

**POLICY ISSUE**  
**(Information)**

February 17, 2017

SECY-17-0024

FOR: The Commissioners

FROM: Victor M. McCree  
Executive Director for Operations

SUBJECT: ANNUAL REPORT ON THE LESSONS-LEARNED PROGRAM

PURPOSE:

This paper provides the Commission with the annual report of the Lessons-Learned Program (LLP). The report covers the period from August 1, 2015, through August 22, 2016. This paper does not contain any new commitments.

BACKGROUND:

At the December 8, 2004, Commission meeting on the Davis-Besse Lessons-Learned Task Force Recommendations, the U.S. Nuclear Regulatory Commission (NRC) staff proposed the establishment of the LLP. In a Staff Requirements Memorandum dated December 15, 2004 (Agency Documents Access and Management System (ADAMS) Accession No. ML043500639), the Commission approved the proposal and directed the staff to keep it apprised of the LLP's status.

The current draft Management Directive (MD) 6.8, "Lessons-Learned Program," (ADAMS Accession No. ML14245A524) describes and sets out the processes, procedures, and oversight designed to achieve the LLP's goals of ensuring that significant agency deficiencies are identified and corrected in such a way that they do not recur. The LLP ensures that existing agency processes are effective by reviewing both internal and external lessons-learned documents for potential agency applicability. For the applicable lessons-learned, the LLP performs the review and approval of the resulting staff corrective actions plan developed to address the identified deficiencies.

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The staff accomplishes the LLP goals by applying a rigorous process to identify significant lessons learned, developing detailed corrective action plans, subjecting those plans to formal review and approval, and ensuring that the corrective actions have been effective and did not result in any unintended consequences. Each corrective action plan includes an explanation of what actions will be taken to institutionalize the knowledge gained through the identification of a lesson learned to help prevent recurrence of the deficiency resolved by the corrective actions.

In accordance with the draft MD 6.8, the Executive Director for Operations designates the Lessons-Learned Oversight Board (Oversight Board) to provide an independent review and approval of proposed corrective action plans and their eventual closeout. The Oversight Board is comprised of senior managers nominated by Office Directors and Regional Administrators to provide oversight to the LLP. Currently, the Deputy Director of the Office of Nuclear Regulatory Research (RES) chairs the Oversight Board. The Lessons-Learned Program Manager (LL Program Manager), also from RES, supports implementation of the LLP and provides technical and administrative support to the Oversight Board.

#### DISCUSSION:

During this last year, the Oversight Board has been reconsidering its effectiveness, along with performing its function in accordance with the draft MD 6.8. This paper summarizes the results of the Oversight Board's work, including the recognition by the Board that it is timely and appropriate to reconsider its role and utility.

#### Lessons-Learned Criteria

Deficiencies entered into the LLP are expected to require significant resources to correct. Therefore, the agency has established a high threshold for entering deficiencies into the LLP.<sup>1</sup> This threshold consists of four criteria, which are specified in the draft MD 6.8, to ensure that only the most important issues will be considered, maximizing the impact of agency resources, and focusing senior management on the most important lessons learned. A deficiency or issue must meet all four of the following criteria before it can be designated as a lessons-learned item under the LLP:

1. The item has significant organizational, safety, security, emergency preparedness, or generic implications.
2. A need exists to institutionalize corrective action for this item because the failure to do so would reasonably be expected to challenge the ability of the agency to meet any of the strategic outcomes designated in the Strategic Plan or the corrective action would substantially improve the safety or security of NRC employees.
3. A root cause exists or can be identified.
4. The apparent resolution is actionable.

Because of the high profile associated with items that meet these criteria, the Commission or senior management will most likely have approved the corrective action plans before the Oversight Board review. However, the LLP process reduces the likelihood that important items will be missed and ensures that any items that pass the screening criteria will receive the

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<sup>1</sup> The agency has other corrective action processes that function at the office level and below.

appropriate attention of senior management throughout the implementation and closeout of the corrective action plan and any subsequent effectiveness review.

