



U.S.NRC

United States Nuclear Regulatory Commission

Protecting People and the Environment

IRRS UNITED STATES 2010

Question and Response Report

for:

Module 04: Management System of the Regulatory Body

IRRS Question and Response Report

Question No: 219

Module 04: Management System of the Regulatory Body

Question

What are the corporate values and ethics of the regulator?

Response

The U.S. Nuclear Regulatory Commission (NRC) operates in an open, collaborative working environment that encourages all employees and contractors to promptly voice differing views. The agency encourages trust, respect, and open communication to foster and promote a positive work environment that improves its regulatory decisionmaking and maximizes the potential of all individuals.

The NRC's values guide the NRC staff and activities:

- Integrity ...in our working relationships, practices and decisions ...trustworthy, reliable, ethical, unbiased
- Service ...to the public, and others who are affected by our work ...responsive, accountable, proactive
- Openness ...in communications and decision-making ...transparent, forthright
- Commitment ...to public health and safety, security and the environment ...dedicated, diligent, vigilant
- Cooperation ...in the planning, management, and performance of agency work ...helpful, sharing, team-oriented, engaged
- Excellence ...in our individual and collective actions ...high quality, continuously improving, self-aware
- Respect ...for individuals' diversity, roles, beliefs, viewpoints, and work-life balance ...professional, courteous, objective, compassionate. These values were developed by the NRC's 1994 Senior Executive Service (SES) Candidate Development Program (CDP) class and reviewed and updated by the 2009 SES CDP class.

As a responsible regulator with an important safety and security mission, the NRC's values guide it in maintaining certain principles in the way it carries out its regulatory activities. These "principles of good regulation" focus the NRC on ensuring safety and security while appropriately balancing the interests of the

NRC's stakeholders, including the public and licensees. The principles of good regulation include the following:

- Independence: Nothing but the highest possible standards of ethical performance and professionalism should influence regulation. However, independence does not imply isolation. All available facts and opinions must be sought openly from licensees and other interested members of the public. The many and possibly conflicting public interests involved must be considered. Final decisions must be based on objective, unbiased assessments of all information, and must be documented with reasons explicitly stated.
- Openness: Nuclear regulation is the public's business, and it must be transacted publicly and candidly. The public must be informed about and have the opportunity to participate in the regulatory processes as required by law. Open channels of communication must be maintained with Congress, other government agencies, licensees, and the public, as well as with the international nuclear community.
- Efficiency: The American taxpayer, the rate-paying consumer, and licensees are all entitled to the best possible management and administration of regulatory activities. The highest technical and managerial competence is required, and must be a constant agency goal. NRC must establish means to evaluate and continually upgrade its regulatory capabilities. Regulatory activities should be consistent with the degree of risk reduction they achieve. Where several effective alternatives are available, the option which minimizes the use of resources should be adopted. Regulatory decisions should be made without undue delay.
- Clarity: Regulations should be coherent, logical, and practical. There should be a clear nexus between regulations and agency goals and objectives whether explicitly or implicitly stated. Agency positions should be readily understood and easily applied.
- Reliability: Regulations should be based on the best available knowledge from research and operational experience. Systems interactions, technological uncertainties, and the diversity of licensees and regulatory activities must all be taken into account so that risks are maintained at an acceptably low level. Once established, regulation should be perceived to be reliable and not unjustifiably in a state of transition. Regulatory actions should always be fully consistent with written regulations and should be promptly, fairly, and decisively administered so as to lend stability to the nuclear operational and planning processes.

In addition to these agency level values and principles of good regulation, the NRC's operating reactor oversight process, which is a risk-informed, tiered approach to ensuring plant safety, is designed with a focus on the following tenets: transparent, objective, understandable, predictable, risk-informed, and performance-based.

All NRC employees are subject to the Federal laws and regulations on ethics. These include the criminal conflict of interest statutes (18 USC 201–209) and the Government-wide regulations on employee conduct, financial disclosure, ethics training, and post-employment (Title 5 of the Code of Federal Regulations, (5 CFR) Parts 2634–2640). The NRC also has regulations on outside employment and security ownership (5 CFR Part 5801, "Supplemental Standards of Ethical Conduct for Employees of the Nuclear Regulatory Commission"). All employees are required to complete annual training on ethics. The agency has ethics counselors whom employees can contact with questions or issues.

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Question

How does the regulator define its relationships with the licensees (operating organizations) in order to maintain good communication, openness and independent decision-making?

Response

The NRC's values guide the agency in maintaining certain principles in the way it carries out our regulatory activities. These principles focus the NRC on ensuring safety and security while appropriately balancing the interests of the NRC's stakeholders, including the public and licensees. The NRC adheres to the principles of good regulation—*independence, openness, efficiency, clarity, and reliability*. (See the response to Question 219 for additional information on the values and principles of good regulation). The agency puts these principles into practice with effective, realistic, and timely regulatory actions. These values guide every action it takes, from a decision on a safety, security, or environmental issue to how it performs an administrative task, to how staff interacts with fellow employees and other stakeholders.

The NRC's principles and values are derived from laws and regulations governing its work (see additional information in the response to Question 219). The agency has requirements governing conflict of interest, government employee ethics, conduct of employees when interacting with licensees, professional demeanor, and financial disclosure. The NRC's communication with licensees and member of the public is also shaped by laws and regulations. Included are those laws and regulations governing public involvement in the regulatory process and covering such topics as public petitioning for rulemaking, access to agency information (freedom of information) and the right of the public to be informed of, to observe, and, in some cases, to participate in or comment on NRC meetings to gather data and deliberate on upcoming actions. These obligations are met by doing such things as publishing notifications of upcoming meetings and meeting summaries, by seeking public comment on draft policies and rulemaking efforts, and by providing public access to documents that describe and explain NRC decisions.

See the response to Question 224, which discusses the "contracts" between the NRC and its licensees that further define the relationship. See also the responses to Questions 235, 253–255, and 272AS for additional information on open communications.

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Question

What working principles are addressed in the regulator's strategy?

Response

The NRC's principles are established through its mission, goals, and strategies in its Strategic Plan (NUREG 1614, Volume 4, "Strategic Plan: Fiscal Years 2008–2013," issued February 2008). An NRC objective is to be a stable regulator in a dynamic environment. In order to meet its goals of safety and security, the NRC developed strategies for organizational effectiveness and operational excellence.

Organizational effectiveness strategies stated in the Strategic Plan include the following: use state-of-the-art technologies and risk insights to improve the effectiveness and realism of NRC actions, with a goal of continuous improvement; reach high-quality and timely decisions; work with stakeholders to minimize regulatory or jurisdictional overlap; anticipate challenges and promptly evaluate and respond to changes in the regulatory and technical environment; and continue to improve the NRC's regulatory and communication programs.

Operational excellence strategies stated in the Strategic Plan include the following:

- Strengthen accountability for setting and achieving individual and organizational performance expectations and for providing timely and comprehensive feedback.
- Reward safety-conscious actions and improve communication throughout the organization to support a culture of openness, trust, and innovation.
- Improve support services to make them more efficient and make it easier to accomplish agency goals.
- Manage agency information and employ information technology (IT) to improve the productivity, effectiveness, and efficiency of agency programs and enhance the availability and usefulness of information to all users inside and outside the agency.
- Use innovative strategies to recruit, develop, and retain a high-quality, diverse workforce.
- Continue to foster a work environment that is free of discrimination and provides maximum opportunities for all employees to use their diverse talents in support of the NRC's mission and goals.
- Sustain a learning environment that provides continuing improvement in performance through knowledge management, performance feedback, training, coaching, and mentoring.
- Ensure that the NRC has the appropriate physical facilities to ensure regulatory effectiveness and operational efficiency.
- Provide accurate, timely, and useful financial information to agency managers for effective decisionmaking.

The NRC has established a management system that effectively communicates policies, objectives, responsibilities, authorities, requirements, guidance, and information to NRC employees. The management system includes: enacting legislation passed by the Congress, Executive Orders from the U.S. President, and Federal Government-wide regulations; administering policies established by the Commission through its 5 year Strategic Plan and directives from the Commission; implementing the Human Capital Management, the Comprehensive Diversity Management Plan, and Knowledge Management Programs; establishing and implementing agency-wide directives (e.g., management directives); and, establishing and implementing office, division, program, and task-specific guidance. For additional information on the overall management system, see the response to Question 237.

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Question

How are differences in safety significance addressed in the regulator's definition and implementation of its regulatory strategy?

Response

The NRC has developed a graded approach for licensee review and implementation of plant modifications, for NRC review, including when review and preapproval are needed based on safety significance, and for expenditure of time and resources for oversight of licensed activities.

Before making any safety-related modifications (i.e., design changes, tests, or experiments), a licensee is to first examine the proposed modification under the provisions of 10 CFR 50.59, "Changes, Tests and Experiments." Using the provisions of this regulation and the industry-issued guidance document, a planned modification would fall under one of two categories: the licensee may make the modification without prior NRC approval, or the licensee has to first seek NRC approval before effecting the modification. The basis for 10 CFR 50.59 is that licensees may make certain since the NRC has assurances that they are implemented properly and, if not, would represent minimal risk. The licensee is required to amend the final safety analysis report (FSAR) to include both categories of modifications performed in a period of time. Each licensee shall submit revisions containing updated information to the NRC on a replacement-page basis that is accompanied by a list that identifies the current pages of the FSAR following page replacement. Both categories of modifications are subject to the NRC's inspection program to ensure that the modifications have been carried out consistent with NRC regulations. Because modifications under the first category had not been previously reviewed and approved by NRC, the inspection program would include sampling of modifications under this category to ensure that the analysis under 10 CFR 50.59 had been performed correctly. For additional information on the NRC's graded approach to licensing, see the Review and Assessment Module (responses to Questions 129 and 131).

The NRC's regulatory strategy for its oversight program to ensure safe reactor operation is defined and implemented by the Reactor Oversight Process (ROP). The NRC considers the safety significance of issues to evaluate licensee performance and allocate and schedule inspection resources. Individual plant performance is determined using a risk-informed process that evaluates the safety significance of NRC inspection findings, plant events, and facility performance indicators. The regulatory framework for reactor oversight consists of seven cornerstones of safety: initiating events, mitigating systems, barrier integrity, emergency preparedness, public radiation safety, occupational radiation safety, and physical protection. Satisfactory licensee performance in the cornerstones provides reasonable assurance of safe facility operation and that the NRC's safety mission is being accomplished. Each cornerstone contains inspection procedures and performance indicators to ensure that their objectives are being met.

Each plant receives a nominal (baseline) inspection effort to ensure plant safety, with increased attention given to those plants that have safety-significant performance issues. The NRC assesses plant performance continuously and communicates its assessment of plant performance in letters to licensees, typically semi-annually. The NRC determines its regulatory response in accordance with an Action Matrix that provides for a range of actions commensurate with the significance of the performance indicators and inspection results. The NRC will supplement its baseline inspection program based on facility licensee performance and include specific inspections to address performance in specific areas. Additional information on the ROP can be found in the Inspection Module.

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Question

What provisions does the regulator make in its regulatory strategy for the promotion of safety culture?

Response

Since its establishment in 1974, the NRC has emphasized safety culture promotion and continuous improvement. As part of the NRC's integrative approach, its emphasis on continuously improving the safety culture of the agency over many years is an evolution of the earlier concept of quality management. The NRC's efforts to formally promote safety culture date back to 1989, when a Policy Statement on Conduct of Operations was issued. The focus was broadened and a new policy was issued in 1996 addressing the concept of a safety-conscious work environment. In 2008, the NRC initiated an effort to modify its regulatory strategy by expanding the Commission's policy on safety culture to address the unique aspects of security. In doing so, the NRC reviewed a range of domestic and international information, considered lessons learned, and obtained input from a wide range of stakeholders. As part of the 2008 effort to develop a new policy statement, the staff developed a set of safety culture characteristics, which are described as the overarching characteristics of an organization's or a program's positive safety culture. These characteristics maintain the same attributes of the safety culture components and aspects currently used in the NRC's ROP.

Based on these activities, in May 2009, the staff presented a draft safety culture policy statement to the Commission and received approval to again engage stakeholders by requesting public comment through publication in the Federal Register (FR). During the public comment period, the NRC worked with stakeholders through a public workshop, which was aimed at refining the definition of safety culture and identifying related traits. After reviewing and resolving the various comments, the staff will undertake an effort to validate the safety culture traits before developing a final policy statement for Commission consideration. The final policy is scheduled to be sent to the Commission in early 2011. Once the policy is final, the NRC will review and revise, as necessary, its programs and processes for the oversight of licensees with respect to the expectations in the policy statement. Licensees and certificate holders will be expected to (1) consider the extent to which the traits are present in their organizations and among individuals who are overseeing or performing regulated activities, and (2) take steps, as necessary, to foster a positive safety culture commensurate with the safety and security significance of activities and the nature and complexity of their organization and functions.

As a result of the activities described above, the NRC's oversight of safety culture at operating reactors has been strengthened since the start of the 2008 initiative. Since that time, the staff has incorporated improvements to the ROP guidance based on lessons learned experience, special internal reviews, and feedback from internal and external stakeholders. The staff will continue to solicit feedback from stakeholders to inform future improvements to the ROP, including implementation of safety culture oversight, and make refinements in accordance with the ROP self-assessment process. The response to Question 67AS provides additional detail on how the NRC implements its oversight of safety culture at nuclear reactor power facilities.

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Question

How does the Regulatory body assess the safety culture aspects of its own organization and its activities?

Response

The NRC fosters and supports a strong safety culture through the development and reinforcement of good safety attitudes in individuals and teams to allow them to carry out their tasks safely. The NRC holds its employees to a high standard of involvement and responsibility for the decisions that are made. The agency expects employees to promptly speak up, listen to differing views fairly, and treat each other with respect. The NRC strives to establish and maintain an open, collaborative working environment that encourages all employees and contractors to promptly voice differing views without fear of retaliation. The NRC encourages trust, respect, and open communication to foster and promote a positive work environment that maximizes the potential of all individuals and improves regulatory decisionmaking. Alternative viewpoints are welcomed, valued, and considered.

Individuals have various mechanisms for expressing and having their mission-related differing views heard by decisionmakers. For example, the NRC has an Open Door Policy that supports and allows any employee to initiate a meeting with an NRC manager or supervisor, including a Commissioner or the Chairman of the NRC, to discuss any matter of concern to the employee. An employee may request an Open Door meeting directly with the selected manager or supervisor without the approval of the intermediate management. In using the Non-Concurrence Process, employees may choose not to concur on any part of a document in which he or she has disagreed. In addition, employees are permitted to document their concerns and attach them to proposed staff positions or other documents to be forwarded with the position as it moves through the management approval chain by using the Non-Concurrence Process. The Differing Professional Opinions Program is a formal process that allows all employees and contractors to have their differing views on established, mission-related issues considered by the highest level managers in their organizations (i.e., office directors and regional administrators). The process also provides managers with an independent, three-person review of the issue (one person chosen by the employee). After a decision is issued to an employee, he or she may appeal the decision to the Executive Director for Operations (EDO), or the Chairman for those offices reporting to the Commission.

The NRC's Office of the Inspector General (OIG) assesses NRC safety culture, also known as internal safety culture, by performing a Safety Culture and Climate Survey (SCCS). About every 3 years since 1998, OIG has conducted an SCCS to monitor the staff's assessment of 17 different categories and identified where additional organizational improvements could be made. The information from the survey is reported not only on an agency level but also down to the division-level work unit. In each case, the staff responded to the results of the SCCS with action plans at the agency, office, and division levels to maintain areas identified as strengths and to improve areas identified as challenges. This approach allows the NRC to monitor safety culture and encourages continual improvement within the organization. The results have generally been favorable over the past years, and the 2009 results indicated improvements in 16 of the 17 categories, with one category remaining positive but unchanged since the last survey.

In addition, the NRC chartered the Internal Safety Culture Task Force in October 2008, to provide the Commission with information about potential initiatives that could improve the agency's internal safety culture. The Task Force focused on identifying existing agency programs and processes that supported a strong internal safety culture and where there may be areas for improvement or enhancement. The Task Force used focus groups, interviews, benchmarking of other organizations as well as internal groups, and outreach to internal and external stakeholders to inform its recommendations. The data collected and analyzed by the Task Force strongly indicates that NRC employees support the agency's mission and feel pride in their jobs, and found that the agency has many existing processes and practices that support a healthy safety culture. The Task Force identified several high-level themes for continuous focus and improvement. The recommendations developed by the Task Force address the themes and are focused on creating effective and lasting improvements that will support a strong safety culture for the agency. Implementation of the recommendations is ongoing.

The NRC has also been rated in an independent assessment of 278 Federal organizations by the Partnership for Public Service and American University's Institute for the Study of Public Policy Implementation. The Best Places to Work rankings are the most comprehensive and authoritative rating and analysis of employee satisfaction and commitment in the Federal Government. The 2009 rankings are the fourth edition of this ongoing series, following the 2003, 2005, and 2007 versions. In 2007 and 2009, the NRC was rated as the Best Place to Work in the Federal Government.

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Question

- 1) How has the regulator identified its tasks and responsibilities with regard to its stakeholders?
- 2) In ISO terms, what documents represent the “contract” between the regulator and its stakeholders?

Response

The NRC has various levels of stakeholders to whom it reports its work plans and accomplishments at regular intervals. Each stakeholder represents a different level of oversight and accountability; yet, through each level, there is a consistency and transparency that ensures the NRC achieves the goals and objects identified. There is the “contract” between the NRC and the United States Congress that provides the funding necessary for the NRC to perform the regulatory tasks required for implementation of its “contract” with another group of stakeholders, the licensees. There is also a “contract” with the public, whose safety and security is the NRC’s paramount concern, and with whom the NRC strives to be open in all regulatory activities. The NRC’s “contract” with Congress is developed through the agency’s Planning, Budgeting, and Performance Management (PBPM) Process, which has four distinct phases of activity:

- budget formulation
- congressional action
- budget execution
- audit, review, and performance reporting

The PBPM process is ongoing, and all activities are tied to the outcomes identified in the President’s Budget to Congress. These outcomes are the distinct, measurable activities that the NRC plans to accomplish each year in support of the NRC’s Strategic Plan. For example, the fiscal year (FY) 2010 Performance Budget uses the Strategic Plan structure to align resources and to show a clear linkage between programs and the agency’s goals. A detailed example is the following passage:

The FY 2010 budget request for the Licensing Tasks Program includes resources to support the completion of an expected 950 licensing actions, including the review of 10 EPU applications, and the expected licensing activities associated with the transition of 15 reactor sites to the National Fire Protection Association (NFPA) Standard 805. Other activities include updating regulatory guides on fire protection and probabilistic risk assessment; 50 operator licensing examination sessions; one improved standard technical specifications (ISTS) conversion; as well as research activities, including materials performance, fire safety, digital instrumentation and control, analytical codes, and generic safety issues. (Extracted from page 25 of U.S. NRC Performance Budget Fiscal Year 2010)

In support of the NRC’s Strategic Plan and annual budget allocations from Congress, and with direction from the Commission, senior managers plan and implement regulatory work activities via office-specific operating plans. These office operating plans are then sent to the Office of the EDO for approval.

