UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CHAIRMAN

July 1, 1997

The Honorable Fred Thompson, Chairman
Committee on Governmental Affairs
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

I am pleased to provide a draft of the Nuclear Regulatory Commission's (NRC) Strategic Plan. We look forward to consulting with you on the draft plan this month.

Consistent with the Government Performance and Results Act of 1993, the NRC assessed the functions we perform and the external and internal factors which affect our mission. Through this strategic assessment and rebaselining, policy issues were identified and evaluated in a series of issue papers which were considered by the Commission. These issue papers and the Commission's preliminary views for responding to the issues were provided to our stakeholders for comment and discussed at several stakeholder meetings. The comments received from our stakeholders were considered by the Commission in its policy decisions which formed the basis for the enclosed draft strategic plan.

The NRC is scheduling a briefing for your staff on the draft strategic plan. If you or your staff need further information about the plan, please contact me or Mr. Jesse L. Funches, Chief Financial Officer, at 301-415-7322.

Sincerely,

Shirley Ann Jackson

Shirley Ann Jackson

Enclosure: As Stated

cc: Senator John Glenn

9710100033

E-1

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CHAIRMAN

July 1, 1997

The Honorable Dan Burton, Chairman
Committee on Government Reform and Oversight
United States House of Representatives
Washington, D.C. 20510

Dear Mr. Chairman:

I am pleased to provide a draft of the Nuclear Regulatory Commission's (NRC) Strategic Plan. We look forward to consulting with you on the draft plan this month.

Consistent with the Government Performance and Results Act of 1993, the NRC assessed the functions we perform and the external and internal factors which affect our mission. Through this strategic assessment and rebaselining, policy issues were identified and evaluated in a series of issue papers which were considered by the Commission. These issue papers and the Commission's preliminary views for responding to the issues were provided to our stakeholders for comment and discussed at several stakeholder meetings. The comments received from our stakeholders were considered by the Commission in its policy decisions which formed the basis for the enclosed draft strategic plan.

The NRC is scheduling a briefing for your staff on the draft strategic plan. If you or your staff need further information about the plan, please contact me or Mr. Jesse L. Funches, Chief Financial Officer, at 301-415-7322.

Sincerely,

Shirley Ann Jackson

Shirley Ann Jackson

Enclosure: As Stated

cc: Representative Henry Waxman

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CHAIRMAN

July 1, 1997

The Honorable Pete Sessions
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Sessions:

I am pleased to provide a draft of the Nuclear Regulatory Commission's (NRC) Strategic Plan. We look forward to consulting with you on the draft plan this month.

Consistent with the Government Performance and Results Act of 1993, the NRC assessed the functions we perform and the external and internal factors which affect our mission. Through this strategic assessment and rebaselining, policy issues were identified and evaluated in a series of issue papers which were considered by the Commission. These issue papers and the Commission's preliminary views for responding to the issues were provided to our stakeholders for comment and discussed at several stakeholder meetings. The comments received from our stakeholders were considered by the Commission in its policy decisions which formed the basis for the enclosed draft strategic plan.

The NRC is scheduling a briefing for your staff on the draft strategic plan. If you or your staff need further information about the plan, please contact me or Mr. Jesse L. Funches, Chief Financial Officer, at 301-415-7322.

Sincerely,

Shirley Ann Jackson

Shirley Ann Jackson

Enclosure: As Stated

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CHAIRMAN

July 1, 1997

The Honorable Joseph McDade, Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
United State House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

I am pleased to provide a draft of the Nuclear Regulatory Commission's (NRC) Strategic Plan. We look forward to consulting with you on the draft plan this month.

Consistent with the Government Performance and Results Act of 1993, the NRC assessed the functions we perform and the external and internal factors which affect our mission. Through this strategic assessment and rebaselining, policy issues were identified and evaluated in a series of issue papers which were considered by the Commission. Those issue papers and the Commission's preliminary views for responding to the issues were provided to our stakeholders for comment and discussed at several stakeholder meetings. The comments received from our stakeholders were considered by the Commission in its policy decisions which formed the basis for the enclosed draft strategic plan.

The NRC is scheduling a briefing for your staff on the draft strategic plan. If you or your staff need further information about the plan, please contact me or Mr. Jesse L. Funches, Chief Financial Officer, at 301-415-7322.

Sincerely,

Shirley Ann Jackson

Shirley Ann Jackson

Enclosure: As Stated

cc: Representative Vic Fazio

DF12 1
Per Dave Messberg

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CHAIRMAN

July 1, 1997

The Honorable Dan Schaefer, Chairman
Subcommittee on Energy and Power
Committee on Commerce
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

I am pleased to provide a draft of the Nuclear Regulatory Commission's (NRC) Strategic Plan. We look forward to consulting with you on the draft plan this month.

Consistent with the Government Performance and Results Act of 1993, the NRC assessed the functions we perform and the external and internal factors which affect our mission. Through this strategic assessment and rebaselining, policy issues were identified and evaluated in a series of issue papers which were considered by the Commission. These issue papers and the Commission's preliminary views for responding to the issues were provided to our stakeholders for comment and discussed at several stakeholder meetings. The comments received from our stakeholders were considered by the Commission in its policy decisions which formed the basis for the enclosed draft strategic plan.

The NRC is scheduling a briefing for your staff on the draft strategic plan. If you or your staff need further information about the plan, please contact me or Mr. Jesse L. Funches, Chief Financial Officer, at 301-415-7322.

Sincerely,

Shirley Ann Jackson

Shirley Ann Jackson

Enclosure: As Stated

cc: Representative Ralph Hall

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CHAIRMAN

July 1, 1997

The Honorable Pete V. Domenici, Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

I am pleased to provide a draft of the Nuclear Regulatory Commission's (NRC) Strategic Plan. We look forward to consulting with you on the draft plan this month.