#### Review of Potential Lessons-Learned Items

Between August 1, 2015, and August 22, 2016, the LL Program Manager screened a total of 150 items for potential deficiencies and issues for the consideration of the Oversight Board under the LLP. Of the 150 items screened, the LL Program Manager referred the following 6 items for consideration as potential agency lessons learned:

- The government response to contaminated drinking water in Flint, Michigan.
- An incident regarding treatment of NRC staff by a foreign country.
- An NRC event involving a failed utility battery on the 15th floor in the One White Flint North building.
- The NRC's regulatory performance and reported near misses at eight different nuclear power plants; which were the subject of reports from the Union of Concerned Scientists (UCS).
- An NRC event that involved the failure of the network and telecommunications systems between Region I and NRC Headquarters.
- "UCS March 2015 Report: 'The NRC and Nuclear Power Plant Safety in 2014'" discussing NRC regulatory performance."

The enclosure provides reference information about these items.

The Oversight Board reviewed the list of reviewed items and discussed the six potential lessons-learned items referred by the LL Program Manager during its November 8, 2016, meeting. On the basis of its review, the Oversight Board concluded that none of the items met all the MD 6.8 criteria for designation as a lessons-learned item under the LLP. The results of the Oversight Board reviews and discussions are summarized below.

With regard to Flint, Michigan, the Oversight Board reviewed and discussed the Flint Water Advisory Task Force Final Report (ADAMS Accession No. ML16349A158) provided to the Governor of Michigan, which described the various organizational and governmental failures that allowed for the contamination of the public water supply for Flint, Michigan. At this time, the United States Environmental Protection Agency has not issued a lessons-learned report on this event. Although the Oversight Board determined that the government response in Flint, Michigan did not meet all the MD 6.8 criteria for consideration as a lessons-learned item under the LPP, the Oversight Board considered this event an opportunity for the agency to gain insight into root and contributing causes. Therefore, the LL Program Manager has requested the Office of Enforcement (OE) to provide an agencywide seminar for educational purposes and to support NRC safety culture.

With regard to the event concerning the treatment of staff on official travel, the Oversight Board determined that the event did not meet all the MD 6.8 criteria for consideration as a lessons-learned item under the LPP. Further information on this issue is not available for public release due to the sensitive nature of this event. However, the Office of International Programs informed the Oversight Board that lessons-learned and corrective actions have been undertaken by the offices involved and have been internalized by the Office of the Executive Director for Operations.

The Oversight Board reviewed the UCS report titled “Near Misses at U.S. Nuclear Power Plants in 2015” (<http://www.ucsusa.org/NRC2015>), which describes events at eight different NRC licensed nuclear power plants, and were considered “near misses” by the UCS. These events have already been considered by the staff through the Reactor Oversight Process, including the Agency Action Review Meeting, and did not meet all the MD 6.8 criteria for consideration as a lessons-learned item under the LPP. Therefore, the Oversight Board agreed no further action was needed at this time. The Oversight Board also agreed that the other UCS report titled, “UCS March 2015 Report: The NRC and Nuclear Power Plant Safety in 2014” (ADAMS Accession No. ML16349A122), which describes the UCS’ assessment of the NRC’s performance as a regulator of the U.S. nuclear reactor power plants, likewise did not meet all the MD 6.8 criteria for consideration as a lessons-learned item under the LPP, thus did not require any further Oversight Board action at this time.

The Oversight Board agreed that the other two remaining items, failure of the Region I telecommunication systems with NRC Headquarters, and the event regarding a failed utility battery on the 15th floor in the One White Flint North building, did not meet all the MD 6.8 criteria for consideration as a lessons-learned item under the LPP, and likewise did not contain any lessons learned items that required further Oversight Board action. Moreover, the Board confirmed that these two items have been addressed by the relevant offices.