Additionally, within individual offices, the PBPM process is the fundamental framework used to develop and execute the annual office budget. The PBPM process includes four components: setting the strategic direction, determining planned activities and resources, measuring and monitoring performance, and assessing performance. This process identifies key steps to follow so that planning decisions are the drivers for resource allocations.

In addition to the Strategic Plan (NUREG 1614), two other principal publications document this process: NUREG 1100, “Performance Budget,” and NUREG 1542, “Performance and Accountability Report.” These publications represent NRC’s specific “contract” with Congress.

Because the NRC is governed by congressional statutory authority established by the Energy Reorganization Act of 1974, the agency’s “contracts” with its licensees are governed by statute, regulations, and license. These are the legally binding documents that grant a licensee the authority to operate, and all interactions with this level of stakeholder are managed in accordance with these documents.

In interactions with public stakeholders, the NRC strives for open communications and encourages public involvement through activities identified in the recently-drafted Open Government Plan that responds to the Obama White House Open Government Initiative, as well as other legally-mandated public requirements, such as the Administrative Procedure Act for rulemaking activities, DLOP 228, “Procedures for Processing License Amendments for Power Reactors and Testing Facilities (the “Sholly” Legislation)—No Significant Hazards Consideration, Noticing and State Consultation,” and opportunities for the public to participate in hearings, environmental assessments, and to provide petitions to the NRC. These “contracts” are captured in the NRC’s regulations.

In addition to publications that detail the NRC’s top priorities in its mission to protect people and the environment, such as the Strategic Plan, which was developed with public participation, the NRC also holds regular public meetings and conferences with its external stakeholders. These meetings provide a forum for stakeholders to voice concerns and provide recommendations. Following these meetings, the NRC reviews all comments and evaluates their feasibility to implement, as well as their impact on safety. One of the most-visible examples of NRC openness and public information sharing with external stakeholders is the annual Regulatory Information Conference, which is held in March of every year; for the 2010 Conference, there were approximately 3,000 attendees and over 25 countries represented for this 3 day event.

The openness and accessibility of the NRC’s decisionmaking and regulatory processes are a key component in the agency’s commitment to carrying out its mission. These various communications channels are intended to serve all of the NRC’s stakeholders. At all times, the NRC strives to create a decisionmaking environment that is consistent, predictable, and promotes openness while ensuring that safety and security are not compromised.

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Question

What internal service standards has the regulatory body established and how is adherence to them verified? What are the results of these assessments?

Response

All NRC processes, whether directed at internal or external stakeholders, are implemented in accordance with NRC organizational values. The NRC strives to conduct all of its interactions with integrity, service, commitment, and respect for NRC clients. The agency engages all of its stakeholders in forthright and direct communication to ensure a common understanding of what is needed.

The NRC's Strategic Plan provides the high-level expectations for providing services and ensuring outcomes. The individual offices and divisions develop operating plans that tie the outcomes to be achieved to the Strategic Plan and budget. The budget, service level agreements, and the operating plans are based on the defined roles and responsibilities of the various parts of the organization. Continual communication with stakeholders is an integral part of monitoring the progress to the NRC's goals. The Office of Nuclear Reactor Regulation (NRR) operating plan is developed yearly as a tool to ensure that planning, budgeting, and performance management are performed in an integrated and balanced manner. It includes a summary of NRR programs, projects, activities, and other items to be measured throughout the year and the metrics that will be used to monitor them. These programs and activities are aligned under the agency's strategic goals. For example, the agency's commitment to achieving corporate (business) measures is achieved through the integration of those measures into the performance plans for all NRC managers.

As part of its management system, the NRC's management directives include a comprehensive set of documents that describe the functions, activities, and practices of the NRC. NRR's office instructions (OIs), operating plans, performance measures, and selected management directives describe the internal service standards associated with reactor regulation. Adherence is verified through internal and external assessments.

Of note are the 2004 Government-wide changes to the SES performance and pay system that established the Senior Performance Official (SPO) rating process at the NRC. Under the SPO process, a formal assessment of organizational performance is conducted annually. The assessment results are used to ensure consistency between individual and organizational performance by providing relevant information on the performance of office directors and the regional administrator and his or her subordinate SES staff. This assessment process includes a midyear discussion between counterparts to discuss progress in meeting operating plan outcomes, progress on addressing SPO feedback from the previous year, and information regarding challenges to be addressed before the end of the current year. This process is supported by continual routine communication among offices and within organizational units.

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Question

How does management demonstrate its commitment to putting in place, maintaining and improving the regulator's management system?

Response

NRC management has demonstrated its commitment to, and has established, appropriate management controls, feedback loops, and well-established values that demonstrate the NRC's commitment to putting in place, maintaining, and improving the NRC's management system. The NRC is headed by five Commissioners appointed by the President and confirmed by the U.S. Senate. The Commission formulates policies and regulations governing nuclear reactor and materials safety and security. The Commission conducts its business in a public forum and encourages input from its stakeholders, thereby reinforcing its belief that nuclear regulation is the public's business, and that it must be transacted publicly and candidly.

Management at all levels demonstrates its commitment to the establishment, implementation, assessment, and continual improvement of the management system through the following activities:

Strategic Planning

The NRC's Strategic Plan describes how the agency intends to accomplish its mission and establishes the Commission's strategic direction by defining the vision, goals, and outcomes it intends to pursue. In particular, the Strategic Plan focuses on the goals of safety and security and strategies for organizational excellence including openness, effectiveness, and operational excellence. Together, these support the agency's ability to maintain the public health, safety, and trust. Success in achieving each goal and strategy in the Strategic Plan is gauged primarily through performance measures that have been developed for the agency's annual Performance Budget and is reported in the annual Performance and Accountability Report.

Performance Budget

Each year, the NRC publishes its Performance Budget (NUREG 1100). This publication describes the agency's programs in the performance plan, the budget estimates for these program activities, and the distribution of the budget by major program. The performance plan also includes goals and measures that gauge the agency's success in accomplishing its mission.

The Performance and Accountability Report

For each fiscal year, the NRC evaluates its own performance against the previous year's Performance Budget (NUREG 1100). The Performance and Accountability Report (NUREG 1542) presents a comprehensive and integrated picture of the agency's performance for a specific fiscal year. This report includes the following elements:

- the NRC's audited financial statements
- the results of an evaluation of management controls
- a report on the agency's success in achieving its strategic and performance goals
- the results of any significant assessments of program activities that were carried out during the reporting period
- the NRC Inspector General's most serious management challenges facing the agency and how the NRC is addressing them

Measuring Performance

Staff, at all levels, are covered by performance appraisal systems to help ensure clarity about results expected and the standards by which work will be evaluated, and to provide feedback about actual performance and recommendations for further development or improvement. The critical performance elements for each employee and supervisor are linked to the agency's strategic goals of safety and security and must indicate how the element fulfills the NRC's organizational excellence strategies of openness, effectiveness, or operational effectiveness.

All supervisors, managers, and executives have performance elements that hold them accountable for their oversight and supervision of their staff as well as achieving results in their program areas. The specific standards vary by level of supervision and nature of responsibilities. Executives' performance plans, for example, are weighted so that 60 percent of the evaluation is based on program results and 40 percent of the evaluation is based on their performance in leading people, leading change, business acumen, building coalitions, and being results driven. Accordingly, NRC management is evaluated, in part, on whether it has met or exceeded the performance measures developed as part of the NRC's strategic plan.

NRR's Office Director and his subordinate managers, collectively known as the Executive Team, have established an internal management process that receives input from the Leadership Team. The Leadership Team is comprised of either the director or deputy from each of the nine NRR divisions. Its roles and responsibilities are defined in the Leadership Team Charter, which includes the following purposes:

- Foster Leadership Team awareness of NRR activities and processes that cut across divisional boundaries, with a goal of continuous improvement in organizational alignment and coherence in NRR decision-making. Examples: officewide initiatives, work process improvements and practices, management controls, regulatory processes, interoffice coordination issues.
- Coordinate among divisions and provide Leadership Team positions and decisions on significant budget, resource utilization, and human capital issues. Examples: SES CDP and Leadership Potential Program recommendations, position utilization and associated hiring decisions, performance plan development and reviews, midyear appraisal expectations, strategy for awards, secretarial hiring and use, branch chief moves, performance monitoring, budget assumptions and development, operating plan reviews.
- Provide insight for strategic direction for program implementation. The Leadership Team provides a forum for staff to obtain collective feedback from NRR leadership on administrative, technical, and regulatory policy issues. The Leadership Team may provide endorsement and advice to the staff on selected issues, as requested. The appropriate Leadership Team member is the sponsor of the issue and is responsible for identifying the actions being

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sought from the Leadership Team. For issues that could affect the ability of divisions to achieve outcomes, the Leadership Team considers the resource impacts of its positions. Examples: technical presentations, formal action plans for resolution of technical issues.

Management demonstrates its commitment to maintaining and improving its management system by supporting the continued review, modification, and implementation of the higher tier documents of the management system and ensuring that the other parts of the management system support these document's goals and objectives.

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Question

What arrangements has the regulator put in place to maintain and improve the leadership skills in its organization?

Response

The NRC has developed and is implementing a Leaders Academy designed to identify and prepare employees for leadership assignments. It is a well-organized system of developmental assessments and opportunities that is based on a program of leadership training, developmental assignments, competitive developmental programs, self-assessments, coaching, and online resources. Whether staff members strive to pursue full-time leadership positions or find themselves in situational leadership activities, all are encouraged to maintain their fundamental leadership competencies and promotion potential.

The Leadership Potential Program and the SES CDP offer in-depth leadership development experience to selected candidates prior to being chosen for a supervisory or executive position. This pool of trained candidates is among the top selections for management and leadership positions.

All managers and supervisors are required to complete a series of training courses regarding managing and empowering employees, leading people and change, ensuring knowledge of human resource policies and practices, and leading by example—promoting good performance, rewarding, and communicating successes and improvements. Up-to-date supervisory training is based on the NRC's recent extensive supervisor needs assessment and the U.S. Office of Personnel Management's 28 leadership competencies, plus feedback from agency culture safety surveys. Internal supervisory training is systematically designed and updated to target the supervisor's key role.

Promotions to and within the management and executive ranks are competitive. Selection is based on past experience, training, developmental assignments, and leadership potential. Entry into the Leadership Potential Program and the SES CDP is based on previous performance and on potential. Applicants are screened before a small subset of the applicants is chosen for these programs.

Supervisors and team leaders not otherwise competitively selected for a formal development program may participate in the Supervisor Development Program or the Team Leader Development Program and complete similar developmental work and assessments.

The primary technical offices, such as NRR, the Office of New Reactors, the Office of Nuclear Material Safety and Safeguards, and the regions, require qualification programs for all technical personnel with specific training and developmental opportunities that must be completed before they can be assigned specific responsibilities. Offices also have branch-specific training plans to meet the needs for succession planning, knowledge management, and cross-training of employees.

Supervisors and team leaders currently in management positions must continue their development, completing mandatory training such as the Team Leader Development Program and the Supervisory Development Program. Senior executives participate in regular seminars featuring noted speakers on leadership concerns to the agency at large.

Individual development plans are used and are available to all staff. Employees, working with their management, identify long-term and short-term goals and the actions the employee will take to meet those goals. These include activities such as technical training, rotations, details, self-study, and specific work assignments. All employees are routinely encouraged to develop and maintain individual development plans and SES members are required maintain development plans and review them with their management at least annually. In addition to the internal training, external training funds are available for all employees to request courses offered outside of the agency. These requests are prioritized based on office skill needs.

The NRC empowers employees to manage their own careers. Employees have a wide range of developmental opportunities available to them, including training courses, a mentoring program, career counseling, individual development plans, rotational assignments, and formal leadership development programs. Typically, senior employees, rather than supervisors or managers, lead task forces, working groups, focus groups, inspections, and allegation responses. These situational leadership experiences help prepare employees for future leadership positions.

Supervisors create an optimum working environment to deliver products on time. Employees are allowed to work flexible schedules, work at home (telecommute) up to 3 days per week, and are encouraged to maintain good health by using agency fitness centers before or after work or during their lunch breaks. Professional ergonomic assessments of employee's workstations are available to all through the first-line supervisor.

The commitment of managers and supervisors to good performance is measured by the way they use their time, resources, and people. Office operations plans include targets for managers that track key deliverables, resources, and training. Employee performance is rated partially on the deliverables that the organization successfully produces, such as safety evaluations. Employee surveys are periodically initiated to look for ways to improve the work life, culture, and commitment to service.

Top management communicates with supervisors to emphasize the importance of managing performance, continuous improvement, recognition and awards, and celebrating successes. They are also given guidance to coach employee's performance not only at appraisal time, but also throughout the year. Open communication is facilitated through the Open Door policy that allows any employee to speak directly with a manager or executive. The agency has several processes for resolving employee issues, including the nonconcurrence process, the differing professional opinion process, and the grievance process. Difficult technical issues are resolved at the lowest, most expert level possible, or resolved by facilitated discussion and resolution involving management.

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Cooperation and coordination across the agency are necessary and encouraged. Executives across the agency meet regularly and at senior leadership meetings to plan agency leadership initiatives and strategy, share information, identify issues, and review resources and agencywide survey data. Office feedback and evaluations are done once a year to measure services and improve interoffice coordination. Management also sponsors culture assessments and ways to make the agency a great place to work. One outcome of the agency's commitment to creating the optimum work environment is the agency's ranking as the Best Place to Work in the Federal Government by the Partnership for Public Service two times in a row, as well as a "best place to work" by Diversity Careers magazine, Woman Engineer magazine, and Washingtonian magazine.

The NRC is doing an excellent job identifying and preparing high-potential staff for leadership and, in addition, providing opportunities to all staff to develop teamwork and project leadership skills. The NRC, like any other organization, has concerns about losing its management and executive ranks, and began 10 years ago to systematically identify and develop new leaders, formally and informally. The NRC's developmental programs have been successful in preparing new supervisors and executives to fill NRC needs. Staff interest in pursuing leadership positions has also been successfully encouraged by agencywide leadership training, mentoring, and developmental activities, which are offered in the NRC's leadership academy. NRC supervisory training, which is part of the Leaders Academy, is being updated as part of the agency's recurring evaluation of the NRC's leadership needs.

Question No: 228

Module 04: Management System of the Regulatory Body

Question

1. Does the senior management conduct a periodic self-assessment of the achievement of strategic objectives?
2. How is this self-assessment documented?

Response

The NRC's mission is to ensure the safety and security of the American public in the use of byproduct, source, and special nuclear materials. To fulfill this mission, the NRC has established two goals: safety and security, which are contained in the agency's FY 2008–2013 Strategic Plan. For each goal, strategic outcomes define success in attaining the goal. In addition, a set of performance measures is associated with each goal that indicates NRC effectiveness in achieving its goals. The performance measures and strategic outcomes provide the basis for measuring the ability of the NRC's processes to achieve their planned results and to identify improvement opportunities. The agency assesses its performance against these measures and periodically adjusts its targets to make them more challenging where possible. This process ensures a continual process of measurement and assessment to ensure continual improvement.

The agency reports its results in an annual Performance and Accountability report (NUREG 1542) that is sent to Congress and can be found on the NRC's Web site. NRC offices monitor quarterly performance progress during the fiscal year using data reported in office operating plans that contain programmatic and corporate management performance measures. See the responses to Questions 225, 264, 265, and 267 for additional information on office management of operating plan targets.

IRRS Question and Response Report

Question No: 229

Module 04: Management System of the Regulatory Body

Question

Does the management regularly evaluate their leadership indicators? How is this evaluation documented?

Response

The NRC cultivates leadership skills, excellence, results, and accountability through its development and performance management programs. The agency assesses organizational and individual results and leadership effectiveness through a variety of tools and processes. The NRC has an integrated and comprehensive program, referred to as the Leaders Academy, for training and developing leaders at all levels in order to emphasize NRC values (e.g., the staff's and agency's adherence to the values and principles of good regulation) and important leadership skills (e.g., coaching and rewarding staff, managing subordinates' performance, fostering diversity, developing teams). Individuals compete for and are carefully selected for leadership positions at each level based on their skills, and the agency is committed to continually developing the skills needed at each level of leadership.

Staff at all levels is covered by performance appraisal systems to help ensure clarity about results expected and the standards by which work will be evaluated, and to provide feedback about actual performance and recommendations for further development or improvement. The performance elements for each employee and supervisor are linked to agency strategic goals or strategies, performance budget goals, or operating plan goals and metrics.

All supervisors, managers, and executives have performance elements that hold them accountable for their oversight and supervision of their staff as well as achieving results in their program areas. The specific standards vary by level of supervision and nature of responsibilities. Executives' performance plans for example, are weighted so that 60 percent of the evaluation is based on program results and 40 percent of the evaluation is based on their performance in leading people, leading change, business acumen, building coalitions, and being results driven. They are held responsible for ensuring that performance management of their subordinates is conducted effectively and rigorously. Appraisals of executives are based in large part on assessments of organizational performance, including consideration of Senior Performance Official reports, Performance Accountability Reports, and operating plan results. A variety of leadership initiatives and programs are designed to contribute to and reward staff openness, sharing of differing and opinions and views, and teamwork. Many agency issues are successfully tackled via interoffice working groups.

The NRC also formally evaluates the design and implementation of its performance management systems on a regular basis through assessment tools developed and reviewed by the U.S. Office of Personnel Management, the Federal agency responsible for advising the President on the U.S. Civil Service. The SES appraisal system is evaluated through submission of detailed NRC regularly evaluates and documents leadership indicators and initiates efforts to further improve leadership and performance requests for certification to the U.S. Office of Personnel Management. The appraisal systems for other NRC staff are evaluated through the Performance Appraisal Assessment Tool. In determining whether or not to grant certification, the U.S. Office of Personnel Management reviews, among other things, governance and oversight within the agency; whether or not the system is results-oriented, holds executives and their subordinates accountable, and is based on balanced measures; and the extent to which it makes meaningful distinctions in performance level, pay, and bonuses based on individual and organizational performance. The agency has received full certification from the U.S. Office of Personnel Management for its SES appraisal system.