Consistent with the Government Performance and Results Act of 1993, the NRC assessed the functions we perform and the external and internal factors which affect our mission. Through this strategic assessment and rebaselining, policy issues were identified and evaluated in a series of issue papers which were considered by the Commission. These issue papers and the Commission's preliminary views for responding to the issues were provided to our stakeholders for comment and discussed at several stakeholder meetings. The comments received from our stakeholders were considered by the Commission in its policy decisions which formed the basis for the enclosed draft strategic plan.

The NRC is scheduling a briefing for your staff on the draft strategic plan. If you or your staff need further information about the plan, please contact me or Mr. Jesse L. Funches, Chief Financial Officer, at 301-415-7322.

Sincerely,

Shirley Ann Jackson

Shirley Ann Jackson

Enclosure: As Stated

cc: Senator Harry Reid

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CHAIRMAN

July 1, 1997

The Honorable James M. Inhofe, Chairman
Subcommittee on Clear Air, Wetlands, Private
Property and Nuclear Safety
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

I am pleased to provide a draft of the Nuclear Regulatory Commission's (NRC) Strategic Plan. We look forward to consulting with you on the draft plan this month.

Consistent with the Government Performance and Results Act of 1993, the NRC assessed the functions we perform and the external and internal factors which affect our mission. Through this strategic assessment and rebaselining, policy issues were identified and evaluated in a series of issue papers which were considered by the Commission. These issue papers and the Commission's preliminary views for responding to the issues were provided to our stakeholders for comment and discussed at several stakeholder meetings. The comments received from our stakeholders were considered by the Commission in its policy decisions which formed the basis for the enclosed draft strategic plan.

The NRC is scheduling a briefing for your staff on the draft strategic plan. If you or your staff need further information about the plan, please contact me or Mr. Jesse L. Funches, Chief Financial Officer, at 301-415-7322.

Sincerely,

Shirley Ann Jackson

Shirley Ann Jackson

*Enclosure:* As Stated

*cc:* Senator Bob Graham

CONSULTATION DRAFT

# U.S. Nuclear Regulatory Commission

# Strategic Plan

## FY 1997 - FY 2002

July 1, 1997

CONSULTATION DRAFT

## PRINCIPLES OF GOOD REGULATION

**Independent.** 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.

**Open.** 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.

**Efficient.** 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. The 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.

**Clear.** 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.

**Reliable.** 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.

CONSULTATION DRAFT

# U.S. Nuclear Regulatory Commission

# Strategic Plan

## FY 1997 - FY 2002

July 1, 1997

CONSULTATION DRAFT

## PRINCIPLES OF GOOD REGULATION

**Independent.** 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.

**Open.** 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.

**Efficient.** 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. The 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.

**Clear.** 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.

**Reliable.** 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.

CONSULTATION DRAFT

# U.S. Nuclear Regulatory Commission

# Strategic Plan

## FY 1997 - FY 2002

July 1, 1997

CONSULTATION DRAFT

# Table of Contents

# Message from the Chairman

Like many organizations, both public and private, the Nuclear Regulatory Commission (NRC) is facing a rapidly changing environment as it prepares to enter the 21st century.

- Industry economic changes are introducing new complexities to the NRC regulatory environment.
- Federal deficit reduction and downsizing are resulting in a decline in real NRC resources.
- Public interest in the safe operation of nuclear power plants and facilities, use of nuclear materials, and management of nuclear waste remains high.
- Technology and other societal trends are changing the characteristics of the NRC workforce and the way that the NRC does its work.

All of these and many other changing conditions suggest that the NRC's future holds many challenges and opportunities, some already known to us, but others we cannot anticipate today. To respond effectively to these challenges, we have established a clear strategic direction that will enable the NRC to carry out its mission and achieve the results expected by its primary customers, the collective interests of the American public. The Commission believes that this mission must be the foundation for making decisions about what activities the agency should perform. Thus, the Commission's programmatic decisions will not be fee-driven but will be based on their contributions to public health and safety.

This strategic plan establishes a strategic framework that will guide future decision-making and will help the NRC continue to meet its responsibility for protecting public health and safety, promoting the common defense and security, and protecting the environment. Meeting these responsibilities requires the collective efforts of the NRC and its licensees, since the regulatory oversight of licensees is the responsibility of the NRC and the safe and secure use of nuclear materials for civilian purposes is the responsibility of NRC licensees. Finally, the development and implementation of the strategic plan will meet the requirements of the Government Performance and Results Act.

Shirley Ann Jackson
Chairman
U.S. Nuclear Regulatory Commission

## Our Mission

The Atomic Energy Act of 1954 and the Energy Reorganization Act of 1974, as amended, establish NRC's basic regulatory mission.

*NRC's mission is to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of the public health and safety, to promote the common defense and security, and to protect the environment.*

## Our Vision

*In implementation of its mission, Nuclear Regulatory Commission actions enable the Nation to safely and efficiently use nuclear materials. NRC's actions should be such that the public, those it regulates, and other stakeholders in the national and international nuclear community have the utmost respect for and confidence in the NRC.*

## Our Goals

The NRC has developed general goals consistent with its mission. These goals are supported by top-level performance goals that represent outcomes that are planned to be achieved over the period covered by this strategic plan (FY 1997 - FY 2002). The safe and secure use of nuclear materials for civilian purposes is the responsibility of NRC licensees, and the regulatory oversight of licensees is the responsibility of NRC. Thus, to achieve these goals requires the collective efforts of the NRC and its licensees.

