

February 2007



Training and Development Strategic Plan Safety Through Knowledge



Office of Human Resources

U.S. Nuclear Regulatory Commission Training and Development Strategic Plan

Table of Contents

raining Mission	2
raining Vision	2
Goal 1: Individual Performance. Goal 2: Training Effectiveness. Goal 3: Training Efficiency. Goal 4: Organizational Performance.	5 8
ndnotes	. 12
ppendix A, The Leadership Journey Inside Back (Cover

.

U.S. Nuclear Regulatory Commission Training and Development Strategic Plan

The purpose of the U.S. Nuclear Regulatory Commission (NRC) Training and Development Strategic Plan is to implement an agencywide strategic and businesslike approach to training and development activities. A strategic approach allows NRC to better establish priorities and leverage investments in training and development to achieve agency results. Appropriate investments in recruitment, training, development, and knowledge management will reward the NRC with a highly skilled and diverse workforce prepared to address the challenges ahead.

The agency developed the goals and strategies in this plan within a framework of strategic alignment and accountability that links to the fiscal year (FY) 2004–FY 2009 NRC Strategic Plan,¹ the NRC Strategic Human Capital and Workforce Restructuring Plan,² the NRC's Comprehensive Diversity Management Plan,³ the President's Management Agenda Leadership and Knowledge Management Standards for Success,⁴ the NRC's Strategic Workforce Planning process,⁵ and the NRC's Planning, Budgeting, and Performance Management (PBPM) process.⁶

Employees and supervisors share the responsibility to ensure that staff members have the knowledge, skills, and competencies to effectively perform their job functions. Offices and regions support this effort by defining knowledge, skills, and competencies for job functions, identifying training needs, establishing and maintaining gualification programs, and ensuring that staff members are adequately trained and qualified to perform their assigned duties. The NRC's Strategic Plan outlines a dynamic program of training, development, knowledge transfer, and formal leadership development programs as the means for achieving the human capital strategies employed to meet the Management Goal.

The Human Resources Training and Development (HRTD) organization designs,

NRC's Strategic Plan Management Goal

Ensure Excellence in Agency Management to carry out the NRC's strategic objective.

Strategic Outcomes for the Management Goal

Continuous improvement in NRC's leadership and management effectiveness in delivering the mission.

A diverse, skilled workforce and an infrastructure that fully support the agency's mission and goals.

develops, implements, and evaluates agencywide training, development, and knowledge management programs, policies, and procedures and manages the Technical Training Center, Professional Development Center, and associated capital assets. Training and development programs support the NRC's Strategic Plan goals of Safety, Security, Openness, Effectiveness, and Management Excellence, by providing the knowledge and skills that the staff needs to make safety and security decisions openly and effectively. In support of the NRC's mission and goals, HRTD has the following mission:

To provide effective learning programs, resources, and services to enable the NRC to acquire and maintain the competencies needed to accomplish the agency's mission.

In executing this mission, HRTD has the following vision:

To be a strategic leader, partner, and catalyst for the NRC to engage in continuous learning and professional development to achieve individual and organizational excellence.

In support of the agency's safety mission, HRTD will work closely with the NRC offices and regions to ensure that the training goals and strategies outlined in this plan are incorporated into organizational decisionmaking and aligned with organizational goals and culture to achieve the Management Goal strategic outcomes. The agency's employees are its most valuable asset and are the primary stakeholders in the training and development opportunities that the agency provides for them. The NRC wants to provide employees with the training and development needed to succeed in their current positions and to prepare them for future agency needs. Acquiring, developing, and sustaining the agency's highly skilled and diverse workforce will be an ongoing challenge in the face of continued employee retirements and the increasing number of new staff hired to support new agency work.

The NRC will work to maintain a diverse, high-performing workforce with the skills needed to achieve the agency's mission by focusing on the following Training and Development goals. The Office of Human Resources (HR) Operating Plan and office operating plans, as appropriate, will include specific activities to achieve these goals and continue to employ HR, office-level, and agencywide metrics to measure results.