In addition to reviewing organizational results and individual performance and developing staff, NRC regularly administers staff surveys to obtain feedback about employee perceptions, including perceptions of leadership, alignment with mission, cooperation within and between organizations, performance evaluation, recognition, training and development, and communications and information sharing. Surveys regularly administered include Human Capital Surveys administered by the U.S. Office of Personnel Management as well as Safety Culture Surveys, which are administered through the NRC's OIG. The NRC typically scores well. For example, the NRC has been rated the best place to work in the Federal Government as a result of the last two Federal Human Capital Surveys and also showed substantial improvement in most areas from one survey to the next. In the last Safety Culture Survey, the NRC scored favorably, exceeding the benchmark in each of the following areas: engagement, empowerment, and open, collaborative working environment. The agency pays close attention to survey feedback, follows up with focus groups and working groups, and acts on opportunities to improve (such as additional communications initiatives).

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Question No: 229AS

Module 04: Management System of the Regulatory Body

Question

- 1) What actions of senior management were taken to seek out and reward excellence in performance of staff?
- 2) How does the Regulator foster teamwork and the building of expertise?
- 3) Does senior management's promotional process satisfy staff expectations?

Response

The NRC has developed common measures and best practices for offices to monitor and evaluate performance.

Managers and employees are provided written performance plans that communicate the critical requirements of their jobs as well as the standards against which their performance will be appraised in terms of quality, quantity, and timeliness.

Individuals receive informal performance feedback throughout the year, as well as formal feedback at the midpoint and end of the performance year.

Throughout the year, individuals are considered for a variety of awards, including informal and honorary awards (plaques, mugs, desk sets with the NRC logo, and certificates of appreciation) and formal awards (cash bonus and time off). At the end of the performance year, individuals are considered for performance awards (cash bonus, time off, and salary increases).

The NRC also recognizes and rewards outstanding employees with two very high honors: the Distinguished Service Awards and the Meritorious Service Awards. These awards recognize NRC staff at a variety of grade levels and in a variety of jobs for accomplishments such as devising or implementing NRC programs, providing outstanding service, contributing toward increased productivity or efficiency, taking initiative in developing new and improved work methods, and inspiring and motivating others.

SES and Senior Level employees are eligible for a variety of awards, including bonuses. The agency has a formal process whereby its Performance Review Board, comprised of 12 senior executives, reviews SES performance and recommends awards to the Commission where appropriate. The agency's senior officials are also eligible for Presidential Rank Awards, which are conferred by the President through the U.S. Office of Personnel Management. Typically, several NRC managers receive such awards each year.

In the Best Places to Work rankings for 2007 and 2009, the NRC was ranked first in the Federal Government for performance feedback and granting performance-based rewards. In 2009, the NRC was ranked first in teamwork, training, and development. The Best Places to Work rankings, produced by the Partnership for Public Service and American University's Institute for the Study of Public Policy Implementation, reflect the most comprehensive and authoritative analysis and ranking of employee satisfaction and commitment in the Federal Government.

Please see the responses to Questions 51 and 52 concerning the agency's efforts to ensure that its staff acquires and maintains relevant competencies, keeps abreast of technological developments, and is aware of new safety principles and concepts. Additionally, the agency fosters the building of expertise through a variety of approaches, including but not limited to the following:

- a performance management program, as described above
- individual development plans, which are used to guide training and development activities
- a formal rotation program, which is used for short-term, internal-to-NRC developmental assignments, as well as a detail program, which is used for the same purpose as well as to facilitate exchange of ideas between the NRC and State and local governments pursuant to the Intergovernmental Personnel Act
- an Undergraduate Scholarship Program, which is used as an early recruitment tool for high quality students
- a Graduate Fellowship Program, which is designed to attract, develop, and retain individuals for highly specialized technical work to meet the agency's current and future critical skills needs
- a Nuclear Safety and Professional Development Program, which attracts outstanding individuals who have limited work experience and hold a degree in an engineering, scientific, or other academic discipline that supports NRC's mission, providing these individuals challenging professional assignments with both a broad and a specialized perspective on NRC operations
- a knowledge transfer program that includes rehire of retired individuals for knowledge transfer purposes, an early replacement hiring (double encumbering) program, NRC databases, electronic reading rooms, interviews, procedures, desk references, communities of practice, and Web sites and portals.

The NRC fosters teamwork through a variety of mechanisms, including numerous formal teambuilding courses, performance standards that hold managers and other employees accountable for effective team work, staff meetings, and formal as well as informal communications.

The agency has a very well-structured promotion process that is communicated to all staff through a variety of mechanisms including orientation, one-on-one meetings, staff meetings, and in writing. The promotion process covering bargaining unit positions reflects consultation and agreement with the employees' exclusive representative (the union) through the collective bargaining process.

In the Best Places to Work rankings for 2007 and 2009, NRC was ranked first in the entire Federal Government for fairness of promotions, employee skills-to-mission match, and pay.

Management promotes ethical conduct through a Web site devoted to this topic as well as through a variety of other mechanisms, including formal ethics training conducted on at least an annual basis. Supervisors are trained to model appropriate ethical standards, and supervisors and employees report to OIG suspected instances of fraud, waste, abuse, or wrongdoing by other employees or contractors in a variety of areas, including contract irregularities, conflicts of interest, theft, abuse of property, travel fraud, time and attendance abuse, misuse of a Government credit card, computer fraud and intrusions,

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and program mismanagement.

These reports may be made in writing or anonymously to a hotline. See the responses to Questions 219 and 220 for additional information on the ethics of NRC staff.

Question No: 229BS

Module 04: Management System of the Regulatory Body

Question

- 1) Does the Regulatory authority have a succession plan?
- 2) Is there an information and knowledge retention plan coordinated with the HR function?

Response

The NRC's Executive Resources Board (ERB), the governing body of the SES, engages in ongoing executive succession planning activities to identify potential successors for executive positions. Succession planning guides executive development and informs SES staffing decisions. The ERB determines skill sets needed and coordinates, monitors, validates, and reviews results of succession planning and developmental activities. Office directors and regional administrators, or their designees, hold ongoing succession planning discussions with executives in their respective organizations to share ERB succession planning activities, discuss career goals, and identify specific development, assessment, mentoring, or coaching needed.

Executives actively participate in the succession planning process by providing input regarding their career goals and working with their supervisor to develop an executive development plan tailored to their individual interests, learning preferences, and needs. Executives are encouraged to consider a wide range of developmental activities, such as reassignment or rotation within the NRC, formal training, mentoring or coaching, independent reading and development, Intergovernmental Personnel Act assignments, international assignments, and interagency projects, details, or rotations. Each executive is provided access to a mentor or executive development coach. The NRC is implementing an Executive Pairing Program to match experienced SES leaders with other executives so that both maximize their growth as leaders. Training was conducted in October 2009 to initiate executive pairings.

Senior leaders will complete a formal assessment tool (i.e., a 360 degree assessment) followed by a session with a private executive coach on the results of the 360 degree assessment and the process for leveraging their strengths.

Through the succession planning process, the NRC identifies potential successors for its executive positions, determines whether they are currently ready or need further development or experience, specifies further development that would benefit the executive and the NRC, and considers strategies for positions for which few or no immediate successors are identified.

Other components of succession planning apply to career paths below the executive corps. The SES CDP prepares individuals who have demonstrated exceptional executive potential for senior leadership positions at the NRC. Participants in the program engage in developmental assignments and formal training activities to enhance their executive competencies and to increase their awareness of public policy, programs, and issues. At the next lower level, the Leadership Potential Program is designed for individuals who aspire to be a team leader or supervisor, and who may have executive potential later in their careers. These programs are held approximately every 1½–2 years based on the projected needs of the agency.

Each organizational unit, as good management practice, is expected to engage in succession planning for its positions, including developing staff, ensuring adequate backup, and conducting knowledge management activities. This includes encouraging each employee to work with his or her supervisor on an individual development plan that identifies skills and assignments designed to develop employees and prepare them for jobs of greater responsibility.

Knowledge management is an integral part of the agency's strategic human capital management plan, which also includes strategic workforce planning, recruitment, and staff training and development. Because of the importance of the knowledge management program, an NRC executive serves as the agency's Knowledge Management Champion to establish leadership and encouragement throughout the agency, and to chair a Knowledge Management Steering Committee comprised of senior agency managers from each office. The NRC has also designated a Senior Advisor for Knowledge Management who works with staff organizations to identify, launch, and manage specific knowledge management initiatives focused on capturing expert knowledge and making it readily available agencywide.

The NRC has implemented a number of strategies to capture and share knowledge. Examples include training and developmental assignments, video interviews of subject matter experts, after-action reviews, electronic topic-based communities of practice, building a retention culture, documentation of agency processes, mentoring, and double encumbering key positions. The agency maintains a Web site to disseminate information on knowledge management and innovative methods and hosts meetings to familiarize staff with knowledge management initiatives and practices, both within and outside the NRC. The NRC has also briefed numerous other Federal agencies and representatives from other countries on the agency's knowledge management program. See the response to Question 254 for additional information on knowledge management tools and activities.

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Question No: 230

Module 04: Management System of the Regulatory Body

Question

- 1) Does the regulator have a strategic plan?
- 2) To what extent does it cover typical subject areas for strategic planning

Response

The NRC has a Strategic Plan, which is published as NUREG 1614. The Strategic Plan is required as part of the Government Performance and Results Act (GPRA), a law that requires agencies to publish a strategic plan.

GPRA requires that a strategic plan contain the following elements:

- a comprehensive mission statement covering the major functions and operations of the agency
- general goals and objectives, including outcome-related goals and objectives, for the major functions and operations of the agency
- a description of how the goals and objectives are to be achieved, including a description of the operational processes, skills, and technology, and the human capital, information, and other resources required to meet those goals and objectives
- a description of how the performance goals included in the plan required by Section 1115(a) of Title 31 shall be related to the general goals and objectives in the Strategic Plan
- an identification of those key factors external to the agency and beyond its control that could significantly affect the achievement of the general goals and objectives
- a description of the program evaluations used in establishing or revising general goals and objectives, with a schedule for future program evaluations

GPRA requires that the strategic plan shall cover a period of not less than 5 years forward from the FY in which it is submitted, and shall be updated and revised at least every 3 years. When developing a strategic plan, the agency shall consult with the Congress, and shall solicit and consider the views and suggestions of those entities potentially affected by or interested in such a plan. Further, GPRA states that developing a strategic plan shall be considered to be inherently governmental functions and that the drafting of strategic plans shall be performed only by Federal employees.

The NRC follows all the requirements of GPRA noted above in developing and updating its Strategic Plan.

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Question No: 231

Module 04: Management System of the Regulatory Body

Question

How and with what frequency does the regulatory body audit its internal processes to verify conformance with policies and plans and adherence to established procedures?

[See also Evaluation and Improvement of Quality Management]

Response

There are several independent and self-assessments performed of NRC programs.

Independent audits are performed by the U.S. Government Accountability Office (GAO). The GAO is an independent, nonpartisan agency that works for the U.S. Congress. The GAO investigates on its own initiative or in response to congressional requests and focuses on how expenditures of funds meet mandated objectives.

The GAO supports congressional oversight by the following activities:

- auditing agency operations to determine whether Federal funds are being spent efficiently and effectively
- investigating allegations of illegal and improper activities
- reporting on how well government programs and policies are meeting their objectives
- performing policy analyses and outlining options for congressional consideration
- issuing legal decisions and opinions, such as bid protest rulings and reports on agency rules

GAO advises Congress and the heads of executive agencies about ways to make government more efficient, effective, ethical, equitable, and responsive. The NRC reviews the results and recommendations for all investigations and audits of NRC activities performed by GAO and provides a written response of the NRC review and any planned actions.

In accordance with the 1988 amendment to the Inspector General Act of 1978, the NRC's OIG was established on April 15, 1989, as an independent and objective unit within the NRC to conduct and supervise audits and investigations relating to NRC programs and operations. The purpose of OIG's audits and investigations is to prevent and detect fraud, waste, abuse, and mismanagement and to promote economy, efficiency, and effectiveness in NRC programs and operations. In addition, OIG reviews existing and proposed regulations, legislation, and directives, and provides comments, as appropriate, regarding any significant concerns. The Inspector General reports to and is under the general supervision of the NRC Chairman but operates with personnel, contracting, and budget authority independent of that of the NRC. The OIG keeps the Chairman and the Congress fully and currently informed about specific issues, recommends corrective actions, and monitors NRC progress in implementing such actions. The 2009 audit plan is found at <http://www.nrc.gov/insp-gen/plandocs/2009annualplan.pdf>. The audit plan is comprised of four phases:

- 1)Survey phase: An initial phase of the audit usually is conducted to gather information, without detailed verification, on the agency's organization, programs, activities, and functions. An assessment of vulnerable areas determines whether further review is needed.
- 2)Verification phase: Detailed information is obtained to verify findings and support conclusions and recommendations.
- 3)Reporting phase: The auditors present the information, findings, conclusions, and recommendations that are supported by the evidence gathered during the survey and verification phases. Exit conferences are held with management officials to obtain their views on the issues in the report. Comments from the exit conferences and any written comments are presented in the published audit report.
- 4)Resolution phase: Positive change results from the resolution process, in which management takes action to improve operations based on the recommendations in the published audit report. Management actions are monitored until final action is taken on all recommendations. When management and OIG cannot agree on the actions needed to correct a problem identified in an audit report, the issue can be taken to the Chairman for resolution.

The U.S. Office of Management and Budget (OMB) requires agencies, including the NRC, to perform self-assessments using its Performance Assessment Rating Tool (PART). Results of these assessments are reviewed by OMB and the results are adjusted based on OMB's review. OMB considers these audits as part of its review of the agency's budget request. The frequency of these audits is dependent on the results of previous audits. NRC actions in response to PART reviews are reported in the Performance and Accountability Report (NUREG 1542).

The Federal Financial Integrity Act of 1982 (Integrity Act) requires the Chairman of the NRC to annually certify, with reasonable assurance, that NRC meets the following objectives: (1) efficient and effective operations, (2) reliable financial reporting, and (3) compliance with laws and regulations. At the NRC, these Integrity Act objectives are accomplished by meeting five standards:

- 1)risk assessment
- 2)control environment (includes safety culture)
- 3)control activities (includes IT systems)
- 4)information and communications
- 5)monitoring

The NRC's reasonable assurance determination process for FY 2009 included, but was not limited to, conducting risk assessment of assessable units (divisions) and reasonable assurance certifications from the office directors and regional administrators. These activities, combined with specific training opportunities, briefings, and specific tools, such as the FY 2009 Assessable Unit Checklist for Identifying Potential Risks, provide a strong culture at the NRC for compliance with applicable regulations and laws. The NRC guidance for financial management controls is contained in Management Directive (MD) 4.4, "Management Controls," dated May 18, 2004.

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Additionally, the NRC performs internal self-assessments, and in FY 2008, the NRC conducted internal program evaluations of the Operator Licensing Program, ROP, and Management Work Planning Process. For example, the specific focus of the Biennial Privacy Act System of Records Review of NRC-16, "Facility Operator Licensees Record Files (10 CFR Part 55)," was on personally identifiable information data. The review focused on ensuring that records are maintained in accordance with the published system notice, and that the system notice accurately describes the system of records. In addition, the review addressed the NRC's recordkeeping practices and ensuring that the records are maintained in accordance with the retention and disposition schedule, that records are only accessible to employees who have a "need to know," and that there are appropriate administrative, technical, and physical safeguards in place to ensure the security and confidentiality of these records.

Question No: 232

Module 04: Management System of the Regulatory Body

Question

Has the senior management defined the needed policies and the subject areas to be addressed?

Response

NRC policy is established by its senior management. This is done by various means, including Commission policy statements, changes to the regulations, direction from the Commission through memoranda, the NRC Strategic Plan, operating plans, and the NRC's budget authority. Through its management system, the NRC has established documents systems, including formal and informal programs that define the policies and delegation of authority for implementation of the policies. The delegations of authorities and roles and responsibilities of offices and managers are included the agency's MD system and OIs.

Policies governing the requirements for licensees are established through applicable laws approved by the U.S. Congress, by regulations approved by the Commission, and through licenses that are issued by NRR. Delegation of these authorities and procedures for implementation are established in the agency's MD system and OIs. See the response to Question 237 for additional information on the management system and examples of policies established by the NRC.

Question No: 233

Module 04: Management System of the Regulatory Body

Question

How does senior management ensure that staff members and organisational units understand the relationship between their work the regulator's policies?

Response

The NRC strives for employee and organizational units to understand the relationship between their work and the agency's policies by providing guidance in its organizational framework, communicating the importance of this work and policy nexus through a variety of means, and assessing the result through measuring outputs, staff performance, and feedback through surveys. The NRC's 5-year Strategic Plan outlines the agency's mission, goals, and strategies. Implementation of the Strategic Plan is assisted by the performance monitoring system and the NRC's vision and values. For example, the SE performance plans state the Strategic Plan goals and note how key programmatic accomplishments link to those goals. All other employees' performance plans contain elements that link to the Strategic Plan. These organizational guideposts provide a foundation for employees and organizational units to understand how their work contributes to the accomplishment of the agency's mission.

Within NRR, the office mission statement is both linked upward to the agency mission statement and cascaded down to division and branch activities, enabling all staff to see the relationship between their individual tasks and the agency's mission of protecting public health, safety, and the environment. Additionally, office training programs (for new, technical, and administrative employees) within the office include modules specifically to "gain an understanding of how their position supports the line organization in fulfilling the agency mission."

Many opportunities are provided throughout each year to emphasize this linkage: messages in the office newsletter and on the Web site, Lunch 'N Learn sessions with senior managers, and senior managers' meetings with secretaries, first-line supervisors, all hands, and all supervisors. Often, descriptions of agency and office actions are noted as supporting a specific safety or security goal or organizational objective of openness, effectiveness, and operational excellence.

Periodic surveys provide a benchmark on whether staff is incorporating this connectivity message: both the triennial OIG Safety Culture and Climate Survey and the biennial federal U.S. Office of Personnel Management's Federal Human Capital Survey includes questions regarding employees' understanding of the agency mission and their role in promoting it. In the 2005 OIG survey, 87 percent of responding NRC employees "believe strongly in the goals and objectives" of the organization, with 84 percent saying, "I believe NRC's commitment to public safety is apparent in what we do on a day-to-day basis." In 2009, the NRC was rated as the best place to work in the Federal Government, with the employee skills-to-mission match category rated highest, at 84.6 percent. That category measures whether or not employees feel that their skills and talents are used effectively and if they understand how their jobs are relevant to the organizational mission.

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Question No: 234

Module 04: Management System of the Regulatory Body

Question

Does the regulatory body have processes to promote internal communication for the sharing of critical or necessary information and instructions, and internal communication mechanisms to motivate people to work co-operatively and efficiently?

