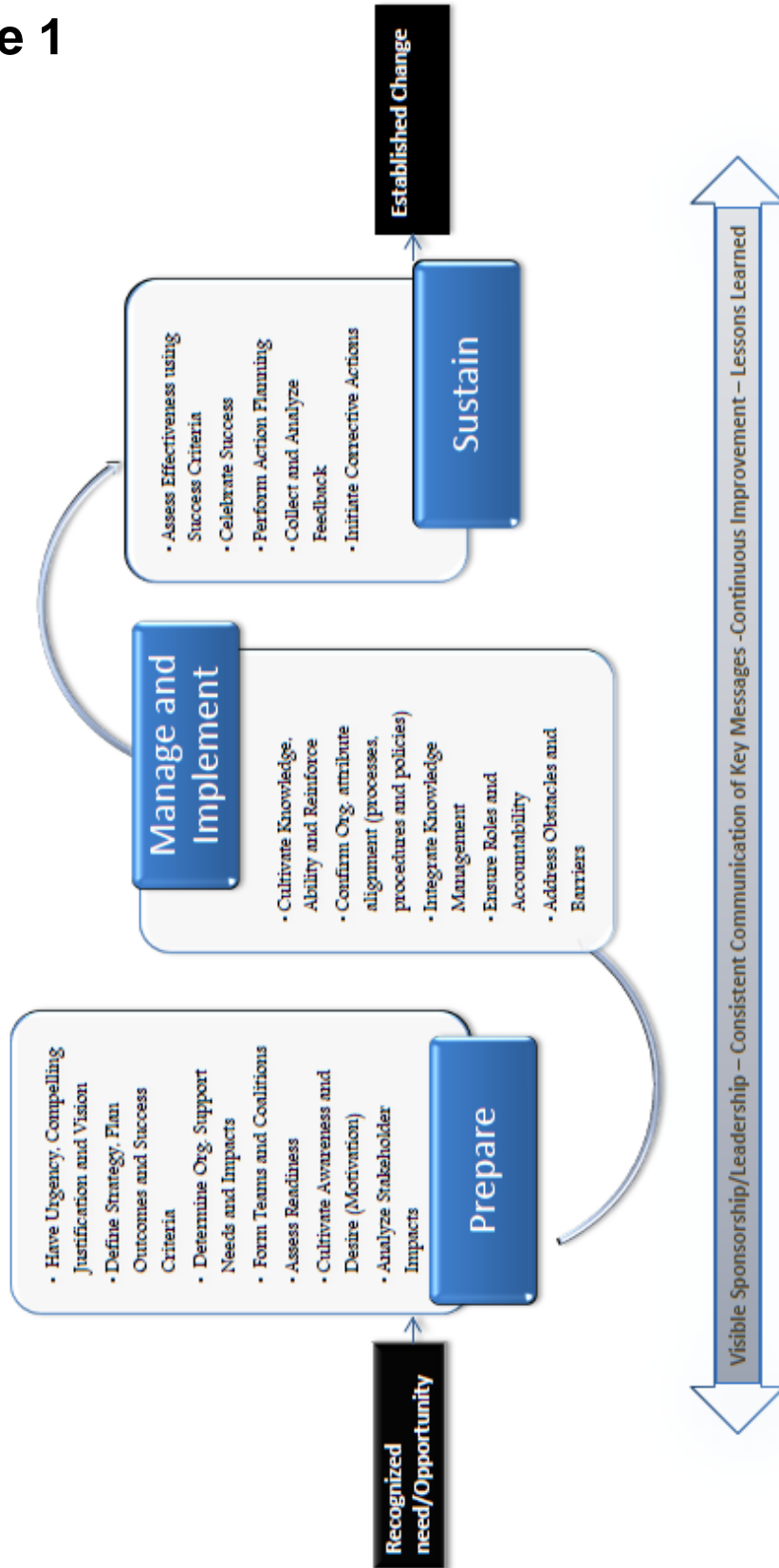
- Results Oriented Cultures, Implementation Steps to Assist Mergers and Organizational Transformations, GAO, GAO-03-669, July 2003.

- Migration Planning Guidance Information Documents: Change Management Best Practices, U.S. Office of Personnel Management, May 23, 2008.

- Audit of NRC's Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Process, OIG-12-A-16, July 12, 2012.

- 2010 Open Government Plan, Revision 1.1, NRC, June 7, 2010.

- Achieving Exemplary Nuclear Regulation in the 21st Century Report on Project Aim 2020, NRC, January 2015.

- SECY-15-0008, Report to the Commission on the Transforming Assets into Business Solutions Initiative, NRC, January 16, 2015.

- NRC Overhead Assessment, Final Report, Ernst and Young, April 30, 2015.

- NRC's Change Management Framework, April 25, 2013.

- Business Process Change Management Procedures, OIS-0203, Revision 1, March 30, 2005.

- Leading Change, and additional materials from Kotter, John P., 1994-2012.

- ADKAR: A Model for Change in Business, Government and Our Community, Hiatt, Jeffrey M., 2006.

- Feedback Report on the Nuclear Regulatory Commission's Project Aim 2020 Report, March 2015.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The work was conducted by RK Wild, Team Leader; Levar Cole, Audit Manager; Vicki Foster, Audit Manager; Kevin Nietmann, Senior Technical Advisor; Tim Wilson, Senior Analyst; Roxana Hartsock, Auditor; Ebaide Esoimeme, Auditor; and Tariq Noaman, Analyst.

Enclosure 1

NRC Change Management Framework

Recognized need/Opportunity

Prepare
- Have Urgency, Compelling Justification and Vision
- Define Strategy, Plan Outcomes and Success Criteria
- Determine Org. Support Needs and Impacts
- Form Teams and Coalitions
- Assess Readiness
- Cultivate Awareness and Desire (Motivation)
- Analyze Stakeholder Impacts

Manage and Implement
- Cultivate Knowledge, Ability and Reinforce
- Confirm Org. attribute alignment (processes, procedures and policies)
- Integrate Knowledge Management
- Ensure Roles and Accountability
- Address Obstacles and Barriers

Sustain
- Assess Effectiveness using Success Criteria
- Celebrate Success
- Perform Action Planning
- Collect and Analyze Feedback
- Initiate Corrective Actions

Established Change

Visible Sponsorship/Leadership – Consistent Communication of Key Messages -Continuous Improvement – Lessons Learned

April 25th 2013 – v 1.0

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COMMENTS AND SUGGESTIONS

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If you wish to provide comments on this report, please email OIG using this [link](#).

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