DSI-G2

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Subject: STRATEGIC ASSESSMENT COMMENTS

Attached please find my comments on (1) the Strategic Assessment Framework, (2) DSI 9 (Non-Reactor Decommissioning), and (3) DSI 14 (Public Communication Initiatives). If you have any questions, please do not hesitate to call me at 415-7190 or via e-mail at "mfw."

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COMMENTS ON NRC'S STRATEGIC PLANNING FRAMEWORK AND
DIRECTION SETTING ISSUE PAPERS

November 29, 1996
Michael Weber, NRC staff

Strategic Planning Framework

Goals, Pg. 8, Goal b

As part of NRC's goals, NRC states that it will ensure that its regulations are consistent with other Federal regulations, nationally and internationally recognized standards, and State regulations to the greatest extent possible (Goal b). As stated, this goal appears to be inconsistent with past Commission policy in negotiations with the U.S. Environmental Protection Agency (EPA) over the last decade. Specifically, NRC has traditionally objected to or otherwise resisted adopting regulations that are consistent with the regulations promulgated by the EPA under the Safe Drinking Water Act; Clean Air Act; Resource Conservation and Recovery Act; and the Comprehensive Environmental Response, Compensation and Liability Act. NRC has often stated its position that adoption of EPA's regulations would pose an unjustified regulatory burden on licensees, States, and the NRC. However, the justifications have seldom, if ever, been based on technical impossibility. Even in those instances that EPA has promulgated standards under the Atomic Energy Act that NRC is obligated to implement and enforce, NRC has actively engaged EPA in attempts to ensure that the standards can be practically implemented without significant adverse effects on operational safety and licensee attention to safety.

Therefore, the goal should be revised to be consistent with past Commission policy (i.e., "...to the greatest extent practical" rather than "possible"). As an alternative, if the Commission intends to drive for consistency with other Federal regulations, including those of EPA, then the costs and impacts of such a change in policy should be carefully considered by the Commission in making decisions on the Direction Setting Issues papers and future decisions.

Direction Setting Issues Paper 9

1. General, Pg. 1

Direction Setting Issue (DSI) Paper 9 represents a thoughtful and constructive analysis of the options to further enhance the regulatory effectiveness of NRC's decommissioning program for facilities other than power reactors. Many of the specific options presented in the paper have already been considered or are already in progress. Consequently, DSI 9 can be seen as an affirmation of the NRC's existing decommissioning program, including the substantial enhancements implemented as part of the Site Decommissioning Management Plan (SDMP) in 1990, the SDMP Action Plan in 1992, and the SDMP Management Plan in 1995.

2. Statement of DSI 9, Pg. 2

As stated, the scope of DSI 9 only covers decommissioning actions at SDMP sites and other "problem" sites. NRC staff generally has referred to such actions as "non-routine" decommissioning actions, which typically represent 10% or less of the 300 to 500 license terminations NRC processes annually. The remaining 90% of the actions are referred to as routine decommissioning actions. Despite the limitation of the scope of DSI 9 to non-routine decommissioning cases, the rest of DSI 9 appears to include both non-routine and routine decommissioning actions. For example, Option 2 would implement a new "performance-based" decommissioning review process allowing licensees to proceed with decommissioning without first receiving NRC approval of a decommissioning plan. Such an option would work best for routine decommissioning actions that involve few, if any, unique policy or regulatory issues. Although non-routine decommissioning actions consume a larger number of staff and technical support resources, by focusing on non-routine cases only in DSI 9, the Commission may miss opportunities to enhance the broader decommissioning program within NRC. Over the next 5 to 10 years, the proportion of staff resources devoted to routine decommissioning cases could be expected to grow as the number of SDMP sites is reduced and other non-routine cases are successfully remedied. Consequently, the scope of DSI should be clarified to include both routine and non-routine decommissioning cases and supplement the analysis to identify enhancements that are primarily directed at the routine cases, rather than focus almost exclusively on options and analysis for the non-routine cases.