The NRC will conduct an efficient regulatory program which allows the Nation to safely use nuclear materials for civilian purposes by working to achieve the following general goals:

- *Prevent radiation-related deaths or illnesses due to civilian nuclear reactors*
- *Prevent radiation-related deaths or illnesses due to civilian use of source, byproduct, and special nuclear materials*
- *Ensure treatment, storage, and disposal of wastes produced by civilian use of nuclear material in ways that do not adversely affect this or future generations*
- *Prevent the loss or theft of special nuclear materials regulated by the NRC, and support U.S. national interests in the safe use of nuclear materials and in non-proliferation*
- *Protect the environment in connection with civilian use of source, byproduct, and special nuclear materials through the implementation of the Atomic Energy Act and the National Environmental Policy Act*
- *The public, those we regulate, and other stakeholders in the national and international community, will have clear and accurate information about, a meaningful role in, and will have respect for and confidence in, NRC's regulatory program*

- *The NRC regulatory program will be efficient and will allow the Nation to safely use nuclear materials for civilian purposes*

## Strategic Arenas

We have organized our strategies for achieving our vision and general goals into seven strategic arenas:

- *Nuclear Reactor Safety*
- *Nuclear Materials Safety*
- *Nuclear Waste Safety*
- *Common Defense and Security and International Involvement*
- *Protecting the Environment*
- *Public Confidence*
- *Excellence*

For each arena that follows we provide a brief introduction, top-level performance goals for measuring results toward meeting our general goals, major environmental factors, and strategies for accomplishing our general goals. The top-level performance goals are the annual outcomes in support of the general goals, and as such, link the strategic plan to the FY 1999 performance plan. We will include additional outcome goals and measures and major program outputs in the performance plan.

# Nuclear Reactor Safety

## GOAL: Prevent radiation-related deaths or illnesses due to civilian nuclear reactors

A major part of our mission is to ensure that our licensees design, construct, operate, and decommission civilian reactor facilities safely. NRC regulates the 110 commercial nuclear power reactors which are licensed to operate and another 13 that are undergoing decommissioning. The safety of commercial nuclear power reactors is the responsibility of NRC licensees. The regulatory oversight of licensee safety is the responsibility of NRC. Thus, safety performance reflects the collective results of the efforts of the NRC and the nuclear industry.

Reactor safety encompasses all NRC efforts to ensure that civilian nuclear reactor facilities are operated in a manner that provides adequate protection of public health and safety. These efforts include reactor licensing, inspection, performance assessment, identification and resolution of safety issues, reactor regulatory research, regulation development, independent assessment of reactor operational events and experience, investigations of alleged wrongdoing by licensees, applicants, contractors, or vendors, and imposition of enforcement sanctions for violations of NRC requirements.

Research provides the information and some of the technical expertise for making timely regulatory judgements and anticipating problems of potential safety significance. NRC's research includes both short- and long-range components. The short-range component, confirmatory research, delivers a well-defined product on a predetermined schedule to assist NRC in making its safety decisions. The long-range component, anticipatory research, focuses on issues of potential future safety significance that are not being pursued by industry.

The top-level performance goals for measuring results toward meeting our nuclear reactor safety goal are:

- **Zero civilian nuclear reactor accidents[1]**
- **Zero deaths due to radiation releases from civilian nuclear reactors**
- **Zero significant radiation exposures due to civilian nuclear reactors[2]**

---

[1] "Nuclear reactor accidents" is as defined in the NRC Severe Accident Policy statement (50 FR 32138, August 8, 1985), that is, those accidents in which substantial damage is done to the reactor core, whether or not there are serious offsite consequences.

[2] "Significant radiation exposures" are those exposures that meet the NRC criteria for reporting abnormal occurrences to the Congress.

Major factors affecting our nuclear reactor safety strategy are as follows:

- Safety questions will continue to arise as the currently licensed reactors age and as operational events continue to occur.
- Restructuring and reorganization within the electric utility industry and economic deregulation will cause increased economic pressure on the operators of power reactors, potentially impacting the economic and regulatory environment in which the utilities operate.
- An application for a new nuclear power reactor or an early site permit is not expected to be submitted during the period covered by this plan.
- Some power reactor owners will continue to express interest in renewing their plants' licenses. A number of the operating reactors are expected to shut down prior to the expiration of their licenses over the period covered by this plan.
- The availability of nuclear-energy-related research skills and experimental facilities is expected to decline.
- Licensees will continue to seek reduced burden and implement plant upgrades to improve economics.

## Strategy

**We will assure that licensees discharge their primary responsibility for conducting safe operations.**

- We will increase the involvement of licensees and others in our regulatory development process. We will encourage industry to develop codes, standards, and guides that can be endorsed by the NRC and carried out by the industry.
- We will communicate with licensees to facilitate a clear understanding of existing and emerging regulatory requirements.
- We will regularly assess, objectively measure, and report on licensees' performance. We will use this information to identify adverse safety trends and to identify early individual plants with declining performance. We will increase our regulatory attention on those licensees with marginal performance, including halting operations if performance falls below an acceptable level, and distributing inspection resources based on licensee performance.

- We will make licensee performance and compliance with our requirements consequential by decreasing the inspection frequency for good performers and assessing penalties to poor performers.
- We will be alert to the changing environment in the electric utility industry and timely adjust our regulatory program to maintain safety.
- We will inspect licensees' operations and activities to help ensure that licensees identify and resolve safety issues before they affect safe plant operations.
- We will review applications from licensees for amendments to their operating licenses to ensure that operational safety is not compromised.
- We will maintain and exercise an incident response capability to ensure that licensees and the NRC are prepared to respond to radiological emergencies.

