

## EVALUATION OF OPTION B4 TO INCREASE FINANCIAL ASSURANCE

### 1. BACKGROUND

In SECY-00-0180, the staff analyzed funding options to facilitate the remediation of existing sites in non-Agreement States, where adequate funding might not be available. Option B4 was one of four options identified. Specifically, Option B4 suggested that existing licensees be required to provide financial assurance sufficient to cover the cost of offsite disposal of radioactive waste until the U.S. Nuclear Regulatory Commission (NRC) approves the site's decommissioning plan. In Staff Requirements Memorandum (SRM)-SECY-00-0180, the staff was requested to further evaluate this option. 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.

### 2. PURPOSE

The purpose of this evaluation is to: (1) further evaluate the implications of using Option B4; (2) evaluate pros and cons for three methods of implementing Option B4; and (3) make conclusions.

### 3. DISCUSSION

#### 3.1 Evaluation of Option B4

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.

Onsite disposal is expected to cost less than offsite disposal. The effect of assuming onsite disposal is to reduce the decommissioning cost estimate and the amount of financial assurance required. If, in fact, the cost estimate turns out to be low, which implies that the financial assurance is inadequate to cover the costs when the facility is decommissioned, and the licensee does not have the resources to pay the full cost, Federal financial assistance might be needed to pay for part of the cleanup.

Option B4 seeks to reduce the potential for Federal financial assistance by requiring licensees to increase their decommissioning cost estimates to include the expense of offsite disposal of radioactive waste. The increase could be substantial in certain cases. If the cost estimate is increased, NRC regulations require that the licensees must increase the amount of financial assurance they provide to cover the higher estimate. This change would impose a continuing expense on the licensees. This is a concern because of the fees charged by sureties to provide financial assurance, which would, for the financially weak licensees of concern, reduce the funds available to perform remediation work. In the most difficult cases, the licensees may be unable to obtain additional financial assurance at any price. Consequently, a change that requires them to increase their financial assurance amounts would yield little, if any, reduction in the potential for Federal financial assistance. At this time, only a few sites have taken this onsite disposal approach for their cost estimates.

### 3.2 Evaluation of Implementation Methods

The staff evaluated three implementation methods: (1) rulemaking; (2) license conditions; and (3) regulatory guidance.

#### 3.2.1 Rulemaking

The regulatory provisions for a DFP are silent regarding the basis that may be used to estimate decommissioning costs. The rules could be amended to address the cost basis for the decommissioning cost estimate. This could be done in several ways, such as specifying the basis to be used, or by requiring NRC approval of the cost estimate. Regardless of the exact wording, certain pros and cons are associated with this method.

##### Pros:

Remove regulatory ambiguity, provide consistency;

Potential reduction of Federal financial assistance; and

Strongest level of assuring adequate financial assurance.

##### Cons:

Rule would apply to only a few sites of concern;

If a licensee could not meet requirements, either an enforcement action or an exemption would be needed;

May result in higher expenditure of NRC resources than license conditions; and

### Rulemaking not well-suited to case-by-case evaluation.

The staff believes that rulemaking is not appropriate to address this concern for the following reasons. First, because only a few sites would be involved, the resources necessary to change the rule may exceed the cost of dealing with the sites on a case-by-case basis. Thus, rulemaking may be an inefficient response to the concern. Second, issuance of a rule requiring a larger amount of financial assurance may be unrealistic for a site whose financial situation renders it unable to comply. Third, if the rule applies to all licensees, it may impose an unnecessary burden on those whose situations do not require a larger amount of financial assurance to adequately assure that funds for decommissioning will be available.

#### 3.2.2 License Conditions

Requirements to increase decommissioning cost estimates to include the expense of offsite disposal of radioactive waste could be imposed through license conditions, either at the license renewal stage or through license amendments, provided the staff can develop an analysis, which can be defended if challenged, that justifies a departure from its regulations. Because this approach would only apply to the few licensees who propose onsite disposal in their decommissioning cost estimates and because the cost of increased financial assurance could lead to reduced funds available to perform remediation work, the staff believes that cases where this license condition approach would be used are rare. However, the license condition approach does provide a regulatory mechanism to require increased decommissioning cost estimates.

At the license renewal stage or through license amendments, NRC could include a condition requiring the licensee to provide financial assurance for decommissioning costs sufficient to cover the cost of offsite disposal of radioactive wastes, until such time as a decommissioning plan using onsite disposal may be approved, assuming the staff can justify a departure from NRC regulations. This approach is available now, without rulemaking or additional guidance development, although a licensee could contest the condition. It offers the most efficient and expedient means of requiring increased financial assurance from licensees, on a case-by-case basis.

#### Pros:

Well-suited to case-by-case evaluation and resolution;

May result in lower resource expenditure than a rulemaking;

Focuses resources on the few sites of concern;

Decommissioning funding evaluation is part of license renewal process;

License conditions have a high degree of enforceability; and

Reduces potential for Federal financial assistance, where possible.

#### Cons:

Less consistency; and

Licensee could contest the regulatory basis for license conditions that it has not specifically requested and the staff has the burden of justifying a departure from the NRC regulations.

Although the staff believes that it would rarely use this approach, the license renewal and license amendment processes provide an opportunity to address the circumstances of each licensee's case. Licensing actions provide the most appropriate, and least resource-intensive, way to evaluate each case on its own merits. While the staff believes that it is improbable that increasing financial assurance for decommissioning will lead to increased decommissioning funding, for licensees that are financially weak, the staff can use the license condition approach to require increased financial assurance on a case-by-case basis.

### 3.2.3 Regulatory Guidance

#### Pros:

Provides flexibility for staff and licensee; and

Can be limited to sites of concern.

#### Cons:

Not a requirement; and

Not enforceable.

The staff believes that regulatory guidance would not be suitable because of the voluntary nature of guidance.

## 4. CONCLUSION

Based on the staff's evaluation, it does not appear that increasing financial assurance would effectively reduce the potential for Federal financial assistance, because it may be difficult, if not impossible, for financially weak licensees to implement.

Although staff does not favor broad implementation of any of the three options (rulemaking, license conditions, or guidance), in rare cases it may be necessary to address specific licensee circumstances and apply case-by-case license conditions, assuming the staff can justify departing from NRC regulations.