

# POLICY ISSUE (Information)

August 14, 2007

SECY-07-0138

FOR: The Commissioners

FROM: Luis A. Reyes  
Executive Director for Operations /RA/

SUBJECT: NRC KNOWLEDGE MANAGEMENT PROGRAM STATUS UPDATE

## PURPOSE:

The purpose of this paper is to provide the Commission with an update of Knowledge Management (KM) Program activities and initiatives. It provides a summary of progress with updates and commentary since the agency established the Nuclear Regulatory Commission's (NRC) KM Program in July 2006. This paper does not address any new commitments.

## DISCUSSION:

In July 2006, SECY-06-0164, "The NRC Knowledge Management Program," informed the Commission about the development and implementation of the agency's KM Program. The KM Program outlined a systematic approach for identifying, collecting, transferring, and using the staff's critical knowledge.

One of the program's first activities was developing guidance to the offices and regions and tasking them with identifying their occupational priorities and critical bodies of knowledge. The Office of Human Resources and the Office of the Executive Director for Operations developed a consolidated list of occupational priorities and critical bodies of knowledge and provided it to the offices and regions to use for identifying KM techniques.

CONTACT: Michael D. Kull, HR  
(301) 492-2291

The agency's senior leadership met in November 2006 to review the KM program's progress and to address three key questions concerning support for the agency's KM initiatives: what actions should senior leaders take; what should be done at the office level; and what should be done at the agency level? The senior leaders also agreed that the agency's KM Program must anticipate an overall change in the NRC's organizational dynamic. The change will come from the significant number of new hires, the diversity they will bring to the NRC, and an expected higher than historical staff turnover rate.

In late 2006, the Knowledge Management Steering Committee (KMSC) was formed as the agency's KM governing body, chaired by the Deputy Executive Director for Materials, Waste, Research, State, Tribal, and Compliance Programs, designated as the Agency KM Champion. The KMSC represents each office and region and provides KM leadership to the NRC's KM activities; to continually identify, develop, pilot, and conduct KM projects; and to provide budget guidance.

The KMSC began formally monitoring and directing the agency's KM activities in FY2007. The KMSC tasked the offices and regions to identify and report their KM activities and each activities' status. This information was assembled into the KM Dashboard that is described in Enclosure 1. In early 2007 the agency hired an expert KM practitioner as the agency's full-time Agency KM Coordinator and adviser to the KMSC.

Enclosure 2 contains the KMSC charter that was developed and finalized in March of 2007. The charter further outlines and defines the KMSC's purposes, context, and organization. Consistent with its chartered responsibilities, the KMSC has begun new initiatives, reprioritized some of the agency's KM efforts, and adjusted the original KM Program timeline accordingly.

In April 2007, the Agency KM Champion led a knowledge-sharing workshop for the senior leaders to elicit their views on some of the agency's best KM practices. One of the workshop's important outcomes was in demonstrating how the senior leaders could learn from each other and the unexpected value this information holds for others.

The agency's KM activities to date—successfully establishing the KMSC, ratifying its charter, developing the KM Dashboard, hiring a full-time Agency KM Coordinator, conducting the knowledge-sharing workshop, and emphasizing communication efforts—provide a good foundation for the agency's ongoing KM efforts.

### Ongoing KM Efforts

#### *Strategic Planning and Communication*

The agency is successfully integrating KM into its strategic planning process. The NRC's draft Strategic Plan now includes an Operational Excellence Strategy supporting KM. The Training and Development Strategic Plan includes fostering a knowledge-sharing culture as a key element for its goal of ensuring that organizational training and development policies and practices foster a culture of continuous improvement and optimal performance. The KM Coordinator is finalizing the agency's KM communication plan.

### *Knowledge-Sharing Practices*

The KMSC has recognized the value of incorporating activities and elements into a larger framework that represents a menu of strategies and techniques for KM integration. This approach led to the completion of several actions set forth in the original timeline contained in SECY 06-164 and adjustment of other schedules and deliverables. The relationship of the original timeline to the KMSC decisions reflects the emergent orientation of the KMSC as the governing body for KM activities, as described above and in its charter.

### *Information Technologies to Acquire, Store, and Share Knowledge*

Cultivating communities of practice (CoPs) has helped move the agency forward along a people-oriented pathway to effective knowledge transfer. As the agency's knowledge structures, CoPs anchor many other KM strategies and systems. Nearly 300 staff members have participated in successful pilots of CoP software, such as the NRC Knowledge Center; full agency adoption awaits approval under the Capital Planning and Investment Control process.

