

DSI-12  
42

STATE OF ILLINOIS  
**DEPARTMENT OF NUCLEAR SAFETY**

1035 OUTER PARK DRIVE  
SPRINGFIELD, ILLINOIS 62704

217-785-9900  
217-782-6133 (TDD)

Jim Edgar  
Governor

Thomas W. Ortceiger  
Director

December 2, 1996



Mr. John C. Hoyle  
Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
ATTN: Chief of Docketing and Services Branch  
Washington, DC 20555-0001

Re: Strategic Assessment and Rebaselining Initiative

Dear Mr. Hoyle:

The Illinois Department of Nuclear Safety (Department) is hereby providing its comments on the U.S. Nuclear Regulatory Commission's (NRC) Strategic Assessment and Rebaselining Initiative. Having had the opportunity to reflect on discussions of these issues at two public meetings, these comments are the official comments of the Department and therefore may be different from preliminary views earlier expressed by the Department's staff. The following summarizes our principal comments on the Direction Setting Issues (DSI) our detailed comments on individual topics are enclosed.

Oversight of the Department of Energy (DSI 2)

Should the NRC seek to expand its regulatory authority and responsibilities to include DOE facilities?

NRC's position that, if asked, it could provide adequate regulatory oversight, is the correct posture. The NRC, however, should plan to use the division of radioactive materials regulatory authority that is currently applied to commercial facilities. Agreement States should have the opportunity to regulate materials use at DOE facilities as they would for any commercial entity.



Acknowledged by card 12/31/96 RMO

U.S. NUCLEAR REGULATORY COMMISSION  
DOCKETING & SERVICE SECTION  
OFFICE OF THE SECRETARY  
OF THE COMMISSION

Document Statistics

Postmark Date 12/2/96  
Copies Received 1  
Add'l Copies Reproduced PC 5  
Special Distribution PDR, RIDS,  
Schum, Hiltz, Speis

Mr. John C. Hoyle  
Page 2  
December 2, 1996

NRC's Relationship with Agreement States (DSI 4)

What should be NRC's strategy regarding states becoming and remaining Agreement States?

The NRC should return to the strategy used prior to October 1, 1996. Specifically, NRC must recognize the many benefits received by the NRC and its licensees from the states and return to a policy of funding training, travel and technical assistance for Agreement States. NRC should use intangible incentives to encourage more states to become Agreement States, and recognize that Agreement States are NRC's co-regulators. If necessary to achieve these objectives, NRC should seek appropriations from Congress for the functions involving Agreement States. Illinois, and probably other Agreement States, are willing to assist NRC in its discussions with the appropriate congressional committees to obtain the necessary funding. However, our support for legislative changes would have been more focused had NRC not chosen to unilaterally impose its current policy on funding Agreement State activities.

Low-Level Waste (DSI 5)

What should be the role and scope of the NRC's low-level radioactive waste program?

As we have expressed before, we strongly recommend that NRC recognize that low-level radioactive waste (LLRW) management is a state responsibility, that NRC recognize the progress being made in this arena and reduce its LLRW program. NRC's pursuit of the Commission's preferred option to assume a strong regulatory role in the national program will only serve to confound the progress of individual states.

High-Level Waste and Spent Fuel (DSI 6)

In recognition of current uncertainties, how should NRC approach the present high-level waste situation?

NRC should assume that the important elements of the national HLW program include not only a repository and centralized interim storage, but also on-site dry cask storage and transportation. Simplification of the hearings process, pursuing binding resolution and early negotiation of issues seem worthwhile for the NRC to explore.

Materials/Medical Oversight (DSI 7)

What should be the future role and scope of the NRC's Nuclear Materials Program, and in particular, NRC's regulation of the medical use of nuclear material?

Mr. John C. Hoyle  
Page 3  
December 2, 1996

Although the discussion of this DSI purports to address all material oversight, it primarily addresses the medical area. We support NRC's initiatives to streamline the licensing process, eliminate duplicative or contradictory regulations, and update regulatory guidance for all categories of licensees, not just medical licensees. The use of radioactive material in this country is safe for workers because there are established requirements for users of radioactive materials. The public is protected because of the regulatory community's diligence in ensuring that individuals using radioactive material do so safely. In some cases, it is necessary to modify the regulations to be less prescriptive, but it is not necessary to relinquish all controls over the safe use of radioactive material.

**Decommissioning - Non-Reactor Facilities (DSI 9)**

What should be NRC's strategy to take advantage of new and different approaches to optimize site remediation of the Site Decommissioning Management Plan and other problem sites?