Response

All policies, guidance, and procedures that are part of the NRC management system (see the responses to Questions on the management system) are provided in written and electronic form. Communication and access to these documents is through the Agencywide Documents Access and Management System (ADAMS), the NRC Web site, SharePoint sites, and e-mail.

The NRC also supports communication among staff through many different informal communications. Nearly every NRC office has an office-specific online newsletter to communicate with staff. A recently-revised agency communications Web page provides agency guidance and procedures on communicating with internal audiences. Communication tools include the NRC Reporter, a Web-based newsletter used to communicate news and features about the agency to NRC staff; Chairman's Blog; NR&C, an electronic periodic used to communicate feature stories and other material about the NRC, staff, and retirees; EDO Update, an e-mail from the EDO used to communicate hand-picked topics and messages to NRC staff; and NRC Announcements, electronic announcements used to convey information of interest to all NRC employees and, in some cases, to alert employees to information of an urgent or time-sensitive nature. To ensure effective and consistent information sharing inside and between the agency offices, the NRC has official guidance on developing internal communication tools such as communication plans, key messages, questions and answers, frequently asked questions, talking points, posters, backgrounders, brochures, fact sheets, Commission Assistant Notes, NRC Daily Notes, and One Week Look Aheads. The purpose of these communication tools is to deliver a consistent and accurate agency message about a specific project, issue, or event to internal and external stakeholders. Communications specialists throughout the agency ensure that all staff members are reached, including those at Headquarters, at each regional office, and staff who are travelling.

Additionally, a Feedback and Share Web site was recently developed on the agency's internal communications Web page. The Web page is an automated distribution database that allows NRC employees to receive feedback on draft communication tools and to share communication tools with individuals from other NRC offices and regions.

The NRC encourages communication through face-to-face and virtual (e.g., telephone, video conferencing) meetings and includes standard in managers' performance plans for holding such meetings with staff in order to share information. Senior management leads by example, holding routine all-hands meetings (see the response to Question 233). The NRC formally evaluates staff on its communication, interpersonal skills, and teamwork by including specific elements and standards for these topics in employee performance plans, including plans for managers.

NRC holds its employees to the highest standard of involvement and responsibility for the decisions that are made. In addition to informal discussions, which generally resolve issues, NRC staff has various mechanisms for expressing and having its differing views heard by decisionmakers. This is accomplished through building an open, collaborative working environment supported by an Open Door Policy, a Non-Concurrence Process, and a Differing Professional Opinions Program. These programs are described in the response to Question 223AS.

For the second cycle (2007 and 2009), the Partnership for Public Service and the American University Institute for the Study of Public Policy Implementation ranked the NRC as a "Best Place to Work in the Federal Government." One reason for this recognition is NRC's commitment to maintaining an open and collaborative working environment.

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Question No: 235

Module 04: Management System of the Regulatory Body

Question

- 1) Does the regulatory body have processes for communicating with external parties or shareholders?
- 2) What areas are covered by the regulator's communication policies and procedures?

Response

All areas of NRC work activities are covered by the agency's communications policies. One of the themes and strategies in the NRC Strategic Plan, which applies to all NRC work, is the NRC's commitment to openness—appropriately informing and involving stakeholders in the regulatory process. The NRC views nuclear regulation as the public's business and, as such, believes it should be transacted as openly and candidly as possible to maintain and enhance the public's confidence. The following are two strategies for "openness":

- "Communicate about the NRC's role, processes, activities, and decisions in plain language that is clear and understandable to the public."
- "Initiate early communicate with stakeholders on issues of substantial interest."

Ensuring openness explicitly recognizes that the public must be informed about, and have a reasonable opportunity to participate meaningfully in, NRC regulatory processes. The NRC communicates information to its licensees and interested stakeholders through several types of communications.

The NRC has established formal processes for providing information to licensees, including transmitting licenses, orders, and inspection reports. In addition, the NRC frequently communicates with licensees through public meetings in which is discusses plant-specific issues and allows the public to observe and, at appropriate times, ask questions of the NRC. For generic issues impacting multiple licensees, the NRC will issue generic communications (e.g., generic letters, regulatory issue summaries) and, typically, hold public meetings to discuss these communications. All documents issued to licensees are captured in ADAMS and made available to the public as appropriate.

For generic regulatory changes, such as rulemaking, the NRC follows a formal process (e.g., LIC 300, "Rulemaking Procedures," dated July 5, 2001) that meets the Administrative Procedure Act. The Act prescribes the minimum procedural requirements that Federal agencies are required to follow when they promulgate rules and conduct adjudicatory proceedings. The NRC complies with the Administrative Procedure Act and all other laws applicable to the rulemaking process as it develops a regulation, and this includes providing advance notice of proposed rulemaking or other, less formal, notification of the contemplated action and request for public comment or other form of public participation.

For licensing actions, the NRC provides an opportunity to interested external stakeholders to participate in the proceeding through hearing processes and during the development of environmental impact statements and assessments.

For communications with other external stakeholders, such as Congress and other Federal agencies, the NRC provides formal reports (e.g., Performance and Accountability Report) and letters and makes these reports available to the public.

For issues of significant public interest, the NRC develops specific communication plans that include identification of all internal and external stakeholders, purpose of actions and communications, and the communication tools employed to achieve openness. Communication tools include holding public meetings, either in the vicinity of nuclear facilities or at NRC Headquarters or regional offices, issuing press releases (e.g., receipt of a significant licensing action), or developing and maintaining Web pages on the NRC's external Web site.

The NRC ensures open communication in a variety of ways. With the exception of security and proprietary information, the NRC shares written documents, guidance, and communication with all internal and external stakeholders. The external NRC Web site and ADAMS are the NRC's principal means of communicating public information about agency activities. In addition, to complement the agency's public outreach activities, the NRC has an established process to respond to requests made under the Freedom of Information Act in a timely manner. Additional information is available in the responses to Questions 253–255.

Question No: 236

Module 04: Management System of the Regulatory Body

Question

Does the regulatory body have a (quality) management system?

Response

The NRC has a management system that is established, implemented, assessed, and continually improved; however, this system is not described in one quality manual. The NRC management system is aligned with the goals of the organization and contributes to their achievement. The NRC communicates to employees the basic NRC policies, requirements, and procedures necessary for the agency to comply with Executive Orders, pertinent laws, regulations, and the circulars and directives of other Federal agencies. The scope and details of the management system are included in the response to Question 237.

IRRS Question and Response Report

Question No: 237

Module 04: Management System of the Regulatory Body

Question

- 1) Does the regulator have a written and published quality management system?
- 2) Does the regulator intend to establish one?

Response

Since its establishment in 1974, the NRC has emphasized safety culture promotion and continuous improvement. As part of the NRC's integrative approach, the emphasis on continuously improving the safety culture of the agency over many years is an evolution of the earlier concept of quality management.

NRC MD 1.1, "NRC Management Directives System," dated February 17, 2009, states that it is the policy of the NRC to communicate to NRC employees the basic NRC policies, requirements, and procedures necessary for the agency to comply with Executive Orders, pertinent laws, regulations, and the circulars and directives of other Federal agencies. The NRC prepares and issues directives and handbooks, as well as revisions to these documents, to meet the requirement that all Federal agencies have an internal management directive system.

The NRC has and maintains a quality management system (QMS) that covers the entire organization, everything from internal policy and guidance to document control to nuclear plant licensing and inspections. However, this system is not described in one quality manual. Therefore, resources are devoted to the development of an overarching document that describes the relationship of each component of NRC's management system to ensure clear NRC staff understanding of how the agency's policies, instructions, and guidance relate to each other to support quality in NRC activities. Reference the draft of this document for an overview of the management system. In addition, below is an outline of the management system.

The NRC management system is designed to communicate and implement the basic NRC policies, requirements, procedures, and guidance necessary for the agency to comply with Executive Orders, pertinent laws, regulations, and the circulars and directives of other Federal agencies. Some examples of other Executive Orders, pertinent laws, regulations, and the circulars and directives of other Federal agencies include the following:

- the NRC's enabling legislation—Atomic Energy Act of 1954, as amended, Energy Reorganization Act of 1974, Reorganization Plan of 1980, Energy Policy Act of 1992, Energy Policy Act of 2005
- Federal laws and regulations—Administrative Procedure Act, which has controls and requirements for establishment of regulations, including requirements for extensive public participation in their development, requirements in 5 CFR, "Administrative Personnel," for recruiting, hiring, and training personnel; requirements in 48 CFR, "Federal Acquisitions Regulation System," for Federal acquisition requirements
- OMB requirements regarding budget and funding authorization, and U.S. Office of Personnel Management requirements—requirements for competitive recruiting, promotions, and training requirements, and for NRC senior managers to implement annual performance plans with outcomes that support the strategic goals and outcomes of the agency

It is the policy of the NRC to communicate this information to NRC employees (MD 1.1). The NRC accomplishes this through the implementation of its management system, consisting of policy and guidance documents that fall into the following five levels:

Level 1: NRC Commission policies and documents—This is the highest level of the management system and follows formal processes for development, review, and implementation. Policies and documents included in this level require Commission review and approval and include Commission policy papers and orders, staff requirements memoranda, the "Strategic Plan for Fiscal Years 2008–2013," approval of rules and regulations, enforcement policy, and the Comprehensive Diversity Management Plan. The review and approval of these documents is controlled by internal Commission procedures that apply to the conduct of Commission business, including issuance of policies and documents, conduct of meetings, and requirements for public access and involvement.

Level 2: NRC policy implementation documents—These documents address general, high-level policy implementation. At the center of policy implementation is the MD system. The MD system meets Federal requirements to have an internal management directive system and specifies policies, objectives, responsibilities, authorities, and other requirements in specific functional areas. MDs guide, inform, and instruct NRC employees in the performance of their jobs and communicate policies to enable employees to work effectively within the agency and with other agencies, regulated entities, and the public. MDs have associated handbooks that contain instructional material consisting of procedures, guides, standards, reporting requirements, and exhibits. The MD system includes requirements for control and management of the system. Other key policy implementation documents include: the Collective Bargain Agreement, which establishes requirements for relations between employees and NRC management with respect to conditions of employment; the Human Capital Strategic Plan; Delegations of Authority memoranda to establish levels of authority and responsibilities for NRC staff; EEO instructions and guidance; and the outreach and compliance coordination program. In order to ensure timely communication to staff of policy implementation changes, the NRC issues and e-mails electronic memoranda (i.e., "yellow announcements") to all NRC staff.

Level 3: Agency guidance documents—These documents provide guidance, direction, and instructions that are applicable to the activities of multiple NRC offices. For example, the NRC Inspection Manual (IM) governs NRC inspections of regulated activities. The IM includes guidance for the conduct of inspections, areas to review and assess, and level of effort. The IM governs all NRC inspections of regulated entities, including inspections of nuclear power plants (NPPs). Another example is the Enforcement Manual, which governs actions regarding regulated entities to emphasize the importance of compliance with regulatory requirements and to encourage prompt identification and prompt, comprehensive correction of violations. Agency guidance also includes systems for development and issuance of guidance (e.g., regulatory guides, NUREGs). Although the administration of these guidance systems is at the agency level, typically the program offices are responsible for the development and maintenance of guidance for the entities they regulate. Although agency guidance is implemented in different forms and under different processes, each form of guidance has an established process for development, review, and updating. All guidance is made available to stakeholders through multiple forms of communication, including the NRC Web site.

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Level 4: Office-specific guidance—Documents at this level contain extensive detail that applies internally to a particular NRC organization. In NRR, the NRR OIs govern administrative activities, the NRR staff training and qualifications program, NPP licensing, interactions and communications with stakeholders, NPP inspection and oversight, and international activities. The OI system includes requirements for management of the OIs. Other NRC offices and regions have similar types of guidance specific to their activities, including guidance that supports regulation of NPPs.

Level 5: Program- and task-specific guidance—The documents at this level reflect the unique nature of the various NRC regulatory activities. For example, Standard Review Plans (SRPs) are issued as NUREGs and provide specific guidance for licensees and the NRC in the development and review of applications. Interim staff guidance documents (ISGs) provide further SRP guidance and are issued in a timely manner as questions arise regarding implementation of SRPs. The guidance included in ISGs is included in the applicable SRP during its next revision. The guidance at the division, program, and task level is the most focused and yet diverse group of guidance of any of these levels. In NRR, this type of guidance includes Program Management, Policy Development and Analysis Staff (PMDA) information notices, which provide corporate information; inspection notebooks with technical information; branch technical positions; and briefing guides with communication information. This level of guidance is used for providing direction, instructions, and information to NRC staff.

Question No: 238

Module 04: Management System of the Regulatory Body

Question

How did the regulator's management express its commitment to the establishment, implementation and improvement of a Q-M system?

Response

When established, the NRC management system was not specifically designed to the standards of any domestic or international quality management standards. However, NRC management committed to establishing and implementing a system to meet Federal requirements, which align with the goals and intent of GS-R-3, "The Management System for Facilities and Activities Safety Requirements" (e.g., Strategic Plan, MDs, Performance Assessment Rating Tool reviews). See the response to Question 244 regarding comparison with international standards.

NRC management is committed to the implementation and improvement of the NRC management system. This is illustrated through the review and approval process for management system documents. For example, Level 2 documents (see the response to Question 237) require the review and approval of the EDO. Some Level 2 documents, such as MDs, also require review and concurrence by program office directors. Further, as part of development these documents, the NRC obtains both internal and external stakeholder input. Evidence of management's commitment to implementation of the management system is its review of performance in meeting the agency's goals and performance targets.

In order to foster and promote a positive work environment that improves regulatory decisionmaking and maximizes the potential of all individuals, NRC management supports the NRC management system through a wide variety of working groups and evaluations to improve the safety culture and management system of the agency. These activities include audits, reviews, assessments, and revisions to the system. See the responses to Questions 231, 263, and 274 for additional information on these improvement activities.

Question No: 239

Module 04: Management System of the Regulatory Body

Question

What are the means to inform the staff about the deployment of a Q-M system and to promote its positive attitude to the adoption of the system?

Response

The NRC's commitment to openness and transparency in its regulatory actions extends to its internal stakeholders. The NRC has several communication vehicles in place for communicating with management and staff on a regular basis. Nearly every NRC office has an office-specific online newsletter to communicate with staff. A recently revised agency communications Web page provides agency guidance and procedures on communicating with internal audiences. Communication tools include the NRC Reporter, a Web-based newsletter used to communicate news and features about the agency to NRC staff; Chairman's Blog; NR&C, an electronic periodic used to communicate feature stories and other material about the NRC, staff, and retirees; EDO Update, an e-mail from the EDO used to communicate hand-picked topics and messages to NRC staff; and NRC Announcements, electronic announcements used to convey information of interest to all NRC employees and, in some cases, to alert employees to information of an urgent or time-sensitive nature.

In fact, the EDO Update newsletter was created in direct response to feedback from the OIG Safety Culture Survey. In addition, the content of the management system is emphasized to the staff through various means, including qualification programs (in both the regions and program offices), office procedures and instructions, and training (e.g. allegations training, security awareness). Also, as the management system is reviewed and revised, employees are notified by e-mails to key users, general e-mails to all employees affected by the changes, or through agencywide electronic announcements. Employees are encouraged to review the revised documents for changes that may affect their position. When appropriate, staff is provided specific training (e.g., classroom, seminars, online review of presentations) on changes so that the staff can make a smooth transition to the new process.

IRRS Question and Response Report

Question No: 240

Module 04: Management System of the Regulatory Body

Question

What staff resources has the management devoted to the development of Q-M?

Response

The NRC has and maintains a QMS that covers everything from internal policy and guidance to document control to nuclear plant licensing and inspections; however, this system does not exist in one quality manual. Therefore, resources are devoted to the development of an overarching document that describes the relationship of each component of NRC's management system to ensure clear NRC staff understanding of how agency policies, instructions, and guidance relate to each other to support quality in NRC activities. In addition, resources are developed to the continued maintenance and improvement of the management system. See the response to Question 238 regarding assessment and improvement of the management system.

Question No: 241

Module 04: Management System of the Regulatory Body

Question

- 1) What kind of training has been provided to different participants in the development and implementation process?
- 2) What kind of training has been provided to the staff relating to the improvement of the Q-M system?

Response

NRC management is committed to the implementation and improvement of the NRC management system. NRC managers strive to ensure that safety is taken into account in all the activities of the agency in order to ensure the protection of people and the environment. The NRC continues to emphasize the promotion and continuous improvement of the safety culture.

The NRC has a broad curriculum to educate the workforce on the management system and quality management principles. Examples of courses include the following:

- NRC: What It Is and What It Does—provides an overview of the roles and responsibilities of the major offices in the NRC
- NRC and Its Environment—helps participants understand how major organizations external to the NRC affect the way the NRC conducts its business
- Building a Quality Management System—a recently deployed course that introduces the QMS model, which is a conceptual framework for the International Organization for Standardization (ISO) 9001:2000, Quality Management Systems—Requirements,” standard requirements
- Continual Quality Improvement—ISO 9000:2000 standard that structures its QMS model into four major areas: management responsibility, resource management, product realization, and measurement, analysis, and improvement; measurement, analysis, and improvement are vital components of the standard
- Processes for Quality Products and Services—ISO 9000:2000 standard that structures its QMS model into four major areas: management responsibility, resource management, product realization, and measurement, analysis, and improvement; product realization is one vital component of the standard
- Quality Assurance and Quality Control—provides all project stakeholders with documented guidelines for delivering a quality product or service
- NRC Qualification Programs—consists of three parts: general requirements, position specific requirements, and oral qualification boards; many learning activities focus on developing engineers and scientists into regulators

See the reply to Question 239.

Question No: 242

Module 04: Management System of the Regulatory Body

Question

Does the quality management system cover, or is it intended to cover, the whole organisation's responsibilities or just part of them?

Response

The NRC management system covers the whole organization. Although the management system is not captured in one document, it covers all the key aspects of GS R 3. For further detail on the NRC's management system, see the response to Question 237.

IRRS Question and Response Report

Question No: 243

Module 04: Management System of the Regulatory Body

Question

What are the quality management principles adopted by the regulator and do they include the following elements:

- main focus on the mandate and legislative objects of the regulator

Response

Its values guide the NRC, and the agency maintains certain principles in the way it carries out its regulatory activities. These principles focus on ensuring safety and security while appropriately balancing the interests of the NRC's stakeholders, including the public and licensees. The NRC adheres to the principles of good regulation—*independence, openness, efficiency, clarity, and reliability*. (See the response to Question 219 for additional information on the values and principles of good regulation.) The agency strives to put these principles into practice with effective, realistic, and timely regulatory actions. These values guide every action the NRC takes, from a decision on a safety, security, or environmental issue to how it performs an administrative task, to how NRC staff engage fellow employees and other stakeholders. Following these principles ensures that the NRC addresses the following elements:

Main focus on the mandate and legislative objects of the regulator – The management system is designed to communicate and implement the basic NRC policies, requirements, procedures, and guidance necessary for the agency to comply with Executive Orders, pertinent laws, regulations, and the circulars and directives of other Federal agencies, including requirements and controls for NRC employees and for the regulated community. (See the response to Question 237.)