**We will incrementally implement risk-informed, and, where appropriate, performance-based regulatory approaches for power reactors.**

- We will focus on those regulated activities that pose the greatest risk to the public, building on probabilistic risk assessment concepts and other approaches for determining high- and low-risk activities.
- Using risk insights together with deterministic analysis and performance history, we will establish objective parameters and criteria to monitor and assess performance.
- We will enhance the transition toward risk-informed, performance-based regulation by assessing our regulatory processes to determine which are amenable to a risk-informed, performance-based or a risk-informed, less prescriptive approach.
- The scope and priority of our assessment of regulatory activities will be based on the cumulative impact on safety, stakeholder initiatives, and the effect on agency and licensee efficiency.
- We will reflect a risk-informed, performance-based approach in our inspection, licensing, and performance assessment activities.

**We will position the NRC for licensing future reactors and renewing existing licenses.**

- We will encourage applicants, vendors and others to inform the NRC at the earliest opportunity of planned future reactor activities.
- Upon their submission, we will give priority to reviewing applications for license renewals, standard and advanced reactor designs, early site approvals, and new reactor licenses.

**We will position the NRC for licensing activities associated with reactor decommissioning.**

- We will provide clear and stable NRC guidance, including specific radiological criteria.
- We will assure that licensees have adequate funds available for decommissioning by establishing additional financial requirements.
- We will adjust our regulatory oversight of facilities undergoing decommissioning to be commensurate with the safety risk.

**We will maintain a research capability to provide timely and independent technical bases for NRC regulatory decisions.**

- We will pursue a reactor safety research program that includes elements of both confirmatory and anticipatory research to meet current and projected regulatory needs. We will focus the research on those areas where operating experience indicates potential problems and areas with the highest safety and regulatory significance.
- We will identify and maintain a core research capability. In doing so, we will evaluate technical activities to determine those specific research skills which will be maintained by in-house staff.
- We will consolidate our research activities at the best laboratories, universities, and commercial contractors.
- We will enter into cooperative research agreements with other countries, the Department of Energy, and the nuclear industry.
- We will use innovative procurement approaches, in addition to educational grants, to facilitate university participation in NRC's research.

**We will improve the measurement of performance of nuclear power plants to identify plants that warrant heightened NRC attention.**

- We will develop performance indicators and measures that provide leading or concurrent indications of plant performance and that identify facilities that warrant increased NRC attention in a consistent manner.
- We will develop improved methods of organizing and displaying performance information in order to enhance the assessment of plant performance and communicate the basis for NRC decisions to the industry and the public.
- We will determine objective criteria and thresholds for determining NRC action levels and categorization of facilities.

# Nuclear Materials Safety

**GOAL: Prevent radiation-related deaths or illnesses due to civilian use of source, byproduct, and special nuclear materials**

The nuclear materials program encompasses over 20,000 specific and more than 100,000 general licenses which are regulated by the NRC and the existing 30 Agreement States[3]. These materials range from very low-risk smoke detectors to relatively high-risk irradiators.

Nuclear materials safety encompasses all NRC efforts to ensure that all NRC-regulated aspects of nuclear fuel cycle facilities, and nuclear materials activities are handled in a manner that provides adequate protection of public health and safety. These efforts include licensing, inspection, and related regulatory activities for fuel cycle facilities and nuclear materials users, transportation of nuclear materials, and uranium recovery.

The top-level nationwide performance goals for measuring results toward meeting our nuclear materials safety goal are:

- **Zero radiation-related deaths due to civilian use of source, byproduct, and special nuclear materials**
- **No more than 23 unplanned significant radiation exposures in FY 1999 due to civilian use of source, byproduct, and special nuclear materials[4]**

Major factors affecting our nuclear materials safety strategy are as follows:

- The proportion of nuclear materials licensees regulated by the Agreement States will increase.
- Agreement States will continue to pursue a more active role in the regulatory process.
- Controversy will continue over how nuclear materials should be regulated and the roles of Federal and State agencies.
- Uncertainty exists with respect to the extent of NRC's future role in regulating Department of Energy (DOE) facilities.

---

[3] An Agreement State is a State that has signed an agreement with the NRC allowing the State to regulate the use of radioactive material, other than use in reactor facilities, within the State.

[4] "Significant radiation exposures" are those exposures that meet the NRC criteria for reporting abnormal occurrences to the Congress. The number of significant exposures in the goal is the five year average minus one.

## Strategy

**We will assure that licensees discharge their primary responsibility for using materials safely.**

- We will increase the involvement of licensees and others in our regulatory development process. We will encourage industry to develop codes, standards, and guides that can be endorsed by the NRC and carried out by the industry.
- We will communicate with licensees to facilitate a clear understanding of existing and emerging regulatory requirements.
- We will regularly measure the level of safety performance exhibited by material licensees and share this information with them.
- We will make licensee performance and compliance with requirements consequential by decreasing the inspection frequency for good compliers and assessing penalties to non-compliers.
- We will license and inspect facilities and material users to help ensure that they operate safely and develop safe products.

**We will regulate material uses consistent with the level of risk involved by decreasing oversight of those materials that pose the lowest radiological risk to the public and continuing emphasis on high-risk activities.**

- We will use risk analysis concepts and other approaches to determine the relative risks of the regulated activities in the nuclear materials area.
- We will assess our regulations and processes to identify those that are now or can be made risk-informed, performance-based or risk-informed, less prescriptive.
- We will reengineer our licensing processes, tailoring them to reflect the relative hazards of licensed activities.
- We will inspect specific licensees at varying frequencies and with varying techniques, depending on the magnitude and relative risk of the licensed material.

