
U.S. Nuclear Regulatory Commission Policy and Planning Guidance 1986

U.S. Nuclear Regulatory
Commission



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I. INTRODUCTION

Purpose

The purposes of the Policy and Planning Guidance document are:

- to set forth the regulatory philosophy of the Nuclear Regulatory Commission and its supporting principles;
- to state the strategic goals and major policies of the Commission; and
- to provide guidance for the development of plans and programs, for the establishment of priorities, and for the allocation of resources.

The Commission believes that the individual review of this document by all employees will result in a regulatory process that is more effective and efficient in protecting the public health and safety, the common defense and security, and the environment.

Background

The Policy and Planning Guidance is organized into four major sections: Introduction; Philosophy of Regulation; Strategic Goals; and Policies and Planning Guidance. The policies and planning guidance are set forth in the context of seven mission areas which cover the entire agency.

The intent of the philosophy section of the document is to establish the framework within which strategic goals, regulatory policies, plans, and priorities are developed. The intent of the succeeding section is to set forth the Commission's strategic goals. The policies in the last section flow from these strategic goals, and the planning guidance provides an expression of specific Commission priorities.

The Commission is planning to publish a Five-Year Plan in 1986. That plan will identify the programs and resources needed to attain the Commission's strategic goals. The Commission intends the Five-Year Plan to be a living document. It will be reviewed and revised annually to reflect changes in the regulatory environment and budget realities. This Policy and Planning Guidance will serve as the policy foundation for formulating the Five-Year Plan.

II. PHILOSOPHY OF REGULATION

The Commission's fundamental mission is to regulate those who commercially use or produce nuclear material so that the public health and safety, the common defense and security, and the environment are protected. The Commission recognizes that its actions can affect the nation's energy mix and inter-dependent energy supply system of which nuclear energy is a significant part. The way the Commission carries out its fundamental mission must be consistent with and complementary to the determination of the Congress that the safe use of nuclear energy for peaceful purposes, particularly in the production of electricity, is a legitimate and important national goal. While the Commission recognizes that its functions do not include the promotion of nuclear energy, it also believes that Commission actions should reflect the broad objectives set forth by the Congress in the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended.

Although the Commission and the nuclear industry fulfill necessarily different roles and have different responsibilities, the fundamental objective of both is to assure that the public health and safety is adequately protected. In meeting this common objective, excellence should be the standard for performance. Excellence can be achieved by having a clear sense of purpose through candid assessment, by valid analysis and effective decisionmaking, by developing strong and vigilant management, and by continually searching for ways to do things better. The Commission urges industry to strive for such

excellence and, in committing the NRC to the same standards, hopes to serve as an example as well as a regulator.

Supporting Principles

The Commission recognizes that regulatory predictability and stability are extremely important to achieving overall safety and the statutory goal of supporting the expansion of the peaceful uses of nuclear energy, with the understanding that safety considerations are always paramount. The Commission continues to pursue predictability, stability and discipline in its internal processes. New requirements will be imposed on existing licensees only in accordance with the Commission's backfit rule and supporting policies.

The Commission will attempt to develop less prescriptive regulatory requirements. Consistent with its goal to improve safety and achieve stability in the licensing process, the NRC will also encourage the nuclear industry to develop standardized plant designs.

When NRC's comprehensive review of a qualified applicant's plans for a nuclear power plant has satisfied the Commission that it can be built and operated safely, the Commission has a statutory obligation to license that plant. At the same time, NRC's review process should provide an accessible avenue for the expression of public concerns and an adequate response to those concerns.

The hearing process is to be used to resolve genuine, factual disputes that are material to the case. The right to participate carries with it the

responsibility to do so in a business-like manner. While the Commission will not allow the deliberative process to be used as a mechanism for unnecessary delay, it will continue to respect and consider differing viewpoints and constructive criticism.

The NRC has a responsibility to audit the construction and operation of a nuclear power plant and to thoroughly review material submitted in support of a license application and amendments. However, quality cannot be inspected into a plant. It is the responsibility of utility management to assure the quality of design, construction, recordkeeping, procedural adherence, and operation, and to assure the quality of service and equipment supplied by vendors. It is the responsibility of the NRC to see that the utilities perform this task.

The Commission is convinced that the control of quality is closely correlated with management involvement and experience and therefore intends to ensure, early in the construction process, that the applicant has the required expertise at its disposal. The Commission will also assure that this involvement and expertise is retained throughout design, construction and plant operation. In the event that an inexperienced utility applies for a license, the Commission will consider, among other initiatives, requiring a more complete design prior to construction permit approval and mandating assistance from a more experienced organization.

Regulatory oversight must be based on sound technical judgments and must include timely and decisive action. The regulatory process must be conducted in an atmosphere of cooperation and trust. Voluntary compliance and industry initiatives to improve safety are to be encouraged. Nevertheless, enforcement is a necessary part of regulation which must be exercised when warranted. The Commission's enforcement policy and its implementation shall be firm and fair. Past performance of a licensee will be a factor in considering enforcement action.

Access to accurate information enhances public awareness and can facilitate meaningful public participation in the regulatory process. The public should be informed of the Commission's activities and responsibilities in a factual, timely, and objective manner.

The Commission intends to shift its regulatory emphasis away from detailed, prescriptive requirements toward more general, performance-based requirements. The severe accident policy, and the development of the revised safety goal and advanced reactor policy, are intended to further this objective. The Commission believes that this approach will result in more effective regulation.

In the execution of this philosophy, the NRC will strive to ensure that all its employees have a common understanding of the Commission's objectives through frequent interaction and discussion by Commission and staff.

The Commission recognizes that the nuclear industry, once heavily engaged in construction, is now almost exclusively occupied with the operation of existing nuclear power plants. Accordingly, changes will be made in the agency's agenda, ordering of priorities, and use of resources to respond to this transition.

