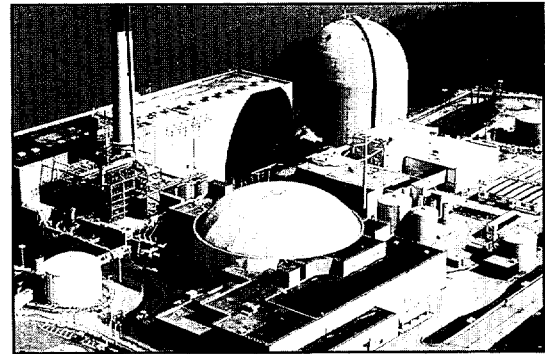
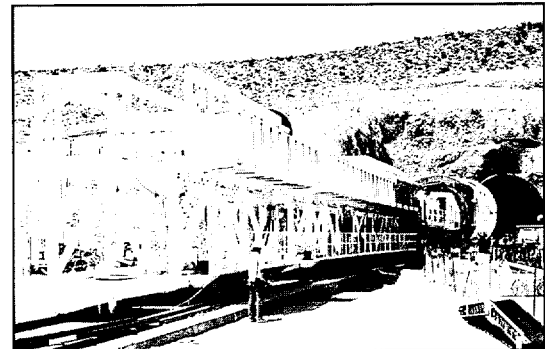


U.S. Nuclear Regulatory Commission
**STRATEGIC
PLAN**



Fiscal Year 2000 - Fiscal Year 2005



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The NRC Technical Library
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Rockville, MD 20852-2738

These standards are available in the library for reference use by the public. Codes and standards are usually copyrighted and may be purchased from the originating organization or, if they are American National Standards, from—
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NUCLEAR REGULATORY COMMISSION

FY2000–2005 STRATEGIC PLAN

VOLUME 2, PART 1

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. The NRC will seek all available facts and opinions openly from licensees and other interested members of the public and consider the many and possibly conflicting public interests involved. The NRC will strive to base final decisions on objective, unbiased assessments of all information and explicitly state its reasons for the decisions.

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 that 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 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. The agency should take into account systems interactions, technological uncertainties, and the diversity of licensees and regulatory activities so that risks are maintained at an acceptably low level. Once established, regulation should be perceived by all stakeholders to be reliable and not unjustifiably in a state of transition. The NRC's 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.



TABLE OF CONTENTS

Principles of Good Regulation ii

Foreword v

Mission vi

Message from the Chairman vii

Strategic and Performance Goals ix

Our Strategic Arenas x

Nuclear Reactor Safety 1

Nuclear Materials Safety 11

Nuclear Waste Safety 23

International Nuclear Safety Support 33

Corporate Management Strategies 37

Endnotes 43

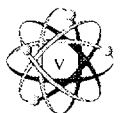


FOREWORD

This report provides the agency's Strategic Plan (Volume 2, Part 1) as required by the Government Performance and Results Act. A companion document is the Strategic Plan Appendix (Volume 2, Part 2) which contains more comprehensive information on the agency's strategic and performance goals, their respective measures and strategies, external factors, and corporate management strategies.

Together, these documents form the framework to drive the agency's budget process and office operating plans for FY 2000-FY 2005. The Strategic Plan Appendix also contains information concerning links to other NRC planning documents, program evaluations, management challenges, cross-cutting functions, and a schematic of NRC's planning process components.

The Plan is available also on the Internet at <<http://www.nrc.gov>>.





MISSION

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



MESSAGE FROM THE CHAIRMAN

I am pleased to transmit the U.S. Nuclear Regulatory Commission's Strategic Plan for Fiscal Years 2000 to 2005. This plan describes how we intend to accomplish our mission. In particular, it discusses our core principles and strategies and sets out both performance goals and measures to gauge our performance.

The mission of the Nuclear Regulatory Commission is to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment by regulating the Nation's civilian uses of nuclear fuels and materials. In undertaking this mission, we oversee nuclear power plants, non-power reactors, nuclear fuel cycle facilities, waste disposal, and the industrial and medical uses of nuclear materials.

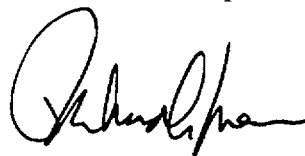
Our highest priority is safety, and our performance goals focus our attention on the achievement of this priority. The Commission also recognizes, however, that to be a successful regulator we must consider the effects of our decisions on the public and the industries we regulate. Therefore, to accomplish our mission in the coming years, our performance goals also include making our activities and decisions more effective and efficient, reducing unnecessary regulatory burden, and enhancing public confidence.

The accomplishment of our Strategic Plan will present some special challenges because the Nuclear Regulatory Commission must chart its path to the future in a time of

significant change. The electricity-generation sector of our economy is now undergoing economic deregulation, resulting in significant restructuring in the nuclear industry. We must adapt, as appropriate, to the fact that there are changing financial pressures on our licensees--pressures to cut costs, coupled with pressures to achieve improved operating performance. Moreover, our regulatory system is subject to significant change as we seek to make greater use of risk-informed and performance-based regulatory approaches. A focus on our mission and our performance goals serves as a guide through this turbulent period.

In developing this Strategic Plan, we benefitted from input from the public, those we regulate, and those vitally interested in the effectiveness of regulation. The result, however, is our own, and we shall implement it in the public interest.

The Plan should be a living document to accommodate and adapt to this dynamic period of change. Accordingly, we shall revise and update this Plan as necessary to reflect change, as well as to respond to future evaluations of our performance.



Richard A. Meserve
Chairman
U.S. Nuclear Regulatory Commission

STRATEGIC AND PERFORMANCE GOALS

The NRC has developed goals consistent with its mission. These strategic goals are supported by performance goals, which represent outcomes the NRC plans to achieve over the period covered by the Strategic Plan (FY 2000-FY 2005).

STRATEGIC GOALS: The NRC will conduct an effective regulatory program that allows our Nation to use nuclear materials safely for civilian¹ purposes and in a manner that protects the public and the environment by working to achieve the following strategic goals:

- Prevent radiation-related² deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors. (Nuclear Reactor Safety)
- Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear material. (Nuclear Materials Safety)
- Prevent significant adverse impacts from radioactive waste to the current and future public health and safety and the environment, and promote the common defense and security. (Nuclear Waste Safety)
- Support U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation. (International Nuclear Safety Support)

The safe and secure use of nuclear materials for civilian purposes is the responsibility of NRC licensees³ and Agreement State licensees, and the regulatory oversight of licensees is the responsibility of the NRC and the Agreement States. Thus, achieving these strategic goals requires the collective efforts of the NRC, the Agreement States, and licensees. All references to licenses are to NRC licenses.

PERFORMANCE GOALS: The protection of public health and safety remains paramount among our goals and will drive our decisions. However, the NRC recognizes that it must consider other key issues, including the effect of our decisions on the public's trust in our regulatory process, the industries we regulate, and our own effectiveness and efficiency. The agency has established performance goals to support the strategic goals for the Nuclear Reactor Safety, Nuclear Materials Safety, and Nuclear Waste Safety arenas: maintain safety, protect the environment and the common defense and security; increase public confidence; make NRC activities and decisions more effective, efficient, and realistic; and reduce unnecessary regulatory burden.

Collectively, these outcome-based performance goals are the key contributors to the strategic goals. Agency work (programs and activities) is being planned, managed, monitored, and assessed according to the contribution to the achievement of these performance goals, with public health and safety as the primary consideration. This evaluation will form the basis to determine whether



existing programs are successfully achieving the goals or whether revised or new initiatives are needed. Resources will be allocated accordingly to the work that is necessary to achieve the performance goals. The Strategic Plan is being used as one of the primary tools to communicate and institutionalize these changes.

OUR STRATEGIC ARENAS

The NRC has organized its strategic goals, performance goals, and strategies for achieving its mission into the following four strategic arenas: Nuclear Reactor Safety, Nuclear Materials Safety, Nuclear Waste Safety, and International Nuclear Safety Support. While there are small differences in each arena, the term “safety” broadly encompasses our responsibilities to protect the public health and safety from radiation, to promote the common defense and security, and to protect the environment.

The next four sections are organized to state (1) the strategic goal that relates to the arena and (2) the strategic goal measure and to state (1) the applicable performance goals, (2) the strategies for accomplishing each performance goal, and (3) the measures for each performance goal. A more detailed discussion of performance goals, strategies, and measures for each arena is provided in Part 2 of this volume. The performance goals are the measurable, outcome-oriented results that provide information to determine whether the NRC is achieving its strategic goals and that link the multi year Strategic Plan to the Annual Performance Plan and Performance Report, consistent with the requirements of the *Government Performance and Results Act*. We will include these strategic and performance goals and their associated measures in the Performance Plan, whose arena chapters describe how the goals, measures, and strategies link to agency programs and activities. Not meeting a strategic or a performance goal measure will, in general, prompt a re-evaluation of the involved programs and activities. The annual Performance Plan will provide greater specificity for certain performance metrics where those metrics are being developed or may change each year.

To evaluate performance measures, the NRC focused on verification and validation of data, generated by the NRC as well as by the industry and other external sources. Establishing the necessary systems, data collection policies and procedures, and verification and validation procedures will ensure that the performance we report is supported by accurate, comprehensive, and reliable internal and external data. To the extent that the agency depends on the industry for performance data, the NRC verifies and validates data on a sound sampling and auditing basis, concentrating on data generated by entities external to the agency that support the achievement of agency goals. As recommendations and decisions are made on the appropriate performance measures, the NRC will define and implement verification and validation procedures for such data.