**We will work with the Agreement States to assure consistent protection of public health and safety nationwide.**

- We will provide for early and substantive involvement of the Agreement States in rulemaking and regulatory processes, including the transition to risk-informed, performance-based regulation or a risk informed, less prescriptive approach.
- We will review the adequacy and compatibility of each Agreement State's Radiation Control Program and give the results of this performance review to the Agreement States.
- We will continue to respond to requests from individual states that express an interest in pursuing Agreement State status and work with each state to achieve this goal; we will also encourage retention of existing Agreement States primarily through non-monetary incentives.

**We will position the NRC to perform regulatory oversight for certain DOE nuclear facilities.**

- We will identify and resolve significant legal, procedural, and technical issues prior to accepting oversight responsibilities of DOE nuclear facilities.
- We will request that funding for oversight of DOE facilities not be included as part of the NRC fee base currently paid by non-DOE licensees.

**We will maintain research capability to provide timely and independent technical bases for NRC regulatory decisions.**

- We will pursue a materials safety research program that includes elements of both confirmatory and anticipatory research to meet current and projected regulatory needs. We will focus the research on those areas where experience indicates potential problems and areas with the highest safety and regulatory significance.

# Nuclear Waste Safety

**GOAL: Ensure treatment, storage, and disposal of wastes produced by civilian use of nuclear material in ways that do not adversely affect this or future generations**

Nuclear waste is a byproduct of the use of radioactive materials. High-level radioactive waste results primarily from the fuel used by reactors to produce energy. Low-level radioactive waste results from medical, academic, industrial, and other commercial uses, and generally contains relatively limited concentrations of radioactivity.

The NRC's high-level waste regulatory activities are mandated by the Nuclear Waste Policy Act of 1982, the Nuclear Waste Policy Amendments Act of 1987, and the Energy Policy Act of 1992. The Nuclear Waste Policy Act specifies a detailed approach for the long-range undertaking of high-level waste disposal, with the Department of Energy (DOE) having operational responsibility and the NRC having regulatory responsibility. The Nuclear Waste Policy Amendments Act directs DOE to characterize only one candidate site, the Yucca Mountain site in the State of Nevada. Likewise, NRC's activities are focused on Yucca Mountain.

The Low-Level Radioactive Waste Policy Act of 1980, amended in 1985, made States responsible for providing for the disposal of commercial low-level waste generated within their borders. The Act encouraged States to enter into compacts that would allow several States to dispose of waste at a regional disposal facility. Most of the States have entered into compacts, and several States are proceeding with plans to construct and operate as many as 12 new disposal facilities. However, to date, no new disposal facilities have been opened.

The top-level performance goals for measuring results toward meeting our nuclear waste safety goal are:

- **No significant accidental releases of radioactive material from storage and transportation of high-level or low-level waste[5]**
- **Establish the regulatory framework for high-level waste disposal, consistent with current national policy, as required by law after the legislatively-required standard is issued[6]**
- **No offsite release of radioactivity beyond regulatory limits from low-level waste disposal sites**

---

[5] "Significant accidental releases of radioactive material" are those releases that meet the NRC criteria for reporting abnormal occurrences to the Congress.

[6] The "regulatory framework" is 10 CFR Part 60. Conforming 10 CFR Part 60 to the legislatively required standard is the measure to meet this goal.

Major factors affecting our nuclear waste strategy are as follows:

- Permanent disposal of nuclear waste will continue to be a national goal; however, uncertainty exists about whether and how Congress will change the approach for reaching this goal.
- There will continue to be opposition to the disposal of nuclear waste, delaying progress in developing both high- and low-level waste disposal facilities.
- The States will strive to meet their legislative requirement to develop new low-level waste disposal sites. These sites will most likely be licensed by the Agreement States rather than the NRC.

## Strategy

**We will advise DOE and prepare to license a high-level waste repository at a pace consistent with the national program.**

- We will participate in the development of a practical and implementable high-level waste safety standard. We will implement the standard through site-specific, performance-based regulation.
- We will focus on resolving the key technical issues that are most important to the performance of a high-level waste repository to provide early feedback to DOE on potentially significant site, design, or assessment flaws as they are identified during the site suitability study, and prior to DOE's viability assessment of Yucca Mountain.
- We will maintain the regulatory framework and the capability necessary to regulate transportation and storage of spent fuel.

**We will perform legislatively required low-level waste activities.**

- We will maintain core technical disciplines needed to assess low-level waste disposal issues, in part, by relying on technical skills in other programs.
- We will provide guidance and assistance to Agreement States about licensing a low-level waste facility.

# Common Defense and Security and International Involvement

**GOAL: Prevent the loss or theft of special nuclear materials regulated by the NRC, and support U.S. national interests in the safe use of nuclear materials and in non-proliferation**

The NRC performs international activities in support of the agency's domestic mission and in support of U.S. national interests. These activities include international policy and priority formulation, export-import licensing for nuclear materials and equipment, treaty implementation, international information exchange activities, and international safety and safeguards assistance. Our domestic safeguards responsibility involves the control of and accounting for nuclear materials, the protection of nuclear materials to prevent theft or diversion, and contingency plans for responding to threatening situations.

The top-level performance goals for measuring results toward meeting our common defense and security goal are:

- **Zero loss or theft of special nuclear materials regulated by the NRC[7]**
- **Strengthen international nuclear safety and safeguards**

A major factor affecting our common defense and security strategy is:

- Increased energy needs and their attendant planning for growth in nuclear power abroad are expected to lead to increased requests for assistance from NRC, particularly from the Pacific Rim countries that are embarking on, or considering, new or expanded nuclear power programs.

