United States Nuclear Regulatory Commission
Office of Public Affairs
Washington, DC 20555
Phone 301-415-8200 Fax 301-415-2234
Internet:opa@nrc.gov

SOME IMPORTANT EMERGING REGULATORY ISSUES

PRESENTED BY

COMMISSIONER KENNETH C. ROGERS
U.S. NUCLEAR REGULATORY COMMISSION

AT THE

NRC REGULATORY INFORMATION CONFERENCE
THE CAPITAL HILTON HOTEL
WASHINGTON, DC

APRIL 10, 1996

S-96-03

Introduction

Good afternoon, ladies and gentlemen. I am pleased to be here with you at the 1996 NRC Regulatory Information Conference. I again have the pleasure and challenge of addressing you after lunch.

This series of regulatory information conferences continues to have excellent attendance. In spite of the fact that there have been areas of disagreement between the NRC staff and various stakeholders, I believe that we all must continue to maintain an open and cordial dialogue. Though there may be honest differences in positions, it behooves us to listen to each other's arguments and try to reach a mutually acceptable accommodation. That we have listened to you is evidenced by the Cost Beneficial Licensing Actions, the Maintenance Rule guidance and implementation, and the recent discussions on the design certification rulemaking for the advanced reactors.

Today, I would like to discuss with you several regulatory issues that I think will have a major impact on both the NRC and the nuclear power industry.

Industry Deregulation and Restructuring

The first issue is that associated with the electric utility industry deregulation and restructuring. Of course, from the Commission's point of view, the interest relates primarily to the possible effect of these activities on nuclear power plant safety. The Commission has continued to meet with representatives from government, industry and the financial community, in particular, those from the Federal Energy Regulatory Commission (FERC) and the National Association of Regulatory Utility Commissioners (NARUC). During a meeting last December, the opinion of those representatives was that the Commission should be careful to not pursue regulatory action too quickly because of the general uncertainty about restructuring and deregulation and because a premature regulatory action may have a potentially harmful impact on the industry.

The NRC staff has also briefed the Commission on its plans to make certain that electric utility deregulation does not adversely affect nuclear plant safety. The staff indicates that it does not yet know the full extent of changes occurring as a result of deregulation, but that change is inevitable, and the NRC needs to ensure safe operation and decommissioning of its licensed power reactors. To this end, the NRC must be able to identify all owners and operators of each power reactor facility and the asset base and recourse to rate recovery of each. The staff intends to take actions in the short term to strengthen its financial qualifications and antitrust review processes. The staff has also recommended that rulemaking on additional funding assurance, and clarification of existing requirement for non-utility power reactor licensees be continued, but that a large-scale overhaul for existing regulations is not needed at this time. The staff has also developed a plan of action, with milestones, which was made publicly available in mid-March.

As a result of the staff briefing, the Commission requested the staff to continue to work on the initiatives it has undertaken to codify and clarify existing practices and regulations and to consider possibilities for long-term arrangements at the staff level with FERC, Securities and Exchange Commission (SEC), and NARUC; to perform a comprehensive review of existing rules to determine if the ongoing restructuring of utilities presents a challenge to the effectiveness of regulations, to examine the desirability of rulemakings it is considering within this context, and to ensure a comprehensive approach which avoids excessive or duplicative rulemaking. In addition, the Commission requested that the staff consider and develop ways to ensure the confidentiality of sensitive financial information that it receives. The Commission requested that the staff provide the Commission with a follow up briefing on the status of these staff actions in July 1996.

The potential deregulation of the power generating industry has raised serious questions concerning the availability of funds for decommissioning. Potential reorganizations of utilities may require a modification of the NRC financial assurance requirements to cover these changes.

Electric utilities are allowed to set aside funds annually over the estimated life of a reactor by collecting funds through ratepayers. With the advent of electric industry restructuring and deregulation, we are concerned that a nuclear power licensee could lose its direct access to a rate base or source of funds to cover the unfunded balance of decommissioning costs. To address this situation, we are considering revising the definition of "electric utility" and requiring periodic reports detailing the progress of decommissioning fund collections. We are also considering allowing licensees the opportunity to take credit for earnings on their trust funds during an extended safe storage period. To obtain relevant information on this topic, we are publishing in the Federal Register an advance notice of proposed rulemaking, which I understand was just issued on Monday.

Environmental Reviews for License Renewal

The next issue I would like to discuss are the requirements governing environmental reviews of applications to renew operating licenses for nuclear power plants. This will prove to be very significant in the years ahead, and I expect it will be one of the primary issues that licensees consider during their deliberations on whether or not to go ahead with plans to renew their licenses.