### *KM Coordination and Reporting*

Offices develop KM activity plans and report progress to the Agency KM Coordinator on a periodic basis. Activity progress and results are linked to the dashboard and posted on the KM Web site. Some of the budgeted activities include CoPs, organizational storytelling, and content management projects and programs. Because the dashboard provides a moving snapshot of KM activities across the agency, it provides the offices and regions with the ability to share the details of each others' KM activities.

The KMSC fosters the approach that business needs must drive KM activities, and that offices must evaluate them through measures appropriate to their goals and circumstances. As best practices emerge and are identified, the KMSC helps to communicate and replicate that knowledge across the agency. The KMSC serves as a common arena for interested agency KM leaders to share ideas, hear from outside experts, and foster collaborative efforts.

### Future Efforts

#### *KM Program Evolution*

The KMSC will direct agency's KM efforts to continually identify emerging areas of need and work to capture and transfer the agency's critical knowledge. This includes expanding the information sharing capabilities of the KM Dashboard, cultivating communities of practice, and exploring the use of social media tools for incorporation into agency operations.

#### *Expertise Exchange Program*

The KM Steering Committee is developing a skills mentoring program to complement the agency's existing career mentoring program. It is envisioned that the offices and regions will locally administer the Expertise Exchange Program to ensure the formal exchange of critical knowledge among their staffs. The program will be piloted following approval by the KMSC.

### *Internal Advisory Groups*

Creating internal advisory groups will also help evolve the KM Program. For example, by harnessing the millennial generation's cultural perspective the agency hopes to identify areas of opportunity to make progressive change to both leverage the younger employees' knowledge as well as attract and retain this generation's top talent into the agency.

### *KM Technology Adoption*

The Strategic Workforce Planning (SWP) tool will continue to be used to identify agencywide and office-level skills gaps. The staff is continuing to explore options to integrate the agency Learning Management System and SWP database into a knowledge resource locator. The staff could potentially use this locator to find experts to answer questions, identify experts for the Expertise Exchange Program, or to identify and fill knowledge gaps.

Staff are also investigating the application of social media technologies such as blogs, Wikis, podcasts and related emerging technologies to enhance or transform the agency's workflow. In addition, the Agency KM Coordinator will expand the use of knowledge capture interviewing and training skills, utilizing some of the new digital media tools such as online video.

### *Collective Ownership and Learning*

The agency's KM Program provides an opportunity for collective ownership and distributed leadership of KM with the responsibility for sharing best practices, lessons learned, and success stories across the agency. KM leadership and staff are working together to develop KM solutions that can be shared agencywide. In time these collaborative efforts will evolve the agency into a more effective learning organization.

### RESOURCES:

The KMSC conducted a KM budget analysis that segmented KM activities into three categories, described below. The KM Champion submitted the results of this analysis to the Program Review Committee and they were used to inform the fiscal year (FY) 2009 budget formulation process. The offices also used these categories in the recent budget call in determining their KM activities.

- Category 1: KM Activities which are already being conducted.
- Category 2: KM activities that require staff efforts, but are included within the full-time equivalent model.
- Category 3: New KM initiative activities.

Funding for KM is included in the offices' FY 2007 and FY 2008 budgets and the funding needed to support the initiatives described in this paper is included in the FY 2009 budget request.

COORDINATION:

The Knowledge Management Steering Committee has reviewed this paper and it reflects comments received by its members. The Office of the General Counsel has reviewed this paper and has no legal objections. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

*/RA/*

Luis A. Reyes  
Executive Director  
for Operations

Enclosures:

1. KM Dashboard
2. KMSC Charter

COORDINATION:

The Knowledge Management Steering Committee has reviewed this paper and it reflects comments received by its members. The Office of the General Counsel has reviewed this paper and has no legal objections. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

*/RA/*

Luis A. Reyes  
Executive Director  
for Operations

Enclosures:

1. KM Dashboard
2. KMSC Charter

**ADAMS Accession Number: ML072120054**

**EDATS: HR-2007-0018**

OFFICE	PDKM/HR	PDKM/HR	ADTD/HR	OCFO
NAME	MKull	JMorris	KGibson	R. Rough
DATE	07/20/07	07/20/07	07/20/07	08/02/07
OFFICE	OGC	HR	DEDMRT	EDO
NAME	SMcAndrew	JMcDermott	MVirgilio	LReyes
DATE	07/20/07	07/23/07	08/14/07	08/14/07

**OFFICIAL RECORD COPY**