III. STRATEGIC GOALS

The Commission is establishing a set of strategic goals which represent the Commission's perspective for activities important to the NRC's meeting its statutory responsibilities. The goals and various supporting objectives are to be used as a framework for agency resource allocation decisions. The Mission Areas discussed in Chapter IV are the accounting subdivisions for presentation of agency resources.

GOAL 1. To Assure Safe Operation of Licensed Facilities and Quality
Construction of Facilities to be Licensed

The Commission's primary goal is to ensure that all NRC-licensed facilities are constructed, operated, and maintained in accordance with the highest standards for public safety. To meet this goal, the Commission will allocate resources to achieve the following set of strategic objectives:¹

1 Each of the letters which follows the strategic objectives enumerated below refers to the Mission Area titles presented in Chapter IV on Policies and Planning Guidance. In order to facilitate cross reference between Mission Areas and strategic goals and objectives, the titles of these Mission Areas are repeated here: A. License and Oversee Nuclear Reactors and Resolve Safety Concerns, B. License and Oversee Materials Licensees/Fuel Cycle Facilities, C. Regulate Nuclear Waste, D. Perform Safeguards Regulatory Activities, E. Conduct Investigations and Enforce Laws and Regulations, F. Sponsor Needed Safety Research, G. Manage and Support the Other Mission Areas.

1. Inspect as necessary to ensure compliance with NRC regulations (A.1, p.18; A.13, p.27)
2. Monitor specific indicators to detect improving and declining performance (A.8, p.26; A.9, p.26)
3. Ensure high standards of quality assurance (A.14, p.20; A.26, p.23; A.19, p.28)
4. Ensure adequate training of licensee personnel (A.6, p.25; A.17, p.21; A.10, p.26; A.17, p.28; A.20, p.29)
5. Allocate NRC resources proportionate to the mix of operating facilities and facilities under construction (A.1, p.18)
6. Reduce challenges to safety systems (A.18, p.21; A.13, p.20; F.4, p.48)
7. Achieve technical resolution of unresolved safety issues and appropriate generic issues (A.6, p.19; A.15, p.21; A.7, p.25)
8. Ensure that NRC and licensees identify and apply lessons learned from operational experience which are relevant to safety (A.10 & 12, p.20; A.10, p.26)
9. Identify root causes of severe accident risks and apply resources to address these root causes (A.5, p.19; A.13, p.20; A.18, p.21; A.5, p.25; F.4 & 6, p.47)
10. Improve NRC capability to recognize and respond promptly to incident precursors (A.9, p.20; A.11, p.20; A.18, p.21; A.8, p.26; A.10, p.20; A.9, p.26)

11. Ensure adequate protection of workers at nuclear facilities against radiation hazards (A.16, p.21)
12. Conduct supporting confirmatory research (F.1-3, p.45; F.4, p.46; F.1, p.47)
13. Identify those problems which should be anticipated as a consequence of plant aging (A.18, p.21; A.23, p.22; F.3, p.48)
14. Enforce applicable regulations (A.14, p.27; E.4, p.41; E.5, p.42; E.6-7, p.42; E.6, p.44)
15. Investigate significant events and allegations expeditiously (A.12, p.20; A.12, p.27; E.1-3, p.41; E.1-4, p.43; E.5, p.44)

GOAL 2. To Improve Regulation of the Nuclear Industry

The Commission will take actions to improve the regulatory climate in which the nuclear industry operates. The Commission has initiated a number of efforts intended to effect improvements. For instance, it is acting to streamline NRC's licensing process and to comprehensively review NRC's regulations. A list of the Commission's strategic objectives for implementing improvements in the regulation of the nuclear industry follows:

1. Continue to advocate licensing reform legislation (A.20, p.22)
2. Provide a disciplined approach to backfitting (A.3-4, p.18; A.2-3, p.24)
3. Implement Commission policy on severe accidents (A.25, p.30; F.6, p.48)
4. Complete the reassessment of radioactive source terms and, where appropriate, implement revised source terms and modify corresponding regulations (A.7, p.19; A.15, p.21; A.27, p.31; F.6, p.46; F.2, p.47)
5. Issue and implement the safety goal policy (A.8, p.19; A.4, p.25; A.28, p.31)
6. Issue and implement the advanced reactor policy (A.25, p.23)
7. Encourage standardization and issue a revised standardization policy (A.24, p.23; A.23, p.29)
8. Minimize regulatory delays and improve the efficiency of the hearing process (A.19, p.21; A.21, p.22; A.18, p.28)

9. Complete a comprehensive review of NRC regulations (A.26, p.30)
10. Amend regulations and technical specifications to reduce both their numbers and prescriptiveness (A.16, p.28; A.25, p.30; B.1, p.32)
11. Urge industry self-improvement, where appropriate, consistent with NRC responsibilities (A.2, p.18; A.1, p.24; A.6, p.25; A.11, p.26; A.15, p.27; A.17, p.28)
12. Maintain or develop the process necessary to license new power plants, including standardized and advanced reactors, to reactivate deferred construction projects and to extend plant operating licenses (A.22-24, p.22; A.25, p.23; A.21, p.29; A.23, p.29; A.24, p.30)
13. Strive to enhance relationships with other Federal and State governmental bodies with whom the agency interacts (F.5, p.46; G.5, p.49)
14. Ensure uniform enforcement of regulations (E.4, p.41)
15. Uphold and enhance the level of professionalism of the staff through training in order to improve relations with the public and licensees (G.8, p.51)

GOAL 3. To Protect the Public Health and Safety from Risks Associated with the Wide-Scale Use of Nuclear Materials.

The Commission places high priority on its effort to protect public health and safety from risks associated with the increasing and wide-spread use of nuclear materials. Consequently, the Commission is establishing strategic objectives for its materials licensing and controls programs.