3. Option 2, Pg. 3 and Pp. 14-15

Under Option 2, the NRC would attempt to streamline the regulatory review process by implementing a performance-based review process allowing licensees to proceed with decommissioning without obtaining NRC approval of decommissioning plans (contrary to existing NRC requirements). The applicability of this option for the non-routine decommissioning cases is questionable because licensees will seek commitments from the NRC in terms of approving decommissioning criteria, survey procedures, and other measures in advance of investing limited resources into decommissioning. Finality of decommissioning has been a paramount objective of many licensees, i.e., to obtain assurance from NRC that no further action will be required of licensees if they decommission sites in accordance with NRC approved procedures. The historical record gives the licensees with reason for questioning the finality committed by the Commission in the SDMP Action Plan in 1992. For many non-routine decommissioning cases, approval of the decommissioning plan is the stage at which the most fundamental and costly commitments are made in terms of (1) adequacy of site characterization, (2) approval of radiological criteria for decommissioning (including the modeling, assumptions, and exposure scenarios used to demonstrate compliance with dose-based criteria), (3) approval of waste disposal and management plans (e.g., offsite vs. onsite disposal), and (4) confirmation of final status survey plans and procedures. Deferral of these decisions until NRC final release of the sites, as a "go" or "no go" decision, would not be a prudent regulatory or business approach because it places the licensee and regulator at too much risk. Most licensees will seek assurances from NRC in some compelling form before committing millions of dollars to characterize, remediate, survey, and dispose of the resulting wastes.

This desire from licensees will probably be intensified under the rulemaking to establish radiological criteria for decommissioning. Whereas licensees current have specific surface activity and volumetric criteria for specific radionuclides (e.g., uranium, thorium, mixed fission products), licensees and NRC will have considerably greater flexibility in evaluating compliance with the dose-based criteria proposed in August 1994 and embraced in the Commission's November 1996 letter to the Office of Management and Budget. Consequently, licensees may see themselves at greater risk to NRC "second guessing" on the dose modeling and survey techniques under the new rule than they would be under the criteria in the SDMP Action Plan and NUREG/CR-5849.

In addition, DSI 9 does not address how this approach would apply to decommissioning projects conducted by responsible parties that are not licensed by NRC. A growing number of such cases is being identified through the review of the adequacy of documentation of license termination decisions from 1954 to the present. Although NRC may have sufficient confidence that licensees with established radiation protection programs and demonstrated proficiency in regulatory compliance and radiation protection to proceed with decommissioning without NRC approval, there is considerably greater uncertainty with respect to the adequacy of radiation protection programs of responsible parties that are not licensed.

The discussion of Option 2 should be revised to specifically address the viability of this option in light of licensees seeking assurances and finality from NRC and potential difficulties associated with not requiring non-licensees to receive NRC approval prior to proceeding with decommissioning.

4. Option 3, Pg. 3 and Pp. 15-17

The approach described in Option 3 of applying a cap on the acceptable dose in the invent of human intrusion into residual contamination should be reconsidered in light of the Commission's preliminary decision on EPA's draft cleanup standards and NRC's radiological criteria for decommissioning rulemaking (cf. November 1996 letter to OMB). If greater reliance is placed on institutional controls, such that certain governmental controls can be relied upon to provide protection of the public in perpetuity, then there does not appear to be a sufficient technical reason to justify placing a cap on the total dose that could occur as a result of inadvertent intrusion. Removing the cap would also be consistent with regulatory approaches used for disposing other hazardous wastes in the U.S. and abroad.

Option 3 also explores the use of less conservative dose assessment scenarios, which consider, among other factors, the probabilities of human intrusion. NRC, EPA, and other agencies have generally assumed the resident farmer exposure scenario is assessing potential risks to humans from intrusions into residual contamination. This approach was adopted because it (1) was protective of existing and future populations, and (2) avoided debates about the probabilities of intrusion. Recognizing the large amounts of uncertainty associated with projections of human behavior, the National Academy of Sciences and other domestic and international organizations have cautioned against attempts to estimate the likelihood or probability of disruptive events caused by humans. Sufficient factual information does not exist on which to base generally defensible estimates of the probabilities

of human intrusion. In addition, any decision to place greater reliance on semi-quantitative or quantitative estimates of the probabilities of intrusion needs to be coordinated with other Federal and State agencies to promote consistency in assessing long-term risk to humans from residual contamination.

