

## **POLICY ISSUE INFORMATION**

January 14, 2002

SECY-02-0008

FOR: The Commissioners

FROM: William D. Travers  
Executive Director for Operations

SUBJECT: STATUS REPORT ON DEVELOPING A MEMORANDUM OF UNDERSTANDING WITH THE U.S. DEPARTMENT OF ENERGY FOR A DECISION PROCESS REGARDING POTENTIAL SITE TRANSFERS UNDER SECTION 151(b) OF THE NUCLEAR WASTE POLICY ACT

PURPOSE:

To provide the Commission with a status report on developing a memorandum of understanding (MOU) with the U.S. Department of Energy (DOE) for a decision process regarding potential site transfers to DOE under Section 151(b) of the Nuclear Waste Policy Act (NWPA). In addition, this paper provides the staff's expanded evaluation of the option of increasing financial assurance, and a revision to the financial criteria for determining sites that might need Federal funding for remediation. This Commission paper partially responds to the December 17, 2000, Staff Requirement Memorandum (SRM)-SECY-00-0180. The staff's response to the remaining SRM direction will be provided to the Commission in April 2002, as requested in the SRM.

SUMMARY:

A status report is provided on the development of an MOU with DOE regarding potential site transfers to DOE under Section 151(b) of the NWPA. The staff has made progress in the following areas: (1) providing DOE with background information; (2) preparing an Agreement in Principle to seek an MOU; (3) preparing a draft MOU; and (4) informing various stakeholder groups of the MOU initiative. Potential challenges related to the MOU are also discussed, including DOE's decision to put the MOU development on hold to evaluate the policy question of voluntarily accepting U.S. Nuclear Regulatory Commission (NRC) sites under Section 151(b).

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Other issues identified are: (1) timely completion of the MOU; (2) implementation of the MOU; and (3) response to a negative DOE decision, should this occur. This paper also evaluates the option of increasing financial assurance and revises the financial criteria for determining sites that might need Federal funding for remediation.

#### BACKGROUND:

In SECY-00-0180, dated August 23, 2000, the staff provided the Commission with an analysis of issues to facilitate remediation of decommissioning sites in non-Agreement States. The analysis considered both formerly licensed sites and currently licensed sites where future funding of decommissioning might be difficult. The staff also provided options to address these difficulties. On December 19, 2000, the Commission approved, in SRM-SECY-00-0180, the following three options: Option A1 for requesting Federal financial assistance for formerly licensed sites in non-Agreement States; Option B1 for pursuing an MOU with DOE; and Option B4 for increasing financial assurance as a fallback option in case DOE will not support the MOU. Regarding Option A1, this paper responds to the Commission's request to more sharply focus the screening criteria the staff would use to identify sites that might need Federal financial assistance. In addition, in April 2002 the staff will respond to the Commission's request to better define the number of sites and potential costs of remediation. For Option B1, this paper provides a status report on the MOU development. For Option B4, this paper provides a response to the Commission's request for further evaluation of the option to increase financial assurance. The Commission also requested, in SRM-SECY-00-0180, additional staff input in April 2002 to allow for possible future Commission consideration of requesting Federal financial assistance for currently licensed sites.

#### DISCUSSION:

##### 1. Status Report on Developing an MOU with DOE

###### a. Status

As stated above, this paper provides an update of the staff's activities for the option of pursuing an MOU with DOE that would implement Section 151(b) of the NWPA and thereby provide a mechanism that licensees could use to meet the institutional controls requirements of 10 CFR 20.1403, that are necessary to terminate a license with restrictions on future site use (Option B1 in SECY-00-0180). At this time, some licensees are having difficulty finding an acceptable party willing to assume responsibility for institutional controls. Section 151(b) authorizes DOE to assume title and custody of low-level radioactive waste and the land on which such waste is disposed of, on request of the owner and after termination of the license issued by NRC, if the Commission makes the following determinations required by Section 151(b) of the NWPA: (1) NRC decommissioning requirements have been met; (2) site transfer is at no cost to the Federal government; and (3) Federal ownership is necessary or desirable to protect the public health and safety and the environment. However, DOE acceptance of a site is discretionary. If DOE assumes title and custody, DOE is authorized to maintain the waste and land in a manner that will protect the public health and safety, and the environment. Therefore, the purpose of the MOU is to identify the criteria and coordination process that NRC and DOE would use to make decisions and take actions, on a site-by-site basis, regarding potential transfers of NRC-licensed sites to DOE.