## Strategy

**We will provide leadership to strengthen nuclear safety and safeguards worldwide.**

- We will seek and maintain a more active and comprehensive larger role for NRC in international nuclear regulatory policy formulation and in developing approaches for its safe and secure use of nuclear material for peaceful purposes.
- We will provide a wide but carefully selected range of safety and safeguards assistance to regulatory bodies in countries establishing or seeking to improve their regulatory programs.

[7] A "loss or theft" is that which meets the NRC criteria for reporting abnormal occurrences to the Congress.

- We will participate in international exchange activities of benefit to our domestic responsibilities or U.S. national interests.
- We will support international programs and research that have beneficial impacts on nuclear reactor and nuclear materials safety.
- We will conduct a comprehensive review and develop criteria that will address the basis for prioritizing and sunsetting NRC's non-mandated international activities. In doing so, we will consider the international activities and capabilities of other organizations (e.g., DOE, International Atomic Energy Agency, Nuclear Energy Agency, and World Association of Nuclear Operators) and will not undertake tasks that are best funded by, or better performed by, entities other than NRC.

**We will assure that licensees control, account for, and protect nuclear materials from being misplaced.**

- We will inspect and complete license reviews to ensure licensees prevent the theft or diversion of nuclear materials.
- We will require that licensees be prepared to respond to threatening situations involving theft or sabotage of nuclear materials.
- We will strengthen domestic and international programs to ensure no improper control or disposal of radioactive material.

**We will assist in curbing the proliferation of the capability to produce nuclear explosives.**

- We will license the export and import of nuclear materials to ensure U.S. non-proliferation interests are protected as contemplated by the Nuclear Nonproliferation Act.
- We will support international safeguards and physical security by working to strengthen the International Atomic Energy Agency's safeguards systems and participating in bilateral exchanges on physical security approaches and practices.

# Protecting the Environment

**GOAL: Protect the environment in connection with civilian use of source, byproduct, and special nuclear materials through the implementation of the Atomic Energy Act and the National Environmental Policy Act**

The NRC recognizes a continuing obligation to conduct its civilian licensing and related regulatory functions in a manner which is both responsive to environmental concerns and consistent with the Commission's responsibility as an independent regulatory agency for protecting the radiological health and safety of the public.

Protection of the environment from potential hazards associated with the civilian use of source, byproduct, and special nuclear materials involves actions to mitigate environmental impacts both during the conduct of licensed activities and afterward. Prior to authorizing licensed activities, the NRC ensures that potential environmental impacts of such activities are assessed consistent with the requirements of the National Environmental Policy Act as implemented by applicable NRC regulations. Under NRC regulations, decommissioning involves safely removing a facility from service and reducing residual radioactivity to a level that permits the property to be released for unrestricted use. This action is taken by a licensee before termination of the license. In some cases, non-licensed facilities may also be required to reduce or stabilize contamination before sites are released

The top-level performance goals for measuring results toward meeting our environmental protection goal are:

- **Zero offsite releases from operating facilities of radioactive material that cause adverse impact on the environment[8]**
- **Releases that do occur will cause only negligible harm to the environment**
- **No sites will be released for unrestricted use until satisfactorily remediated in accordance with NRC release criteria**

[8] Releases of radioactive material that cause "adverse impact" are those that exceed 10 CFR Part 20 limits for reporting release to NRC immediately or within 24 hours of discovery as provided under 10 CFR 20.2202.

## Strategy

**We will improve the process by which licensees successfully complete decommissioning of non-reactor sites.**

- We will provide clear and stable NRC guidance, including specific radiological criteria, for decommissioning sites.
- We will assure that licensees have adequate funds available for decommissioning and maintaining financial requirements.
- We will revise our decommissioning review process to be more performance oriented and more efficient.
- We will strengthen litigation and enforcement to make compliance with decommissioning regulations more consequential.
- As a last resort, we will transfer to EPA those sites for which EPA agrees that the remedies EPA can bring to bear will have a higher probability of success for achieving cleanup.

**We will assure that licensees protect the environment during operations.**

- During initial licensing and any other major NRC action that could significantly affect the quality of the environment, we will consider the environmental effects and alternatives associated with such major NRC actions.
- We will inspect to ensure that licensees identify and mitigate potential adverse impacts on the environment from their operations as required by NRC.

# Public Confidence

**GOAL: The public, those we regulate, and other stakeholders in the national and international community, will have clear and accurate information about, a meaningful role in, and will have respect for and confidence in, NRC's regulatory program.**

Building and maintaining public trust is critical to carrying out our mission and achieving our vision. To be an effective steward for nuclear safety, our actions must be such that the public, those we regulate, and other stakeholders in the national and international community have the utmost respect for and confidence in the NRC.

The top-level performance goal for measuring results toward meeting our public confidence goal is:

- **Implement the Agency's plan to improve how it informs and involves the public, those we regulate, and other stakeholders in NRC's regulatory program**

Major factors affecting our public confidence strategy are as follows:

- Skepticism and mistrust will continue to be an element of the public's attention directed toward the use of nuclear materials.
- The public's confidence in the safe use of nuclear materials will be affected by how well NRC does its job.
- The public's assessment of the NRC's performance will continue to be closely tied to the performance of the regulated industry.
- Deregulation of the utilities and changes in NRC's regulatory strategies probably will raise new questions about the effectiveness and credibility of NRC's regulatory oversight programs.

## Strategy

**We will objectively demonstrate that NRC's efforts are enabling the nation to use nuclear materials safely.**

- We will establish and clearly communicate our annual performance goals and measures.
- We will measure and report the performance of both NRC and its licensees and share this performance information in a fair and focused way with interested stakeholders.