Goal 1: Individual Performance—Ensure that training and development opportunities enhance individual performance and support continuous learning at all levels.

Strategies:

- 1. Provide a comprehensive, competency-based, integrated system for employee training and development.
- 2. Establish and implement documented training and qualification programs for positions and functions, as appropriate, to ensure that employees have the knowledge and skills necessary to meet performance expectations.
- 3. Link training and development courses and programs to job skills and competencies.
- 4. Encourage the use of individual development plans (IDPs) to guide individual training and development activities.

The changing NRC workforce profile requires the matching of organizational needs with the appropriate mix and level of staff skills and competencies. To this end, the agency must formally define competencies and

training needs for major functions or groups of like positions. Understanding the developmental needs of the workforce also contributes to the agency's ability to better meet the diverse needs of all employees.

NRC Comprehensive Diversity Management Plan

Goal 2—Develop and retain diverse employees.

The agency has some aspects of a comprehensive, competency-based,

integrated system of training and development. Examples include formal qualification and development programs, performance elements and standards, position descriptions, training needs surveys, and the strategic workforce planning system. Better integration of these elements will assist employees in becoming proactive participants in their own development.

The agency has some established formal processes that aid in workforce development such as the inspector and license reviewer qualification programs, the Nuclear Safety Professional Development Program, and the Acquisition Certification and Training Program. These programs can serve as models for establishing more formal training guidelines for other agency positions and functions. The agency will identify the knowledge, skills, and competencies for positions and functions necessary to implement the NRC Strategic Plan and link training courses and programs to these knowledge, skills, and competencies. The NRC will also identify individual training and development opportunities through a comprehensive catalog of in-house and external training courses and programs to help meet the unique and diverse needs of NRC employees.

The Office of Personnel Management (OPM) is responsible for providing human capital advice and leadership for Federal agencies and delivering associated human resources policies, products, and services. OPM has identified 28 competencies necessary for effective leadership and has stratified these competencies by leadership level (Core–Managing Self, Project Manager/Team Leader–Managing Projects, Supervisor–Managing People, Manager–Managing Programs, and Executive–Leading Organizations). Half of the competencies are designated for managing self and managing projects and are applicable to nearly all agency employees. Therefore, as the agency develops and updates its training courses, programs, and individual training and development plans, it will consider the appropriate OPM competencies for management and staff. (Refer to Appendix A, *The Leadership Journey*.)

IDPs are written schedules or plans designed to meet employees' development goals. Employees and supervisors can use IDPs to plan learning opportunities such as training courses, rotational assignments, special projects, self-study, and on-the-job training. IDPs help employees set reasonable goals, assess their strengths, identify areas for development, and chart where they can best contribute and grow. Using IDPs is a systematic way of planning for training and gaining experience that develops the specific skills and knowledge needed for current or future jobs. IDPs give both employees and their supervisors the opportunity to set objectives and plan developmental experiences that will support these objectives.

Supervisors will encourage the use of IDPs for their staff to ensure that individual training and development activities contribute to achieving job performance goals. Better definition of the required competencies and training options for the employee's current position, as well as expectations for continuing development, assist the employee and the organization in meeting performance goals.

Goal 2: Training Effectiveness—Ensure agency training needs are identified and met.

Strategies:

- 1. Use the strategic workforce planning (SWP) and learning management system (LMS) tools to better determine, plan for, track, and meet training and development needs.
- 2. Consistently implement a systems approach to training to ensure that training activities achieve the intended performance outcomes.
- 3. Strengthen partnerships among training and development stakeholders to ensure their awareness of agency training products and services and to keep training programs current and relevant.
- 4. Evaluate and apply current and emerging learning tools and methodologies, as appropriate, to reduce time and travel costs for attending classroom training.