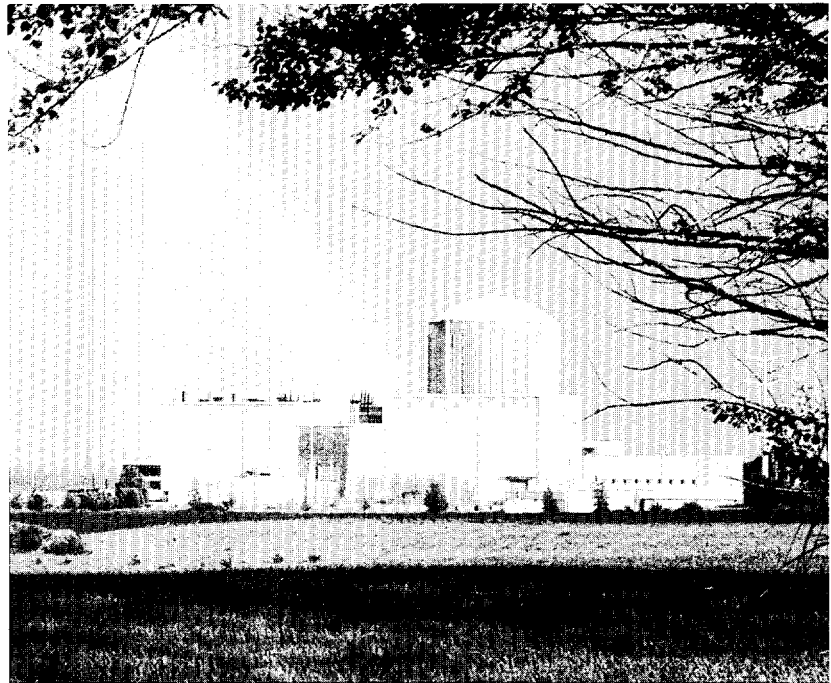
We anticipate no major unique resource requirements; however, this Strategic Plan assumes adequate resources during the strategic planning period to achieve the strategic and performance goals. Our annual integrated budget and Performance Plan will include the resources needed to achieve our goals.



NUCLEAR REACTOR SAFETY

STRATEGIC GOAL: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors.

This strategic goal represents the focus of the Nuclear Reactor Safety arena. The goal is to achieve our statutory mission to ensure that civilian nuclear power reactors, as well as non-power reactors, are operating in a manner that adequately protects public health and safety and the environment and that safeguards special nuclear material used in reactors. NRC regulates 103 civilian nuclear power reactors and 37 non-power reactors.



Kewaunee Nuclear Power Plant

We will use the following **measures**⁴ to assess results in achieving the Nuclear Reactor Safety Strategic Goal:

Measures

- *No nuclear reactor accidents.*⁵
- *No deaths resulting from acute radiation exposures from nuclear reactors.*
- *No events at nuclear reactors resulting in significant radiation exposures.*⁶
- *No radiological sabotages at nuclear reactors.*
- *No events that result in releases of radioactive material from nuclear reactors causing an adverse impact*⁷ *on the environment.*



PERFORMANCE GOAL: *Maintain safety, protection of the environment, and the common defense and security.*

Maintaining safety, protection of the environment, and the common defense and security is the preeminent performance goal and takes precedence over all other performance goals. In working toward this goal, the NRC will apply its Principles of Good Regulation. Principles applicable to this goal are related to independence, openness, efficiency, regulatory clarity, and reliability.

The safety performance of the nuclear power industry has improved substantially over the past ten years, and nuclear reactors, collectively, are operating above acceptable safety levels consistent with the agency's Safety Goal Policy (51 FR 28044). The NRC believes this level will be maintained. If substantial safety improvements are identified, additional requirements should only be imposed consistent with the Commission's Backfit Rule (10 CFR 50.109). Allowing small-risk increases⁸ may be acceptable when there is sufficient conservatism and reasonable assurance that sufficient defense-in-depth and safety margins are present. Small-risk changes that reduce unnecessary burden will allow more efficient use of licensee and NRC resources as well as bring into focus those areas that are more critical to the safety of the public and environment.

The NRC licensees will continue to have the primary role in maintaining safety and are expected to identify, through mechanisms such as operating experience feedback and integrated risk assessments, the design and operational aspect of their plants that should be enhanced to maintain acceptable safety performance levels. For nuclear power plants to continue operating, safety performance must be at or above acceptable levels. The NRC will take action to improve safety performance before it falls below acceptable levels and will require the shutdown of plants when their safety performance is identified as unacceptable. This principle is inherent in the NRC's new oversight process.



Control Room at a Nuclear Reactor



The NRC will employ the following **strategies** to maintain safety and the protection of the environment and to promote the common defense and security.

<p>Strategies</p>	<ul style="list-style-type: none"> • <i>We will sharpen our focus on safety to include a transition to a revised NRC reactor oversight program for our inspection, assessment, and enforcement activities.</i> • <i>We will respond to operational events involving potential safety or safeguards consequences.</i> • <i>We will evaluate operating experience and the results of risk assessments for safety implications.</i> • <i>We will identify, evaluate, and resolve safety issues, including age-related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.</i> • <i>We will ensure that changes to operating licenses and exemptions to regulations maintain safety and meet regulatory requirements.</i> • <i>We will ensure that safety is maintained as licenses are renewed by ensuring that aging effects will be adequately managed and that the licensing basis related to the present plant design and operation will be maintained.</i> • <i>We will maintain safety by ensuring that operator licenses are issued and renewed only to qualified individuals.</i> • <i>We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance-based⁹ regulatory approaches to maintain safety.</i>
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The NRC will use the following **measures** to assess results in our efforts to maintain safety, and protection of the environment and to promote the common defense and security.

<p>Measures</p>	<ul style="list-style-type: none"> • <i>No more than one event per year identified as a significant precursor of a nuclear accident.¹⁰</i> • <i>No statistically significant adverse industry trends in safety performance.¹¹</i>
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**Measures
(cont)**

- *No events resulting in radiation overexposures¹² from nuclear reactors that exceed applicable regulatory limits.*
- *No more than three releases per year to the environment of radioactive material from nuclear reactors that exceed the regulatory limits.¹³*
- *No breakdowns of physical security that significantly weaken the protection against radiological sabotage or theft or diversion of special nuclear materials in accordance with abnormal occurrence criteria.*

PERFORMANCE GOAL: Increase public confidence.

The NRC views building and maintaining public trust and confidence that the NRC is carrying out its mission as an important performance goal for the agency. To reach this goal, the NRC must be viewed as an independent, open, efficient, clear and reliable regulator. This will be accomplished by providing our stakeholders with clear and accurate information about, and a meaningful role in, our regulatory programs. The NRC desires that diverse stakeholder groups (i.e., general public, Congress, NRC licensees, other Federal agencies, States, Indian Tribes, local governments, industry, industry workers, technical societies, the international community, and citizen groups) increasingly recognize that NRC actions assure that public health and safety, the common defense and security, and the environment are, and will remain, adequately protected from hazards resulting from the use of nuclear reactors.



Public Meeting—Chairman Meserve, center, and Commissioners McGaffigan, Dicus, Diaz, and Merrifield on re-licensing of Oconee nuclear plant.



Public concern about reactor safety has at times been high, particularly for the public who live near nuclear facilities. The methods provided by the NRC for members of the public to express their views have been perceived by some members of the public to be insufficient in some circumstances. This goal reflects the NRC's desire to improve in this area, which would include explaining the NRC's role and responsibilities and how public concerns are considered.

This performance goal stems from recognition that the NRC must be candid with the public about reactor safety incidents and issues, provide opportunities for meaningful public participation, and demonstrate through our performance that we are capable, independent, and objective regulators. It also stems from recognition that, while the public may not always agree with NRC actions, public confidence in the NRC is enhanced when the agency consistently carries out its mission in a thorough, disciplined, and timely manner.

The NRC will employ the following **strategies** to increase public confidence:

Strategies	<ul style="list-style-type: none"> • <i>We will make public participation in the regulatory process more accessible. We will listen to the public's concerns and involve our stakeholders more fully in the regulatory process.</i> • <i>We will communicate more clearly. We will add more focus, clarity, and consistency to our message; be timely; and present candid and factual information in the proper context with respect to the risk of the activity.</i> • <i>We will continue to enhance the NRC's accountability and credibility by being a well-managed, independent regulatory agency. We will increase efforts to share our accomplishments with the public.</i> • <i>We will report on the performance of nuclear power facilities in an open and objective manner.</i> • <i>We will continue to foster an environment in which safety issues can be openly identified without fear of retribution.</i>
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We will use the following **measures** to assess the results in our efforts to increase public confidence:

Measures	<ul style="list-style-type: none"> • <i>Complete the milestones in the annual Performance Plan relating to collecting, analyzing, and trending information for measuring public confidence.</i>
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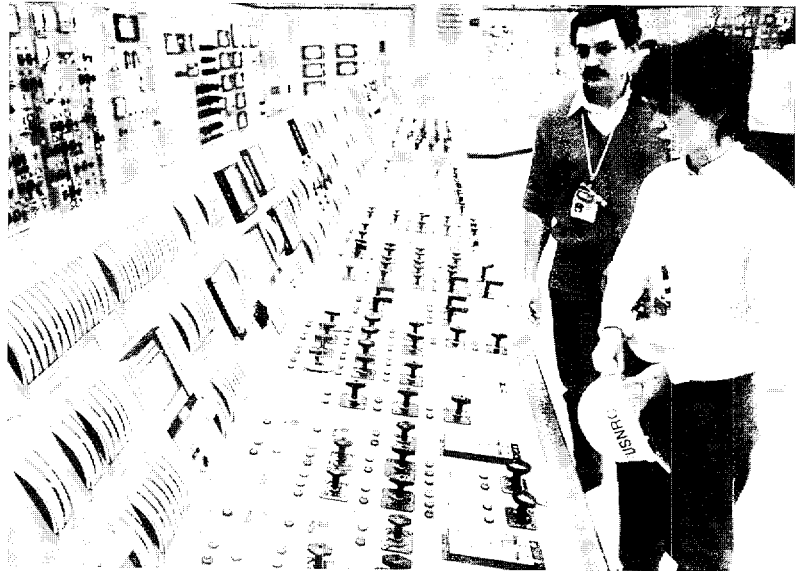


<p>Measures (cont)</p>	<ul style="list-style-type: none"> • <i>Complete all of the public outreaches as scheduled in the annual Performance Plan.</i> • <i>Complete the milestones specific to the agency allegation program effectiveness assessment plan as identified in the annual Performance Plan.</i> • <i>Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206¹⁴ within an average of 120 days.¹⁵</i>
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PERFORMANCE GOAL: *Make NRC activities and decisions more effective, efficient, and realistic.*

By maintaining the quality of the technical base for our decisions and by optimizing our regulatory activities, while maintaining safety and increasing public confidence, the NRC will ensure adequate protection of public health and safety and the environment. In working toward this performance goal, the NRC will apply its Principles of Good Regulation, which include improved efficiency, clarity, and reliability.

The costs of most NRC activities and decisions contribute to our licensees' operating and maintenance costs and ultimately are borne by the public. As the electric utility industry is in transition from a rate-regulated to a market-based business environment, the NRC must keep its costs reasonable and predictable by being effective, efficient, and realistic in our activities and decision-making while continuing to maintain safety.



NRC resident inspectors are assigned to each nuclear power plant; specialists from NRC regional offices and headquarters conduct additional inspections.