-Exercise and maintenance of leadership—The NRC engages in a succession planning process, through which it identifies skills needed and potential successors for senior leadership positions, determines development that would benefit executives to prepare them for such NRC positions, and considers strategies for filling positions for which the NRC has few potential successors. The process informs selections for NRC positions and the establishment of executive development plans for all executives. (See the response to Question 227.)

-Consultation and involvement of stakeholders—The NRC believes that nuclear regulation is the public's business and must be transacted publicly and candidly. Development of key documents includes input, consultation, and sharing of information with both internal and external stakeholders. (See the response to Question 223 for an example of how the NRC seeks stakeholder input.)

-Process definition—Each document within the management system includes a definition of affected processes.

-Knowledge retention—The NRC has incorporated knowledge management into its strategic workforce planning with the intent of becoming better able to identify short- and long-term critical skill gaps. The NRC has adopted an agencywide knowledge management plan that serves as a framework to integrate new and existing approaches that generate, capture, and transfer knowledge and information relevant to the NRC's mission. (See the response to Question 254.)

-Fact-based decisionmaking—The management system includes fact-based decisionmaking. (See the response to Question 272AS.)

-Partnerships and cooperation to leverage resource and capabilities—The management system includes partnership and cooperation starting at the initial budget development process through the reallocation of resources in response to emerging issues or to challenges in meeting operating targets. (See the response to question 275.)

-Continuous improvement—The management system is continually reviewed and improved. (See the response to Question 274 for a description of how the NRC is continually improving its management processes.)

IRRS Question and Response Report

Question No: 244

Module 04: Management System of the Regulatory Body

Question

How does management system of the regulatory body measure up to internationally recognised quality management standards and practices (e.g. of the International Organisation for Standardisation (ISO), the European Foundation for Quality Management (EFQM), the National Quality Institute (NQI), Baldrige National Quality Programme (BNQP), etc.) or IAEA guidance (e.g. IAEA TECDOC-1090, IAEA Safety Standards Series Draft Guides DS113

Response

Although not specifically designed to International Atomic Energy Agency (IAEA) standards, the NRC's management system compares favorably with and meets internationally recognized quality management standards, including those set forth in GS R 3, "The Management System for Facilities and Activities Safety Requirements." A comparison of NRC's QMS compares favorably to the criteria described in GSR3:

(1) Management System: The NRC has an established management system that is regularly assessed and continually improved. For example, the NRC regularly administers staff surveys to obtain feedback about employee perceptions, including perceptions of leadership, alignment with mission, cooperation within and between organizations, and communications and information sharing. This feedback is used to continually improve the strong safety culture that is promoted by the agency. In so doing, the NRC ensures that the management system is aligned with the agency's goals. (Additional detail on this factor can be found in the responses to Questions 226 and 237.)

(2) Management Responsibility: Management at all levels in the NRC demonstrates its commitment to the establishment, implementation, assessment, and continual improvement of the management system and is held accountable through a comprehensive performance management system. The critical performance elements for each employee and supervisor are linked to the agency's strategic goals of safety and security, and each performance management plan must show a link to the NRC's organizational excellence strategies of openness, effectiveness, or operational effectiveness. (Additional detail on this factor can be found in the responses to Questions 226 and 238.)

(3) Safety Culture: In accordance with IAEA guidance, the NRC supports a strong safety culture by the following:

- ensuring a common understanding of the key aspects of safety culture within the organization
- providing the means by which the organization supports individuals and teams in carrying out their tasks safely and successfully
- reinforcing a learning and questioning attitude at all levels of the organization
- providing the means by which the organization continually seeks to develop and improve its safety culture

For example, the agency employs several processes for resolving technical issues. These include the nonconformance process, the differing professional opinion process, and the grievance process. Difficult technical issues are resolved at the lowest, most expert level possible, or resolved by facilitated discussion and resolution involving management. (Additional detail may be found in the response to Question 234.)

(4) Resource Management: NRC management determines the amount of resources necessary and provides the resources required to carry out the activities of the NRC. (Additional detail on this factor can be found in the responses to Questions 227, 229AS, 229BS, and 265.)

(5) Process Implementation: NRC processes meet requirements and deliver products to support the safety mission of the agency. Specifically, documents and products are controlled (see the responses to Questions 251, 254, and 255). Purchasing requirements are well established and documented (see the response to Question 258). Internal communications concerning the implementation and effectiveness of the management system takes place at all levels of the NRC (see the responses to Questions 235 and 239). Organizational changes are evaluated, communicated, monitored, tracked and recorded to ensure that safety is not compromised.

(6) Measurement, Assessment, and Improvement: The effectiveness of the NRC management system is monitored and measured on a continual basis to confirm the ability of NRC processes to achieve the intended results and to identify opportunities for improvement. (See the discussion of the management system above and the response to Question 263.)

Because the management system does not exist in one quality manual, resources are devoted to the development of an overarching document that describes the relationship of each component of NRC's management system to ensure clear NRC staff understanding of how the agency's policies, instructions, and guidance relate to each other to support quality in NRC activities.

IRRS Question and Response Report

Question No: 244AS

Module 04: Management System of the Regulatory Body

Question

- I. What are the performance indicators used by the Regulator to manage internal processes and monitor perceptions of its stakeholders?
- II. Were the performance indicators developed with input from stakeholders and licensees?
- III. How often are these performance indicators reviewed by management?

Response

The performance measures used by the NRC to manage internal processes are detailed in the following three publications: NUREG 1614, NUREG 1100, and NUREG 1542. In addition, the agency establishes performance indicators and tracks performance in NRC office operating plans during the year. Under the SPO process, managers of program offices receive feedback from their internal stakeholders. (For a discussion of the SPO rating process at the NRC, see the responses to Questions 225, 264, 265, and 267.)

The NRC carefully considered internal stakeholder and licensee input to the Strategic Plan and developed the “FY 2008–2013 Strategic Plan Comment Resolution Matrix,” which identifies each commenter, the comment provided and the disposition for that comment. This information remains as a companion document to the published Strategic Plan (NUREG 1614, Volume 4).

The NRC’s performance indicators are reviewed at least monthly in NRR and at least quarterly by NRC senior management. The NRC also provides quarterly and semiannual reports to Congress (at <http://www.nrc.gov/reading-rm/doc-collections/congress-docs/monthly-reports/>) in which it describes the agency’s progress in achieving the goals outlined in the Strategic Plan. The reports to Congress also provide examples of the various external stakeholder interactions that provide a forum for external feedback on staff initiatives.

For the NRC, effectiveness of corrective actions on shortfalls in performance is addressed in the Performance and Accountability Report (NUREG 1542). For NRR, the performance metrics and improvement strategies are reported in monthly management discussions of the Performance Monitoring Report. Shortfalls in performance are addressed in NRC management reviews during the FY and also in the NRC’s Performance and Accountability Report at year end. Corrective actions are developed to address any shortfalls and progress tracked. The effectiveness of the corrective actions can be measured by monitoring the performance measure results.

The NRC receives feedback in a variety of ways. OMB and Congress provide feedback through the budget cycle. Internal stakeholder satisfaction is reflected in the SPO process and is captured in more detail in periodic employee surveys. In addition, external stakeholders are encouraged to participate in public meetings and to capture and provide their perceptions on the meeting topics as well as on the NRC’s interactions with the public. Some major reactor regulation programs also use public surveys to gather public perceptions. For example, the ROP uses a semiannual public survey to capture specific comments from external stakeholders. Those survey responses, like all feedback to the NRC, are evaluated, responses are developed and published, and if appropriate, changes are made to programs, processes, and guidance documents.

Question No: 245

Module 04: Management System of the Regulatory Body

Question

- 1) What existing documents describe the management systems of the regulator?
- 2) What existing documents describe the functions, activities, and practices of the regulator?
- 3) Do these documents describe every existing process?

Response

The NRC has and maintains a QMS that covers the entire organization, from internal policy and guidance to document control to nuclear plant licensing and inspections. However, this system is not described in one quality manual. Therefore, resources are devoted to the development of an overarching document that describes the relationship of each component of the NRC’s management system to ensure clear NRC staff understanding of how the agency’s policies, instructions, and guidance relate to each other to support quality in NRC activities. (See the response to Question 237 for additional information on the management system.)

An example of one piece of the management system that includes a description of the above information is the MD system. As noted in the response to Question 237, the MD system is at the center of the Level 2 NRC policy implementation documents. The MDs are divided into 14 broad categories and encompass the NRC’s organizational structure and activities. MD Volume 9, “NRC Organization and Functions,” is a comprehensive set of documents that outlines the basic policies and standards for the NRC’s organizational structure and assigns responsibility to organizational components. More specifically, MD 9.27, “Organization and Functions, Office of Nuclear Reactor Regulation,” details the management responsibilities for the office director of NRR and assigns him the responsibility to supervise, direct, coordinate, and approve the activities of the various organizational units within the office.

IRRS Question and Response Report

Question No: 246

Module 04: Management System of the Regulatory Body

Question

1. What hierarchy of Q-M documents has the regulator decided to develop?
2. How many levels of documents were identified?

Response

The NRC management system was not specifically designed to the standards of any domestic or international quality management standards. However, aspects of the system were designed to meet Federal requirements that align with the goals and intent of GS R 3 (e.g., Strategic Plan, MD, Performance Assessment Rating Tool reviews).

The NRC management system is designed to communicate and implement the basic NRC policies, requirements, procedures, and guidance necessary for the agency to comply with Executive Orders, pertinent laws, regulations, and the circulars and directives of other Federal agencies, including requirements and controls for NRC employees and for the regulated community. The hierarchy of documents that accomplish this is as follows:

- Level 1—NRC Commission policies and documents
- Level 2—NRC policy implementation documents
- Level 3—agency guidance documents
- Level 4—office-specific guidance
- Level 5—program- and task-specific guidance

For more information on each level, please refer to the response for Question 237.

Question No: 247

Module 04: Management System of the Regulatory Body

Question

1. Does a quality manual exist?
2. Does it describe how the regulator operates in its different areas of activity?

Response

The NRC has and maintains a QMS that covers the entire organization, from internal policy and guidance, to document control, to nuclear plant licensing and inspections. However, this system is not described in one quality manual. Therefore, resources are devoted to the development of an overarching document that describes the relationship of each component of the NRC's management system to ensure clear NRC staff understanding of how the agency's policies, instructions, and guidance relate to each other to support quality in NRC activities. (See the response to Question 237 for additional information on the management system.)

The management system includes policies and procedures that incorporate the IAEA performance criteria listed above. For example, it includes a Strategic Plan that sets out the agency's mission and goals; a Human Capital Strategic Plan and supporting documents that support recruiting, hiring, and training of staff; document and record control procedures (see the responses to Questions 251, 254, and 255); and regulations, policies, and procedures for review and assessment, inspection, and enforcement (see the responses to the Questions in appropriate Modules).

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Question No: 248

Module 04: Management System of the Regulatory Body

Question

To what extent does the quality manual identify the decision-making authority and accountability of the staff?

Response

The NRC management system is designed to communicate and implement the basic NRC policies, requirements, procedures, and guidance necessary for the agency to comply with Executive Orders, pertinent laws, regulations, and the circulars and directives of other Federal agencies, including requirements and controls for NRC employees and for the regulated community. These orders, laws, and regulations establish enabling authority for the NRC and for certain positions in the NRC, such as program office directors. These are then implemented through the management system (see the response to Question 237).

Examples of decisionmaking authority and accountability of staff are included in MDs, delegations of authority, and staff training. For example, MDs are divided into 14 broad categories and encompass the NRC's organizational structure and activities. MD 9 is a comprehensive set of documents that outlines the basic policies and standards for the NRC's organizational structure and assigns responsibility and authority to organizational components. More specifically, MD 9.27 details the management responsibilities for the office director of NRR and assigns him the responsibility to supervise, direct, coordinate, and approve the activities of the various organizational units within the office.

Authorities and responsibilities are delegated to management and staff through specific memoranda and issuance of delegation of authority policies. In NRR, OI ADM 200, "Delegation of Signature Authority" Revision 9, dated October 31, 2004, includes the specific authorities and responsibilities for its activities, ranging from authorities for personnel actions and decision to review, concurrence, and issuance of documents to licensees (e.g., licenses). To ensure staff has knowledge of their responsibilities and authorities, as well as the skills and abilities needed to meet their responsibilities, the NRC has established qualification programs. All NRR employees receive training through NRR OI ADM-504, "Qualification Program" (for technical staff); NRR OI ADM-505, "NRR Administrative Qualification Program" (for administrative staff); and, NRR OI ADM-503, "NRR New Employee Orientation and Training Guide." Other offices within the NRC have similar office-level instructions that clearly define the decisionmaking authority and accountability of staff and required training.

Question No: 249

Module 04: Management System of the Regulatory Body

Question

How does the quality manual (or other Q-M document) specify the expectations and criteria for meeting documents?

Response

The expectations for meeting the agency's goals are included in the NRC's Strategic Plan (NUREG 1614). The Strategic Plan describes how the agency intends to accomplish its mission and establishes the Commission's strategic direction by defining the vision, goals, and outcomes it intends to pursue. In particular, the Strategic Plan focuses on the goals of safety and security and strategies for organizational excellence including openness, effectiveness, and operational excellence. Criteria for achieving each goal and strategy in the Strategic Plan are gauged primarily through performance measures that have been developed for the agency's annual Performance Budget (NUREG 1100) and are reported in the annual Performance and Accountability Report (NUREG 1542). Each year, the NRC publishes its Performance Budget. This publication describes the agency's programs in the performance plan, the budget estimates for these program activities, and the distribution of the budget by major program. The performance plan also includes goals and measures that gauge the agency's success in accomplishing its mission. Criteria are further defined through the development of operating plans with clear performance targets.

The NRC documents its evaluation of meeting the expectations and criteria. For each FY, the NRC evaluates its own performance against the previous year's Performance Budget (NUREG 1100). The Performance and Accountability Report (NUREG 1542) presents a comprehensive and integrated picture of the agency's performance for a specific FY. This report includes the following elements:

- the NRC's audited financial statements
- the results of an evaluation of management controls
- a report on the agency's success in achieving its strategic and performance goals
- the results of any significant assessments of program activities that were carried out during the reporting period
- the NRC Inspector General's most serious management challenges facing the agency and how the NRC is addressing them

Each program office, including NRR, reviews and adjust operating plans on a quarterly basis and documents the results of these reviews to the EDO. See the responses to Questions 225, 244AS, 264, 265, and 267 for information on how the NRC uses operating targets to evaluate performance and manage resources.

The NRC implements a graded approach to manage and adjust performance through its delegations of authority, which provide expectations for all NRC staff. The establishment of these delegations to manage and review work and performance account for the significance of the activities and empowers staff to make fact-based decisions.

IRRS Question and Response Report

Question No: 250

Module 04: Management System of the Regulatory Body

Question

How are the quality manual updated and other Q-M documents updated?

Response

Each document system within the management system has its own requirements and procedures for review and update. For example, the Strategic Plan is updated and revised at least every 3 years in accordance with requirements of the GPRA and includes extensive stakeholder input. MDs are maintained in accordance with MD 1.1. In 2005, agency officials recognized that the NRC's MD system needed improvements and formed a Management Directives working Group (ADAMS Accession No. ML0611990061, "Final Report of the Management Directives Working Group"). One of the Working Group recommendations was that the MDs be reviewed and reissued every 5 years. As a result, the ADM established the 5 year review plan (ADAMS Accession No. ML081540095), in which all agency offices have been or will be requested to review the status of MDs under their purview. This 5-year plan is currently ongoing (from 2008 until 2012). Some MDs have already been through a review, and some are scheduled at a later date within the 5-year time frame. NRR OIs are reviewed and updated every 3 years in accordance with OI ADM 100, Revision 1, "Preparing and Maintaining NRR Office Instructions," dated May 13, 2002.

Question No: 251

Module 04: Management System of the Regulatory Body

Question

Did the management establish a documentation system to control the preparation, review, approval, issuance and revision of documents?

Response

The Office of Information Services (OIS) maintains ADAMS, which contains most of the official agency records of all newly created or received NRC unclassified programmatic and administrative records that were kept in paper recordkeeping systems before April 1, 2000, except for unclassified Safeguards Information (SGI), allegations, and records determined to be inappropriate for electronic maintenance. ADAMS is a critical component of the NRC's document control process, and therefore it is categorized as a "major" IT system, which means that the system must meet rigorous standards. One of those standards is a certification and accreditation process to ensure that the IT system's vulnerabilities are identified and resolved, and to provide adequate information security protection for all documents stored in ADAMS.

All documents entered into ADAMS that are to be made publicly available are required to have a Sensitive Unclassified Non-Safeguards Information (SUNSI) review. All documents that are to be made publicly available in ADAMS will be viewable via the NRC's public Web site. NRR's Web sites specifically cite the ADAMS accession number for all documents that have been declared as official agency records. In addition, any document intended to be placed on an NRR Web site is subjected to multiple levels of review and approval prior to being placed on the Web. These quality control measures are intended to facilitate version control while avoiding duplication of documents.

For additional information, please refer to the response to Question 250 regarding preparation, review, approval, issuance, and revision of the management system and its documents. See the responses to Questions 253–255 regarding processes and controls for issuance, distribution, and control of agency official records.

IRRS Question and Response Report

Question No: 252

Module 04: Management System of the Regulatory Body

Question

To what extent is the regulatory body's document management system up to-date and complete?

Response

The MDs used by the NRC are maintained in accordance with MD 1.1. In 2005, agency officials recognized that the NRC's MD system needed improvements and formed a Management Directives working Group (ADAMS Accession No. ML0611990061, "Final Report of the Management Directives Working Group"). One of the Working Group recommendations was that the MDs be reviewed and reissued every 5 years. As a result, the Office of Administration established the 5 year review plan (ADAMS Accession No. ML081540095), in which all agency offices have been or will be requested to review the status of MDs under their purview. This 5 year plan is currently ongoing (from 2008 until 2012). Some MDs have already been through a review, and some are scheduled at a later date within the 5 year time frame.

It is the policy of the NRC that all official records made or received by the NRC in the course of its official business comply with the regulations governing Federal records management issued by the National Archives and Records Administration (NARA) and the General Services Administration. All internally and externally generated records and documents are processed, maintained, distributed, made available to the public, and preserved or destroyed, as appropriate. ADAMS maintains appropriate NRC unclassified, non-SGI, official program-related records in a centralized electronic records repository. The NRC's publicly available documents are made available to the public via the NRC's external Web site and the ADAMS public libraries. In addition to ADAMS, the NRC maintains hard copy and electronic record- and document-handling systems necessary to meet the needs of the agency. All NRC systems, including ADAMS, are designed to meet NARA regulations.