1. Ensure the adequacy of utility ALARA programs (A.16, p.21)
2. Reduce overexposures of radiographers (B.2, p.32; B.3, p.33)
3. Examine measures to minimize medical misadministration of radioisotopes (B.2, p.32; B.3, p.33)
4. Ensure that handling of radioactive materials is conducted safely (A.16, p.21; B.3, p.32; B.2, p.32; B.3-5, p.33)
5. Ensure that safeguards measures are commensurate with credible threats (D.1 & 3, p.38; D.1-3, p.39; D.5, p.40)
6. Ensure necessary controls are applied to exports of strategic nuclear material (D.2, p.38; D.4, p.40)

GOAL 4. To Ensure the Safe Transportation, Storage and Disposal of Nuclear Wastes

The NRC has major regulatory responsibilities in the radioactive waste management area. Consequently, the Commission must allocate substantial resources to meet its statutory responsibilities for the safe storage and disposal of nuclear wastes. The Commission's strategic objectives to assure that nuclear wastes are safely managed are listed below.

1. Identify as soon as possible technical issues that must be addressed as part of the Commission licensing process for a high-level waste repository and attempt to reach a scientifically defensible resolution (C.1, p.34; C.1 & 4, p.35; C.5-6, p.36)
2. Review DOE's high-level waste repository program in a timely fashion (C.1, p.34; C.4-5, p.35; C.5-7, p.36)
3. Encourage State and Indian tribe participation in DOE's high-level waste repository program (C.1, p.34; C.2, p.35)
4. Monitor implementation of the Low Level Radioactive Waste Policy Amendment Act of 1985 (C.2, p.34; C.8, p.36)
5. Provide advice to states and/or compacts to assist in their selection of sites and appropriate technology for low-level waste disposal (C.2, p.34; C.9, p.37)

6. Support efforts to clean up TMI-2 safely (C.3, p.34; C.10, p.37)
7. Conduct supporting safety research (C.3, p.35; F.5, p.47)

GOAL 5. To Manage Agency Resources More Effectively and Efficiently

The Commission intends to improve its internal management of the agency so as to assure that all public resources are efficiently and effectively utilized. The Commission's strategic objectives for improved agency management are listed below.

1. Assure most effective and efficient use of our human and fiscal resources (G.1, p.49; G.7, p.51)
2. Enhance value of NRC employees through effective training, development and recognition (G.3, p.49; G.3, p.50)
3. Consolidate headquarters staff (G.2, p.49; G.2, p.50)
4. Improve management accountability tracking of Commission decisions and directives, planned accomplishments and schedules (G.5, p.50)
5. Enhance information processing and distribution (G.4, p.49; G.4, p.50)
6. Enhance management/employee communications, including between Commission and EDO staff, for improved understanding of the Commission's goals and objectives (G.6, p.51)
7. Achieve EEO goals (G.9, p.51)

IV. POLICIES AND PLANNING GUIDANCE

The NRC's major policies and planning guidance are organized under seven general mission areas: (A) License and Oversee Nuclear Reactors and Resolve Reactor Safety Concerns, (B) License and Oversee Materials Licensees/Fuel Cycle Facilities, (C) Regulate Nuclear Waste, (D) Perform Safeguards Regulatory Activities, (E) Conduct Investigations and Enforce Laws and Regulations, (F) Sponsor Needed Safety Research, and (G) Manage and Support the Other Mission Areas.

Within each mission area there is a policy section which establishes a general framework for shaping NRC plans and programs. Planning guidance is furnished in those areas where the Commission believes more detail is warranted to meet specific priorities or schedules, or where major assumptions are needed for program development. While the mission areas cover the entire agency, specific policies or planning guidance with respect to each and every activity within the NRC is not furnished, since it is not intended that this document be all-inclusive.

A. LICENSE AND OVERSEE NUCLEAR REACTORS AND RESOLVE REACTOR SAFETY CONCERNS

Policy

General

1. One of NRC's fundamental tasks is to assure that existing nuclear reactors and those coming on-line operate safely. Consequently, the highest priority will be given to assuring that (1) operating facilities maintain adequate levels of protection to public health and safety, and (2) reactors are adequately designed, built, and tested prior to operation. (GOALS 1.1; 1.5)
2. The staff should carry out NRC regulatory activities cognizant of the fact that licensees have the primary responsibility for the safe design, construction, and operation of nuclear facilities. (GOAL 2.11)
3. The NRC must be sensitive to the large number of requirements imposed on licensees. Requirements imposed on the regulated industry by NRC shall be imposed only in accordance with the Commission's backfit rule. (GOAL 2.2)
4. To the extent practicable, issues which affect numerous licensees should be addressed in the context of rulemaking or standard orders as opposed to case-by-case review. Insofar as practical, an effort should be made

to avoid requirements which would build in more differences among plants than already exist. (GOAL 2.2)

5. Where data permit, probabilistic risk assessment is a useful tool for assessing the reliability of safety systems and for weighing risks against one another. Quantitative risk assessment techniques will be used judiciously by the staff and the boards to estimate risks as an aid to decisionmaking. (GOAL 1.9)
6. Unresolved safety issues should be promptly resolved. Priorities for implementation should be established in light of the safety significance of the issue and all other requirements imposed on the licensee. (GOAL 1.7)
7. Changes to current regulatory policies will be considered if the reassessment of the radioactive source terms and their risk importance demonstrates, based on sound science, that such changes are justified. (GOAL 2.4)
8. The Commission has developed preliminary safety goals and related safety guidance and will continue to evaluate their future regulatory potential. (GOAL 2.5)