The Department continues to object to the radiological dose limit of 15 mrem/yr contained in the proposed decommissioning rule. We have repeatedly objected to this value primarily because the technical justification for this proposal has not been provided, and the dose limit is unnecessarily restrictive. The radiation protection standards in 10 CFR 20 of 100 mrem per year and the 25 mrem per year limit in 10 CFR 40 Appendix A are reasonable and protective of public health and safety and the environment.

**Operating Reactor Program Oversight (DSI 11)**

Given the changes in the external/internal environment, what are the implications for the current strategies for the operating reactor program?

Option 1 describes the general process of oversight that must be applied to any well-managed on-going activity. If this is accomplished properly, Options 2 and 3 naturally become areas subject to review.

**Risk-Informed, Performance-Based Regulation (DSI 12)**

What criteria should the NRC use in expanding the scope in applying a risk-informed, performance-based approach to rulemaking, licensing, inspection and enforcement?

NRC should focus on those areas that constitute the most risk to the public using the best available to accomplish that task. If risk assessments can be relied on to identify the risk contributors, they should be used in the regulatory process where it makes sense to do so. If

Mr. John C. Hoyle  
Page 4  
December 2, 1996

risk assessments cannot be relied on, then more conventional means, or some combination of analyses, should be used. Inherent in risk analyses are uncertainties caused by lack of objective data. The better the data, the more assurance we have that risks can be predicted. Data can be resource intensive to gather. Hence, there is a cost/safety benefit tradeoff. We believe that rigorous Probabilistic Risk Assessment (PRA) should be required of nuclear power plant licensees. They should also meet pre-defined standards for accuracy and completeness, and should be kept current.

Public Communication Initiatives (DSI 14)

What approach should the NRC take to optimize its communication with the public?

We concur with the Commission's preliminary views. Public concerns must be identified and addressed as early in the process as possible. Agreement States have routinely asked the NRC for the opportunity to provide early and substantive input into rules and policies being developed by the NRC that have impacts on Agreement States. Option 2, giving priority to early identification of public concerns, appears to address some of the concerns raised by Agreement States. Agreement States, representing regulatory authorities equivalent to the NRC, can use their experience and expertise to contribute toward identification and resolution of issues, and help identify otherwise unforeseen impacts.

International Activities (DSI 20)

What is the appropriate role of NRC in the development and implementation of policies on international nuclear matters?

The discussion in this DSI failed to address the involvement that Illinois and other states have in responding to incidents and issues that result from importation of contaminated items from outside the United States. One could conclude that if NRC can afford to fund international activities with licensee fees, they could also afford to maintain funding for Agreement State training and travel.

Fees (DSI 21)

In making decisions about what activities the NRC should perform in support of its mission, to what extent should fees be considered?

Illinois can appreciate NRC's challenge in carrying out its mission of protecting the public health and safety while complying with statutes that restrict funding alternatives and attempting to implement a system of fees that is fair and equitable. Illinois and the other

Mr. John C. Hoyle  
Page 5  
December 2, 1996

Agreement States face similar challenges. We endorse Option 3 because we perceive it is the option most likely to achieve the result discussed under DSI 4 of restoring funding for Agreement State programs. We direct the NRC to our comments to DSI 4 on the many benefits provided to NRC by the Agreement States. We would anticipate that if NRC insists on charging the Agreement States for assistance from NRC, the Agreement States will sooner or later begin charging NRC for assistance to the NRC.

Research (DSI 22)

What should be the future role and scope of NRC's research program?

Much of the scope of current research is directed at predicting the mode and/or consequences of failure of a particular system or system component. This seems to be the trend regardless of the type of system (i.e., reactor, HLW repository, LLRW facility, tailings pile). There should be a body of experience available, after more than 30 years of performance related observations for such facilities, to allow some research into examinations of how these systems have evidently protected the public from the hazards of radiation. It would be useful, and refreshing, to research the degree and basis for these successes instead of mostly limiting our evaluations to predictions of future failures.

Power Reactor Decommissioning (DSI 24)

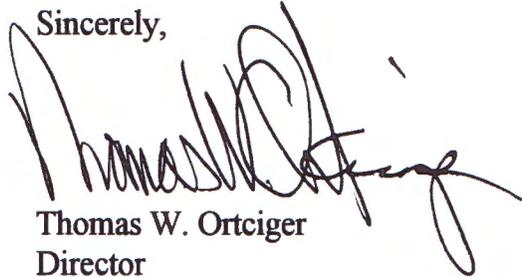
What should be NRC's strategy for regulating decommissioning activities at power reactor sites?