Effective training and development programs empower employees, improve their performance, and increase job satisfaction. The NRC faces continuing challenges to enhance and improve its training and development processes. The agency must ensure that its employees have the information, skills, and competencies they need to work effectively in a rapidly changing and complex environment. Emerging demands and the increased availability of new technologies challenge the agency to provide training that meets individual and organizational needs.

The agency has made a significant investment in SWP to support the assessment of gaps in skills and competencies and the identification of strategies for closing these gaps to meet current, emerging, and future challenges. Investments in training, development, and education programs will be linked in large measure to gaps identified through SWP. The agency will also use succession planning information in planning training and development programs.

The NRC is implementing an agencywide LMS. The LMS is a Web-based software product that will increase effectiveness and efficiency by giving employees and managers more tools at their desktop for planning training, registering, tracking, reporting, and providing access to online training opportunities. Increased use of IDPs and qualification program templates within the LMS can serve as useful planning tools by providing input to decisionmakers as they set training priorities and identify the agency's future skill and competency needs. "The primary purpose of Strategic Workforce Planning is to support human resources allocation decisions around the Commission's Planning, Budgeting, and Performance Management process. The process will identify core competency requirements and the strategies necessary to meet the agency's programmatic strategic human resources needs. The approach for carrying out this process...includes methods to be used for:

- performing an assessment of current technical capacity
- identifying competencies (e.g., knowledge and skills) needed to achieve mission requirements
- designing workforce strategies to
 - address the gaps between current capacity and projected needs."

-SECY-01-0012 Action Plan for Maintaining Core Competence The NRC conducts its training programs in accordance with the five elements of the systems approach to training, a model commonly used by many other training organizations. The NRC requires the nuclear industry to use this model of the training and development process. The model describes a structured methodology to help ensure that training investments achieve desired performance outcomes. The model's five elements are (1) analyzing skill or competency gaps to identify learning

FY 2004–FY2009 Strategic Human Capital and Workforce Restructuring Plan Human Capital Goal

Sustain the technical competence of the NRC's workforce and enhance its effectiveness in achieving the mission.

objectives and performance outcomes, (2) designing the training to cover the learning objectives to achieve the performance outcomes, (3) developing the training modules and materials, (4) implementing the course or program, and (5) evaluating the training to ensure that it is effective and efficient and achieves the desired results. Well-designed training and development programs are linked to agency goals and to the skills and competencies needed for effective job performance.

Effective training requires close communication and cooperation among the training organization, the program offices, and the regions to identify and understand training and development needs and to plan and coordinate training and development activities. The training organization uses the training and development Web site, management directives, policies, procedures, and network announcements to inform stakeholders about training and development programs. Offices and regions communicate with the training organization through counterpart meetings, working groups, and training needs surveys. Phone calls and emails among managers, office training and development needs and issues. The offices and regions keep training personnel apprised of changes in regulatory policies and practices that may need to be incorporated into the training programs. To enhance communications, the agency will employ new approaches, such as information portals and gateways, training expositions, and training course catalogs and brochures.

The agency will align training courses and programs with its goals and strategies and maintain their currency with new and changing policies and programs. Maintaining and updating the curricula are essential for effective, and relevant training and development programs. Training must reflect current regulatory, technical, and policy information and prepare participants to address emerging issues. For in-house and contracted courses, training providers and user communities will work in partnership to identify, evaluate, and determine information appropriate for inclusion in existing or new training activities. Subject matter experts from the offices and regions will assist in ensuring that agency training activities reflect NRC policies and positions.

Involving stakeholders throughout the design and development phases ensures that the training product covers the learning objectives and results in the desired performance outcomes. Delivery methods such as self-study, computer-based training, or on-the-job training may be more convenient or better meet the stakeholders' needs when provided on demand–when and where the student needs to learn the material. These approaches may be more timely or meaningful when they are integrated with workflow and workers can receive just-in-time

training. Traditional classroom training and computer-based training may be blended together to provide a more enhanced, effective training experience.