Operating Reactors

9. The Commission will continue to use performance indicators to identify potential operational problems as early as practicable so that action is taken before such problems can significantly affect safety. (GOAL 1.10)
10. The NRC and the industry must continue to learn the lessons that only experience can teach. Accordingly, a high priority should be given to the development of capabilities to foresee problems through monitoring performance and analysis of operational data. (GOAL 1.8, 1.10)
11. Analysis of domestic and foreign operational data will be used to help identify potential accident precursors. (GOAL 1.10)
12. Provisions for prompt and effective investigation of major incidents must be maintained, including appropriate training of teams to carry out the incident investigation. (GOALS 1.8; 1.15)
13. The NRC will increase its understanding of how reactor safety systems and components behave under postulated accident conditions. The NRC will evaluate major reactor safety systems so that the agency can identify potential weaknesses and provide alternatives or identify necessary backups to prevent accidental releases of radioactivity. (GOALS 1.6; 1.9)
14. One of NRC's goals is to ensure a high level of quality in reactor operations and maintenance. The NRC and industry need to better

understand the causal factors leading to problems and to work to eliminate the repetition of past mistakes. (GOAL 1.3)

15. The Commission continues to believe in emergency backup systems, containment integrity and emergency planning as essential parts of the defense-in-depth philosophy. Assumptions made in planning for nuclear emergencies should be based on the best available scientific data and should be subject to update as new information warrants. (GOALS 1.7; 2.4)
16. The Commission continues to believe that radiation protection of workers must be a major consideration when engineering and operational decisions for nuclear facilities are made. (GOALS 1.11; 3.1; 3.4)
17. The Commission places considerable importance on the need for the NRC to ensure that the industry properly trains their people, particularly in preventive, corrective, and all other areas of maintenance. (GOAL 1.4)
18. The Commission encourages the staff to identify safety issues and options for addressing issues related to operating facilities. (GOALS 1.6; 1.9; 1.10; 1.13)

Licensing of Reactors

19. The NRC intends that its regulatory processes be efficient and cost effective, without compromising safety, safeguards, or environmental

requirements or preventing the candid disclosure of information relating to radioactive risks to the public. Actions should continue to be taken to minimize unwarranted delay in reaching decisions. The Commission reaffirms its statement of policy of May 1981 on licensing proceedings which urged licensing boards to take actions needed to assure the efficient conduct of hearings. (GOAL 2.8)

20. NRC should continue to support the need for licensing reform legislation. In addition, the staff should promptly recommend to the Commission specific administrative reform proposals which would come as close as possible under existing authority to implementing the objectives of the licensing reform legislation. (GOAL 2.1)
21. The staff shall evaluate ways that procedural aspects of the licensing process can be simplified without detracting from public participation and candid disclosure of risks to the affected public. (GOAL 2.8)
22. The staff should establish criteria for the maintenance of deferred plants in the event that the licensing process for such plants is to be resumed. The Staff should also establish any necessary procedural criteria for the resumption of the licensing process. (GOAL 2.12)
23. Requests for an operating license renewal are to be anticipated and will require advanced planning and analysis. The Commission intends to continue development of the policies and criteria to define requirements for operating license extensions to help assure that industry's efforts

in this area are focused on the primary regulatory concerns. (GOALS 1.13; 2.12)

24. A Commission objective is to approve standard plant designs. There are advantages to the development and use of standardized nuclear steam supply system and balance of plant designs. Such designs can benefit public health and safety by concentrating the resources of designers, engineers and vendors on particular approaches, by stimulating standardized programs of construction practice and quality assurance, by improving the training of personnel and by fostering more effective maintenance and improved operation. The use of such designs can also permit more effective and efficient licensing and inspection processes. Therefore, the Commission endorses regulatory actions that will strongly encourage industry to pursue standardization of power reactor designs. (GOALS 2.7; 2.11)
25. The NRC will maintain the capability to respond to innovative and advanced reactor designs that might be presented for Commission review. Generally, the licensing and regulation of advanced reactor concepts shall be in accord with requirements within the framework of the Advanced Reactor Policy statement. (GOALS 2.6; 2.12)
26. The NRC will continue to explore better ways to ensure quality in the design and construction of new power plants. (GOAL 1.3)

Planning Guidance

General

1. The Commission will consider alternate regulatory approaches which recognize the contributions of cooperative industry initiatives to the extent that such initiatives are effective and consistent with NRC regulatory responsibilities. The Commission supports such industry efforts as INPO's Training Accreditation Program, the INPO Operating Plant Evaluations, the Nuclear Plant Reliability Data System, and fitness for duty and maintenance improvements. (GOAL 2.11)

2. The EDO has overall authority and responsibility for managing backfitting. The staff should diligently manage backfitting for reactors under construction or in operation in accordance with Commission regulations and supporting policy. (GOAL 2.2)

3. The Committee for Review of Generic Requirements (CRGR) shall continue to review and make recommendations to the EDO on proposed generic requirements for reactor licensees. The CRGR shall continue to assure that proposed requirements (a) contribute to the protection of public health and safety, and (b) provide for the utilization of both NRC and licensee resources in a manner which effectively and efficiently achieves protection of the public. (GOAL 2.2)

4. Attention should be given to refining the use of probabilistic risk assessment techniques to implement Commission policy on safety goals, as directed by the Commission, and in other regulatory applications especially amenable to risk assessment. Whenever probabilistic risk assessment is used in the decision-making process, there must be clear statements of the scope and depth of the assessment, clear identification of the most significant assumptions, a systematic evaluation of the uncertainties, and a clear description of how uncertainties have been treated in making decisions. (GOALS 1,8; 2.5)

5. Attention should be given to developing an integrated program for the collection, analysis and distribution of data needed for risk assessment. (GOAL 1.9)

6. The staff should continue the efforts approved in the NRC Human Factors Program Plan. The staff should make effective use of available human factors data and take industry efforts (such as INPO and NUMARC) into account in developing NRC programs. (GOALS 1.4; 1.7; 2.11)

7. By the end of 1986, to the extent practical, the staff will issue for public comment draft technical resolutions for currently-identified unresolved safety issues. The Staff should continue to review and approve the addition of new generic safety issues in accordance with current Commission policies and resolve the high priority issues first. (GOAL 1.7)