It is also the policy (per MD 3.17, "NRC Information Quality Program," dated April 9, 2009) of the NRC to ensure the quality of all information it relies on for making decisions or disseminates to the public. The NRC's policies and practices are designed to ensure that the appropriate level of quality commensurate with the nature of the information is established and maintained. Thus, the most influential scientific, financial, and statistical data are subject to the most rigorous quality standards. Influential scientific, financial, or statistical information is defined as information that forms the technical basis for a substantive rulemaking that has substantial impact on an industry. The NRC will correct information that does not meet its standards and OMB's guidelines on the basis of the significance and the impact of the correction.

Question No: 253

Module 04: Management System of the Regulatory Body

Question

How does the document control system ensure that staff is provided with easy access to all relevant documentation?

Response

The NRC has established a document control system that is the official repository for all official agency records. This system is ADAMS, and it is available to all NRC staff as part of the desktop infrastructure. ADAMS has easy search capabilities, because documents residing in ADAMS are profiled to be retrievable according to attributes such as the document date, the author's name and affiliation, the date of availability in ADAMS, the document type (according to a structure list of choices), document title, and document text. Additionally, logical operators such as "greater than" and "less than" that allow the staff to search by value ranges.

All documents necessary for the NRC to conduct its regulatory business are maintained in ADAMS. For example, all MDs and OIs are contained in ADAMS; in addition, the offices maintain hard copies, as necessary. There is training available to staff at the agency's training facility (i.e., Professional Development Center). This training is a tiered approach to allow casual users to be fully trained, while the administrative assistants who are responsible for data entry of the profiles may receive even more intensive training at the Professional Development Center. In addition, there are contractors onsite whose sole job is to perform batch data entry and scanning of documents to ensure they are available within ADAMS in a timely manner. (See the response to Question 253AS for additional information about ADAMS.) The NRC heavily utilizes IT tools and services to communicate with staff. Almost all documents that govern agency policy or procedures or are necessary for staff to perform its jobs are available to staff through the NRC's internal Web site or through SharePoint portals. These tools are especially helpful for documents that are considered a "work-in-progress" or for which there is a need for shared consensus. In addition, for time sensitive notifications, the NRC maintains current communication with staff via e-mail and inclusion on its internal Web site. The NRC also uses its external Web site to communicate with external stakeholders. Almost all applicable guidance for licensees is included on the external Web site, and the Web site is also a notification system for meetings and conferences. (For additional information, see the response to Question 253AS.)

IRRS Question and Response Report

Question No: 253AS

Module 04: Management System of the Regulatory Body

Question

What is the information technology infrastructure that helps achieve safety objectives related to the use of atomic energy?
Is this infrastructure adequate to allow all stakeholders access to needed information?

Response

ADAMS is the agency repository for official agency records up to, but not including, SGI. Official agency records include the documents that are part of the management system, internal correspondence, and correspondence between the NRC and its stakeholders. ADAMS allows users, depending on their roles and their need to know, access to the information through several interfaces. Stakeholders within the NRC can access ADAMS from their desktop computers. Stakeholders outside of the NRC can access publicly available records through the ADAMS Web interface.

The staff adds documents to ADAMS and uses the system to declare documents as official agency records. These records can be made available to the public at various times depending on the need. In general practice, an NRC-generated document is made available to the public through ADAMS, if it is marked publicly available, on the sixth working day after the date of the document. Documents resident in ADAMS are profiled to be retrievable according to attributes such as the document date, the author's name and affiliation, the date of availability in ADAMS, the document type (according to a structured list of choices), document title, and document text. Logical operators such as "greater than" and "less than" permit searches by ranges of values.

ADAMS periodically performs a satisfaction survey. The last completed survey was in 2006. Respondents to the 2006 ADAMS Satisfaction Survey gave the system a satisfaction rating of 2.60 on a scale of 1 to 4 for the availability of documents that had been placed in the system since it became an official recordkeeping system in April 2000. The satisfaction level for ADAMS has stabilized, so a determination was made to reduce the number of questions in the survey and add them to the overall agency IT Satisfaction Survey. The next IT Satisfaction Survey was scheduled for fall 2009.

While ADAMS is the official recordkeeping system, the NRC uses other IT infrastructure to provide stakeholders access to information. Access to information is organized and highlighted on the NRC internal and external Web sites. The Web provides information to stakeholders by supporting the offices in providing the agency's most current information through the public Web site. The upcoming redesign will assist the public stakeholders by increasing the findability of information through user-centered research in designing the site that will incorporate improved navigation and a one-stop Google search for the Web site as well as publicly available ADAMS documents. For internal communications, NRR has an internal Web site that includes links to all necessary policy and guidance documents, has community of practice sites that allow for sharing of safety and technical information, and SharePoint sites to facilitate communications and document development. Also, NRR makes use of electronic mailing lists to ensure that interested stakeholders are provided electronic copies or notification of availability of information related to a specific topic.

Question No: 254

Module 04: Management System of the Regulatory Body

Question

How is relevant information classified, collected, processed, retained and archived?

Response

Information received from outside the agency is either submitted electronically or in hard copy form and processed into ADAMS, with few exceptions (refer to ADAMS Desk Reference Guide). It is the responsibility of the organization submitting the information to appropriately classify and mark the information and provide it through an appropriate means. Guidance to organizations handling and submitting information is included in the NRC regulations and guidance (see the response to Question 255). The regulations include requirements for retention times for required records. Regulations on information collection and retention are reviewed every 5 years. Internally generated records are added to ADAMS and declared official agency records. Once declared official agency records, these documents are maintained in ADAMS in accordance with record handling, retention, and archive procedures (see NUREG 0910, "NRC Comprehensive Records Disposition Schedule," Revision 4, issued March 2005).

Specific guidance is provided to NRC staff on handling information, including incorporation into ADAMS. This guidance includes identifying and classifying information as official agency records and guidance for incorporating information into ADAMS. (For more information on regulations and guidance on sensitive information, see the response to Question 255.) All NRC staff members are provided periodic training on their roles and responsibilities for handling sensitive information.

The NRC recognizes that development, transfer, retention, and application of relevant knowledge are essential to the success of the agency. A loss of valuable knowledge could pose a challenge in the future as new employees are hired to replace subject matter experts. The development and implementation of a systematic process to assess the need for identifying, transferring, retaining, and applying critical knowledge and skills enhances the ability of the agency to meet its mission, while ensuring that the staff employ consistent and efficient practices within their professions. Knowledge management activities—such as the NRC's Knowledge Management Fair on January 28, 2010, with booths and demonstrations of activities such as e-rulemaking through Regulations.gov—demonstrate the agency's commitment to this knowledge transfer. Individual offices, such as NRR, implement the Knowledge Management Process in accordance with the NRR OI ADM 506, "Knowledge Management Process." For example, NRR sponsors branch chief and team leader monthly seminars with topics of interest that are videotaped and can be borrowed for continuous learning, as well as the popular lunchtime program for all staff, "Brown Bag Lunch," which has featured NRR's executives sharing knowledge with staff on topics such as interacting with the NRC Commission and the Office of the Secretary of the Commission (SECY). All of these activities are designed to help the NRC's new staff assimilate NRC culture, while enhancing the skills and knowledge of current staff. (For additional information about knowledge management, also see the responses to Questions 221, 227, 229BS, 251, 273, 279, and 280.)

IRRS Question and Response Report

Question No: 255

Module 04: Management System of the Regulatory Body

Question

How is sensitive information handled?

Response

Sensitive information is handled according to the level of sensitivity of the information, as specified in the applicable laws, regulations, or NRC MDs. Specific guidance is provided for the authority to designate sensitive information, who may have access to the information, marking documents and other media, the use of cover sheets, reproduction, processing on electronic systems, use at home, use while traveling or commuting, physical copy transmission, electronic copy transmission, storage, destruction, and authority to decontrol the information.

One of the most sensitive forms of nonclassified information at NRC is SGI policy. The definition and authority for SGI are contained in Section 147 of the AEA (42 U.S.C. 2147, enacted as part of Pub. L. 96-295 (1980)). NRC regulations implementing these provisions are found in 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements," 10 CFR 73.22, "Protection of Safeguards Information: Specific Requirements," and 10 CFR 73.23, "Protection of Safeguards Information—Modified Handling: Specific Requirements "Access To Safeguards Information (see <http://www.nrc.gov/reading-rm/docollections/cfr/part073-0021.html>). Staff requirements for implementation of SGI are described in MD 12.7, "NRC Safeguards Information Security Program," dated June 25, 2008. Staff guidance is also implemented through a Web-based general awareness training program as well as an SGI Designator's course. A Designation Guide for Safeguards Information (DG SGI 1) is also available for staff to determine what qualifies as SGI. SGI guidance to licensees is available in 10 CFR 73.21, NUREG 0794, "Protection of Unclassified Safeguards Information," issued October 1981, and generic communications to licensees, such as regulatory information summaries (RIS). NRC has issued two such documents to licensees in the last 4 years: RIS 2002 15, "NRC Approval of Commercial Data Encryption Products for the Electronic Transmission of Safeguards Information," Revision 1, dated January 6, 2006, and RIS 2003 08, "Protection of Safeguards Information from Unauthorized Disclosure," dated April 30, 2003.

SUNSI policy is contained in the ADAMS document entitled "NRC Policy and Procedures for Handling, Marking, and Protecting Sensitive Unclassified Non-Safeguards Information" (ADAMS Accession No. ML051220278), and within MD 12.6, "NRC Sensitive Unclassified Information Security Program," December 20, 1999 (ADAMS Accession No. ML041700603), which is pending revision. SUNSI policy staff implementation is available in Yellow Announcement Number 2005-077, Policy Revision: NRC Policy and Procedures for Handling, Marking, and Protecting Unclassified Non-Safeguards Information (SUNSI), October 26, 2005, and intranet Web site guidance found at <http://www.internal.nrc.gov/sunsi/>. SUNSI guidance to licensees is available in RIS 2005 026, "Control of Sensitive Unclassified Nonsafeguards Information Related to Nuclear Power Reactors," dated November 7, 2005, and RIS 2005 031, "Control of Security-Related Sensitive Unclassified Non-Safeguards Information Handled By Individuals, Firms, and Entities Subject to NRC Regulation of the Use of Source, Byproduct, And Special Nuclear Material," dated December 22, 2005.

The system for designation and protection of the NRC's SGI has been in effect for more than 20 years and is well understood by the nuclear industry and its regulators at the State and Federal level. Creation of a Web-based training program, SGI Designation Guide, and SGI cover sheets has streamlined NRC procedures for designating and handling SGI. The NRC published MD 12.7 in June 2008. The NRC has taken these steps to distinguish SGI from other types of sensitive information.

The measure of success as to the effectiveness of the SGI program is twofold. NRC licensees are evaluated based on inspections of their programs by the NRC, as well as on their own quality assurance reviews. The significance of any noncompliance is determined through the NRC enforcement policy, which is a multistep process to ensure effectiveness and consistency. Any mishandling of SGI by NRC employees or its contractors is addressed through MD 3.4, "Release of Information to the Public," dated February 6, 2009, MD 12.1, "NRC Facility Security Program," dated August 2, 2007, and MD 12.6, "NRC Sensitive Unclassified Information Security Program," dated December 20, 1999, to ensure adequate protection and reporting of disclosures to senior management.

The NRC's regulations are contained in 10 CFR 73.21, 73.22, and 73.23, and were subject to public comment prior to implementation of the rule. The NRC is currently engaged in a proposed rulemaking on SGI to revise the regulation consistent with recent orders to licensees and applicants ensuring adequate protection of the common defense and security. The purpose of the proposed rulemaking is to obtain stakeholder and public comment prior to issuance of any final rule.

By separating SUNSI policy from SGI policy, the NRC made the procedures for use of SUNSI simpler, less stringent, and less confusing. The SUNSI intranet Web site is simple to use as a quick reference to answer questions about policy and procedures. Internal stakeholders can also ask questions by sending an email to SUNSI.Resource@nrc.gov.

There are no specified effectiveness metrics for SUNSI. One indicator of effectiveness is a low rate of reported inadvertent disclosures of SUNSI. However, this is not a true measurement of effectiveness.

There is no requirement or method for stakeholder evaluation of SUNSI policy and procedures, although anecdotal information from internal stakeholders resulted in the Commission's requirement to consolidate the seven current SUNSI groups into two tiers, completion of which has been deferred due to the development and implementation of the new Controlled Unclassified Information Framework, and to defer the requirement to encrypt SUNSI until Federal guidelines are issued.

IRRS Question and Response Report

Question No: 256

Module 04: Management System of the Regulatory Body

Question

How are records related to quality management handled?

Response

As stated in NRC MD 3.17, it is the policy of the NRC to ensure the quality of all information it relies on for making decisions or disseminates to the public. The NRC's policies and practices are designed to ensure that the appropriate level of quality commensurate with the nature of the information is established and maintained. Thus, the most influential scientific, financial, and statistical data are subject to the most rigorous quality standards. Influential scientific, financial, or statistical information is defined as information that forms the technical basis for a substantive rulemaking that has substantial impact on an industry. In addition, all information that supports the issuance of legally binding documents, such as licenses and orders issued to licenses, are Official Agency Records. The NRC will correct information that does not meet its standards and OMB's guidelines on the basis of the significance and the impact of the correction. ADAMS maintains the official agency records, including records related to quality management, such as those pertaining to assessment, inspection, testing, survey, audit, review, and related results. Revisions to documents are maintained in ADAMS.

Question No: 257

Module 04: Management System of the Regulatory Body

Question

How does the Regulatory Body establish and implement appropriate arrangements for a systematic approach to quality management which extends throughout the range of responsibilities and functions undertaken?

Response

Quality management is established and implemented through the development and implementation of the programs and documents that constitute the NRC management system (see the response to Question 237). The management system covers all NRC activities and, in addition to ensuring initial standards for quality, incorporates processes for the improvement of the programs.

Question No: 258

Module 04: Management System of the Regulatory Body

Question

- 1) What suppliers provide services that are important to fulfilling regulatory obligations?
- 2) Are these suppliers appropriately qualified?

Response

The NRC uses qualified contractors to provide services that are important to fulfilling regulatory obligations when it is more beneficial to the government to outsource the requirement. NRR uses a number of external sources, both commercial firms via competitive contracts and DOE National Laboratories via interagency agreements.

The NRC issues contracts for research projects and to gain access to independent technical expertise. The NRC's major source of this expertise is the U.S. National Laboratory system. The National Laboratory system includes research facilities, located throughout the United States, with extensive and varied technical capabilities. The NRC also contracts with other Federal agencies, universities, and commercial businesses to conduct research projects and to obtain technical expertise. Commercial sources are selected through competitive solicitation.

The NRC follows the strict guidelines established by the Federal Government for Federal contracting, known as the Federal Acquisition Regulations or "FAR". These guidelines establish the regulatory framework for all contracting efforts and ensure that there is an openly competitive process for acquiring all services and products. Additionally, the NRC has an active Small Business program that solicits resources from small business entities, as appropriate. Section 170A of the Atomic Energy Act of 1954, as amended, and the implementing NRC acquisition regulation (48 CFR 2009.570, "NRC Organizational Conflicts of Interest") require the agency to avoid, eliminate, and neutralize organizational conflict of interest (OCOI). This regulation applies to potential or actual OCOIs with contractors potentially supporting the NRC's mission. To this end, the NRC requires every prospective contractor to submit information describing any relationship it may have with other persons or organizations that might result in an actual or potential OCOI if it were to serve as a contractor. The NRC's policy ensures that NRC independence is not compromised by using contractors that may have relationships with others that may diminish their capacity to give impartial, technically sound, objective technical assistance and advice or that may result in an inferior work product.

In identifying suppliers, the staff identifies specific requirements that can be contracted out, and then develops a performance-based statement of work defining the required outcome of the effort and standards by which the staff will measure performance under the contract. The NRC then solicits an offer, or multiple offers, and evaluates the offers received against criteria developed specifically for the work requirement. The criterion for rating external sources typically includes the caliber of the source's staff and corporate qualifications, in addition to the source's past performance under other, similar contracts. Specifically, the "Key Personnel" clause ensures that only appropriately qualified personnel are permitted to work on the project, and submitted resumes are scrutinized to ensure these personnel meet the established standards (e.g., have the appropriate qualifications and certifications).

An NRC technical monitor and an administrative project manager closely monitor the performance under the awarded contract or interagency agreement to ensure the contractor has met the objectives of the work in a satisfactory and timely manner. All NRC technical monitors and administrative project managers must attend a rigid training program, resulting in certification, and must maintain their certification with periodic additional refresher training.

IRRS Question and Response Report

Question No: 259

Module 04: Management System of the Regulatory Body

Question

Is the quality management system regularly updated in line with feedback from working experience and in response to external influences?

Response

The NRC management system is reviewed at planned intervals to ensure its continuing suitability and effectiveness and its ability to enable the agency to accomplish its mission. For additional information on planned reviews and audits of management system documents and on reviews of how the NRC management system reflects working experience and external influences, see the responses to Questions 231 and 262.

Question No: 260

Module 04: Management System of the Regulatory Body

Question

- 1) What methods of assessment are used in the evaluation of regulatory activities?
- 2) How are the results of these assessments monitored and tracked by the management?

Response

All levels of NRC management periodically review and assess performance against key indicators that are linked to the Strategic Plan. Information on these reviews is included in the responses to Questions 225, 264, 265, and 267.

Discussion on assessments and review of safety culture are included in the responses to Questions 223 and 223AS.

In regards to review of nuclear power plant performance, see the responses to the Questions in the Modules on Inspection and Review and Assessment.

Within NRR, managers use a variety of methods to improve performance. In addition to more formal programs (e.g., Agency Lessons Learned Task Force, NRR Corrective Action Programs), managers perform informal lessons and share the results among their organizations and, when appropriate, across organizations. The results and recommendations are typically communicated during branch or division meetings and shared through knowledge management activities. Although less formal, the recommendations are usually incorporated as part of routine activities because they are initiated by branch staff.

Also, NRR uses the Lean Six Sigma Process to identify and assess improvements. NRR is in the process of completing incorporation of recommendations into the rulemaking process for 10 CFR 50.55a, "Codes and Standards," and the review of licensees' requests for relief from 10 CFR 50.55a requirements.

Question No: 261

Module 04: Management System of the Regulatory Body

Question

Does the regulator use internal audits or other means to verify compliance with Q-M system requirements?