Feedback from stakeholders, self-assessments, international experience, and research results suggest that we should capitalize on advances in technology, implement efficiencies to improve our internal processes, and improve the quality and bases for decision-making. Feedback and our own analyses suggest that we should improve the consistency and predictability of our regulatory decisions by evolving to a more risk-informed and performance-based approach.

The NRC will employ the following **strategies** to make NRC activities and decisions more effective, efficient, and realistic.

Strategies	<ul style="list-style-type: none"> • <i>We will use risk information to improve the effectiveness and efficiency of our activities and decisions.</i> • <i>We will make agency decisions based on technically sound and realistic information.</i> • <i>We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.</i> • <i>We will identify, prioritize, and modify processes based on effectiveness reviews to maximize opportunities to improve those processes.</i>
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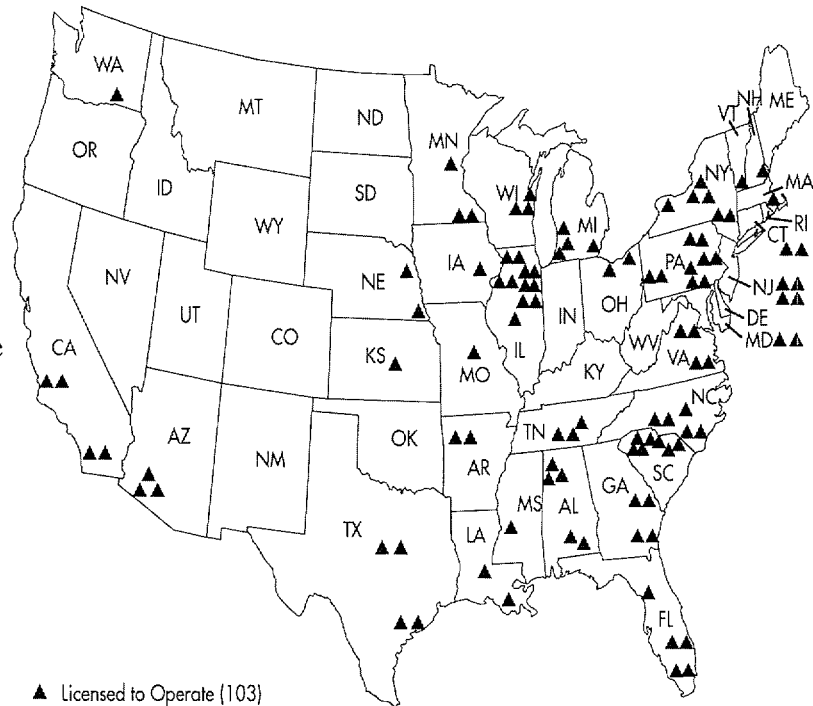
The NRC will use the following **measures** to assess results in our efforts to make NRC activities and decisions more effective, efficient, and realistic.

Measures	<ul style="list-style-type: none"> • <i>Complete those specific reactor milestones in the Risk-Informed Regulation Implementation Plan identified for completion in the annual Performance Plan.</i> • <i>Complete at least two key process improvements per year in selected program and support areas that increase efficiency, effectiveness, and realism.</i> • <i>Complete all license renewal application reviews within 30 months.</i>
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PERFORMANCE GOAL: Reduce unnecessary regulatory burden on stakeholders.

By reducing unnecessary regulatory burden, both the NRC and licensee resources may be made available to more effectively focus on safety issues. Unnecessary regulatory burden for NRC licensees may be defined as requirements that go beyond what is necessary and sufficient for providing reasonable assurance that public health and safety, the environment, and the common defense and security will be protected. For example, recent risk-informed initiatives for inspection and testing have allowed the licensees to focus resources more directly on the high risk significant systems and components, and reduce the attention on low risk-significant systems and components thereby contributing to safety and improving effectiveness. The costs associated with NRC activities can impact a variety of NRC stakeholders. This performance goal supports the NRC mission of ensuring adequate protection of public health and safety and the environment in the use of nuclear reactors. In working toward this goal, the NRC will apply its Principles of Good Regulation for being an independent, open, efficient, clear, and reliable regulator.



▲ Licensed to Operate (103)

U.S. Commercial Reactors

During the past 30 years, an ever-increasing body of technical knowledge and operational experience has been accumulated, both domestic and international, that allows for refinements and enhancements in NRC requirements and programs that can reduce unnecessary regulatory burden, while assuring maintenance of safety. The NRC believes that for some areas of NRC regulations and practices, the burden is not commensurate with the safety benefit. Not all of our requirements and programs have been updated to take into account these advancements, and thus they may not be as efficient and effective as possible. Reduction in unnecessary regulatory burden may contribute to the NRC effectiveness and efficiency by allowing more focus on safety and risk-significant issues. For example, the new reactor oversight process is allowing more effective staff focus on safety significant issues related to licensee performance.



Although regulation, by its nature, is a burden, we will impose on licensees only the necessary level of burden that is required to maintain safety. While our current performance goal is to reduce unnecessary regulatory burden, our long-range plans are to eliminate unnecessary regulatory burden to the extent feasible and cost effective. We will pursue risk-informed and performance-based approaches, if justified, so that we can focus our attention on those areas of highest safety priority. We will make more realistic decisions through reducing excessive conservatism.

The NRC will employ the following **strategies** to reduce unnecessary regulatory burden on stakeholders:

Strategies	<ul style="list-style-type: none"> • <i>We will utilize risk information and performance-based approaches to reduce unnecessary regulatory burden.</i> • <i>We will improve and execute our programs and processes in ways that reduce unnecessary costs to our stakeholders.</i> • <i>We will improve our reactor oversight program by redirecting resources from those areas less important to safety.</i> • <i>We will actively seek stakeholder input to identify opportunities for reducing unnecessary regulatory burden.</i>
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We will use the following **measure** to assess our results in reducing unnecessary regulatory burden on stakeholders:

Measure	<ul style="list-style-type: none"> • <i>Complete those specific milestones to reduce unnecessary regulatory burden as identified in the annual Performance Plan.</i>
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NUCLEAR MATERIALS SAFETY

STRATEGIC GOAL: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear material.¹⁶

This strategic goal represents the focus of the Nuclear Materials Safety arena. The goal is to achieve our statutory mission to ensure that medical, academic, and industrial users of nuclear materials do so in a manner that adequately protects public health and safety and the environment and safeguards special nuclear material. The Nuclear Materials Safety regulatory activities encompass 26 operating uranium recovery sites, 21 uranium recovery sites under decommissioning, 10 major fuel cycle facilities and several smaller facilities, 100,000 general licensees, and more than 20,000 specific materials licensees regulated by the NRC or by 32 Agreement



Medical procedure using radioactive material

States throughout the country. This arena encompasses a wide range of uses for nuclear materials ranging from very low-risk smoke detectors to potentially high-risk irradiators and the chemical processing of special nuclear material. NRC licensees and Agreement State licensees are responsible for the safe use of nuclear materials and facilities. Regulatory oversight of licensee safety is the responsibility of the NRC (Headquarters and Regions) or the Agreement State. Thus, performance reflects the results of the collective efforts of the NRC, the Agreement States, and licensees.

To the extent applicable, strategic goal measures include NRC and Agreement States licensee events. With respect to the second measure and metric, NRC and Agreement States' licensees have reported a small number of such exposures nearly every year for which reporting was required. Each exposure is a cause of concern, prompting us to analyze its root cause and to determine appropriate follow-up actions. We will always strive to prevent such events from occurring, but it

is possible that a few such events will occur. The NRC and the Agreement States regulate more than 20,000 materials licensees who use millions of medical procedures annually, and thousands of industrial processes for nuclear materials every day. Failure to meet this metric, or any of the others, would trigger a self-assessment of the NRC's materials arena activities to determine if changes are needed.

We will use the following **measures**⁴ to assess results in achieving the Nuclear Materials Safety strategic goal:

Measures	<ul style="list-style-type: none"> • <i>No deaths resulting from acute radiation exposures from civilian uses of source, byproduct, or special nuclear materials, or deaths from other hazardous materials used or produced from licensed material.</i> • <i>No more than six events per year resulting in significant radiation or hazardous material exposures¹⁷ from the loss or use of source, byproduct, and special nuclear materials.</i> • <i>No events resulting in releases of radioactive material resulting from civilian uses of source, byproduct, or special nuclear materials that cause an adverse impact on the environment.⁷</i> • <i>No losses, thefts, or diversion of formula quantities of strategic special nuclear material; radiological sabotages; or unauthorized enrichment of special nuclear material regulated by the NRC.¹⁸</i> • <i>No unauthorized disclosures or compromises of classified information causing damage to national security.¹⁹</i>
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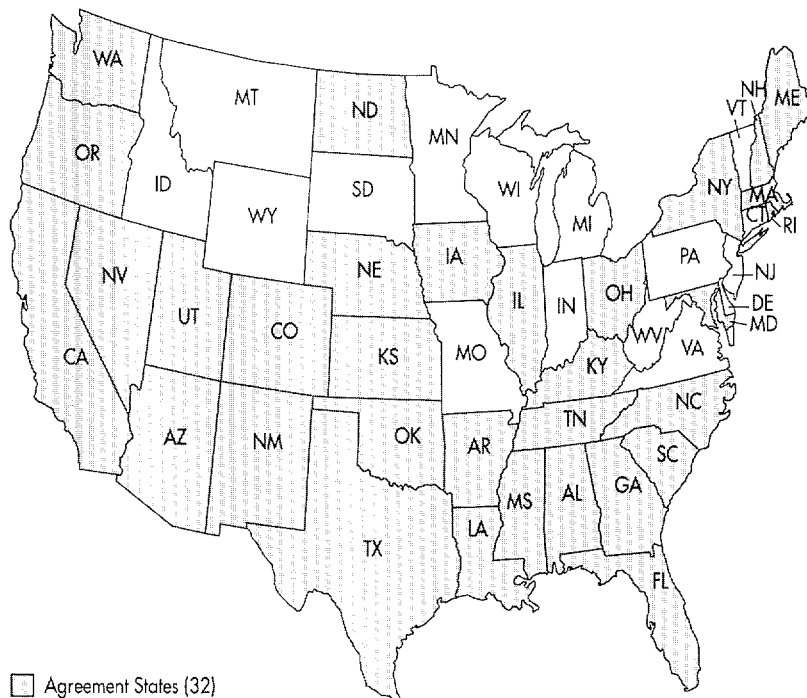
PERFORMANCE GOAL: Maintain safety, protection of the environment, and the common defense and security.