Operating Reactors

8. The staff's inspection of operating reactors should continue to focus on the plant operations of licensees. The analysis of operational data, risk-based analysis, systematic assessments of licensee performance and the monitoring of performance indicators will be used to help focus NRC activities, to allocate agency resources, and to assess the licensee's management of its plant. Priority attention will be given to licensees with low performance ratings. The staff will provide information gained from performance appraisals to licensees and will ensure that licensees take appropriate action. The staff will consult in a timely manner with the Commission whenever performance indicates the need for added regulatory attention. (GOALS 1.2; 1.10)
9. The NRC staff should continue careful monitoring of performance indicators for operating reactors. (GOALS 1.2; 1.10)
10. The staff should continue to closely monitor the first two years of operation of new plants coming on line, particularly those of licensees who have no prior experience with nuclear plants. (GOALS 1.4; 1.8)
11. The staff should continue to interact closely with INPO and other industry organizations to assure the most efficient and effective utilization of NRC's resources in the treatment of operational data. (GOAL 2.11)

12. The staff will implement the program for investigation of significant operational events approved by the Commission. (GOAL 1.15)
13. The staff should continue to assure that licensees implement all existing and new requirements which are imposed and to verify licensee implementation. (GOAL 1.1)
14. The staff should continue its efforts to establish an integrated implementation schedule for new and existing requirements reflecting relative priorities for each power reactor licensee. Where practical, and where the degree of understanding and data permit, the results of cost-benefit analysis should be used as one tool for evaluating new requirements. The schedules should reflect the importance of the requirement to safety or safeguards, as well as the licensee's ability to complete the necessary engineering, evaluation and design. Once compliance dates have been established, the NRC will vigorously enforce license requirements associated with such schedules. (GOAL 1.14)
15. Licensees have the responsibility to assure that vendor-supplied equipment is adequately inspected. The staff should emphasize to licensees and industry that there is a need for their increased involvement in assuring the quality of vendor-supplied equipment and services. The staff should assure itself through its own selective inspection effort that both licensees and vendor organizations are meeting their responsibilities. (GOAL 2.11)

Licensing of Reactors

16. The staff must perform its responsibilities efficiently so as to: provide for the timely review and implementation of changes to power plant licenses necessary to assure safe operation, e.g., amendments, technical specification changes and approved new requirements; provide timely responses to the public under 10 CFR Part 2.206; and continue to provide for replacement and requalification examinations to nuclear power plant personnel so that operations are not unnecessarily affected. (GOALS 2.9; 2.10)

17. The staff should continue to monitor the effectiveness of the accreditation program by performing independent reviews of training programs and actual performance. (GOALS 1.4; 2.11)

18. Consistent with maintaining adequate levels of protection and applicable procedural requirements for operating facilities, staff reviews and public hearings for nuclear facilities should be completed on a schedule that assures the licensing process will not be a critical path item which could unnecessarily delay reactor startup. (GOAL 2.8)

19. The staff will continue to improve those activities that monitor the quality of design and construction, particularly with respect to the translation of applicants' design commitments in the licensing process into plant hardware, procedures, staffing and training. Inspection programs associated with design and construction should continue to be

integrated to assure that applicants' commitments are carried out in the construction process. (GOAL 1.3)

20. The staff should verify, on a plant-specific basis, the adequacy of reactor operator commercial experience at every near-term operating plant. In addition, it should consider the competence and experience of the management and staff before licensing each facility. (GOAL 1.4)
21. In view of the number of plants that have been postponed in the midst of construction, the staff will consider the legal and technical ramifications should a utility desire to reactivate a project after construction and licensing have stopped. The staff should, within appropriate jurisdictional boundaries, propose policy guidance for such projects by the end of 1986. Beginning in FY 1987, the staff should be prepared for a possible request to restart construction on deferred plants. (GOAL 2.12)
22. In view of industry initiatives to address operating license renewals, the staff should propose policy guidance and develop licensing criteria to define requirements for operating license extensions. The staff should work with industry to ensure that key regulatory issues are identified. (GOAL 2.12)
23. The staff should propose revisions to the Commission's 1978 Policy Statement on Standardization of Nuclear Power Plants and associated regulations to reflect the Commission's severe accident policy. The

staff should prepare, for Commission consideration, proposed NRC actions which will encourage industry to proceed with standardization. An option that should be considered is formal NRC certification of standard designs (including balance of plant) with incentives for license applications that do use a certified standard design. During 1986, the staff should develop revised procedures for the review and licensing of new standardized nuclear power plant designs and to review and preapprove potential plant sites by revising our licensing procedures as necessary. Through the remainder of the 1980's, the NRC should continue to maintain its capability to review, in a timely manner, applications for standardized plants and preapproved sites. (GOALS 2.7; 2.12)

24. The staff should identify any needed changes to the general design criteria and regulations to accommodate advanced reactors. The staff should evaluate the safety characteristics of new reactor types as such new reactor concepts evolve and come before the NRC. (GOAL 2.12)
25. The staff should expeditiously carry out those activities necessary to implement the Commission's severe accident policy. (GOAL 2.3)
26. Existing regulatory requirements should be reviewed to see if some could be eliminated without compromising safety, safeguards or environmental protection. For those requirements that are necessary, effective measures should be taken to ensure that they are implemented in a timely manner. (GOAL 2.9; 2.10)

27. If supported by the reassessment, the staff should develop a revised, more realistic source term and proposed modifications to the regulations, as justified by the new source term and risk data. Specific modifications should be proposed when a sound scientific basis exists. (GOAL 2.4)

28. In 1986, the staff will provide the Commission with recommendations on proposed safety goals resulting from the two-year evaluation period. The recommendations will discuss in detail the regulatory implications of the safety goal. (GOAL 2.5)