There is no technical basis for the selection of 15 millirem per year as a decommissioning standard. With this in mind, we support the concept of revisiting the approach to setting residual contamination criteria and review scenarios independently of the EPA. With respect to the single issue of radiological criteria for decommissioning, we recommend that NRC select Option 3--the NRC staff would move slowly in implementing its current rulemaking approaches. Given that the NRC's approach to this issue is heavily influenced by its apparent need for agreement with the EPA, and given that the Commission needs to fully consider the Options for DSI 9, it is premature to move forward with the current rulemaking.

Mr. John C. Hoyle  
Page 6  
December 2, 1996

We appreciate the opportunity to contribute to the NRC's efforts to determine its future direction. If you have any questions regarding these items, you may contact me at 217-785-9868.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas W. Ortziger". The signature is fluid and cursive, with a large initial "T" and "O".

Thomas W. Ortziger  
Director

TWO:bc

Enclosure

cc: Jim Lynch, State Agreements Officer  
NRC Region III

**Comments on USNRC's Strategic Assessment and Rebaselining Initiative  
by the Illinois Department of Nuclear Safety**

**Direction Setting Issue Paper # 12  
"Risk-Informed, Performance-Based Regulation"**

The Direction Setting Issue (DSI)--"What criteria should the NRC use in expanding the scope in applying a risk-informed, performance-based approach to rulemaking, licensing, inspection and enforcement?"

**Specific Comments**

**Option 1--Continue Current Process**

Changes to the current process are needed. See comments in Option 2.

**Option 2--More Rigorously Assess Relationship to Public Health and Safety**

In the current environment of cost-consciousness, it is more than ever important to get the best possible results from efforts and resources. Utilizing risk assessment to identify the most fertile areas for attention is an excellent way to maximize results. In order to utilize risk assessment, it is imperative that the process meets acceptable standards and practices that are clearly delineated and followed. This is not presently the case, and these results can be misleading at best and wrong at the worst. The Department believes that the NRC should establish guidelines and standards for risk assessment and ensure adherence before such can be used for regulation. With these guidelines and standards in place, the NRC should require that rigorous PRAs be required of licensees and maintained at specified levels of accuracy, completeness and currency.

**Option 3--Perform a Comprehensive Assessment of NRC Regulatory Approaches**

Once Option 2 is in place, Option 3 could be applied to verify and bound the rigor that needs to be applied to the risk analyses to ensure the safety goal policy is being met and that safety/cost tradeoffs are thoughtful and consistent.

## Option 4--Consider Risk-Informed, Performance-Based Approaches Primarily in Response to Stakeholder Initiatives

The Department believes that stakeholders will identify where risk-informed, performance-based approaches make sense and that the NRC should consider those so identified.

### Subsumed Issues

1. What should be NRC's strategy and philosophy with respect to changing NRC's responsibilities and authority in areas of little public risk?

Use the safety goal policy to determine the areas that are within the NRC's statutory purview and regulate those areas. If this determination cannot be made with assurance, such areas should be regulated.

2. What approach should NRC take in modifying the materials regulations to move toward risk-informed, performance-based regulation, recognizing the requirements will vary as a result of the range of products and the divergence of the licensees that use or possess byproduct nuclear material?

The NRC should establish a working group consisting of staff from both the NRC and Agreement States to determine what areas and regulations are appropriate for such as well as the language of regulations and policies to accomplish the change. Licensee and other stakeholders should also have input into the working group's deliberations.

3. Should NRC revise its regulations to address the uses of material resulting from technological advances and changing human factors? If so, to what extent should NRC articulate objectives to prevent or limit the effects of equipment failures and human factors/human performance?

The NRC should establish a working group consisting of staff from both the NRC and Agreement States to determine what regulations are appropriate for such as well as the language of regulations and policies to accomplish the change. Licensees and other stakeholders should also have input into the working group's deliberations. The NRC needs to learn that neither it, nor anyone else, can prevent all effects of equipment failures and human factors/human performance.

4. What should be the approach for licensing material uses with various levels of inherent risks?

In general, the more risk inherent the more assurance through regulatory means is needed. The NRC should establish a working group consisting of staff from both the NRC and Agreement States to determine what means are appropriate for such. Licensees and other stakeholders should also have input into the working group's deliberations.