Attachment 1 lists seven potential restricted-use sites, where licensees are planning decommissioning. However, it is unlikely that one of these sites (Jefferson Proving Ground) will be a candidate for transfer to DOE under Section 151(b) of the NWPA because its owner, the U.S. Army, has completed an MOU, with the U.S. Fish and Wildlife Service and U.S. Air Force, to provide long-term institutional control of the site. For the other six sites, it is difficult to predict at this time how many would be candidates for transfer to DOE under Section 151(b), using the MOU, because of numerous uncertainties for each site. For example, at the Sequoyah Fuels Corporation (SFC) site, the licensee is pursuing two options for transfer to DOE: transfer under Section 151(b) or transfer under Title II of the Uranium Mill Tailings Radiation Control Act (UMTRCA). In addition, to bound the total number of sites that might be future candidates for transfer to DOE, the staff also estimated how many currently operating NRC licensed sites might be decommissioned in the future using the restricted use option. The staff's estimate is based on an informal screening of about 5000 NRC licensed sites using data in NRC's Licensing Tracking System and input from NRC project managers. The staff's screening identified five sites with large quantities of long-lived radionuclides, which the staff used as an indicator of the potential for licensees to consider the restricted use option with DOE ownership under Section 151(b). From this estimate, the staff concludes that the total number of candidate sites for transfer to DOE under Section 151(b) is small, and is probably less than fifteen (assuming all decommissioning sites in Attachment 1 and future candidates from currently operating licensed sites). However, considering the conservative assumptions made in the estimate, the number of actual candidate sites for transfer to DOE under Section 151(b) may be as low as five over the next 20 years.

NRC and DOE staff have made progress toward developing an MOU since the staff received the Commission's direction on December 19, 2000, to pursue this option. The NRC staff began its work by providing the DOE staff with background information on many topics related to NRC's Decommissioning Program including: (1) regulations, guidance, and decommissioning/license termination process for restricted use sites; (2) difficulties in arranging enforceable institutional controls; (3) justification for seeking an MOU; (4) number of decommissioning sites considering restricted use; and (5) number of operating NRC licensees that might consider restricted use in the future. The purpose of this background information was to establish a foundation of understanding, about NRC's program, to facilitate preparing the MOU. The staff also evaluated NRC's license termination process and site transfer process to DOE for uranium mill tailings sites under UMTRCA Title II, and the AMAX site in Parkersburg, West Virginia, under Section 151(c) of the NWPA. Lessons learned from these successful site transfer processes contributed to developing a similar process for the Section 151(b) MOU.

NRC and DOE staffs prepared an Agreement in Principle that was signed by NRC and DOE senior managers on March 16, 2001, to seek an MOU that would define the criteria and process that each agency would use to make determinations regarding the potential transfer of a site, consistent with Section 151(b) of the NWPA (see Attachment 2). NRC and DOE management also established the NRC-DOE Working Group that would develop the MOU and agreed to the goal of completing the MOU by September 2001.

The NRC-DOE Working Group prepared a draft MOU and provided it to both NRC and DOE staff reviewers on April 30, 2001. NRC's review team consisted of: Division of Waste Management staff with decommissioning and environmental review experience; Division of Fuel Cycle Safety and Safeguards staff with uranium mill tailings license termination and long-term surveillance experience; and legal staff from the Office of the General Counsel (OGC). DOE's

review team consisted of staff with long-term stewardship experience from Environmental Management, General Counsel, and the Grand Junction Field Office. NRC staff comments were received and incorporated into the draft MOU. Although some general DOE comments were discussed, DOE put completion of written comments on hold in early July.

DOE staff decided to put the MOU development on hold to conduct an evaluation of the pros and cons of the policy question of DOE voluntarily accepting NRC sites under Section 151(b) of the NWSA. DOE staff planned on providing this evaluation in a Decision Memorandum to the Secretary of Energy. Although the Agreement in Principle and the draft MOU clearly stated that the MOU was limited to the criteria and process for NRC and DOE to use in making future decisions on a site-specific basis, DOE staff became concerned about potential liabilities and the appearance that completing an MOU might be viewed as a DOE commitment to the future transfer of candidate restricted-use sites. DOE staff decided that the policy issue needed to be fully evaluated at this time, and presented to the recently appointed DOE senior managers and the Secretary for consideration and policy direction, before proceeding with further MOU development.

In a parallel effort, the NRC staff believed it would be beneficial to prepare a letter for the Chairman to send to the Secretary of Energy, expressing the importance of resolving the institutional control issue and encouraging efforts to develop an MOU. The Chairman sent this letter to the Secretary of Energy on November 2, 2001.