Response

The NRC uses both independent audits and self-assessments to verify compliance with the management system. The response to Question 231 provides information on independent audits by GAO and NRC's OIG, and self-assessments to meet the OMB requirements to perform self-assessments using its PART and to support meeting the Federal Financial Integrity Act of 1982 (Integrity Act), which requires the Chairman of the NRC to annually certify, with reasonable assurance, that the NRC meets its objectives. Also, the NRC assesses its performance on meeting its goals through the development and quarterly review of operating plan targets. See the responses to Questions 225, 244AS, 264, 265, and 267 for additional information on office development and management of operating plan targets and their use in assessing compliance with the management system.

Question No: 262

Module 04: Management System of the Regulatory Body

Question

- 1) How has management defined and organized the self-assessment process within the regulatory body?
- 2) Does management use performance indicators or quality criteria to assess compliance with quality objectives?

Response

The NRC has defined and organized independent audits and self-assessments of processes within the agency. See the response to Question 231 for additional information. In addition, the NRC has performance indicators to assess compliance and performance. See the responses to Questions 225, 244AS, 264, 265, and 267 for additional information on office development and management of operating plan targets and their use in assessing compliance with the management system.

IRRS Question and Response Report

Question No: 263

Module 04: Management System of the Regulatory Body

Question

- 1) How are the results of the self-assessments used to improve Q-M?
- 2) How are the results of the self-assessments corroborated?

Response

In 2005, agency officials recognized that the NRC's MD system needed improvements and formed a Management Directives Working Group (ADAMS Accession No. ML0611990061, "Final Report of the Management Directives Working Group"). One of the Working Group recommendations was that the MDs be reviewed and reissued every 5 years. As a result, the Office of Administration established the 5 year review plan (ADAMS Accession No. ML081540095), in which all agency offices have been or will be requested to review the status of MDs under their purview. This 5 year plan is currently ongoing (from 2008 until 2012). Some MDs have already been through a review, and some are scheduled at a later date within the 5 year timeframe. The results of audits of specific aspects of the management system by GAO and the NRC's OIG are included in reports issued by these organizations. A list of the 2010 reports follows:

- Social Engineering Assessment Report – OFFICIAL USE ONLY – SECURITY RELATED INFORMATION (For information, please contact OIG at 301 415 5915) (Date: March 16, 2010; Number: OIG 10 A 11)
- Memorandum Report: Review of NRC's Implementation of the Federal Manager's Financial Integrity Act for Fiscal Year 2009 – March 11, 2010 (Date: March 11, 2010; Number: OIG 10 A 10)
- Audit of NRC's Personnel Security Clearance Program for Employees (Date: February 23, 2010; Number: OIG 10 A 09)
- Audit of NRC's Use of Electronic Submissions for Combined License Applications (Date: January 22, 2010; Number: OIG 10 A 08)
- Independent Auditor's Report on the Condensed Financial Statements (Date: January 14, 2010; Number: OIG-10-A-07)
- Independent Auditor's Report on the U.S. Nuclear Regulatory Commission's Special Purpose Financial Statements as of September 30, 2009 and 2008, and for the Years Then Ended (Date: November 16, 2009; Number: OIG 10 A 06)
- Results of the Audit of the United States Nuclear Regulatory Commission's Financial Statements for Fiscal Years 2009 and 2008 (Date: November 10, 2009; Number: OIG 10 A 05)
- Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act for Fiscal Year 2009 (Date: November 17, 2009; Number: OIG 10 A 04)
- Memorandum Report: Audit of NRC's Management Directive 6.8, Lessons Learned Program (Date: November 17, 2009; Number: OIG 10 A 03)
- Audit of NRC's Quality Assurance Planning for New Reactors; (Date: November 16, 2009; Number: OIG 10 A 02)
- Audit of NRC's Physical Security Inspection Program for Category I Fuel Cycle Facilities (Date: November 3, 2009; Number: OIG 10 A 01)

The results of NRC self-assessments using OMB's Performance PART are another self-assessment tool that the NRC has used for the reactor program.

Question No: 264

Module 04: Management System of the Regulatory Body

Question

- 1) Has the regulatory body produced lower level operational policies that are specific to business or organisational units?
- 2) Are these policies aligned with or based on high level corporate policies and are they consistent with each other?
- 3) How is this alignment and consistency ensured?

Response

The Question 237 discussion of the overall hierarchy of the management system includes a discussion of how the agency's operational level policies relate to the overall management system. The operational-level documents are the lowest tiers of documents in the management system and provide the most specific direction to NRC staff. All lower level operating policies, procedures, and guidance are aligned with the higher tiered documents.

NRC policies are implemented at the operational level through guidance. For example, OIs include instruction for administrative activities, training and qualifications programs for NRR staff, NPP licensing, interactions and communications with stakeholders, NPP inspection and oversight, and international activities. The OI system includes requirements for managing the OIs and making them accessible to NRC staff. Other NRC offices and regions have similar types of guidance specific to their activities, including guidance that supports regulation of NPPs. Other example of NRR guidance include PMDA Information Notices, which provide corporate information, inspection notebooks with technical information, and briefing guides with communication information. This tier of guidance is used for providing direction, instructions, and information to both NRC staff and the regulated entities.

The office leadership team reviews the development and revision of each document to ensure consistency and alignment with agency policies, procedures, support of operating plan metrics, and resource expenditures. In addition, because these documents support the first level of operations, the desired outcomes from implementation of these procedures is confirmed through the quarterly review of operating plan metrics and strategic goals.

IRRS Question and Response Report

Question No: 265

Module 04: Management System of the Regulatory Body

Question

- 1) Does the regulator have a short-term-plan for one year or shorter?
- 2) How does the short term planning enable the management to plan the workload and ensure necessary resources to fulfil its obligations?

Response

The NRC's short-term planning efforts are included in the Performance Budget (NUREG 100), which identifies the goals, budget resources, and program output measures that gauge the agency's success in accomplishing its mission. The performance plan aligns with the NRC's Strategic Plan goals and strategic outcomes, which are the agency's long-term plans.

Short-term planning at the NRC ensures that the various organizational components accomplish all of their workload with adequate, qualified resources for each of the agency's regulatory areas. Resources versus needs are evaluated on an ongoing basis at all levels within the organization. Resources may be reallocated on the basis of emerging needs and program priorities consistent with any statutory and congressional requirements and OMB and NRC policies and procedures. The reallocation of resources typically occurs during midyear of the FY. Additionally, subordinate offices have annual office operating plans in which regulatory work is planned, prioritized, and controlled to ensure that the agency's objectives are met systematically and in a timely fashion. The performance targets and standards are found in the Performance Budget (NUREG 1100) and operating plans (<http://nrr10.nrc.gov/nrr-office/pm-rpts/rbooks.cfm>). The Performance Monitoring Report may be found at <http://nrr10.nrc.gov/nrr-office/pm-rpts/oplan.cfm>.

NRR devotes a significant amount of time and effort to short-term planning and managing resources and created a separate organization devoted to this effort, called the Center for Planning and Analysis Branch (CPA). This organization is responsible for planning and scheduling all NRR licensing actions (e.g., license amendments, power uprates). The CPA staff meets on a regular basis with representatives of each division in NRR to assign, coordinate, and review the resource allocations for each licensing action. Tracking is performed via Task Assignment Control numbers that uniquely identify each type of work. Frequent and regular management reports ensure that NRR's managers are aligned with short-term plans and are adequately coordinated across organizations. These interactions ensure appropriate allocation of resources in order to meet operating plan objectives. First-level supervisors are responsible for the day-to-day management of resources and workload to meet short-term plans and goals, to make appropriate adjustments, and to identify significant changes or needs to office management for decisionmaking. The NRR leadership team meets quarterly to review and adjust workloads to support the short-term plans and goals. The NRC empowers its first-line supervisors (branch chiefs) to manage and coordinate much of its short-term planning. Specifically, in addition to the activities discussed above, the Branch Chiefs will meet about their workloads and short-term assignments and reprioritize work based on the needs of the organization, availability of staff, and opportunities for staff development. Although some of these discussions and decisions are not approved nor even discussed with their supervisors, the branch chiefs use the agency's values and performance measures as guideposts in making these decisions.

IRRS Question and Response Report

Question No: 266

Module 04: Management System of the Regulatory Body

Question

How is the financial management system integrated with the work management system?

Response

The financial management system is integrated with the work management system. This is demonstrated by the tight coupling between the two key areas of budget formulation and budget execution. The NRC has established a formal, structured monitoring and reporting process that utilizes the operating plan and Performance Monitoring Report, which is developed by the CPA, an organization that is also responsible for centralized work planning. The end product of these activities is an invoice to the licensee for work performed, through a process known as "fee billing" that generates invoices based upon the actual hours spend by NRC staff on fee-billable activities, such as processing license amendments, license renewals, and power uprates.

The budget formulation process aligns work products and product lines with the estimated resources necessary to accomplish this planned work. Resources are both the full-time equivalents (FTE) per employees and the contract dollars that are required for the planned accomplishment area. An excellent example of how the budget formulation process uses planned work activities as the foundation for developing budget estimates is this example from the FY 2010 budget request for the Licensing Tasks Program, which requested resources to support the following:

[T]he completion of an expected 950 licensing actions, including the review of 10 EPU applications, and the expected licensing activities associated with the transition of 15 reactor sites to the National Fire Protection Association (NFPA) Standard 805. Other activities include updating regulatory guides on fire protection and probabilistic risk assessment, 50 operator licensing examination sessions, one improved standard technical specifications (ISTS) conversion, as well as research activities, including materials performance, fire safety, digital instrumentation and control, analytical codes, and generic safety issues.

Budget execution activities are similarly aligned with the work products, and a monitoring tool, the NRC's operating plan and Performance Monitoring Report, identifies major and significant milestones to assist in tracking progress toward completion of activities. This report highlights areas where actual performance differs significantly from targets. Preestablished, routine meetings are held to review performance, conduct structured analyses of results, and determine corrective actions to take if and when results vary from the expected measures or targets (i.e., out-of-standard). Following the review of performance reports, NRR management determines and communicates required follow-up actions. Quarterly operating plan updates provide information about program effectiveness and internal and external environmental changes so that operational changes and a shifting of resources (as needed) can be made. Every quarter, office-specific operating plans are submitted to the Office of the EDO for review. Any changes to work plans must be aligned with the agency's Strategic Plan goals.

At a lower operational level, staff in each division has specific projects with milestones and schedules of varying levels and complexity for the plant-specific activities. To aid in the coordination of these projects, NRR's CPA tracks specific work items. Changes to work items are negotiated across branches (and across divisions if needed and appropriate), with divisional representatives serving as facilitators.

Technical assignment control codes exist to measure the amount of effort (FTE and financial resources) being applied by staff to specific work items. Another NRR system, the office-specific systems, such as the Reactor Program System (RPS), is used by NRR in planning and scheduling inspections and in identifying the resources required for such work. Leveraging IT tools such as RPS allows regional managers to view the over- or underallocation of their staff and make appropriate adjustments, thereby ensuring that all inspections are accomplished on schedule. Each quarter, the charges against each technical assignment control code are collected by the Office of the Chief Financial Officer (OCFO), and compiled into an invoice for the applicable licensee. This "fee billing" process is the NRC's means of receiving reimbursement for all work performed during the quarter and represents the ultimate tie-in between the financial management system and the work management system.

IRRS Question and Response Report

Question No: 267

Module 04: Management System of the Regulatory Body

Question

How can it be confirmed that new regulatory responsibilities can be fitted to existing work loads and schedules?

Response

New regulatory responsibilities are identified at the start of the budget formulation process through the identification of program priorities and considerations. This starts 2 years prior to the budget execution year. In the year prior to the execution year, management reassesses the budget considerations and fact-of-life changes and adjusts the budget. In making these adjustments, the NRC uses the PBPM process, a performance management framework, to address emerging workload through budget requests and prioritization of workload.

During the execution year, all work assignments, workloads, and schedules are reviewed by management to confirm that new assignments can be accomplished and integrated into current work schedules. NRR is supported in this effort by CPA (see the response to Question 265 for information on CPA and work planning). First-level supervisors are responsible for ensuring that new work can be accomplished without impacting the operating plan metrics. If this cannot be accomplished, recommendations are made to the NRR leadership team to obtain additional resources or to make appropriate adjustments to the operating plan metrics. The NRR leadership team uses the PBPM process to make appropriate adjustments and coordinates changes with upper management. In addition, the NRR leadership team meets quarterly to review and ensure that operating plan metrics are being met and reviews and decides on any changes based on new work.

Prior to and during the execution year, management is responsible for ensuring that it has the necessary personnel to perform the work. This is accomplished through development and management of office, division, and branch staffing plans. In hiring staff in accordance with staff plans, managers consider known and potential new work in the out years to ensure both recruiting and development activities support flexibility, fungibility, and having staff with the appropriate knowledge and skills to accomplish the work. In addition, management ensures staff has the necessary training and qualifications through implementation of qualification plans (e.g., ADM 502, ADM 503, ADM 504, ADM 505) and branch training plans.

Question No: 268

Module 04: Management System of the Regulatory Body

Question

- 1) How do the business units of the regulatory body plan their work?
- 2) How are these plans approved?

Response

Management of work at the agency level is planned through the budget formulation and execution process, PBPM process, and execution of work to meet strategic plan goals and operating plan metrics.

For NRR, the day-to-day work is managed through CPA. When work is received, work and schedules are coordinated through division planning representatives and branch chiefs. Most work is accomplished in accordance with predetermined schedules based on the type of work (e.g., completion of licensing actions within 1 year). Branch chiefs coordinate and agree upon adjustments to interim milestones and final due dates based on workloads and work toward meeting these agreed upon schedules. When necessary, recommendations are made to the NRR leadership team to obtain additional resources or to make appropriate adjustments to the operating plan metrics.

IRRS Question and Response Report

Question No: 269

Module 04: Management System of the Regulatory Body

Question

How does the regulatory body verify that work is performed according to work plans and changes are approved before being implemented?

Response

The Strategic Plan sets the goals of the agency, and operating plans are developed and implemented to meet these goals. Budgets are developed and executed in accordance with the strategic goals and operating plans, and results are reviewed and reported to Congress annually in its Performance and Accountability Report.

Every quarter, office operating plans are submitted to the Office of the EDO for review. Any changes to work or operating plans must be aligned with the agency's Strategic Plan goals. On an operational level, divisions have specific project milestones and schedules of varying detail and complexity (e.g., little detail for routine license amendments and more structure for power uprates). NRR CPA coordinates the workload and provides NRR management with necessary reports to verify completion of work. Preestablished, quarterly meetings are held to review performance, conduct structured analyses of results, and determine corrective actions to take if and when results vary from expected measures or targets (i.e., out-of-standard). Following review of performance reports, NRR management determines and communicates required follow-up actions. Quarterly operating plan updates provide information about program effectiveness and internal and external environmental changes so that operational changes and a shifting of resources (as needed) can be made. For NRR, changes to the operating plan metrics are reviewed and approved by the leadership team and reported to the EDO. Interim and final milestone adjustments that still meet the operating plan metrics are coordinated, aligned, and approved between the branch chiefs in the responsible organizations.

See the responses to Questions 225, 264, 265, and 267 regarding review and approval of changes to operating plan metrics.

Question No: 270

Module 04: Management System of the Regulatory Body

Question

- 1) Is there a structured set of documented (main and supplementary) processes?
- 2) Do process definitions cover the following aspects?

Response

NRC has structured, documented processes that implement agency-wide policy for both NRC staff and licensees.

NRC policy is to all employees the basic NRC policies, requirements, and procedures necessary for the agency to comply with Executive Orders, pertinent laws, regulations, and the circulars and directives of other Federal agencies. There are formal, Government-wide (i.e., not part of NRC's process) established processes for the development and revision of laws, regulations, and directives. The NRC prepares and issues directives and handbooks, as well as revisions to these documents, to meet the requirement that all Federal agencies have an internal management directive system. NRC has established supplementary processes through the establishment of agency, office, and task-specific procedures and guidance. These include MDs, OIs, and regulatory guidance. These systems provide descriptions and guidance on policy, objectives, organizational roles and responsibilities and delegations of authority, applicability, and basic requirements. The processes governing development and implementation of policy and guidance as part of the management system vary based on the level and legal requirements of the document system. For example, regulation development includes extensive processes for stakeholder input and follows the requirements of the Administrative Procedure Act. The regulations include the authorities and requirements for licensing and inspecting licensees. Branch-level guidance is usually subject to a less formal review, approval, and revision process.

See the response to Question 237 for additional information on documents included in the management system.

Question No: 271

Module 04: Management System of the Regulatory Body

Question

Are the scope, the structure, the purpose and the legal status of different regulatory documents clearly defined?

Response

The scope, structure, purpose, and legal status of regulatory documents are clearly defined. For example, laws and regulations are part of formal legal processes that meet U.S. Government-wide requirements. NRC regulatory documents, including internal (e.g., MDs, OIs) and external documents (e.g., licenses, orders, regulatory guides), include development processes that require the scope, structure, purpose, and legal status to be established. Many of the requirements for these regulatory documents are established in regulations. For example, 10 CFR Part 2, "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities, include the requirements for the issuance of licenses and orders.

See the response to Question 237 for additional information on documents included in the management system.

IRRS Question and Response Report

Question No: 272

Module 04: Management System of the Regulatory Body

Question

How does the regulator ensure that its decisions are made based on accurate and up-to-date information?

Response

The NRC has a regulation, 10 CFR 50.71(e), to ensure that nuclear power plants' final safety analysis report are up-to-date. In 10 CFR 50.71(e), the NRC states, in part, "Each person licensed to operate a nuclear power reactor shall update periodically, the final safety analysis report (FSAR) originally submitted as part of the application for the license, to assure that the information included in the report contains the latest information developed." The NRC has an electronic repository of plant FSARs. In addition, regulation 10 CFR 50.9(a) requires that "Information provided to the Commission by a licensee shall be complete and accurate in all material respects." Also, information provided by a nuclear power plant licensee must be certified as accurate under oath and affirmation (10 CFR 50.30(b)).

The most significant case in which information provided to the NRC was materially incomplete and inaccurate involved the Davis-Besse nuclear power plant in 2001 regarding the status of its reactor pressure vessel head. The NRC issued a decision based on incomplete and inaccurate information that allowed Davis-Besse to operate for over 2 additional months prior to shutdown for vessel head inspection, whereupon significant and unacceptable degradation was found. Enforcement actions pursued included NRC issuance of its largest civil penalty to the licensee, the Department of Justice's issuance of a civil penalty to the licensee, and the prosecution of individuals. Based on this event, the NRC initiated a task force to review the causes and develop lessons learned.