We have been working on rulemaking related to the environmental aspects of license renewal since 1989 when we had a public workshop that discussed this issue. An advance notice of proposed rulemaking was published in 1990 and a proposed rule published in 1991. After numerous discussions with the Council on Environmental Quality (CEQ), the EPA and a number of States regarding procedural and regulatory authority issues, and several more public workshops, we issued a supplement to the proposed rule in 1994 that we believe addressed those concerns. We are here today with comments from 68 organizations and 49 private citizens and additional comments from the various public workshops and meetings. The staff feels that it has addressed and appropriately resolved the comments and has made appropriate revisions to the rule proposed in 1991 and 1994. Since the issues addressed by the revisions may concern some of those who commented on the proposed rule, we are planning to issue an interim final rule and offer an additional opportunity for comments.

I would like to give you some details about what we will be providing an opportunity to comment on. The amendments have been crafted to improve the efficiency of the process of environmental review for applicants seeking to renew an operating license for up to an additional 20 years. Our initial decision to undertake a generic assessment of the environmental impacts associated with the renewal of a nuclear power plant operating license was motivated by the beliefs that license renewal will involve nuclear power plants for which the environmental impacts of operation are well understood, therefore the environmental impacts of activities associated with license renewal can be reasonably predicted.

Although these final amendments are consistent with the generic approach and scope of the proposed amendments, several significant modifications have been made in response to the public comments received. I will briefly mention those I consider to be most significant.

The final amendments have reduced the number of issues from 104 to 92 due in part to:

(1) the elimination from the review of the consideration of the need for electric power and associated generating capacity and of the direct economic benefits and costs associated with electric power;

(2) eliminating several regional economic issues under socioeconomics that are not directly related to environmental impacts;

(3) identifying collective offsite radiological impacts associated with the fuel cycle and all impacts of high level waste and spent fuel disposal as separate issues; and

(4) adding environmental justice as an issue for consideration.

Of the 92 issues, 68 were found to be adequately addressed in the GEIS and therefore, additional assessment will not be required in a plant-specific review. Twenty-four issues were found to require additional assessment for at least some plants at the time of the license renewal review. The Commission is also taking positions regarding the uranium fuel cycle and solid waste management. First, in accord with our Waste Confidence Decision, we are assuming that a repository can and likely will be developed at some site which will meet acceptable dose limits to individuals, and this issue will not be treated on a plant-specific basis. Second, the Commission believes that there is reasonable assurance that sufficient Low Level Waste (LLW) and mixed Low Level Waste disposal capacity will be made available when needed so that facilities can be acceptably decommissioned,

and this issue would not be considered on a plant-specific basis.

Public comments on the adequacy of the analysis for each issue were considered by the NRC staff. Any changes to the analyses and findings that were determined to be warranted were made in the final GEIS and incorporated in the final rule. Several changes were also made to the procedural features of the proposed rule in response to comments by the Council on Environmental Quality, the Environmental Protection Agency, and a number of State agencies. First, the NRC will prepare a supplemental site-specific environmental impact statement (SEIS), rather than an environmental assessment (as initially proposed), for each license renewal application. The SEIS will be issued for public comment as part of the individual plant review process. The NRC will delay any conclusions regarding the acceptability of the overall impacts of the license renewal until completion of the site-specific review. In addition, the SEIS will be prepared in accordance with existing public scoping requirements. The NRC will also review and consider any new and significant information presented during the review of individual license renewal applications. In addition, any person may challenge the validity of the conclusions codified in the rule by filing a petition for rulemaking. Finally, the NRC will review the rule and the GEIS on a schedule that allows revisions, if required, every 10 years. This review will be initiated approximately 7 years after the completion of the previous revision cycle.

In addition to the changes involving public participation, this final rule also contains several changes regarding the scope of analysis and conclusions in the rule and GEIS. The conditional cost-benefit balance has been removed from the GEIS and the rule. In place of the cost-benefit balancing, the NRC will use a new standard that will require a determination of whether or not the adverse environmental impacts of license renewal are so great, compared with the set of alternatives, that preserving the option of license renewal for future decisionmakers would be unreasonable. The issue of need for power and generating capacity will no longer be considered in NRC's license renewal decisions. The final GEIS has been revised to include an explicit statement of purpose and need for license renewal consistent with this acknowledgment. Lastly, the final rule has eliminated the consideration of utility economics from license renewal reviews under the National Environmental Policy Act (NEPA) except when such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation.

Power Reactor Decommissioning

Finally, I would like to discuss power reactor decommissioning, an area that will be getting more and more Commission attention as our fleet of reactors age and the competitive pressures resulting from deregulation of the electrical industry increase. I would like to put things into perspective and give you an idea of the status of decommissioning activities:

• 64 research and test reactors have already had their licenses terminated and 11 more are in the process of either being dismantled or have a Possession Only license.

• Seventeen power reactors are in the decommissioning process including 2 where the process is essentially complete, 1 being dismantled, 9 with approved SAFSTOR decommissioning plans, and 5 whose decommissioning plans are under review.

While there are several rulemaking activities that will affect reactor decommissioning, such as the radiological release criteria of decommissioning facilities, I would like to discuss the power reactor decommissioning rule because I believe that it will have a major influence on the way future decommissionings will take place and also because its final implementation is imminent. I understand that the staff plans to have a final rulemaking package to the Commission this month.