The agency selects training delivery methods for courses by first considering their effectiveness for the subject matter and the potential audience. It then weighs these factors against cost and timeliness to select training that meets both the agency's and individuals' needs and results in a satisfactory outcome. The agency evaluates alternative approaches to reduce time and travel costs to attend classroom training and implements them when they will provide an effective learning experience.

Identifying competencies and training needs in an integrated manner provides a basis for constructing a more effective, comprehensive, and efficient training program that meets the needs of all agency employees, positions, functions, and organizations. As the agency identifies competency gaps, it will revise and update training, development, education, and knowledge management programs to provide the needed competencies.

Goal 3: Training Efficiency—Ensure training resources are optimized and the agency is realizing the intended benefits of training.

Strategies:

- 1. Improve the processes for planning, budgeting, and scheduling training and development resources and activities.
- 2. Effectively use agency training resources (training staff, instructors, facilities, and equipment) to support agency programs.
- 3. Ensure the appropriate mix of centralized and decentralized training.
- 4. Implement meaningful evaluation tools and performance measures to assess progress toward achieving results aligned with the agency's mission and goals.

Planning and executing an integrated, agencywide approach for training and development is key to positioning the agency to address current challenges and meet emerging demands. The agency must take steps to better anticipate staffing, skills, and expertise to improve planning and reduce reactive responses. The NRC focuses on the delivery of training as a value-creating proposition. It can increase the effectiveness of training by providing higher value training–training that is more accurate, relevant, meaningful, or timely. The agency also seeks to provide cost-effective training–training that meets programmatic goals but requires less time or capital.

The agency will improve training needs surveys to obtain strategic, organizational, and tactical changes requiring new and revised training and development efforts. Offices and regions will use training utilization data provided by the training organization to identify efficiencies in planning, scheduling, and resource allocation.

The agency will use budget planning and execution processes and the time and labor system to capture and track agencywide expenditures for conducting and attending training. The NRC Program Review Committee (PRC) reviews and prioritizes training budget requests to ensure that resources are adequate to support the agency's goals and strategies. Complete and accurate data will allow the agency to better establish priorities, identify efficiencies and inefficiencies, maximize the use of

NRC 2004–2009 Strategic Plan Management Goal Budget and Performance Integration Strategies

The NRC will employ the following strategies to achieve the management excellence goal:

- Improve linkage of individual and organizational performance standards to NRC's Performance Budget.
- Use and improve the Planning,
 - Budgeting, and Performance Management process to ensure better integration of performance results into NRC planning and budgeting.

resources, and determine the best ways to leverage investments to improve performance and achieve results.

Members of the training staff frequently support agency nontraining programs by providing expertise in their specialty areas, such as support for licensing, inspection, research, and incident response initiatives. Significant training staff involvement in incident response activities is anticipated in the future. Simulators support program and regional office projects and NRC training resources support training requests from Agreement States, other Federal agencies, and foreign regulatory organizations. The NRC will prioritize the use of training and development resources to maintain agency training programs and assist in meeting other agency goals.

Currently, the agency offers a mix of centralized and decentralized training. Centralizing training and development enhances the consistency of training content and offers potential cost savings through economies of scale. Decentralized training allows the tailoring of programs to meet the specific needs of the organizational unit and enables the units to exert more control over resources and associated costs of training; however, decentralized programs may present challenges unless the systems approach to training is used. An appropriate mix of centralized and decentralized training limits unnecessary overlap and duplication of effort and ensures delivery of integrated and high-quality training. Offices and regions will partner with the training organization to determine the most appropriate method to efficiently meet training and development needs and to ensure consistent quality of training.