Finally, the NRC staff, as part of its enhanced public outreach efforts, has conducted briefings of stakeholder groups to inform them of the institutional control issue and how NRC and DOE are working together on an MOU that would help resolve this issue. Briefings were given to: (1) decommissioning licensees and stakeholders during the November 2000 Decommissioning Workshop; (2) NRC's Advisory Committee on Nuclear Waste; and (3) the Board of Radioactive Waste Management of the National Academy of Sciences. In addition, licensees considering restricted-use (Sequoyah Fuels and Whittaker) were briefed, in public meetings, on the status of the MOU development.

#### b. Potential Challenges and Outcomes

The first and foremost challenge facing NRC is to gain full DOE support for the policy of potential site transfers under Section 151(b). There are different views among the many DOE offices that have some role in DOE's long-term stewardship activities. Therefore, positive direction from the Secretary may be needed if MOU development is to proceed. Such direction would establish a common path forward for all DOE offices to follow. As mentioned previously, the Chairman's letter to the Secretary of Energy expressed the importance of resolving the institutional control issue and encouraged efforts to develop an MOU. A management meeting will be held with DOE to discuss their plans for response.

The second challenge is completing the MOU in a timely manner and without delay, assuming that positive direction from the Secretary would allow the Working Group to resume MOU development. The next steps would include: (1) DOE and NRC management agreeing to a new schedule; (2) DOE completing its comments on the draft MOU; (3) the Working Group resolving DOE comments and completing a draft final MOU that senior DOE and NRC managers are ready to sign; and (4) providing the draft final MOU to the Secretary and the Commission.

Another challenge is timely implementation of the completed MOU for licensees who might propose using the Section 151(b) site transfer to DOE after license termination. At this time, SFC is the only licensee that has expressed a desire to both DOE and NRC, to use the Section 151(b) approach and has actually submitted a Decommissioning Plan. The staff is currently reviewing the SFC Decommissioning Plan and preparing the draft Environmental Impact Statement (EIS). Should the MOU be completed, DOE and NRC staffs would need to agree on a schedule for implementing the MOU for the SFC site. It is still somewhat early in the review and draft EIS preparation process, and therefore, now is a useful time for DOE to become involved. Although no specific schedules can be assumed at this time, the sooner an MOU can be completed, the sooner DOE coordination and review can begin, and the less impact there may be on the overall existing schedule for completing the SFC review and EIS development.

If significant delays result and impact the staff's existing schedule, SFC might be financially impacted, which could in turn begin to impact SFC's ability to conduct successful decommissioning. Because of the current uncertainty regarding site transfer to DOE under Section 151(b), SFC also proposed that its site be reclassified as a byproduct material facility for license termination under Title II of the UMTRCA and 10 CFR Part 40, Appendix A. Should this path be approved, transfer of the site to DOE would be mandatory under UMTRCA if the State declines the responsibility. The staff is currently evaluating SFC's request and will provide a paper to the Commission on a proposed course of action in the near future.

Finally, the most significant challenge would result from DOE deciding not to continue the MOU development. Should this occur, the staff will inform the Commission immediately and recommend options for Commission consideration, consistent with the Commission's direction in SRM-SECY-00-0180.

## 2. Evaluation of the Option of Increasing Financial Assurance

In addition to directing in SRM-SECY-00-0180 that the staff report on the status of the DOE MOU, the Commission also directed the staff to further evaluate the option of increasing financial assurance for the amount necessary for offsite disposal until NRC approves the site specific decommissioning plan (Option B4 in SECY-00-0180). The staff's evaluation is summarized here, and the complete evaluation is provided in Attachment 3. The following summary and the discussion in Attachment 3 are limited to sites where licensees assume onsite disposal with restrictions on future site use to determine the level of their required financial assurance. The following discussion does not address new license applicants, nor existing licensees with onsite burials that could decommission in the future to unrestricted release criteria, because these types of licensees were beyond the scope of the Commission-directed evaluation in SRM-SECY-00-0180. However, because the staff recognizes that similar concerns may exist for such sites, the staff will consider whether changes to the regulatory structure or other appropriate actions are needed to avoid potential funding shortfalls in the future for these types of sites.

