



OVERVIEW OF NRC'S REEVALUATION OF DECOMMISSIONING FUNDING REQUIREMENT, 10 CFR PART 50.75

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Basis for Formula Reevaluation:

- SRM-SECY-06-0065 - “Office of the Inspector General Recommendations On Decommissioning Funding Assurance,” dated May 17, 2006.
- Recommendation from assessment to the Commission will be in late 2011.

Initial Key Assumptions in Formula:

The decommissioning funding requirement formula in 10 CFR 50.75(c) is based on two studies performed by PNNL for NRC in the late 1970s:

- NUREG/CR-0130, June 1978, “Technology, Safety and Costs of Decommissioning a Reference Pressurized Water Reactor Power Station,” and;
- NUREG/CR-0672, June 1980, “Technology, Safety and Costs of Decommissioning a Reference Boiling Power Station.”

Initial Key Assumptions (Continued):

PNNL was contracted by NRC in the mid-1990s to update these studies:

- NUREG/CR-5884, November 1995, “Revised Analyses of Decommissioning for the Reference Pressurized Water Reactor Power Station,” and;
- NUREG/CR-6174, July 1996, “Revised Analyses of Decommissioning for the Reference Boiling Water Reactor Power Station.”

Neither the original or the updated studies addressed site remediation, property taxes, decommissioning strategy, plant generated waste during operation etc.

Objective of Formula Evaluation:

- To assure the formula reflects the current costs associated with decommissioning power reactors;
- The results of the evaluation of the formula may require updating/revising the formula;
- To align formula amount with site specific cost estimate and assumptions.

Reasons for Revising the Formula:

- Decommissioning technology and practices in use today are significantly different than assumed in the original studies,
- A significant amount of experience has been gained since the original studies were conducted 30 years ago;
- Information submitted from Utilities to the NRC that, over the last several years, show several preliminary decommissioning cost estimates for “large” aging nuclear power plants that are within five years of potentially ceasing operation;

Reasons for Revising Formula (Continued):

- The cost of LLW management and disposal has increased dramatically since the original studies;
- Management of LLW generated during decommissioning is highly uncertain relative to that assumed in the original studies; and
- Currently there is no disposal capacity available for Class B or Class C LLW

Conclusion:

If the development of a new formula is required, the appropriate cost variables to be included may address cost variables that are site specific:

- site remediation, property taxes, decommissioning strategy, impacts from life extension, etc;
- account for costs not currently included in the formula (e.g., management and disposal of LLW generated during plant operations);
- management and storage of spent nuclear fuel and greater-than-Class C waste; and
- plant operations after permanent shutdown but prior to decommissioning, etc.

FORMULA - 10 CFR 50.75(c):

Estimated Cost (Year X) = [1986 \$ Cost] [A Lx + B Ex + C Bx]

A, B, and C are the fractions of the total dollar costs that are attributable to labor (0.65), energy (0.13), and burial (0.22), respectively, and sum to 1.0. The factors Lx, Ex, and Bx are defined by:

Lx = labor cost adjustment,

Ex = energy cost adjustment,

Bx = LLW burial/disposition cost adjustment

QUESTIONS?



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