The training organization will evaluate stakeholder input and feedback mechanisms for training and development programs to determine whether additional levels of evaluation are necessary and cost-effective to ensure quality and results. Increased use of higher level evaluations would require cooperation, input, and resource expenditure from all training stakeholders including attendees, supervisors, and managers.

The agency will explore ways to improve performance measures and metrics focusing on the training and development programs' contributions to individual and organizational performance. To ensure value added and cost-effectiveness, the agency will discuss the proposed feedback, evaluation, and performance measurement processes with the offices and regions before implementing any revisions.

Goal 4: Organizational Performance—Ensure that organizational training and development policies and practices foster a culture of continuous improvement and optimal organizational performance.

Strategies:

- 1. Provide agency leaders with training and development opportunities for the full spectrum of leadership competencies designated by the OPM.
- 2. Provide organizational development services to help agency managers and supervisors identify and address organizational performance improvement opportunities.
- 3. Provide orientation, training, and development opportunities to initiate new employees into the mission, vision, values, and culture of the NRC.
- 4. Foster a knowledge-sharing culture to facilitate learning as part of the agencywide knowledge management program.

The training and development strategies to achieve optimal organizational performance align with and support NRC's human capital strategies by developing competent leaders, addressing performance improvement opportunities, orienting new employees to NRC's mission and culture, and supporting a knowledge-sharing environment.

A strong, motivated leadership is fundamental to the success of any organization. The NRC will continue its well-established system of training courses and developmental programs for its current and future leaders. This includes required training courses for new supervisors and team leaders, the Team Leader Development Program and Leadership Potential Program for aspiring new supervisors, the Senior Executive Service Candidate Development Program (SESCDP) for aspiring executives, and Executive Leadership Seminars for continuing learning

opportunities for NRC leaders. The NRC Executive Resources Board oversees the agency's leadership training and development programs to ensure that these programs are consistent with the agency's strategic goals and meet agency needs.

NRC's SESCDP is designed to ensure that participants in the program attain competency in each of the leadership competencies required for SES certification by OPM. The NRC adopted OPM's leadership competencies as the basis for developing leaders at all levels of the agency. The NRC will revise its leadership development programs and internal leadership courses to correspond to the OPM leadership competencies.

President's Management Agenda Leadership and Knowledge Management Standards for Success:

Agency leaders and managers effectively manage people, ensure continuity of leadership, sustain a learning environment that drives continuous improvement in performance, and provide a means to share critical knowledge across the organization. Knowledge Management must be supported by an appropriate investment in training and technology. Occasionally, NRC's leaders need professional assistance diagnosing and addressing functional problems within their organizations. Organizational development (OD) is the systematic process of assisting an organization to be more effective in accomplishing its desired goals. It is distinguished from human resources development (HRD) in that HRD focuses on the personal growth of individuals within organizations, while OD focuses on developing the structures, systems, and processes within the organization to improve organizational effectiveness. In that context, OD can be viewed as training for the organization. OD addresses the ways in which people communicate and work together concurrently with technical or procedural issues.

To facilitate improvement in organizational performance, the NRC provides resources to support the development of effective organizations. The availability and use of these services will be communicated to managers and supervisors to ensure their awareness of how and when to request services. Effective use of OD services requires partnership between the service providers and the managers needing support. Clearly defining action plans and resource requirements will ensure effective and efficient use of resources to improve organizational performance.

The NRC achieves a high-quality, diverse work force by recruiting individuals with detailed knowledge and specialized skills in a variety of disciplines. The agency provides programs to orient and engage these individuals in NRC's mission. NRC will continue to offer a comprehensive new employee orientation program, a Nuclear Safety Professional Development Program, and office-sponsored training and qualification programs to ensure that employees collectively have the knowledge and skills to achieve NRC's mission and goals.