29. The Commission recognizes the value of foreign experience in helping NRC identify and evaluate possible approaches to resolving regulatory issues and changes to improve U.S. regulatory processes and requirements. The staff should continue to maintain an understanding of the nuclear experience of foreign countries with respect to subject areas of special interest and shall keep the Commission currently informed of that experience. (GOAL 2)

B. LICENSE AND OVERSEE MATERIALS LICENSEES/FUEL CYCLE FACILITIES

Policy

1. Byproduct, source and special nuclear materials must receive regulatory attention commensurate with their potential hazards to the public and to the users of these materials. Efforts to achieve greater standardization of material licensing reviews and consistency in application of regulatory requirements should be continued. (GOAL 3)

2. The Commission intends to pursue regulatory efforts aimed at improving radiography safety and will examine current requirements to determine their effectiveness in minimizing medical misadministrations. (GOALS 3.2; 3.3; 3.4)

3. The Commission considers the regulation of the transportation of radioactive materials to be an important part of its responsibilities. (GOAL 3.4)

Planning Guidance

1. Applicable regulations should be reviewed and updated to provide the necessary degree of regulation with a focus on general performance-based requirements. (GOAL 2.10)

2. Regulations to consolidate and streamline the safety requirements associated with medical use of byproduct materials and well-logging should be promulgated along with associated regulatory guidance, standard review plans and inspection procedures by mid-1986. (GOAL 3.4)

3. Regulatory efforts to improve radiography safety, and minimize medical misadministration, in particular through the establishment of performance-based requirements, as well as more effective training and inspection programs, should be completed by July 1986. Rulemaking to improve safety should be coordinated through the ad hoc Radiography Steering Committee. (GOALS 3.2; 3.3; 3.4)

4. The staff shall continue to develop regulations to implement the Environmental Protection Agency (EPA) mill tailings standards for groundwater protection. Efforts to develop alternate concentration limits methodology jointly with EPA should receive high priority. (GOAL 3.4)

5. The staff should assure that NRC responsibilities in regulating the transportation of special nuclear materials and radioactive substances are coordinated with other Federal agencies to achieve an integrated Federal Program for protecting the public health and safety, common defense and security, and environment, while minimizing unnecessary impacts on the regulated industry. The staff should conduct transportation workshops as necessary. (GOAL 3.4)

C. REGULATE NUCLEAR WASTE

Policy

1. The NRC High-Level Waste Management Program is critical to the success of an urgent national priority. NRC will provide the necessary pre-licensing consultation, and licensing and regulatory oversight and guidance for the Executive Branch's program as required by the Nuclear Waste Policy Act of 1982 (NWPA), the Atomic Energy Act, the Energy Reorganization Act, the National Environmental Policy Act, and the Commission's regulations. NRC's programs, including the necessary research and development, will be directed to an effective and efficient discharge of its responsibilities. The staff should identify any policy or technical issues as early as possible. (GOALS 4.1; 4.2; 4.3)
2. The NRC will continue to regulate low-level waste in accordance with its regulations and applicable law. (GOALS 4.4; 4.5)
3. Expedient and safe cleanup of the TMI-2 reactor is an important NRC priority. While direct responsibility for cleanup rests with the licensee, NRC will continue to provide oversight and, if necessary, direction to ensure decontamination of the facility as well as safe and timely removal of radioactive products from the site. (GOAL 4.6)

Planning Guidance

1. If it becomes clear that NRC cannot maintain its schedule to review a high-level waste repository site proposed by DOE, as a result of insufficient resources or other factors, the staff will promptly inform the Commission so that the required notification of DOE and the Congress can be made. (GOAL 4.1)

2. The staff should continue to maintain the necessary communications with DOE, the States and Indian Tribes so that required Nuclear Waste Policy Act activities, technical issues and lead times are identified early in the planning process. (GOAL 4.3)

3. System development required to support programs to implement the NWPA are the responsibility of DOE and will not be duplicated by NRC. NRC will continue its technical program to support the development of licensing criteria and evaluation methods, and the early identification and resolution of technical and quality assurance or control issues. (GOAL 4.7)

4. The staff should review the existing and proposed regulations that are addressed by the NWPA, and make conforming changes as necessary. The staff should formalize the procedures for documenting agreements between the NRC and DOE staffs on the resolution of technical issues in advance of the license review. (GOALS 4.1; 4.2)

5. The NWPA has established that nuclear utilities have the primary responsibility for interim storage of spent fuel, pending repository operation or availability of monitored retrievable storage. The NRC should review utility proposals for adding spent fuel storage capacity in a timely manner, consistent with safety and legal requirements. In the absence of unresolved safety concerns, regulatory actions should not unnecessarily affect reactor operation. NRC must also be prepared to conduct licensing reviews specified by the NWPA for limited federal interim storage capacity of spent fuel which may be proposed by DOE. The NRC should continue to develop the basis for rulemaking that would, to the extent practicable, enable use of dry spent fuel storage casks without site-specific licensing reviews. (GOALS 4.1; 4.2)

6. The staff should establish licensing requirements and be ready to review proposals for monitored retrievable storage facilities in the event the Congress authorizes the Department of Energy to proceed with such facilities. (GOALS 4.1; 4.2)

7. The staff should continue to coordinate with DOE in defining the requirements for a licensing information management system to be implemented by DOE in support of the high-level waste repository construction authorization review. The staff will identify its needs to DOE so that NRC will not develop a redundant system. (GOAL 4.2)

8. Within budget priorities, the staff shall monitor the activities associated with the implementation of the Low Level Radioactive Waste

Policy Amendment Act of 1985 and shall apprise the Commission of any problems requiring Commission action along with recommendations for each action. (GOAL 4.4)

9. The staff, within budget priorities, shall promptly provide the necessary technical guidance and criteria for applicants who may wish to pursue approaches other than shallow land burial for the disposal of low-level waste. (GOAL 4.5)

10. NRC should continue to closely monitor the removal and disposition of solid nuclear wastes from the cleanup of TMI-2. The objective of NRC's monitoring is to help assure that the wastes are safely removed from the site. NRC should also assist DOE in development of plans for the safe and timely offsite disposition of the damaged core. (GOAL 4.6)