This is the NRC's pre-eminent performance goal, which has a higher priority than the other Nuclear Materials Safety performance goals. In working toward this goal the NRC will apply its Principles of Good Regulation. Principles applicable to this goal are related to independence, openness, regulatory clarity, and reliability.

This represents a composite approach for the many categories of licensees represented in this arena. Because of the diversity within and among licensed activities in this arena, and the risks involved in the activities, additional safety improvements in certain

areas may be warranted. Most nuclear material facilities and a large majority of materials licensees have operated safely and securely for many years. Certain elements of the fuel cycle and materials industries are mature, and practices and standards already in place have been tested over time and found to be acceptable in maintaining safety and security. On the other hand, other elements of this arena involve newer technologies and practices. As new technologies and other advances are introduced by applicants or licensees, the NRC will determine, on a case-by-case basis, when early notification of the States is warranted.

The arena also recognizes the NRC's shared regulatory responsibility with the 32 Agreement States. The NRC has to ensure that the State programs are adequate and compatible with its own regulatory programs to attain a uniform nuclear safety policy throughout the Nation. This uniformity will take on increased significance as more States assume regulatory authority for materials safety over the next several years. In recognition of the important contributions of the Agreement States toward maintaining safety, the NRC will encourage States to pursue a more active role in the implementation of strategies that contribute to the safety performance goal. The NRC and Agreement States will take decisive action to improve the safety performance of licensees identified as operating below acceptable levels for ensuring public health and protection from undue hazards.



□ Agreement States (32)
NRC Agreement States

For our uranium recovery activities, most of the work supporting the safety oversight of DOE’s remedial actions to clean up inactive mill sites is completed. Thus, the program’s focus will be on controlling the radiological and non-radiological hazards of mill tailings sites and assuring the safe operation of uranium extraction facilities.

The NRC will continue to protect the public, workers, and the environment and ensure that licensed and authorized activities will not be inimical to the common defense and security. This protection will be accomplished by ensuring that regulated materials¹⁶ activities are undertaken consistent with applicable statutes and regulations. In so doing, the NRC will continue to provide reasonable assurance that adverse impacts from licensees’ use of byproduct, source, and special nuclear material will be prevented. This protection also entails maintaining a high assurance against loss, theft, diversion, or unauthorized enrichment of nuclear material; sabotage of nuclear facilities; and disclosure of classified information.

The NRC will employ the following **strategies** to maintain safety, protection of the environment and the common defense and security:

Strategies	<ul style="list-style-type: none"> • <i>We will continue to improve the regulatory framework²⁰ to increase our focus on safety and safeguards, including incremental use of risk-informed⁹ and, where appropriate, less prescriptive performance-based⁹ regulatory approaches to maintain safety.</i> • <i>We will continue authorizing licensee activities only after determining that these proposed activities will be conducted consistent with the regulatory framework.</i> • <i>We will confirm that licensees understand and carry out their primary responsibility for conducting activities consistent with the regulatory framework.</i> • <i>We will respond to operational events involving potential safety or safeguards consequences.</i> • <i>We will maintain safety by continuing to evolve along with Agreement States materials programs into a single “National Materials Program” by encouraging the States to continue to pursue a more active role in the regulatory process.</i>
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The NRC will use measures to assess results in our effort to maintain safety and protect the environment and to promote the common defense and security. These include events involving the NRC and Agreement States. Many of the events that are counted in these measures do not, on an individual basis, have a public health and safety impact. For example, most of the losses of control



of licensed material are of shielded material, unlikely to result in overexposures or releases to the environment. Others are medical events that include underexposures (i.e., radiation treatments involving less radiation than the physician intended). These events are included because they may indicate program weaknesses, which, if ignored, could later trigger a more significant problem. The NRC will use the following **measures**:

Measures

- *No more than 350 losses of control of licensed material per year.²¹*
- *No occurrences of accidental criticality.*
- *No more than 20 events per year resulting in radiation overexposures²² from radioactive material that exceed applicable regulatory limits.*
- *No more than 45 medical events per year.²³*
- *No more than 40 releases per year to the environment of radioactive material from operating facilities that exceed the regulatory limits.²⁴*
- *No non-radiological events that occur during the NRC-regulated operations that cause impacts on the environment that can not be mitigated within applicable regulatory limits, using reasonably available methods.²⁵*
- *No more than five substantiated cases per year of attempted malevolent use of source, byproduct, or special nuclear material.*
- *No breakdowns of physical protection or material control and accounting systems resulting in a vulnerability to radiological sabotage, theft, diversion, or unauthorized enrichment of special nuclear material.²⁶*

PERFORMANCE GOAL: Increase public confidence.

The NRC views building and maintaining public trust and confidence that the NRC is carrying out its mission as an important performance goal for the agency. To reach this goal, the NRC must be viewed as an independent, open, efficient, clear and reliable regulator. This will be accomplished by providing our stakeholders with clear and accurate information about, and a meaningful role in, our regulatory programs. The NRC desires that diverse stakeholder groups (i.e., general public, Congress, NRC licensees, other Federal agencies, States, Indian Tribes, local governments, industry, industry workers, technical societies, the



Quality control test on mill tailings cover at L-Bar site in New Mexico.

international community, and citizen groups) increasingly recognize that NRC actions assure that public health and safety, the common defense and security, and the environment are, and will remain, adequately protected from hazards resulting from the use of nuclear materials.

The NRC must continue to forthrightly inform the public about nuclear safety and safeguards incidents and issues and provide avenues for meaningful input and dialogue. However, discussing in a public forum issues involving nuclear security or related to national defense is not usually prudent. Because of the diversity of stakeholder and public interests within this arena, the goal includes recognition that the NRC may not always be able to obtain a consensus among its stakeholders. This goal also includes recognition that, although the public may not always agree with the NRC's actions, public confidence in the NRC is enhanced when the agency listens to all interested parties, provides appropriate feedback, and makes its decisions in a thorough, disciplined, and timely manner.

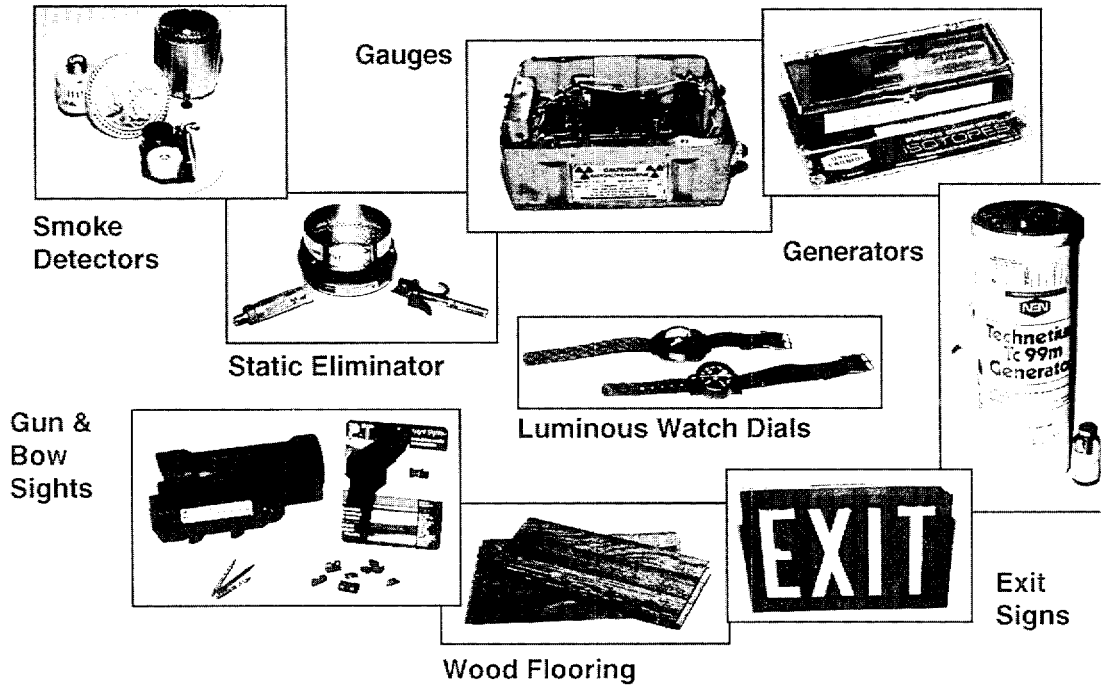
The NRC will employ the following **strategies** to increase public confidence:

<p>Strategies</p>	<ul style="list-style-type: none"> • <i>We will make public participation in the regulatory process more accessible. We will listen to their concerns and involve them more fully in the regulatory process.</i> • <i>We will communicate more clearly. We will add more focus, clarity, and consistency to our message; be timely; and present candid and factual information in the proper context with respect to the risk of the activity.</i> • <i>We will continue to enhance the NRC's accountability and credibility by being a well-managed, independent regulatory agency. We will increase efforts to share our accomplishments with the public.</i> • <i>We will continue to foster an environment in which safety issues can be openly identified without fear of retribution.</i>
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We will use the following **measures** to assess the results in our efforts to increase public confidence:

<p>Measures</p>	<ul style="list-style-type: none"> • <i>Complete the milestones in the annual Performance Plan relating to collecting, analyzing, and trending information for measuring public confidence.</i> • <i>Complete all of the public outreaches as scheduled in the annual Performance Plan.</i> • <i>Complete the milestones specific to the agency allegation program effectiveness assessment plan as identified in the annual Performance Plan.</i> • <i>Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206¹⁴ within an average of 120 days.¹⁵</i>
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PERFORMANCE GOAL: Make the NRC activities and decisions more effective, efficient, and realistic.



Radioactive materials are used in a wide variety of applications besides fuel for nuclear power plants.

The NRC will continue to improve its regulatory processes so that they become more effective, efficient, and realistic. The NRC, and the Organization of Agreement States, will identify and focus on necessary and sufficient regulatory activities that are linked to its goals. In those regulatory activities, the NRC will strive to optimize regulatory programs and processes, where possible, while assuring safety and security and improving public confidence. In working toward this performance goal, the NRC will apply its Principles of Good Regulation, which include efficiency, clarity, and reliability.

The NRC will ensure that its decisions are scientifically-based; risk-informed; and shaped by operational experience, new information, and research, including cooperative international activities. As a result, the NRC's decisions will be realistic, will be systematic, and will appropriately treat areas of uncertainty. The NRC will ensure that its procedures, processes, and expectations are better-defined, clearer, and more transparent. The NRC's regulatory actions will support more consistent, reliable, predictable, and timely decision-making. Furthermore, the NRC will seek to minimize duplication of efforts with stakeholders to achieve this goal, while relying on the technical and managerial competence of its staff to achieve success.