In addition to the requirements placed on licensees and applicants and strong enforcement for noncompliance, the NRC instills a questioning attitude in all of its employees to ensure it receives accurate and complete information. Specifically, during licensing reviews and inspections, NRC staff is encouraged to question statements and information provided by licensees and applicants, request further information or clarification, and, when appropriate, request that the licensee or applicant provide the information in writing, under oath, on the docket. NRC staff uses engineering judgment to evaluate information provided and to evaluate whether additional actions are necessary to determine the accuracy and adequacy of the information.

Question No: 272AS

Module 04: Management System of the Regulatory Body

Question

- 1) What is the documented regulatory decision-making process?
- 2) Does this process contain all the attributes corresponding to effective and timely decisions?
- 3) What is the empowerment chain for decision-making?

Response

A documented decisionmaking process for regulating licensees is included in the regulations, specifically, 10 CFR Part 2 and 10 CFR Part 50. NRR has further documented these processes through the issuance of OIs, handbooks, and SRPs. These documents support effective and timely decisionmaking through having stakeholders review selected documents through the development process and by providing stakeholders venues (e.g., Differing Professional Opinions Program, hearing process) to identify concerns with NRC decisions. The procedures also include and support timeliness metrics for the age of licensing actions, renewals, and completion of the reviews. Volume 9 of the NRC MDs defines the roles and responsibilities of each office within the NRC. Within each office, there are signature authority procedures that further define authority and responsibilities for decisionmaking in specific activities, such as NRR OI ADM-200.

NRC policy encourages the use of risk-informed decisionmaking. The basic procedures for risk-informed decisionmaking are contained in regulatory guides (RGs) (e.g., RG 1.174, RG 1.175, RG 1.177, and RG 1.178). NRR OI LIC 501, "Program Coordination for Risk-Informed Activities," outlines NRR staff and managers' roles and responsibilities as they relate to coordination and integration of risk-informed activities. Guidance related to evaluating operating events is contained in NRR Office Instruction LIC 504, "Integrated Risk-Informed Decision Making Process for Emergent Issues." IM Chapter (IMC) 0308, Attachment 3, "Significance Determination Process Basis Document," dated October 16, 2006, contains the significance determination process, which is the application of probabilistic risk assessment techniques to the evaluation of the safety significance of potential violations of NRC requirements. NRC decisions to impose new requirements on licensees during the licensing process require a cost-benefit evaluation pursuant to 10 CFR 50.109, "Backfitting." Additional guidance is contained in NRR Office Instruction LIC 202, "Procedures for Managing Plant-Specific Backfits and 50.54(f) Information Requests."

The NRC guidance documents are generally performance based and allow for expert judgment by licensees and NRC staff during the review processes. For example, the SRPs provide methods for meeting NRC requirements. However, an applicant may propose an approach different than the SRP. In doing so, the licensee must provide a discussion of the differences and adequate justification for how the application still meets all regulatory requirements. In addition, licensees may request specific exemptions from the regulations (10 CFR 50.12 "Specific Exemptions") or relief from ASME Code requirements (10 CFR 50.55a). The staff uses its expert judgment in review of these flexibilities.

IRRS Question and Response Report

Question No: 273

Module 04: Management System of the Regulatory Body

Question

What are the processes and supporting documents in place for ensuring document control, the keeping of records, information and knowledge retention and management?

Response

ADAMS includes official agency records and appropriate processes and procedures for adding and revising documents. ADAMS's design includes search capabilities that support knowledge management functions. All official agency records are subject to record management and retention schedules. MD 3.53, "NRC Records and Document Management Program," dated March 15, 2007, defines the policies for capturing, managing, disseminating, and processing documents associated with the NRC licensing, regulatory, and adjudicatory activities. It also provides documentation and production requirements, standards, and practices for official records made or received by the NRC in the course of its official business. The NRC Comprehensive Records Disposition Schedule (CRDS) provides the authorized disposition for all NRC records. Each record schedule has been approved by the appropriate NRC officials, and GAO when appropriate, and is authorized by the Archivist of the United States. Application of the disposition schedules is mandatory and is in accordance with the National Archives and Records Administration's regulations provided in 36 CFR Part 1228, "Loan of Permanent and Unscheduled Records," and statutory requirements set forth in Title 44 U.S. Code, "Public Printing and Documents." NRC implementing policies are contained in NRC MD 3.53. In addition, Volume 12 addresses roles, processes, and procedures for different information categories.

Key management document systems for NRR include the MD and OI systems. Each of these systems includes specific requirements for review, revision, and document control.

The NRC has included specific programs and activities to support knowledge retention and management. All NRR employees receive training through formal qualification programs. The NRC has launched a knowledge management program to support more effective approaches to knowledge collection, transfer, and use. A few recent initiatives include upgrading the Knowledge Management Center, continuing to populate the Expertise Exchange, videotaping subject matter experts and building the knowledge management Subject Matter Expertise Library, and pursuing other information technology initiatives to streamline workforce planning, expert location, and qualifications tracking. NRR OI ADM 506, "Knowledge Management Process," defines the knowledge management process for NRR. The process assists supervisors and employees to identify the important information that should be captured, stored, and transferred to employees. The process also assists in identifying potential methods for capturing and transferring knowledge. Handbooks, desk references, seminars, video interviews, and training manuals are all examples of means for knowledge capture and transfer. (For additional information on knowledge management activities, see the response to Question 254.)

IRRS Question and Response Report

Question No: 274

Module 04: Management System of the Regulatory Body

Question

What provision has the regulatory body made for improving the management of its process?

Response

Continuous process improvement is a theme throughout the NRC, and funding for these improvements is included in the annual budget formulation. NRC follows guidance from OMB, which has a formal program assessment effort, PART, which is a diagnostic tool used to assess the performance of Federal programs and to drive improvements in program performance. Once completed, PART reviews help inform budget decisions and identify actions to improve results. Agencies are held accountable for implementing PART follow-up actions, also known as improvement plans, for each of their programs. The PART is designed to provide a consistent approach to assessing and rating programs across the Federal government. PART assessments review overall program effectiveness, from how well a program is designed to how well it is implemented and what results it achieves.

Internally, the NRC uses multiple assessment tools, including Lean Six Sigma, which is a highly structured methodology used to accomplish sustained improvements to the types of process, transactions, and services that are performed every day at the NRC. Examples of current Lean Six Sigma projects include NRR's Relief Request Review and the 10 CFR 50.55a rulemaking process. The Relief Request Review is expected to save 2,250 hours each year, through cycle time reductions, and the 10 CFR 50.55a rulemaking process is expected to reduce the duration of the 50.55a rulemaking from greater than 48 months to 24 months, while maintaining or improving the quality.

NRC-wide process improvements can be seen in the financial arena with the recent implementation of a new program structure for improving alignment with the agency's strategic goals. Currently, there is an ongoing development effort to deploy a new core financial accounting system, including a new fee billing module and an acquisition module, so that all of these corporate processes are more tightly integrated.

Program area process improvements include, but are not limited to, the following: implementation of Enterprise Project Management (EPM), and LIC 109 "Acceptance Review Procedures."

The EPM pilot was initiated by CPA as a means of improving the planning and tracking of licensing actions received by the NRC. Previously, these licensing actions were tracked in a database, with limited collaboration capability. The EPM solution is a Microsoft suite product that will allow staff to share information on a real-time basis and collaborate on developing schedules, with the capability to integrate other Microsoft tools, such as Outlook and Excel, for increased planning and reporting capabilities.

NRR monitors progress toward achieving office-specific process improvements on a consistent and regular basis to ensure successful and timely completion of each stated objective. NRR has defined processes and automated tools in place to monitor this progress. Specifically, all work is assigned an individual "Technical Assignment Control (TAC)" Number for monitoring, and all staff working on the activity must schedule this work via NRR's time, resource, and inventory management (TRIM) module of the RPS system. Once scheduled in the TRIM system, this TAC Number is used for reporting in the Time and Labor System, as well as within the NRR database maintained by CPA.

Weekly reports generated by the CPA staff are useful management tools for monitoring progress and contain color-coded attributes of red, yellow, and green, which are easily reviewed for those TAC's that are late (red), or at risk of becoming late (yellow). Actual hours charged are downloaded from the NRC's Time and Labor System, HRMS, and reports are available via the NRR Web site, the Dynamic Web Site, showing hours charged to each TAC in various optional formats. In addition, on a quarterly basis, the project manager is asked to review the TAC hours charged, on a per-employee basis, to ensure that the fee bills are accurate.

RPS is an IT system used by regional inspectors and on-site resident inspectors to plan and schedule their inspections and inspection-related activities, such as preparation and documentation. The Inspection Report Number is the key field for monitoring progress on all planned inspections, and is used by Regional staff in HRMS, just as the TAC Numbers are used to record and track actual hours charged for Headquarters activities. RPS has a separate set of reporting tools that are available for managing inspection activities, as well as the Dynamic Web Site reports mentioned previously. There are currently plans to upgrade and improve the underlying infrastructure for RPS, which is expected to yield process improvements for all users of that system.

Revision 1 to LIC-109 provided updated guidelines and criteria to the staff in performing acceptance reviews and covered activities that require NRC approval prior to implementation (e.g., license amendments, relief requests, exemptions, security and emergency plan changes) and topic report reviews. The objective was to provide a basic framework for performing an acceptance review upon receipt of a requested licensing action; it made the process more predictable for both the licensees and the NRC staff because the early identification of insufficient information benefits both the NRC staff and the licensee or applicant.

All of the abovementioned tools and activities contribute to the efficient and effective oversight of all process improvements and ensure that there is continuous improvement in all areas, throughout the organization.

IRRS Question and Response Report

Question No: 275

Module 04: Management System of the Regulatory Body

Question

What sort of performance indicators has the regulatory developed and do they meet the criteria for good indicators?

Response

The NRC has developed a variety of indicators that effectively measure progress and performance in achieving the agency's mission. The NRC's Strategic Plan contains strategic outcomes and strategies, and the budget and operating plans align with the Strategic Plan goals and link resources to specific program outputs. As discussed in response to Question 230, the Strategic Plan development includes development of good indicators through meeting GPRA requirements. The achievement of performance targets is reported annually in the Performance and Accountability Report. NRC's performance measures include precursors and are tied to traceable, verifiable data or facts. For example, the NRC has established a safety strategic goal to "prevent the occurrence of any acute radiation exposures resulting in fatalities," for which there is a performance metric that includes serious injuries from radiation exposure, which is a precursor measure that is traceable and verifiable.

Output measures are used as part of the agency's policy of continuous improvement. By continually improving its internal processes to meet precursors, the NRC is able to make the most efficient use of the funds appropriated by Congress and provided to the Commission to carry out its mission. The agency balances the cost versus the benefit of increasing the output measure for a given process. In addition, managers compare the value of increasing the output measures from one activity against the value from increasing the output measures from another activity. In addition, program evaluations are conducted to assess performance problems and successes. Evaluations include assessment of the degree to which performance measures adequately reflect intended program outcomes and the verification and validation of performance data.

Performance against metrics and indicators is reviewed by senior management on a quarterly basis, and the adequacy of the performance indicators is reviewed annually as part of the budget development process.

Question No: 276

Module 04: Management System of the Regulatory Body

Question

- 1) What performance indicators does the regulatory body use to show that it is effective and efficient?
- 2) Are they adequate and valid for demonstrating and improving effectiveness and efficiency?

Response

The NRC has developed performance indicators that measure the effectiveness of activities that occur throughout the agency. The NRC's performance indicators used to manage internal processes are detailed in the following three publications: NUREG 1614, NUREG 1100, and NUREG 1542. The Strategic Plan is reviewed and revised every 3 years. The agency starts development of the performance budget 2 years in advance using lessons learned from implementation of past indicators and reviews and modifies the performance indicators the year before implementation. As noted in the responses to Questions 225, 264, 265, and 267, performance indicators are in NRC office-level operating plans and performance reviewed by various levels of management throughout the budget execution year. Final results that demonstrate the effectiveness and efficiency of the indicators are included in the Performance and Accountability Report, issued annually. Any shortfalls in performance are addressed in NRC management reviews during the fiscal year and also in the NRC's Performance and Accountability Report. Corrective actions are developed to address any shortfalls and progress tracked. The effectiveness of the corrective actions can be measured by monitoring the performance measure results.

IRRS Question and Response Report

Question No: 277

Module 04: Management System of the Regulatory Body

Question

How does the regulatory body show that it is striving to continuously improve its regulatory performance?

Response

The NRC implements the goals of its Strategic Plan to maintain safety and security. Regarding improvements to regulatory performance, the NRC reviews and revises its Strategic Plan every 3 years and uses lessons learned to implement improvements in the plan. In addition, each year offices assess and improve their operating plan metrics that support the Strategic Plan. Implementation of these measures designed to improve performance are clearly communicated to both internal and external stakeholders.

Another source of regulatory improvement is NRC's response to self-assessments and independent audits. For example, the NRC's OIG is an independent and objective unit that conducts and supervises audits and investigations relating to NRC's programs and operations. The purpose of OIG's audits and investigations is to prevent and detect fraud, waste, abuse, and mismanagement, and promote economy, efficiency, and effectiveness in NRC programs and operations. In addition, OIG reviews existing and proposed regulations, legislation, and directives, and provides comments, as appropriate, regarding any significant concerns. Also, the GAO, another Government organization independent of the NRC, performs independent audits and investigations of NRC activities, either on its own initiative or in response to requests from the U.S. Congress. The NRC assesses and responds to audit and investigation findings by both OIG and GAO.

Annually, the agency performs a reasonable assurance certification to certify, with reasonable assurance, that the NRC meets the following objectives: (1) efficient and effective operations, (2) reliable financial reporting, and (3) compliance with laws and regulations. Areas for improvement are identified and implemented as part of this review and certification. (See the response to Question 231 for additional information on reasonable assurance certification.)

As noted in the response to Question 223AS, the agency responds to areas for improvement in response to the triennial Safety Culture and Climate Survey. In addition, each office implements review and assessment activities to improve its performance. For example, one program in NRR is a corrective action program that is included in OI ADM 101.

Question No: 278

Module 04: Management System of the Regulatory Body

Question

How does the regulatory body continuously improve its performance?

Response

See the response to Questions 277 and 244AS on development and review of performance indicators.

IRRS Question and Response Report

Question No: 279

Module 04: Management System of the Regulatory Body

Question

- 1) What strengths and weaknesses have been identified in exiting regulatory practice?
- 2) What are the intended activities to eliminate the weaknesses and improve regulatory work?
- 3) How does the regulatory body deal with non-conformance and sub-standard regulatory performance?

Response

The NRC continually evaluates its internal controls and implements continual process improvements. (See the response to Question 274)

MD 6.8, "Lessons-Learned Program," dated August 1, 2006, implements an agencywide program that will provide reasonable assurance that major organizational problems (nonconformances) identified as lessons learned will not recur and that the knowledge gained from the lessons learned is retained and disseminated in a manner that will maximize its benefit and usefulness to the staff. In addition, NRC's knowledge management activities support retention of lessons learned. (See the response to Question 254 for knowledge management activities.)

The NRC places a high priority on communicating with, and obtaining feedback from, staff, licensees, other Federal agencies, and interested external stakeholders. One example is in the ROP.

The staff maintains the NRC's Web pages to communicate current ROP-related information and results. To promote communications with external stakeholders, the staff conducts monthly public working-level meetings with the Nuclear Energy Institute (NEI), the industry, and interested stakeholders to discuss the status of ongoing refinements to the ROP. The staff also conducts formal licensee and other public stakeholder venues in the vicinity of each operating reactor to discuss the results of the NRC's assessment of the licensee's performance and other topics of stakeholder interest. These annual meetings involving the public provide an opportunity to engage interested stakeholders on the NRC's role in ensuring safe and secure plant operations. In addition, the NRC performs an annual self-assessment in accordance with IMC 0307, "Reactor Oversight Process Self-Assessment Program," dated March 23, 2009.

In addition to the ROP self-assessment program, several independent evaluations have been performed since the inception of the ROP to analyze its effectiveness and recommend improvements. The staff publishes a survey in an FR notice on a biennial basis to obtain external stakeholder input regarding ROP effectiveness, and internal surveys are conducted on a biennial basis (opposite years) to solicit and analyze stakeholder feedback from NRC staff to inform the staff's annual self-assessment.

Question No: 280

Module 04: Management System of the Regulatory Body

Question

- 1) How does the regulator track and use lessons learned information, best practices, innovations, new ideas, methodologies, and technologies to improve its capabilities and regulatory performance?
- 2) How does the regulatory body keep abreast of best practices and advances in methodologies and technologies?

Response

The NRC's Strategic Plan, "Organizational Excellence," directs the "use of state-of-the art technologies and risk insights to improve the effectiveness and realism of NRC actions, with the goal of continuous improvement." This direction inherently includes the use of lessons learned, best practices, innovations, new ideas, methodologies, and technologies to improve capabilities and regulatory performance. The NRC tracks and uses lessons learned information in accordance with the MD 6.8. The Lessons-Learned Program is a set of processes, procedures, and oversight that is designed to collectively ensure that significant agency deficiencies are identified and corrected in such a way that they do not recur. This goal is accomplished by using 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 plans have been effective and have not had any unintended consequences. Each corrective action plan must include an explanation of what actions will be taken to institutionalize the knowledge gained through the identification of a lesson learned to help prevent its recurrence. In addition, each office supports lessons learned for specific activities, and NRR implements a Corrective Action Program to encourage staff to identify areas for improvement.

In addition, the NRC evaluates NPP operating experience, information from inspections, audits, and investigations, and regulatory research. As necessary, the NRC requires changes to the licensing basis for NPPs through the release of new or revised regulations, the issuance of orders, and acceptance of licensee commitments to modify NPP designs and procedures. In such cases, the NRC follows established processes that ensure the appropriate NRC actions are taken with full consideration of the safety significance of the issue and opportunity for stakeholder involvement (e.g., rulemaking, hearing process, backfit analysis). The NRC ensures that staff is knowledgeable of these changes through implementation of changes to regulatory documents and through its knowledge management programs and tools.

The NRC initiates research and development work when it is determined that there is a need for additional studies beyond those identified and undertaken by the industry. There may also be situations in which the NRC requires independent research work so that it can apply suitable critical considerations in its review and assessment. Most research at the NRC is conducted by the Office of Nuclear Regulatory Research and is identified through User Needs from other NRC Offices. The Office of Nuclear Regulatory Research supports the NRC's regulatory decisionmaking processes by providing technical advice, analytical tools, and information as requested by other NRC offices to support the technical staff's ability to identify and resolve safety issues, make regulatory decisions, develop regulations and guidance, conduct independent analyses to support decisions to grant or deny licensee proposed changes, renew plant operating licenses, evaluate operating experience, evaluate proposed designs and technologies, and enhance the efficiency and effectiveness of NRC programs and processes.