**We will identify regulatory decisions or issues that are likely to generate substantial public interest or concern at an early stage, and employ appropriate methods to inform and involve the public.**

- For each of the various types of issues, we will develop a specific approach for responding to public interests and concerns, ensuring that our approaches to public interaction employ open processes that provide opportunities for meaningful participation, candid communication, and exchange of views among the participants.
- We will ensure that the approaches developed are consistently practiced agency-wide by using centralized planning and coordination, and decentralized implementation, primarily by the program offices and regions.
- We will obtain feedback from the public to improve our public information dissemination and interaction programs.
- We will periodically re-examine our responsiveness to allegations and petitions from the public to ensure timely and technically adequate information is clearly and understandably communicated to the parties and regulatory action is taken if warranted, consistent with the risk significance of the issues.

**We will reexamine existing modes and explore new modes of communication to make information dissemination and public interaction more effective and efficient.**

- We will capitalize on information technology for improving information access, information distribution, and public interaction, being careful not to eliminate paper in favor of electronic communication without full consideration of the public's ability to access information electronically.
- We will identify areas where informal communication can be used. We will use these informal communication processes where they can help to enhance the quality and efficiency of our interaction with the public.

# Excellence

**GOAL: The NRC regulatory program will be efficient and will allow the Nation to safely use nuclear materials for civilian purposes.**

Striving for regulatory excellence in all NRC functions is both desirable and necessary to maintain an effective and efficient regulatory framework in today's changing environment. As stated in the NRC's Principles of Good Regulation, the American taxpayer, the rate-paying consumer, and licensees are all entitled to the best possible management and administration of regulatory activities. Where several effective alternatives are available, the option which minimizes the use of resources should be adopted.

The top-level performance goals for measuring results toward meeting our excellence goal are:

- **Implement the agency's plan for regulatory excellence**
- **Evaluate and implement needed improvements for five major NRC processes by July 1, 1999**
- **Reduce NRC cycle times for license applications and amendment applications by 10 percent from the average FY 1995-97 baseline**

## Strategy

**We will make regulatory excellence the cornerstone for all of our strategies and activities.**

- We will proactively examine our programs and performance in order to improve the way we do our work.
- We will implement changes to improve the effectiveness and efficiency of our regulatory programs and our management and support activities.
- We will make our improvements in a continuous, systematic, and open manner with the support and input of our internal and external stakeholders.
- We will provide training and development to our staff to enable us to achieve excellence in our organizational and individual performance.
- We will eliminate unnecessary regulatory requirements and policy statements, and streamline our processes, including using information technology to help improve efficiency.

# APPENDIX

# Links to Other NRC Planning Documents

Key documents that are linked to and complement this strategic plan are: Commission decisions on Direction-Setting Issue papers, annual performance plans, annual budget requests to the Office of Management and Budget (OMB) and Congress, NRC's information resource management plan, and program evaluations.

## Commission Decisions on Direction Setting Issue Papers

The NRC's Strategic Plan is a product of a broader strategic assessment and rebaselining initiative. The first two phases of that effort resulted in the creation of a series of Direction-Setting Issue papers. These issue papers and the associated Commission decisions form the foundation for this strategic plan. The Commission decisions were made after obtaining stakeholder comments as part of Phase II.

## Annual Performance Plans

The NRC's annual performance plans will be directly linked to the NRC's Strategic Plan. The general goals in this strategic plan set the framework for developing annual performance plans. The performance plans will delineate objective, quantifiable, and measurable performance goals to be achieved in a given fiscal year in furtherance of the general goals contained in the strategic plan. Each annual performance plan will also include performance indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes related to the performance goals. We expect to measure our progress by using a combination of output and outcome performance goals.

## Performance Report

Within six months after the close of each fiscal year, the NRC will submit to the President and the Congress a report on program performance for the fiscal year which has just closed. This performance report will review the success of the agency in achieving the performance goals established for the fiscal year being reported upon. Where those goals have been achieved, the underlying assumptions and strategies will be examined to ensure that continued applicability is warranted in the future. If any of the performance goals are not met, the agency will conduct a thorough analysis of why it did not meet the goal and the actions necessary to meet the goal in the future. One result of this analysis will be the documentation of plans and schedules for achieving the established performance goal. If the analysis should indicate that the performance goal is impractical or infeasible, the performance report will document why that is the case and what action is recommended.

## Annual Budget Request to OMB and Congress

Each year, the NRC submits a budget request to OMB, which is part of the President's budget to the Congress. The budget will specify the programs, activities, milestones, and resources necessary to implement the strategic plan and the performance plan.

## NRC's Information Resource Management Plan

The Paperwork Reduction Act requires NRC to develop and maintain a strategic information resource management plan that describes how information resource management activities help accomplish agency missions. The plan will be submitted to OMB annually, and its development will be guided by this strategic plan.

## Program Evaluations

The major program evaluation that supported the development of this strategic plan is the Strategic Assessment and Rebaselining Initiative. In Phase I of that initiative, the NRC assessed where the agency is today by examining current NRC functions and activities, including their bases (e.g., statute, regulation, Commission guidance). After analyzing this information, the NRC identified Direction-Setting Issues (DSIs) whose resolution will influence the strategic direction of the agency. In Phase II, the NRC evaluated the DSIs and developed and evaluated a range of options to address the DSIs. These evaluations resulted in a series of issue papers which were provided to our stakeholders for comment. The comments received were reviewed by the Commission in its review of the DSI's and associated issue papers. The Commission decisions on the issue papers form the basis for this strategic plan.

In addition, the following key evaluations were considered in the development of this strategic plan.