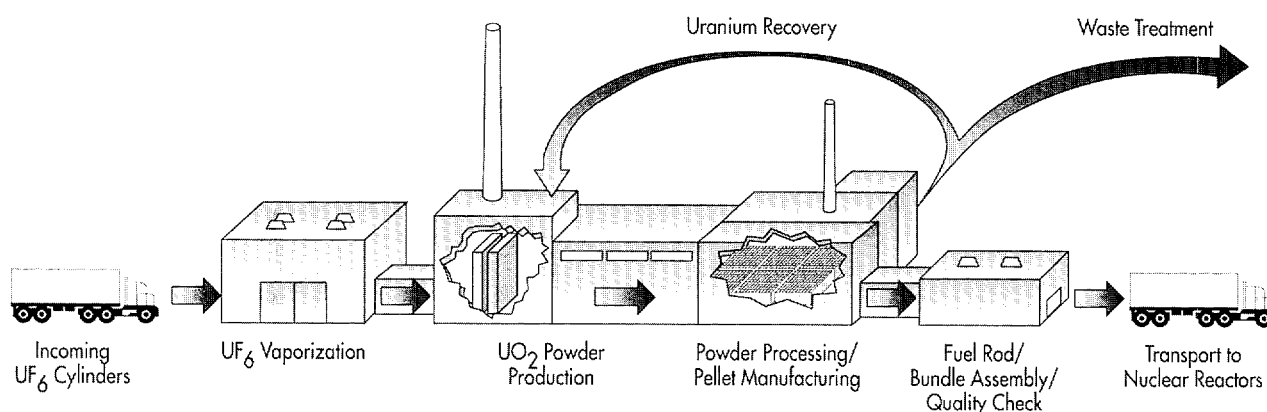
The NRC will employ the following **strategies** to make the NRC activities and decisions more effective, efficient, and realistic:

<p>Strategies</p>	<ul style="list-style-type: none"> • <i>We will continue to improve the regulatory framework to increase our effectiveness, efficiency, and realism.</i> • <i>We will identify, prioritize, and modify processes based on effectiveness reviews to maximize opportunities to improve those processes.</i> • <i>We will improve efficiency and effectiveness by continuing to evolve along with Agreement States materials programs into a single “National Materials Program” by encouraging the States to continue to pursue a more active role in the regulatory process.</i>
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The NRC will employ the following **measures** to make NRC activities and decisions more effective, efficient, and realistic:

<p>Measures</p>	<ul style="list-style-type: none"> • <i>Complete those specific materials milestones in the Risk-Informed Regulation Implementation Plan identified for completion in the annual Performance Plan.</i> • <i>Complete at least two key process improvements per year in selected program and support areas that increase efficiency, effectiveness, and realism.</i>
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PERFORMANCE GOAL: Reduce unnecessary regulatory burden on stakeholders.



The NRC licenses and inspects all commercial nuclear fuel facilities involved in the processing and fabrication of uranium ore into reactor fuel. A typical fuel fabrication plant is illustrated above.

The NRC will strive to reduce unnecessary regulatory burden and associated costs if possible, while achieving the other three performance goals. Unnecessary regulatory burden for the NRC licensees may be defined as requirements that go beyond what is necessary and sufficient for providing reasonable assurance that public health and safety, the environment, and the common defense and security will be protected. The costs associated with NRC activities can impact a variety of NRC stakeholders. For some stakeholders, such as States and the public, costs could potentially result from actions by States or other federal agencies with concurrent jurisdiction to augment the NRC regulatory program, clean up sites, or dispose of radioactive material that are paid for with public funds. For others, such as applicants and licensees, unnecessary burden may be imposed by an overly detailed technical review that could result in increased costs that are passed on to the consumer.

Although regulation, by its nature, is a burden, the NRC will ensure that only the level of burden necessary to maintain safety is imposed on licensees. This burden reduction can be achieved by using risk-informed and performance-based approaches, if justified, to focus attention on those areas of highest safety priority and by making more realistic decisions without excessive conservatism.

Consideration will be given to making regulatory burden commensurate with the risk of the regulated activity and the enhanced benefit to the workers, the public, and the environment. Furthermore, regulatory burden associated with a safety enhancement will be considered in light of a cost/benefit analysis prior to the imposition of a new regulatory requirement. Regulatory oversight will be fair, consistent, effective, and timely in its application. Costs associated with the regulatory infrastructure must be fair, equitable, and shared by all users. In particular, we will ensure that NRC actions minimize the potential for future bankruptcies that could impose burden on the public (e.g., actions involving the remediation of uranium recovery sites).



The NRC will employ the following **strategies** to reduce unnecessary regulatory burden on stakeholders:

<i>Strategies</i>	<ul style="list-style-type: none"> • <i>We will continue to improve our regulatory framework in order to reduce unnecessary regulatory burden.</i> • <i>We will improve and execute our programs and processes in ways that reduce unnecessary costs to our stakeholders.</i> • <i>We will actively seek stakeholder input to identify opportunities for reducing unnecessary regulatory burden.</i>
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The NRC will use the following **measures** to assess results in reducing unnecessary regulatory burden:

<i>Measures</i>	<ul style="list-style-type: none"> • <i>Complete those specific milestones to reduce unnecessary regulatory burden as identified in the Annual Performance Plan.</i> • <i>Reduce paperwork and record keeping imposed by the NRC on its licensees by at least 25 percent over a period of 5 years.</i>
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NUCLEAR WASTE SAFETY

STRATEGIC GOAL: Prevent significant adverse impacts from radioactive waste to the current and future public health and safety and the environment, and promote the common defense and security.

This strategic goal represents the principal focus of the Nuclear Waste Safety arena. The goal is to achieve our mission and fulfill our statutory requirements. The NRC licensees³ are responsible for safe transport, storage, and disposal of radioactive waste. The NRC licensees are also responsible for designing, constructing, operating, and remediating the wide variety of facilities or sites within the scope of this arena. Regulatory oversight of licensee activities is the responsibility of the NRC; however, the NRC has relinquished its regulatory authority for some activities in this arena to Agreement States. Thus, performance reflects the results of the collective efforts of the NRC, the Agreement States, and licensees.



Proposed high-level waste disposal site at Yucca Mountain, Nevada.

Nuclear waste is a byproduct of the use of radioactive materials. Such waste is produced by nuclear reactors, fuel processing plants, and institutions such as hospitals and research facilities. It also results from decommissioning nuclear reactors and other facilities that are permanently shut down. High-level radioactive waste results primarily from the fuel used by reactors to produce energy. Low-level radioactive waste results from reactor operations and from medical, academic, industrial, and other commercial uses.

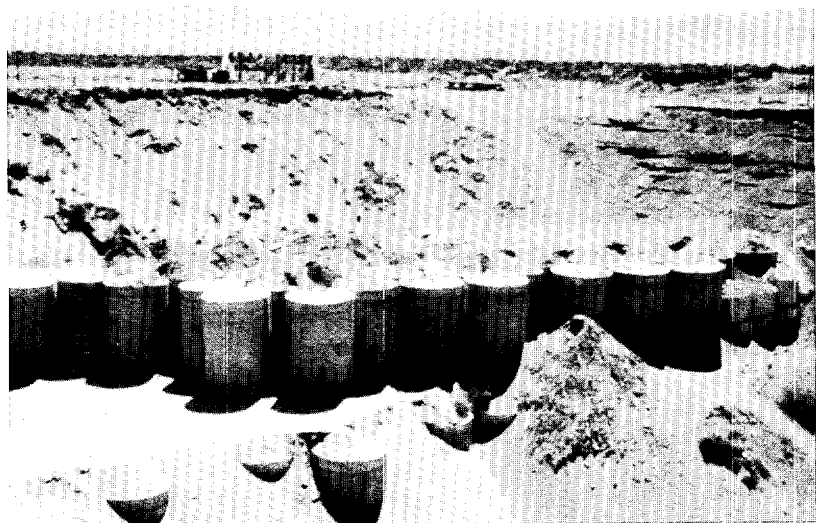
We will use the following **measures**⁴ to assess results in achieving the Nuclear Waste Safety strategic goal:

Measures	<ul style="list-style-type: none"> • <i>No deaths resulting from acute radiation exposures from radioactive waste.</i> • <i>No events resulting in significant radiation exposures²⁷ from radioactive waste.</i> • <i>No releases of radioactive waste causing an adverse impact on the environment.⁷</i> • <i>No losses, thefts, diversions, or radiological sabotages¹⁸ of special nuclear material or radioactive waste.</i>
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PERFORMANCE GOAL: *Maintain safety, protection of the environment, and the common defense and security.*

This is the NRC’s primary performance goal, which has a higher priority than the other Nuclear Waste Safety performance goals. In working toward this goal, we will apply the NRC’s Principles of Good Regulation. Principles applicable to this goal are related to independence, openness, regulatory clarity, and reliability.

The NRC will structure its activities to ensure that current levels of safety are maintained for this arena now and in the future. With respect to the High Level Waste program, the NRC is applying a regulatory framework²⁰ to preclicensing reviews and consultations with the Department of Energy (DOE) to resolve, at the staff level, issues most important to repository safety and preparing to address the licensing phase of this process if the Presidential and Congressional decisions are made regarding site approval and a license application is submitted. For the low-level waste program, the NRC’s



Low-level waste disposal facility in Hanford, Washington.

focus will be to maintain a consistent national program and provide support to the States, as requested, to resolve specific technical issues and to review requests for onsite disposal. Our program for decommissioning nuclear reactors and fuel cycle facilities will receive more attention as the NRC considers options, including (1) an integrated, risk-informed rulemaking for decommissioning nuclear reactors that addresses emergency planning, insurance, safeguards, operator staffing and training, and other potential areas and (2) activities related to the release of solids. In addition, decommissioning will be impacted as the NRC makes a transition toward a more risk-informed and streamlined process through the preparation of implementing guidance for the recently finalized license termination rule.

Protecting future generations is a unique aspect of the Nuclear Waste Safety arena. This protection is accomplished through maintaining requirements for such protection in our regulations and authorizing licensee activities only after determining that proposed activities will protect both current and future generations. This approach is reflected in the first and second strategies for this arena.