D. PERFORM SAFEGUARDS REGULATORY ACTIVITIES

Policy

1. Safeguards are an integral and ongoing element of the Commission's responsibility. Safeguards regulation should be conducted with the same defense-in-depth philosophy as safety regulation. Implementation of safeguards requirements shall not be contrary to the safe operation of a facility and will include consideration of overall cost effectiveness. Safety impacts of all new safeguards requirements shall be evaluated. Emphasis should be given to performance-based requirements rather than prescriptive requirements to allow licensees to select the most cost-effective ways to satisfy NRC requirements. Safeguards must be effective and commensurate with threat levels as approved by the Commission. (GOAL 3.5)
2. The proliferation of nuclear explosives technology poses a threat to the security interests of the United States. Hence, the NRC will carefully discharge its statutory licensing responsibilities to ensure that necessary controls are applied to the import and export of nuclear materials, equipment, and facilities. (GOAL 3.6)
3. Steps should be taken to convert, to the extent practicable, non-power reactors to the use of low-enriched uranium rather than highly-enriched uranium, in accordance with the NRC's rules. (GOAL 3.3)

Planning Guidance

1. Evaluation of safeguards events will serve as a basis for regulatory change and response. This evaluation should include domestic events -- within both the defense and the regulated community -- and foreign events. However, the staff should not wait for significant events to occur before proposing to the Commission safeguards changes that are considered necessary. The staff should continue to evaluate the threat environment based on intelligence information received from other government agencies as well as on experience. (GOAL 3.5)

2. The staff, in addition to assuring that safeguards plans are in place at operating facilities and for transportation, will continue its independent assessment that these implemented plans meet safeguards objectives and that safeguards regulations adequately support those objectives. An annual report shall be provided to the Commission detailing the results of the previous year's assessments. The report shall contain recommendations for continuing or discontinuing the assessment. (GOAL 3.5)

3. The staff will implement the rule converting non-power reactors to low enriched uranium fuel. The staff should propose for Commission review any additional physical security measures it considers necessary at research reactors. Such measures would not be subject to any funding contingency such as in the case of fuel conversion. The staff should

expedite its efforts to reduce security concerns by having the licensee remove excess HEU and proposing any other necessary measures. (GOAL 3.5)

4. The NRC will continue to meet its commitments for the implementation of international safeguards at U.S. licensing facilities and to work with the Executive Branch as the U.S. pursues improvements in international safeguards. (GOAL 3.6)

5. The NRC staff will continue to review the design basis threats and make appropriate recommendations to the Commission on changes to the assumptions and regulations. (GOAL 3.5)

E. CONDUCT INVESTIGATIONS AND ENFORCE LAWS AND REGULATIONS

Policy

1. NRC employees shall carefully review all allegations of wrongdoing and provide as complete information as possible regarding circumstances when referring these matters to the appropriate investigative office. (GOAL 1.15)
2. The Offices of Investigations and Inspector and Auditor shall investigate significant allegations of wrongdoing. (GOAL 1.15)
3. Investigations should follow reasonable leads to determine whether specific acts of wrongdoing that have been alleged, or are suspected, actually occurred. When initial collection of evidence indicates that the matter involves criminal violations of the Atomic Energy Act, appropriate referrals will be made to the Department of Justice. (GOAL 1.15)
4. NRC should maintain an effective enforcement program with uniform and timely application of enforcement policy throughout the regional offices. Enforcement policy will be firm and fair. The principal goals of NRC's enforcement program will be to assure safety through compliance with NRC safety and safeguards requirements. (GOALS 1.14; 2.13)

5. NRC enforcement activities must be directed to assure that licensee corrective actions of deficiencies in performance are appropriate and that future compliance with requirements is ensured. For licensees that have a history of noncompliance, prompt and vigorous action will be taken. A licensee must not benefit by violating NRC regulations. Licensees who cannot achieve and maintain an adequate level of protection of the public health and safety, safeguards, and the environment will not be permitted to operate. Inspections and investigations on which enforcement activities are based should be thorough and should seek to identify the basic reasons why violations and deficiencies occurred. (GOAL 1.14)

6. Enforcement actions should encourage an aggressive approach by licensees to ensure adequate protection, and credit should be given for prompt reporting of deficiencies by licensees and for prompt, thorough, and voluntary corrective actions. (GOAL 1.14)

7. NRC must actively attempt to gain from its enforcement activities the maximum generic benefits to improve both regulatory and licensee performance. The broader benefits of information produced by enforcement activities should be effectively utilized in NRC's overall regulatory mission. (GOAL 1.14)

Planning Guidance

1. The Office of Investigations, in coordination with the EDO, should expeditiously complete development of appropriate threshold levels and the priorities for initiating and terminating investigations that were to have been completed by mid-1985. (GOAL 1.15)
2. The EDO should provide technical support to the Office of Investigations in the conduct of investigations with due regard to their mutual priorities. (GOAL 1.15)
3. Consistent with available resources, investigations should be performed in a timely manner and shall be initiated and terminated in accord with approved Commission policy. Findings and conclusions on questions of intent and willfulness should be provided to cognizant offices. Information which is believed to be of potential safety significance should be immediately referred to the cognizant office. (GOAL 1.15)
4. OI is expected to promptly present the Commission with an approach to deal with the backlog of investigations which have no estimated completion date or for which no effort has been expended. (GOAL 1.15)
5. Close coordination should be maintained as appropriate between the Commission, the Office of Investigation, the headquarters staff, and the regional offices regarding investigative matters. The results of

investigations should be followed by appropriate action on the part of cognizant offices and the EDO. (GOAL 1.15)