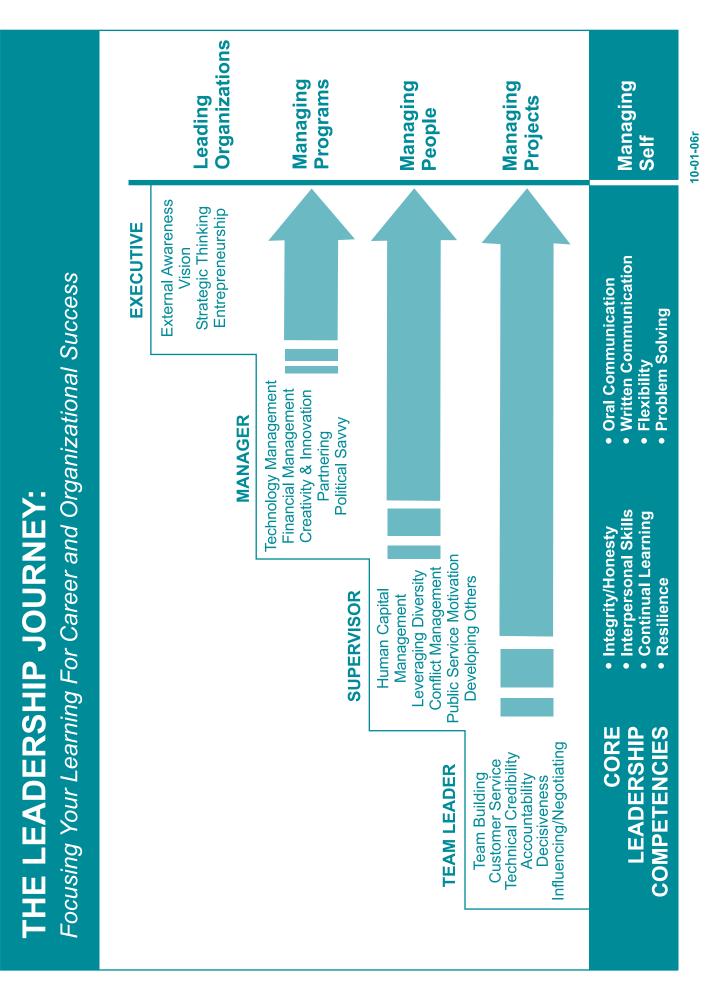
The NRC is a knowledge-centric agency that relies on the aggregate knowledge of its staff to make the sound regulatory decisions needed to accomplish the agency's mission. The agency will institute a systematic approach to knowledge management (KM) to support knowledge collection, transfer, and use to meet the agency's needs resulting from increased staff retirements, mid-career staff turnovers, the addition of new staff, and the broader scope of knowledge needed to deal with new technologies and new reactor designs.

The agency will develop a set of KM standard practices and techniques, including technical mentoring, formal training and qualification programs, policies and procedures, regulatory guides, standard review plans, job aids, best practices, and information technology solutions. As the agency moves forward in implementing its KM program, it will integrate these practices and techniques with training and development activities to facilitate the sharing of critical knowledge and skills among NRC staff.

Endnotes

- 1. FY 2004-FY 2009 NRC Strategic Plan http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1614/v3/sr1614v3.pdf
- 2. NRC Strategic Human Capital and Workforce Restructuring Plan <u>http://adamswebsearch2.nrc.gov/idmws/doccontent.dll?library=PU_ADAMS^PBNTAD01</u> <u>&ID=063550131:2</u>
- 3. NRC's Comprehensive Diversity Management Plan http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0316/br0316.pdf
- President's Management Agenda Leadership and Knowledge Management Standards for Success <u>http://www.opm.gov/hcaaf_resource_center/assets/HCAAF_3_LeadKnowMngt.pdf</u>
- 5. NRC's Strategic Workforce Planning Process <u>http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2001/secy2001-0012/2001-0012scy.html</u>
- 6. NRC's Planning, Budgeting, and Performance Management (PBPM) Process http://www.nrc.gov/who-we-are/plans-performance.html





NUREG/BR-0332

February 2007