#### Other Lessons-Learned Oversight Board Activities

With regard to LLP administrative activities, the LL Program Manager, on behalf of the Oversight Board, is working with the Office of Administration to finalize and publish MD 6.8. This revision will also address the future direction of the Oversight Board. This topic is discussed more in detail in the next section, “Future Direction for the LLP and the Oversight Board.”

The LLP’s web-based knowledge management system—the SharePoint Executive Lessons-Learned System—was retired in August 2013 and replaced with the Agency Lessons Learned Tracking System (ALLTS). ALLTS provides a lessons-learned knowledge management area within ADAMS and streamlines the LLP process by eliminating the burden of additional data entry on the part of NRC users.

ALLTS was released for agency use on February 12, 2016. The link for the ALLTS is located at: <https://adamsicm.nrc.gov/ALLTS/>. For ease of access, there is a link for ALLTS under the “Quick Links” tab in the agency Knowledge Management Web site located at: <http://www.internal.nrc.gov/HR/KM/>. The availability of the ALLTS was announced via an agency Yellow Announcement (ADAMS Accession No. ML15273A478, non-public). Additionally, on February 23, 2016, the LL Program Manager, with support from the Oversight Board and the Office of the Chief Information Officer, provided training for the staff. The system is designed for all staff and management to submit lessons-learned items for Oversight Board consideration through their ALLTS office contacts. I emphasized the importance of NRC management and staff sharing lessons learned in an Agency Mission Meeting this fall. The various Oversight Board members and the LL Program Manager will continue to remind staff of the availability of ALLTS, and the LL Program Manager will solicit input into the system for consideration.

Finally, during the reporting period, OE provided the Oversight Board an update to the status of the safety culture case study on the “Report to the President from the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling.” OE informed the LL Program

Manager that it has not yet released the case study because of the ongoing litigation related to the accident. The LL Program Manager will continue to monitor the status of OE's review and will advise the Oversight Board once the report becomes available.

#### Future Direction for the LLP and the Oversight Board

In addition to addressing the six proposed items for lessons-learned consideration at the November 8, 2016, meeting, the Oversight Board addressed the future direction and scope of the LLP and MD 6.8. Consistent with assuring the effectiveness of NRC programs and in the spirit of Project Aim, I requested a review of the LLP in its current form. The Oversight Board devoted a significant amount of time discussing its historical role, with a focus on evaluating whether this role was still appropriate and effective in enhancing NRC's safety and security mission.

In particular, the Oversight Board considered whether—given that the agency has changed significantly since the lessons-learned program was introduced (post 2001 Davis-Besse head degradation event)—such a program was still needed. Arguments in favor of maintaining the LLP included that it provides an overall high-level consideration of deficiencies to ensure that they are identified and corrected, and that any associated lessons are institutionalized effectively. On the other hand, offices now use more systematic approaches to conducting their own lessons-learned activities, and the current execution of the LLP has not yielded significant results. Resources could be saved if the LLP were discontinued.

Going forward, the Oversight Board will continue to consider the appropriate role, value, and effectiveness of the LLP, including whether the Oversight Board should operate solely in an "oversight" mode by evaluating the effectiveness of previous agency lessons-learned. Another issue is whether the threshold criteria for the LLP—correction of significant agency deficiencies—is too high. The current threshold reflects the original intent of the program, but few or no issues have met the criteria over several years. Changing the criteria might allow for the consideration of a wider variety of events. Prior to selecting this option, there are resource considerations that should be further explored, including additional technical support to manage the LLP program (currently .3 full-time equivalent), and subsequently, increased Oversight Board reviews and activities and increased activities for assigned offices resulting from additional effectiveness reviews. The Oversight Board will provide recommendations to me on the path forward via separate tasking for the update to MD 6.8 (due date, August 31, 2017).

#### COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection. The Office of the Chief Financial Officer has reviewed this paper and did not identify any new resource implications.

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Enclosure:  
As stated

Annual Report on the Lessons-Learned Program dated:

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