6. The Commission has established an Ad-Hoc Advisory Committee for Review of the Enforcement Policy composed of individuals with diverse backgrounds. The Commission will consider the Committee's recommendations for changes in the enforcement policy by June 1986. Prompt attention will be placed on evaluating and modifying as necessary the present material false statement policy. (GOAL 1.14)

F. SPONSOR NEEDED SAFETY RESEARCH

Policy

1. The research program is an essential element in many of the Agency's missions. The research program should: provide the technical basis for rulemaking and regulatory decisions; support licensing and inspection activities; assess the feasibility and effectiveness of safety improvements; and increase our understanding of phenomena for which analytical methods are needed. (GOALS 1.12; 2)

2. There should be continued emphasis on using research results in the regulatory process and on obtaining results that are useful therein. The staff should be alert to research which shows that we ought to change our regulations. NRC regulations should be changed when research shows them to be either too stringent or not stringent enough to adequately protect the public health and safety. (GOALS 1.12; 2)

3. The NRC will assess the ability of the containments to prevent accidental releases of radioactivity under postulated accident conditions so that the public can be assured that, in the event of an accident, radioactivity is contained within the facility. The Commission will continue to develop containment performance criteria. (GOAL 1.12)

4. NRC will continue to maintain a long-range research plan which is consistent with the agency's mandate and directed toward areas of importance to the licensing and inspection processes. The long-range research plan and the NRC's Five-Year Plan will be consistent with each other. Research resources should be allocated to support a balanced program between research to reinforce or revise the current regulatory base and conceptual research for improved reactor safety, waste management, and other licensed activities. The major research commitment for NRC research efforts will be light water reactor safety. The priority for research should be assigned in accordance with its safety significance. (GOALS 1.12; 2)

5. Joint or coordinated research programs with industry groups, other government agencies and foreign groups should be pursued when possible, both to expand the technical breadth provided to projects and to maximize the benefit to be derived from limited resources. Due consideration should be given to questions of conflict of interest when contemplating joint or coordinated research with industry. Research results should be examined through the use of strong, effective peer review groups. (GOAL 1.5)

6. The Commission has decided to proceed expeditiously with further characterization of radioactive source terms. (GOAL 2.4)

Planning Guidance

1. The staff should continue their efforts to investigate the feasibility of containment performance criteria that will ensure effective containment performance. If such criteria are shown to be feasible and practical, a set of such criteria should be developed. (GOAL 1.12)
2. The radioactive source terms and their risk importance should be better characterized by a systematic analysis of accident sequences, containment performance and the release and transport of radioactivity. (GOAL 2.4)
3. The staff will coordinate a research effort to identify measures which can be taken to correct deficiencies attributable to aging and irradiation and to reduce safety risks inherent to degraded equipment. (GOAL 1.13)
4. In its safety systems evaluation, including postulated accident sequences, the NRC will conduct research on complex operational and thermal-hydraulic transients. (GOALS 1.6; 1.9)
5. The NRC will continue its research efforts to develop methods for repository and waste packaging performance assessment in support of the agency's high-level waste regulations and associated regulatory guides. (GOAL 4.7)

6. The severe accident research program must provide timely information in the Commission's decision-making process on severe accidents. (GOALS 1.9; 2.3)

G. MANAGE AND SUPPORT THE OTHER MISSION AREAS

Policy

1. NRC's greatest resource is its people. NRC management should encourage fully efficient and productive utilization of its people. NRC people have shown a tremendous dedication to professionalism and a commitment to the interests of their fellow citizens. NRC people should fully appreciate the special trust and confidence placed in them. (GOAL 5.1)

2. The Commission will continue to attempt to consolidate its staff and headquarters personnel in order to achieve more efficient and effective management of the Agency. (GOAL 5.3)

3. The NRC should assure greater commercial reactor operating expertise within the agency through training, hiring, and promotion practices. (GOAL 5.2)

4. Information technology should be used more efficiently and more effectively to accomplish NRC's mission. (GOAL 5.5)

5. The Commission will work to improve its relationships with those federal agencies and state and local governments with whom the agency interacts. (GOAL 2.13)

Planning Guidance

1. NRC managers should give high priority to training and assigning employees in ways that make the most of actual and potential expertise and abilities, including creative affirmative action and upward mobility strategies that take full advantage of employee's skills, motivation, and abilities. NRC managers should also give high priority to programs to provide agency personnel with needed training and experience. (GOAL 5.2)
2. The Commission will continue to pursue consolidation of its Headquarters operations. (GOAL 5.3)
3. The staff should continue the effort to employ individuals with commercial reactor operating experience. (GOAL 5.2)
4. The staff should develop a plan explaining how information technology will be used in meeting NRC's regulatory objectives. The plan should explain how telecommunications, document storage and retrieval, and data processing will be integrated. (GOAL 5.5)
5. The Executive Director for Operations (EDO) will assure that the necessary agency resources are applied to implement this document. The EDO will maintain a management system for the Commission to track major program accomplishments that support the Policy and Planning Guidance, and, when developed, the Five-Year Plan. (GOAL 5.4)

6. In order to facilitate information flow, the Commission intends to meet with the staff on a regular basis in areas of particular interest; for example, to discuss progress in implementing specific regulatory programs, to receive reports on serious safety concerns, to explore activities in the regions, and to hear from various advisory panels. (GOAL 5.6)

7. Ensure that the Agency retains a core of people to conduct reactor licensing even though there is a transition to regulating operating reactors. (GOAL 5.1)

8. Management should provide NRC orientation and any other necessary training to employees who will assume positions that entail significant interactions with licensees, applicants, and the public. (GOAL 2.15)

9. The NRC should vigorously pursue its EEO programs. (GOAL 5.7)

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The purposes of the Policy and Planning Guidance document are to set forth the regulatory approach of the Nuclear Regulatory Commission and to provide the supporting principles to the approach; to state the major policies and planning objectives of the Commission; and to provide a common basis for the development of programs, for the establishment of priorities, and for the allocation of resources.

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