NRC regulations in 10 CFR 30.35, 40.36, and 70.25, require that a decommissioning funding plan (DFP) must contain a cost estimate for decommissioning. These regulations simply create a reporting requirement for licensees, and the regulations do not specify any criteria on how the licensee should estimate the decommissioning cost. More significantly, the regulations do not provide for NRC approval of the estimated amount. In order to determine if

a cost estimate satisfies the reporting requirement, the staff uses regulatory guidance to review the contents of the DFP. NRC guidance allows a licensee to select onsite waste disposal under restricted release criteria as the basis for its cost estimate. This decommissioning approach will be accepted, for cost estimation purposes, if the licensee identifies and justifies key assumptions. After evaluating cost estimates, the staff will either accept the licensee's estimate (perhaps after requesting additional information) or find that the licensee has not met the reporting requirement. Rejecting an estimate on the basis that it does not meet the reporting requirement is difficult to justify if the licensee has made a reasonable effort to calculate the cost of decommissioning. Therefore, the existing regulatory structure for financial assurance allows the licensee to provide a cost estimate based on the presumption of eventual NRC approval of onsite disposal under restricted release criteria, when the decommissioning plan is approved. The assumption of onsite disposal typically results in a much lower cost estimate for decommissioning as compared to offsite disposal methods.

At this time, only a few licensees have taken this onsite disposal approach for their cost estimates. However, some licensees might not be able to employ onsite disposal if they cannot find a long-term steward or they cannot fully satisfy all the NRC technical criteria for onsite disposal with restrictions on future site use. Therefore, for some cases, if onsite disposal is not approved, the licensee's financial assurance may fall short of the actual costs of decommissioning with offsite disposal. Under these circumstances, should the licensee declare bankruptcy and not be able to conduct remediation, Federal financial assistance might be needed. The staff evaluated whether this risk could be reduced by requiring an increase in financial assurance, to address the cost of offsite disposal until a licensee's decommissioning plan is approved. The disposal cost increase could be substantial in certain cases, and would increase the carrying cost of financial assurance for licensees. Thus, increased financial assurance may not be possible for financially weak licensees that might present the greatest risk of bankruptcy because they might be unable to obtain increased financial assurance. Furthermore, for these financially weak licensees, increasing the cost of financial assurance could reduce limited funds available for remediation.

The staff also evaluated three methods to motivate licensees to increase financial assurance: rulemaking, case-by-case license conditions, and guidance. Based on the staff's evaluation, it may be necessary, in rare cases, to address specific licensee circumstances and apply case-by-case license conditions, assuming that the staff can develop an analysis, which can be defended if challenged, that justifies a departure from the NRC regulations. However, the staff does not favor broad implementation of any approach to increasing financial assurance, because it may be difficult, if not impossible, for financially weak licensees to implement.

### 3. Revision to Financial Criteria

The SRM directed the staff to consult with OGC on whether the financial criteria discussed in SECY-00-0180 should be more sharply focused, as the proposed criteria may not accurately reflect the circumstances under which the government can impart a remediation obligation on a private party (i.e., a former licensee or parent company of a former licensee).

The staff and OGC determined the criteria should recognize that “legal reachability” is a key factor in determining financial responsibility of a former licensee. We recognize that the ability to hold a former licensee or parent company financially responsible depends on the facts of the case, and that the law is not well defined. Rather than developing specific criteria to address a variety of factual circumstances that may or may not occur, the staff believes it is more appropriate to use the following criteria that would require a case-by-case analysis when specific facts are presented before providing financial assistance:

Previous licensee and parent company, if any, exist, and

- Previous licensee and parent company, if any, are not legally reachable; or
- Previous licensee and parent company, if any, are legally reachable, and all available assets have been obtained without causing bankruptcy, but these assets are insufficient to complete remediation.

The criteria from SECY-00-0180 have been revised and reformatted to address these concerns and are provided in Attachment 4.

#### RESOURCES:

The staff had planned to complete the MOU in fiscal year (FY) 2001. Because the MOU has been delayed, work will need to continue into FY 2002, if DOE decides to support further development of the MOU. This does not present a resource issue because the staff budgeted 0.3 full-time equivalents for MOU implementation in FY 2002. If it appears that the MOU cannot be completed in FY 2002, the need for resources in FY 2003 will be evaluated during the next budget cycle and resources will be reprogrammed, if needed. Although the option of increasing financial assurance does have potential resource implications, the staff's planned course of action negates the need for resources.

COORDINATION:

OGC has reviewed this paper and has no legal objections. The office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

*/RA/*

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Attachments:

1. "List of Potential Restricted-Use Sites"
2. "Agreement in Principle"
3. "Evaluation of Option B4 to Increase Financial Assurance"
4. "Revised Criteria for Determining Site Remediation Funding Needs"

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