The proposed rule was published for comment last July and was intended to clarify the applicability of certain regulations to permanently shut down nuclear power reactors and to provide for public participation in the process.

Regarding the proposed rule, it was based on a concept that there are three distinct phases of decommissioning that must be addressed. The first phase covers permanent cessation of power production operations, public notification, early plant modifications, and on-site rearrangement, packaging and removal of components and waste prior to entering SAFSTOR status. This phase includes the licensee's early component removal program, if any, during which plant structures, systems, and components may be removed and shipped off site, as allowed by §50.59 and other regulations. The duration of this phase is probably measured in months or, in some cases, a few years.

The second phase would be when the facility is in the SAFSTOR mode with little on-site or off-site activity other than monitoring of systems required to maintain SAFSTOR, e.g., Spent Fuel Pool cooling systems. This phase will probably last for years or even decades, and its duration will depend upon the availability of low level waste sites to accept waste materials

from plant dismantlement at a feasible price. If the licensee chooses to proceed to final decontamination and license termination shortly after completion of the first phase, the second phase could be compressed, but would probably still be dependent on the availability of suitable radioactive waste sites.

The third and last phase would cover the period after the licensee commences the final steps to complete decommissioning and would involve radiological decontamination of the facility and site, and termination of the reactor license. This phase is probably measured in months or years.

This final phase will require a license termination plan to address final release of the site. However, during this phase, we proposed the inclusion of a provision for the opportunity for a public hearing on the termination plan. This hearing would be held under 10 CFR Part 2, Subpart L, a so-called Subpart L hearing. These additional requirements appear justified in view of the significant time delay that may conceivably occur between the time that the licensee completes major component removal activities and enters a SAFSTOR phase and the time when final decommissioning activities resume. In addition, there is the likelihood, because of this time delay, that the licensee's staff will consist of many new operating and engineering individuals, if not an entirely new organization, and new engineering and decommissioning techniques may have become available.

During the first phase, we have proposed that the licensee be required to submit a preliminary report, called a post-shutdown decommissioning activities report, or PSDAR, that would describe the planned decommissioning activities, a schedule, estimated costs, and a discussion of the environmental impacts. We propose to make the PSDAR available for public comment and will hold a public meeting in the vicinity of the reactor facility site to discuss the licensee's plans. Major decommissioning activities would not commence until about 30 days after the public meeting. By this technique, we hope to ensure that the public will be fully informed and will be able to make its concerns known before rather than after decommissioning activities start.

The opportunity for an informal Subpart L hearing on the termination plan during the final phase is appropriate for a permanently shutdown facility where the fuel has been removed from the site, since the facility would then be similar to a nuclear materials site that typically uses Subpart L hearings for license amendments. We also proposed requiring a full public meeting to be held when the license termination plan is received.

Summarizing some of the major features of the proposed rule, as some of you may have heard yesterday, it would:

- Eliminate the need for a full decommissioning plan approval

- Before decommissioning activities could begin, licensees would have to submit certifications of permanent cessation of operations and permanent removal of fuel from reactor vessel

- Prohibit operation of the reactor and extend certain Part 50 requirements to decommissioning activities

- Impose a 90-day waiting period before major decommissioning could occur and include a public information meeting in the vicinity of the site

- Allow use of § 50.59 to dismantle the facility, subject to 4 additional criteria

- Require written notification for any activities that are inconsistent with the PSDAR or result in a significant schedule change from the PSDAR

- Require FSAR updating

Regarding the license termination process, the proposed rule would require -

- Submittal of a license termination plan and a supplement to the environmental report

- That a public information meeting be held

- A license amendment process that provides an opportunity for a hearing under subpart L

Regarding financial assurance provisions, the proposed rule would -

- Continue to require submission of a preliminary cost estimate 5 years prior to license expiration

- Allow staged use of decommissioning funds

- Permit use of 3% of the generic amount of estimated decommissioning funds prior to cessation of operations, 20% of the funds 90 days after PSDAR submittal, and the remainder of the funds after the site-specific cost estimate is received

- A grandfathering provision of the proposed rule would permit a licensee with an approved decommissioning plan the option of

continuing the decommissioning process as in the current rule or switching to the new decommissioning process

- Regarding license extension, the proposed rule clarified that a license does not terminate until the Commission decides to terminate it.

I understand that 34 comment letters were received with 24 generally favoring the proposed rule and 10 generally opposed. Though I have not yet seen the new staff recommendations, I understand that, in response to the comments received, the staff is only considering some minor changes regarding limitations on use of the §50.59 provisions and the grandfathering provision.

As I indicated above, we expect that the final rule package will be sent to the Commission during April and, if we have no major problems with the rule, would probably be issued for implementation within the next few months.

Conclusion

I have mentioned only three of the more significant emerging regulatory issues with which you and the NRC will be impacted in the next years. By reemphasizing them, and informing you of them, I hope we will be able to resolve any difficulties that might arise and quickly begin to realize the benefits of their implementation.

Thank you for your attention. Now I would be happy to respond to any comments or questions you may have.