5. Option 5, Pp. 3-4

Option 5 proposes to treat source material waste consistently with other naturally occurring and accelerator produced radioactive material (NARM) wastes. Although such a decision would clearly affect decommissioning, this option raises its own Direction Setting Issue on how and whether NARM should be regulated within the U.S. to ensure sufficient protection of the public and environment. This issue has much broader and fundamental implications to the U.S. than simply how such sites should be decommissioned. Consequently, NARM regulation should be removed as an option from DSI 9 and considered as its own Direction Setting Issue.

6. Option 6, Pg. 4 and Pp. 21-23

Option 6 would transfer certain problem sites to the EPA for oversight and remediation under the Comprehensive Environmental Response, Compensation, and Liability Act. Although the text hints that such sites may be considered low priorities for remediation under EPA's program, in fact, NRC understands from discussions with EPA staff that some of the most contaminated licensed sites may not even score high enough under the Hazard Ranking System to qualify for listing on the National Priorities List for remediation under CERCLA. Consequently, transfer of such sites to EPA may result in increased public and environmental risk as a result of resource constraints, remediation priorities, and other factors. For example, the Commission should recognize that, in some cases, transfer of the site may result in public exposures in excess of NRC's radiation protection limits for members of the public.

In addition, the viability of this option is unclear at this time. The option is contrary to established EPA policy, which has been in effect since 1983. EPA has chosen not to list releases of source, byproduct, and special nuclear material from any facility with a current license issued by NRC on the grounds that NRC has full authority to require cleanup of such releases [48 FR 40661, 3rd column]. The two cases deferred to EPA in 1995 were both instances of sites that were formerly licensed or were never licensed. It is unclear whether EPA would rescind or amend its earlier policy, based on resource or other policy factors. Additional consideration of this option, in consultation with EPA, is warranted prior to a Commission decision on whether it should be implemented.

7. Option 7, Pg. 4

The option of developing regulatory frameworks for lower cost disposal of decommissioning wastes has already been implemented for disposal at uranium mill tailings facilities and is well underway for transfer of disposal units to the Department of Energy for long-term custody and control under section 151(b) of the Nuclear Waste Policy Act. This status should be reflected in the DSI. It is not

clear what additional steps, if any, would be required to implement Option 7.

8. Option 8, Pg. 4

Once the rulemaking to establish radiological criteria for decommissioning has been completed, the regulatory framework should be in place to allow aggressive enforcement of the regulations to compel decommissioning. For example, over the last several years, the Commission has substantially enhanced the regulatory framework for decommissioning, including rulemakings on recordkeeping, timeliness, and financial assurance. It is not clear that additional rules are required to provide a strong regulatory basis for taking enforcement action to compel decommissioning. However, in a couple cases where the staff has proposed to take such action, the Commission has directed that less aggressive steps be taken to resolve the matters (e.g., enforcement action on Chemetron). Consequently, DSI 9 should be revised to identify and assess the additional enhancements that are contemplated as part of Option 8.

9. Additional Options, Pg. 4

There are several additional options that the Commission should consider in determining the future direction for the decommissioning program. These include the following:

(a) NRC certify or promote an independent, credible third party to certify contractors who demonstrate proficiency in site characterization, decommissioning, remediation, and final status surveys. NRC would then require that decommissioning be performed by certified contractors. Such an option could save NRC and licensees considerable resources by avoiding the repetitious learning process that many licensees and contractors go through in assessing, selecting, and designing decommissioning projects.

(b) NRC require independent third-parties to conduct confirmatory surveys of the final radiological status of licensed (and unlicensed) facilities prior to release. This would conserve NRC staff and contractor resources and place the burden on the licensee to demonstrate the adequacy of remediation efforts prior to site release. It would also avoid having NRC place the role of the "middleman" between the survey contractor and licensee. However, it would probably also lessen the perceived independence and competency of NRC's contractor in conducting the confirmatory surveys that are highly desired by members of public in the communities around the decommissioned sites.

(c) NRC require and approve decommissioning plans, at least conceptual, prior to issuing new licenses for facilities that will likely require decommissioning at some point in the future prior to site release. This approach would require license applicants to focus on the design and operation of their facilities in advance of contamination and provide an incentive to minimize unnecessary contamination and effluents to the environment.

(d) NRC adopt a more consultative role with certain licensees and non-licensees that lack the technical and financial capabilities to complete decommissioning

in a timely, safe, and efficient manner. This approach could be especially useful with some smaller licensees that actually pose limited public risks and decommissioning challenges, but require several years of start-up preparations to learn the regulatory framework, decide on decommissioning strategies, and obtain regulatory approval.