For certain waste arena activities located in Agreement States (i.e., low-level waste disposal and non-reactor decommissioning), the NRC has relinquished regulatory authority to those States. The NRC has to ensure that these State programs are adequate and compatible with its own regulatory programs to attain a uniform nuclear safety policy throughout the Nation. Therefore, safety performance reflects the results of the collective efforts of the NRC, the Agreement States, and the regulated community.

The NRC will continue to protect the public, workers, and the environment and ensure that licensed and authorized activities will not be inimical to the common defense and security. This protection will be accomplished by ensuring that regulated waste activities are undertaken consistent with applicable statutes and regulations. In so doing, the NRC will continue to provide reasonable assurance that adverse impacts caused by radiological exposure²⁷ will be prevented for facilities and activities associated with uranium recovery, decommissioning, storage of spent nuclear fuel, transportation of radioactive materials, and disposal of nuclear waste. This also entails maintaining a high assurance against loss, theft, diversion, sabotage, and protection of classified matter to protect the common defense and security.

The NRC will employ the following **strategies** to maintain safety and protection of the environment and to promote the common defense and security:

Strategies

- *We will continue developing a regulatory framework to increase our focus on safety, including the incremental use of risk-informed⁹ and, where appropriate, less prescriptive performance-based⁹ regulatory approaches to maintain safety.*

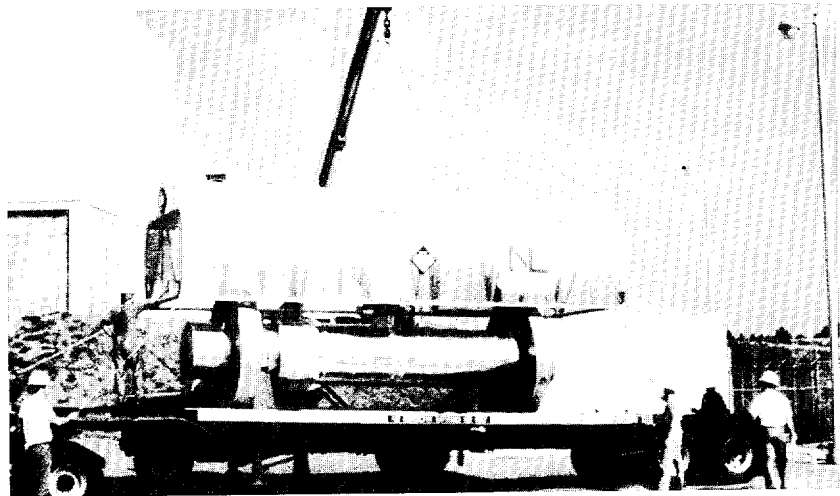
Strategies (cont)	<ul style="list-style-type: none"> • <i>We will continue authorizing licensee activities only after determining that these proposed activities will be conducted consistent with the regulatory framework.</i> • <i>We will confirm that licensees understand and carry out their primary responsibility for conducting activities consistent with the regulatory framework.</i> • <i>We will respond to operational events involving potential safety or safeguards consequences.</i> • <i>We will evaluate potential new information from research, new safety issues, changing external factors, international programs, and licensee operational experience so that improvements can be made to maintain an adequate regulatory framework.</i> • <i>We will keep pace with the national high-level waste management program. We will apply the regulatory framework to prelicensing reviews and consultations with DOE to resolve the issues most important to repository safety and prepare for addressing a licensing decision within the statutory time period.</i>
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The NRC will use the following **measures**⁴ to assess results in maintaining safety, protecting the environment, and promoting common defense and security:

Measures	<ul style="list-style-type: none"> • <i>No events resulting in radiation overexposures²⁸ from radioactive waste that exceed applicable regulatory limits.</i> • <i>No breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste.²⁹</i> • <i>No radiological releases³⁰ to the environment from operational activities that exceed the regulatory limits.</i> • <i>No instances where radioactive waste and materials under the NRC's regulatory jurisdiction cannot be handled, transported, stored, or disposed of safely now or in the future.</i>
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PERFORMANCE GOAL: Increase public confidence.

The NRC views building and maintaining public trust and confidence that the NRC is carrying out its mission as an important performance goal for the agency. To reach this goal, the NRC must be viewed as an independent, open, efficient, clear and reliable regulator. This will be accomplished by providing our stakeholders with clear and accurate information about, and a meaningful role in, our regulatory programs. The NRC desires that diverse stakeholder groups (i.e., general public, Congress, the NRC



Spent reactor fuel is carried in containers that are specially designed to withstand accident conditions without releasing their radioactive contents.

licensees, other Federal agencies, States, Indian Tribes, local governments, industry, industry workers, technical societies, the international community, and citizen groups) increasingly recognize that the NRC actions assure that public health and safety, the common defense and security, and the environment are, and will remain, adequately protected from hazards resulting from the activities in the Nuclear Waste Safety arena.

The NRC will employ the following **strategies** to increase public confidence:

<p>Strategies</p>	<ul style="list-style-type: none"> • <i>We will make public participation in the regulatory process more accessible. We will listen to their concerns and involve them more fully in the regulatory process.</i> • <i>We will communicate more clearly. We will add more focus, clarity, and consistency to our message; be timely; and present candid and factual information in the proper context with respect to the risk of the activity.</i> • <i>We will continue to enhance the NRC's accountability and credibility by being a well-managed, independent regulatory agency. We will increase efforts to share our accomplishments with the public.</i>
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Strategies (cont)	<ul style="list-style-type: none"> • <i>We will continue to foster an environment where safety issues can be openly identified without fear of retribution.</i>
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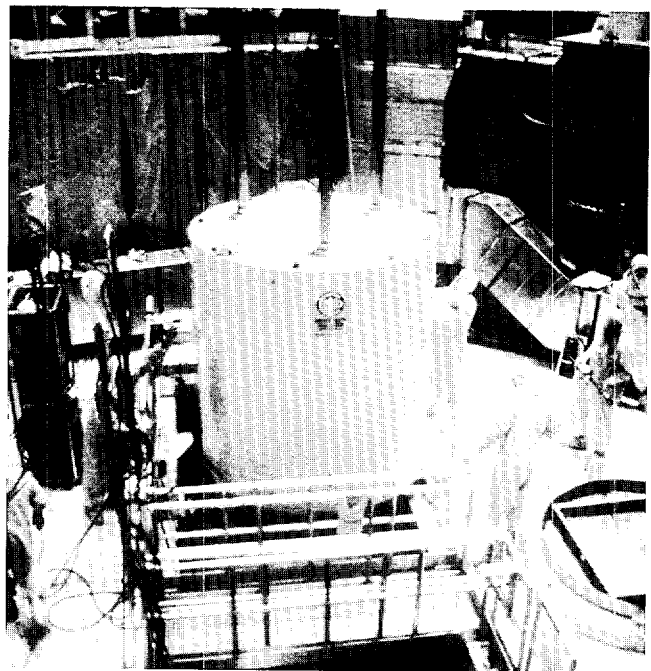
We will use the following **measures** to increase public confidence:

Measures	<ul style="list-style-type: none"> • <i>Complete the milestones in the annual Performance Plan relating to collecting, analyzing, and trending information for measuring public confidence.</i> • <i>Complete all of the public outreaches as scheduled in the annual Performance Plan.</i> • <i>Complete the milestones specific to the agency allegation program effectiveness assessment plan as identified in the annual Performance Plan.</i> • <i>Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206¹⁴ within an average of 120 days.¹⁵</i>
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PERFORMANCE GOAL: *Make the NRC activities and decisions more effective, efficient, and realistic.*

The NRC will continue to improve its regulatory processes so that they become more effective, efficient, and realistic. The NRC will identify and focus on necessary and sufficient regulatory activities that are linked to its goals. In those regulatory activities, the NRC will strive to optimize regulatory programs and processes, where possible, while assuring safety and improving public confidence. In working toward this performance goal, the NRC will apply its Principles of Good Regulation which include improved efficiency, clarity, and reliability.

The NRC will ensure that its decisions are scientifically-based; risk-informed; and shaped by operational experience, new information, and research, including



Decommissioning Fort St. Vrain reactor in Colorado.

cooperative international activities. As a result, the NRC's decisions will be realistic, will be systematic, and will appropriately treat areas of uncertainty. The NRC will ensure that its procedures, processes, and expectations are better-defined, clearer, and more transparent. The NRC regulatory actions will support more consistent, reliable, predictable, and timely decision-making. Furthermore, the NRC will seek to minimize duplication of efforts with stakeholders to achieve this goal, while relying on the technical and managerial competence of its staff to achieve success. To avoid duplication of research activities being performed by other countries, we will coordinate our research programs with other countries, thus leveraging our research funds.

The NRC will employ the following **strategies** to make the NRC activities and decisions more effective, efficient, and realistic:

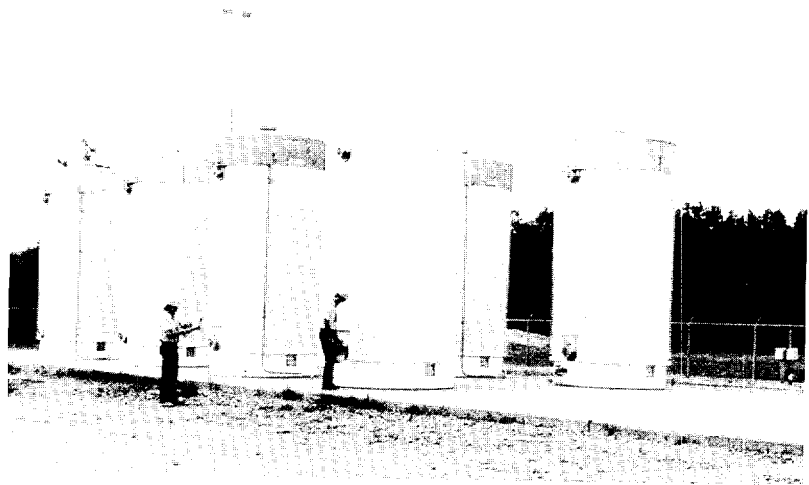
Strategies	<ul style="list-style-type: none"> • <i>We will continue to improve the regulatory framework to increase our effectiveness, efficiency, and realism.</i> • <i>We will identify, prioritize, and modify processes based on effectiveness reviews to maximize opportunities to improve those processes.</i>
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The NRC will use the following **measures** to make the NRC activities and decisions more effective, efficient, and realistic:

Measures	<ul style="list-style-type: none"> • <i>Complete those specific waste milestones in the Risk-Informed Regulation Implementation Plan identified for completion in the annual Performance Plan.</i> • <i>Complete at least two key process improvements per year in selected program and support areas (considering internal and external input) which increase efficiency, effectiveness, and realism.</i> • <i>Complete all major prelicensing milestones needed to prepare for a licensing review of the Yucca Mountain repository, consistent with DOE's schedules and before DOE submits its license application.³¹</i>
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PERFORMANCE GOAL: Reduce unnecessary regulatory burden on stakeholders.