- NUREG-CR-6330, Results of Regulatory Impact Survey of Industrial and Medical Nuclear Materials Licensees of the Office of NMSS, 1995.
- NUREG-1444, Supplement 1, Site Decommissioning Management Plan, 1995, containing a management review of SDMP.
- NUREG-1551, Final Report of the NRC-Agreement State Working Group to Evaluate Control and Accountabiiity of Licensed Devices, 1996.
- SECY-95-085, Recommendation on the Senior Management Meeting Process for the Continued Use of Trending Letters and for Plants that Remain on the Problem Plant List for an Extended Period, April 1995.
- SECY-95-163, Improvements to the Power Reactor Inspection Program and Implementation of the Integrated Performance Assessment Process, June 21, 1995.
- Millstone Lessons Learned Task Group Report, September 1996.

We will use the new NRC organization that was established in December 1996. Top management of the agency has been realigned based on a recognized need for increased program oversight and assessment of regulatory effectiveness. One of the features of the realignment is the establishment of a Deputy Executive Director for Regulatory Effectiveness to provide a high-level program evaluation focal point, independent of the line organizations that

have responsibility for the day-to-day operation of regulatory programs. The grouping of offices for the regulatory effectiveness organization was designed to facilitate improvement of program evaluation. Regulatory effectiveness findings will focus emphasis on improving NRC's regulatory performance. To the extent practical, these evaluations will be performance-based, involve objective means of assessment, and be risk-informed.

# Updating this Plan

This strategic plan establishes the framework that will guide future NRC decision-making. An updated and revised strategic plan is required by the Government Performance and Results Act every three years. Since this plan is a living document, we will review it annually and revise it as appropriate. The annual review will be conducted in the Fall under the purview of the NRC's Executive Council. The results of that review will be presented to the Commission along with any proposed changes to the goals, objectives, strategies, underlying assumptions, or other facets of the plan. Commission decisions regarding proposed changes to the strategic plan will form the basis for the subsequent performance plan development and budget formulation cycle. Details of this process will be contained in NRC Management Directive 4.7 after the agency completes the first cycle of developing the strategic plan, the FY 1999 performance plan, and the FY 1999 budget.

Minor adjustments to this strategic plan will be made by including such changes in the agency's annual performance plan. Major policy or programmatic changes to the plan will be incorporated by issuing a revised strategic plan.

# THE NRC'S SAFETY PHILOSOPHY

In the Atomic Energy Act of 1954, Congress authorized the civilian use of nuclear energy subject to regulation by the Commission. The principal terms of this regulatory mandate -- "protect health and safety," "assure the common defense and security," "minimize danger to life or property," and "provide adequate protection" -- are not defined in the Act, nor are they self-explanatory. Since 1954, therefore, the Commission has been engaged in a continuing process of interpreting and applying these terms in such a way as to give effect to the Congressional intent. This process has taken place with Congressional oversight as well as judicial review of specific NRC actions. The result has been the creation of a body of regulations, decisions, and practices through which the Commission's safety and safeguards philosophy is expressed. This philosophy comprises several closely interrelated elements: defense in depth, licensee responsibility, safety culture, regulatory effectiveness, and accountability to the public.

**DEFENSE IN DEPTH** ensures that successive measures are incorporated into the design and operating procedures for nuclear installations to compensate for potential failures in protection or safety measures, wherever failures could lead to serious public or national security consequences. Protection and safety must be ensured by sound management and engineering, quality assurance, training and qualification of personnel, comprehensive assessments including the effect of human performance on safety and safeguards, attention to lessons learned from operating experience and research, and procedures for mitigating accidents and protecting the public should multiple system failures or malevolent activities nevertheless occur.

**LICENSEE RESPONSIBILITY** embodies the principle that, although the NRC is responsible for developing and enforcing the standards governing the use of nuclear installations and materials, it is the licensee who bears the primary responsibility for conducting those activities safely. The NRC's role is not to monitor all licensee activities but to oversee and audit them. This allows the agency to focus its inspection, licensing, and other activities on those areas where the need, and the likely safety and safeguards benefit, is greatest.

**SAFETY CULTURE** recognizes each licensee's responsibility to establish and maintain a set of attitudes that ensure safety issues get the attention they warrant. A safety culture encourages a questioning and learning attitude toward protection and safety and discourages complacency. It reflects an understanding that safety and protection are permanently the highest priority; that problems must be identified and addressed promptly and appropriately; that individuals at all levels must know their responsibilities and have suitable training; and that, within the organization, effective communication on protection and safety must be ensured.

**REGULATORY EFFECTIVENESS** emphasizes the approach that, because safety is paramount in the Commission's regulatory program, certain standards and practices to ensure adequate protection will be required, whatever the cost. Over and above that baseline, additional safety upgrades will be required only if their benefits justify the added cost. In implementing its program, moreover, the NRC is conscious of the need to foster efficiency, so that a given level of safety and safeguards can be achieved through the most cost-effective means. NRC's requirements and regulatory approaches must reflect state-of-the-art information, taking into account accumulated operating experience, technological developments, and progress in research.

**ACCOUNTABILITY TO THE PUBLIC** dictates that just as licensees are accountable to the NRC, so too is the NRC accountable to the American people and their elected representatives, the Congress. For the NRC, part of accountability entails being candid with the public about what it is doing and why, as well as acknowledging the public's interest in safety issues and its right to know. In addition, the NRC recognizes that the Atomic Energy Act ensures that the public has an important role to play as the agency addresses issues of safety and health. For members of the public to perform that role, they need sound, complete, and up-to-date information from NRC. A key element of the NRC's safety philosophy is that nuclear regulation is the public's business.