Direction Setting Issue 14

1. General, Pg. 1

The Commission should be commended for the initiatives taken over the last several years to improve public communication in the regulatory process. Based on my experience at NRC and with other Federal agencies, NRC is much more open and accessible for public observation than many other agencies engaged in similar lines of business (e.g., Environmental Protection Agency). The Options described in DSI 14 offer additional enhancements to this strong program.

However, as presented in the paper, the options are not sufficiently distinct to be able to assess and compare their costs, benefits, and implications. There appears to be considerable overlap between the options. This makes it difficult to determine what approach may be optimal and most responsive to NRC's many stakeholders. In addition, none of the options appears to reduce the amount of public involvement or information, which is certainly a valid option that should be considered with the other alternatives. Further, many of the specific actions described under the options are already in progress, which clouds comparisons of the merits of each option.

The selection of the options needs to be driven by a Commission decision on the fundamental objectives for public communication. For example, does the Commission believe that public involvement is intended to inform the public, involve the public in a meaningful way in regulatory decisionmaking, reduce adverse and costly litigative efforts, obtain information on which to make regulatory decisions, or to influence public sentiment toward NRC decisions. DSI 14 should include, upon completion, a single, clear statement of NRC's objective for public communication.

2. Other Options, Pg. 1

DSI 14 should consider additional options for public communication, including the following:

(a) NRC working with other Federal agencies and the States to pool our public communication experiences and resources to improve communication with the public. For example, instead of EPA and NRC both developing separate pamphlets that describe the regulatory framework for licensing high-level waste disposal, the agencies could have worked together to develop a joint description of the regulatory issues, programs, and responsibilities.

(b) NRC could require/encourage the regulatory industry or individual licensees to be more proactive in public communication to supplement or replace NRC

communication efforts.

Another side issue to be considered in the paper is who should pay for NRC public communication efforts. If the licensees inevitably pay for public communication efforts as overhead or specific licensee fees, they may demand more of a role in NRC public communication efforts. However, because NRC conducts such efforts as part of its overall program, which benefits the public and licensees at large, it may be more appropriate to seek a non-fee based appropriation for NRC public communication efforts.

3. Scope of DSI 14, Pg. 1

The scope of DSI 14 is not clearly defined or assessed in DSI 14. Much of the paper deals with public communication as managed by the Office of Public Affairs, Office of Congressional Affairs, or the program offices. However, there are other agency efforts that have a mixed public communication and safety function. For example, NRC response to enforcement petitions submitted under 10 CFR 2.206 or to allegations have a public communication component that should be explicitly considered as part of this DSI. Similarly, the procedural requirements for public consideration of environmental assessments and environmental impact statements under 10 CFR Part 51 should be considered (this latter topic is omitted from the appendix of pertinent regulations and laws). NRC's participation in the schools programs, administration of the licensing and hearing requirements in 10 CFR Part 2, attempts to write regulations in plain english, open meeting policies, outreach to local elected officials by project managers and resident inspectors, and maintenance of local public document rooms are all involved and need to be integrated with NRC's public communication initiatives. DSI 14 should be expanded to cover the full gamut of these activities and the impact of the options on each type of activity should be explicitly considered.

4. Dealing with Public Harassers, Pg. 1

As part of NRC's attempts to ensure timely and equitable access of citizens to the NRC to raise safety issues, NRC has committed considerable resources to evaluating and responding to allegations from individual members of the public. Generally, these concerns are raised and resolved in a timely manner and any necessary safety information is duly considered in licensing and enforcement proceedings. However, there are a limited number of individuals that appear to abuse these procedures by inordinately detaining NRC staff to pursue issues of very limited, if any, safety significance. This inevitably diverts the staff from other regulatory matters and may result in increased, though unquantifiable, risk to the public. As part of NRC's public communication program, NRC should establish a clear policy and set of procedures for dealing with individuals who appear to have crossed the line from being a concerned citizen raising safety concerns to become a public harasser who raises concerns to penalize licensees or the agency, increases the overhead costs on the regulated community, raises spurious allegations of limited or questionable safety basis, or other similar abuses.