The NRC will strive to reduce unnecessary regulatory burden and associated costs if possible, while achieving the other three performance goals. Unnecessary regulatory burden for the NRC licensees may be defined as requirements that go beyond what is necessary and sufficient for providing reasonable assurance that public health and safety, the environment, and the common defense and security will be protected. The costs associated with NRC activities can impact a variety of NRC stakeholders. For some stakeholders, such as States and the public, costs could potentially result from actions by States to augment the NRC regulatory program, clean up sites, or dispose of radioactive material that are paid for with public funds. For others, such as applicants and licensees, unnecessary burden may be imposed by an overly detailed technical review that could result in increased costs that are passed on to the consumer.



Storage casks at Surry Nuclear Power Plant in Virginia.

Although regulation, by its nature, is a burden, the NRC will ensure that only the level of burden necessary to maintain safety is imposed on licensees. This burden reduction can be achieved by using risk-informed and performance-based approaches, if justified, to focus attention on those areas of highest safety priority and by making more realistic decisions without excessive conservatism.

Consideration will be given to making regulatory burden commensurate with the risk of the regulated activity and the enhanced benefit to the workers, the public, and the environment. Furthermore, regulatory burden associated with a safety enhancement will be considered in light of a cost/benefit analysis prior to the imposition of a new regulatory requirement. Regulatory oversight will be fair, consistent, effective, and timely in its application. Costs associated with the regulatory infrastructure must be fair, equitable, and shared by all users.

The NRC will employ the following **strategies** to reduce unnecessary regulatory burden on stakeholders:

Strategies	<ul style="list-style-type: none">• <i>We will continue to improve our regulatory framework in order to reduce unnecessary regulatory burden.</i>• <i>We will improve and execute our programs and processes in ways that reduce unnecessary costs to our stakeholders.</i>• <i>We will actively seek stakeholder input to identify opportunities for reducing unnecessary regulatory burden.</i>
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The NRC will use the following **measure** to reduce unnecessary regulatory burden on stakeholders:

Measures	<ul style="list-style-type: none">• <i>Complete those specific milestones to reduce unnecessary regulatory burden as identified in the Annual Performance Plan.</i>
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INTERNATIONAL NUCLEAR SAFETY SUPPORT

STRATEGIC GOAL: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation.



Dr. William Makgoba, Chairperson for the National Nuclear Regulator of South Africa (NNR) and NRC Chairman Richard Meserve signing the Arrangement between the NRC and the NNR for the Exchange of Technical Information and Cooperation in Nuclear Safety Matters, at NRC in Rockville, Maryland, March 30, 2000.

The International Nuclear Safety Support strategic arena³² encompasses international nuclear policy formulation, export-import licensing for nuclear materials and equipment, treaty implementation, nuclear proliferation deterrence, international safety assistance, and safeguards

support and assistance. The NRC also participates in international safety cooperation, information exchange, and cooperative safety research. These activities are addressed in the individual Nuclear Reactor Safety, Nuclear Materials Safety, and Nuclear Waste Safety strategic arenas because that is where most of the results of these international efforts are used, where their major resource support is located, and consequently where their benefits and costs can most effectively be measured. These international activities, for instance, enable the NRC to gain access to non-U.S. safety information, which can alert NRC to potential safety problems, help NRC identify possible accident precursors, and provide accident or incident analyses, including lessons learned that could have immediate applicability to U.S. nuclear power plants and other facilities. Further, these activities enable NRC to leverage research dollars, exchange research results, share research facilities, coordinate analyses of important issues, and avoid duplication of efforts.

The absence of further discussion of the domestic impacts of these international activities is not meant to diminish the direct, substantial, and valuable contributions international activities make to the NRC's domestic nuclear safety and cooperative research programs. The NRC international activities maintain support of the NRC's domestic mission, as well as of broad U.S. domestic and international interests. In this way, we help influence the incorporation of effective policies and practices into the nuclear programs of other countries and international organizations to improve safety and security and to reduce the potential for proliferation while gaining valuable knowledge, experience, and resources for our domestic regulatory and research programs. With every major problem in the international nuclear arena having repercussions for the NRC or the domestic program, and with our commitment to protect the global commons, it is in the direct interest of both the NRC and the United States to enhance the safe and secure operation of nuclear facilities worldwide.

The NRC will employ the following **strategies** to support U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation:

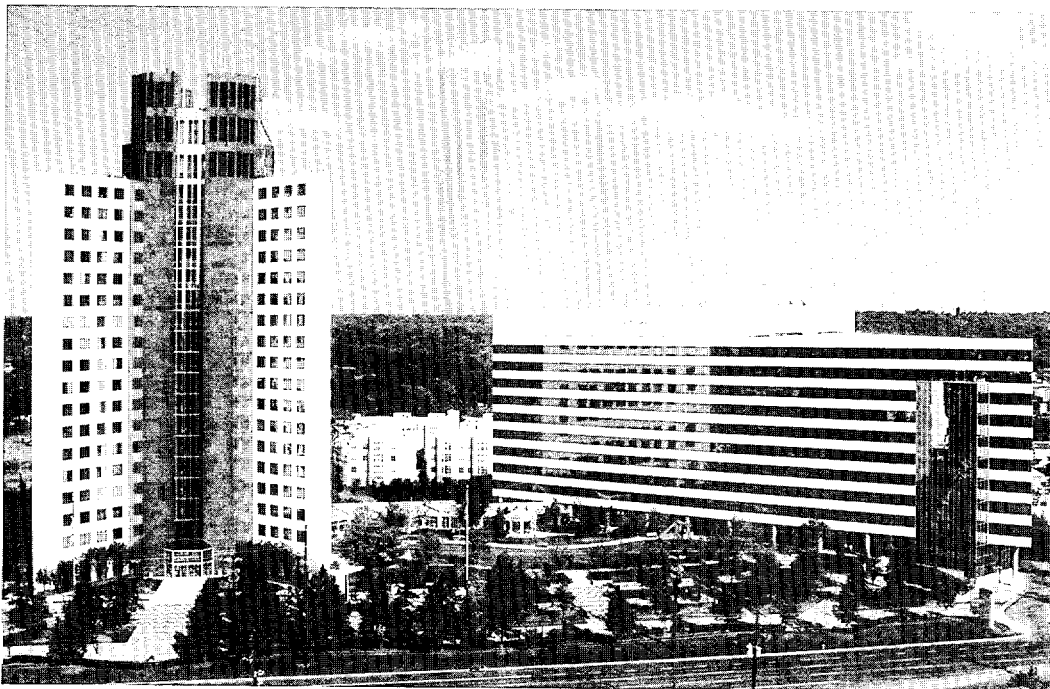
<i>Strategies</i>	<ul style="list-style-type: none"> • <i>We will continue to take a proactive role in strengthening safety, safeguards, and nonproliferation worldwide.</i> • <i>We will focus appropriate agency activities and resources on significant international obligations and U.S. and the NRC international priorities.</i> • <i>We will enhance integration of international activities in the NRC.</i>
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The NRC will use the following **measures** to assess the results of our efforts to support U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation:

<i>Measures</i>	<ul style="list-style-type: none"> • <i>Fulfill 100 percent of the significant obligations over which the NRC has regulatory authority arising from statutes, treaties, conventions, and Agreements for Cooperation.³³</i> • <i>No significant proliferation incidents attributable to some failure of the NRC.</i> • <i>No significant safety or safeguards events that result from the NRC's failure to implement its international commitments.</i> • <i>Outcomes in international forums are consistent with U.S. Government objectives identified as pertinent to and actively supported by the NRC at least 60 percent of the time.</i>
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CORPORATE MANAGEMENT STRATEGIES



The Nuclear Regulatory Commission Headquarters in Rockville, Maryland.

To help accomplish our strategic and performance goals, we have established the following corporate management strategies:

***Corporate
Management
Strategies***

- *Employ innovative and sound business practices.*
- *Sustain a high-performing, diverse workforce.*
- *Provide proactive information management and information technology services.*
- *Communicate strategic change.*

These corporate management strategies help us work together more effectively, both within and across strategic arenas. These strategies also help the support offices better serve their customers within the agency to help them achieve the agency's goals. Our corporate management strategies describe the means by which we will conduct business to successfully implement the Strategic Plan and accomplish the agency's mission. For the next update/revision cycle for the Strategic Plan, the NRC will develop measures for Corporate Management Strategies. Each of the following strategies is described in greater detail in the Strategic Plan Appendix (Volume 2, Part 2).

Employ Innovative and Sound Business Practices

The NRC will employ the following supporting **strategies** to foster innovative and sound business practices:

<p><i>Supporting Strategies</i></p>	<ul style="list-style-type: none"> • <i>We will strengthen collaborative processes for conducting business among support offices and between support and program offices.</i> • <i>We will improve customer service, balancing internal customer needs with overall agency priorities and available resources.</i> • <i>We will find new and better ways of doing business to increase effectiveness and efficiency of operations.</i> • <i>We will create and maintain a planning, budgeting, and performance management process that is focused on outcomes and provides an effective tool for setting goals, allocating resources, tracking progress, measuring results, and identifying areas for improvement.</i> • <i>We will strengthen our financial systems and processes to ensure that our financial assets are adequately protected consistent with risk and that our financial information is better integrated with decision-making.</i> • <i>We will acquire goods and services in an efficient manner that helps to accomplish our mission, ensures fair and equitable treatment for all parties wishing to do business with the NRC, and results in the best value to the NRC.</i>
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<p>Supporting Strategies (cont)</p>	<ul style="list-style-type: none"> • <i>We will modify our management and organizational structure, as appropriate, to meet the changing demands of internal and external factors, such as the economic deregulation of the electric utility industry and any resulting consolidation of the nuclear industry.</i>
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Sustain a High-Performing, Diverse Workforce

We will employ the following supporting strategies to sustain a high-performing, diverse workforce:

<p>Supporting Strategies</p>	<ul style="list-style-type: none"> • <i>We will recruit, hire, and retain a high-quality, diverse workforce with the skills needed to achieve our mission and goals.</i> • <i>We will foster a work environment that is free of discrimination and provides opportunities for all employees to optimally use their diverse talents in support of our mission and goals.</i> • <i>We will base our human resource decisions on sound workforce planning and analysis.</i> • <i>We will improve the capability of our workforce through training, development, and continuous learning.</i> • <i>We will select and develop strong managers who can provide vision and strategic leadership.</i> • <i>We will focus on results by linking rewards and recognition to outcomes and organizational effectiveness.</i>
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Provide Proactive Information Management and Information Technology Services

We will employ the following supporting strategies to use information and information technology to achieve the NRC's efficiency and effectiveness goals:

<p>Supporting Strategies</p>	<ul style="list-style-type: none"> • <i>We will work jointly with program and support offices to integrate information technology and business planning as a means of achieving agency goals and strategies.</i>
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**Supporting
Strategies
(cont)**

- *We will make it easier for the staff to acquire, access, and use the information they need to perform their work.*
- *We will assume a leadership role in improving the agency staff's capability to use current and planned information technology to enhance performance.*
- *We will provide and maintain a robust, reliable, cost-effective, and "user-friendly" information technology infrastructure that is driven by the agency business needs.*
- *We will work jointly with stakeholders to optimize the delivery of information technology and management service.*
- *We will improve the ability of the NRC and external entities to conduct our mutual business electronically.*
- *We will provide external stakeholders the ability to easily access desired publicly available information to aid in their participation in the NRC's regulatory processes, and to enhance understanding of the agency's mission, goals, and performance.*

Communicate Strategic Change

We will use the following supporting **strategies** to establish, evaluate, and sustain effective methods of communication with our stakeholders:

**Supporting
Strategies**

- *We will review and assess the effectiveness of communication channels and methods within the NRC to ensure that they support the needs of a changing environment.*
- *We will assess the effectiveness of communications by evaluating the effectiveness of communication channels or methods used to provide information to the public.*
- *On the basis of the assessments above, we will develop and implement communication plans that support strategic change and foster the desired work environment.*



***Supporting
Strategies
(cont)***

- *We will improve communication with the public by using strategies that recognize the ongoing changes in the environment external to the agency.*
- *We will respond to requests and inquiries from stakeholders in a timely, courteous, and professional manner.*
- *We will identify regulatory decisions or issues that are most likely to generate substantial public interest at an early stage of development and initiate actions to inform and involve the public.*

ENDNOTES

1. As used in this Strategic Plan, “civilian” usage or activities refer to those commercial and other uses of nuclear materials and facilities, including certain military activities (such as at hospitals, high-level waste disposal, and Naval nuclear fuel fabrication), required by the Atomic Energy Act to be licensed and otherwise regulated by the NRC.
2. The term “radiation-related” as used in this document includes other hazards associated with the production and use of radioactive materials such as potential chemical hazards related to fuel processing.
3. “Licensees” as used in this strategic plan include persons required to be licensed (as defined in Section 11(s) of the Atomic Energy Act, as amended) as well as, where appropriate, applicants for NRC licenses, certificate of compliance holders and applicants for certificates of compliance, contractors (including subcontractors, suppliers, consultants, and vendors), and all persons subject to NRC’s regulatory jurisdiction.
4. Specific values of the metrics were, in general, set after consideration of past performance. Failure to meet a metric target will generally prompt a re-evaluation of the involved programs and activities. However, some failures to meet some metrics may be due solely to randomness in the timing of events and not due to a change in underlying level of safety. In such cases, no changes to programs or activities would be warranted.
5. “Nuclear reactor accidents” are defined in the NRC Severe Accident Policy Statement (50 *Federal Register* 32138, August 8, 1985) as those accidents which result in substantial damage to the reactor core, whether or not serious offsite consequences occur.
6. “Significant radiation exposures” are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician in accordance with Abnormal Occurrence Criterion I.A.3.
7. Releases that have the potential to cause “adverse impact” are currently undefined. As a surrogate, we will use those that exceed the limits for reporting abnormal occurrences as given by AO criterion 1.B.1 (normally 5,000 times Table 2 (air and water) of Appendix B, Part 20).

8. Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions in Plant Specific Changes to the Licensing Basis," establishes general principles for using risk information in NRC review and approval of licensing actions.
9. Stated succinctly, risk-informed, performance-based regulation is an approach in which risk insights, engineering analysis and judgement, and performance history are used to (1) focus attention on the most important activities, (2) establish objective criteria based upon risk insights for evaluating performance, (3) develop measurable or calculable parameters for monitoring system and licensee performance, and (4) focus on the results as the primary basis of regulatory decision-making. This definition is contained in the Commission White Paper on this subject, which can be located at www.nrc.gov/NRC/COMMISSION/SRM/1998-144srm.html.
10. Such events have a $1/1000$ (10^{-3}) or greater probability of leading to a reactor accident.
11. The agency provides oversight of plant safety performance on a plant-specific basis as well as on an industry-wide basis. As a refinement to the existing process, the specific parameters and criteria for measuring statistically significant adverse trends in industry-wide safety performance will be developed. The parameters to be monitored will include NRC-approved performance indicators, inspection findings, accident sequence precursor results, and other risk-related indications or measures of industry safety performance that will be developed and qualified for use in phases.
12. Overexposures are those that exceed limits as provided by 10 CFR 20.2203(a)(2), excluding instances of overexposures involving a shallow dose equivalent from a discrete radioactive particle in contact with the skin.
13. Releases for which a 30 day reporting requirement under 10 CFR 20.2203(a)(3) is required.
14. A 10 CFR 2.206 petition is a written request filed by any person to institute a proceeding to modify, suspend, or revoke a license, or for any other enforcement action. The petition specifies the action requested and sets forth the facts that constitute the basis for the request. The NRC evaluates the technical merits of the safety concern or investigates the wrongdoing presented by the petition. Based on the facts determined by the NRC technical evaluation or investigation of the merits of the petition, the Director will issue a decision to grant the petition, in whole or in part, or deny the petition. The Director's Decision explains the bases upon which the petition has been granted and identifies the actions that NRC staff has taken or will take to grant the petition in whole or in part. Similarly, if the petition is denied, the Director's Decision explains the bases for the denial and discusses all matters raised by the petitioner in support of the request.



15. The start time of the 120 days is the date that the Petition Review Board (PRB) determines that the proposed petition satisfies the criteria of NRC Management Directive (MD) 8.11, "Review Process for 10 CFR 2.206 Petitions" and acknowledges by letter the petitioner's request. MD 8.11 is currently being revised to allow the petitioner and the licensee various opportunities to participate in the petition process. This additional stakeholder involvement may have an effect on the 120 day performance measure.
16. For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material, consistent with proposed amendments to 10 CFR Part 70. It also includes exposures from uranium recovery activities under the Uranium Mill Tailings Radiation Control Act.
17. Significant exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician. Hazardous material exposures only apply to fuel cycle and uranium recovery activities in the Materials Arena.
18. In accordance with Appendix G to 10 CFR part 73 and 10 CFR 74.11(a).
19. In accordance with the requirements of 10 CFR 95.57.
20. In this context, the regulatory framework consists of several interrelated aspects. They are: 1) the NRC's mandate from Congress in the form of enabling legislation; 2) the NRC's rules in Title 10 of the Code of Federal Regulations; 3) the regulatory guides and review plans that amplify those regulations; 4) the body of technical information, obtained from research performed by the NRC or by others and from evaluation of operational experience, that supports the positions in the rules and guides and review plans; 5) the licensing and inspection procedures utilized by the staff; and 6) the enforcement guidance.
21. Material entering the public domain in an uncontrolled manner. The Nuclear Materials Event Data base contains the list of these events as reported by the NRC licensees and, through the Agreement States, their licensees.
22. Overexposures are those maximum annual exposures that exceed limits as provided by 10 CFR 20.2203(a)(2). For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material, consistent with proposed amendments to 10 CFR 70. Reportable chemical exposures are those that exceed license commitments. It would also include chemical exposures involving uranium recovery activities under the Uranium Mills Tailings Radiation Control Act.
23. Medical events as reported under 10 CFR 35.
24. Releases for which a 30 day reporting requirement under 10 CFR 20.2203(a)(3) is required.

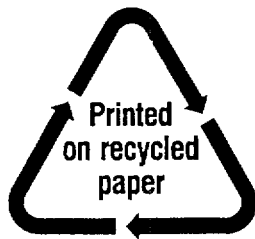
25. This involves chemical releases from the NRC regulated activities under the Uranium Mill Tailings Radiation Control Act.
26. We recognize that no explicit reporting requirements exist for substantiated breakdowns of programs. The NRC relies on its safeguards inspection findings and licensee notifications.
27. Significant radiation exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician.
28. Overexposures are those that exceed limits as provided by 10 CFR 20.2203(a)(2).
29. We recognize that no explicit reporting requirements exist for substantiated breakdown determination. The NRC relies on its safeguards inspection findings and licensee notifications.
30. Releases for which a 30 day reporting requirement under 10 CFR 20.2203(a)(3) is required. This measure includes only radiological releases.
31. Prelicensing activities such as this constitute informal conferences between a prospective applicant and the staff and are not part of a potential licensing proceeding.
32. As used in this arena:
 - Nuclear safety means protection of the public health and safety and the environment.
 - Domestic safeguards are those nuclear material control and accounting measures and physical protection measures implemented by and within any country, including the U.S., to prevent sabotage of nuclear materials or facilities or theft or diversion of nuclear materials by an individual or a group within that country. Secure use of nuclear materials is achieved through the successful implementation of domestic safeguards.
 - International safeguards are the independent verifications performed by the International Atomic Energy Agency (IAEA) of a country's "peaceful use" declarations on nuclear materials and nuclear facilities.
 - Nuclear nonproliferation means control over or deterrence of the spread of nuclear explosive devices or of the direct capability to manufacture or otherwise acquire such devices.



33. Agreements for Cooperation in the Civil/Peaceful Use of Nuclear Energy are required under section 123 of the Atomic Energy Act of 1954, as amended, to establish the legal framework for technical cooperation in the production and use of special nuclear material as well as for the supply of such material or fuel cycle equipment, or related sensitive information to another country or international organization. These Agreements for Cooperation (or Section 123 Agreements, as they are also known) include such nonproliferation conditions and controls as safeguards commitments; a guarantee of no explosive or military use; a guarantee of adequate physical protection; and U.S. rights to approve retransfers, enrichment, reprocessing, other alterations in form or content, and storage of U.S.-supplied or derived material. They must be in effect before an NRC export license can be issued.



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