

OUTLINE OF VALUE-IMPACT STATEMENT FOR  
ADVANCE NOTICE OF PROPOSED RULEMAKING CONCERNING  
CONSIDERATION OF DEGRADED OR MELTED CORES IN  
SAFETY REGULATION

PAR  
PR-MISC

I. Introduction

This value-impact statement provides preliminary cost or burden information to assist in determining the propriety of the action proposed. The reader should recognize, however, that in the context of health, safety, and environment, the usefulness of cost information is limited; health, safety, and environmental protection are not economic considerations since they concern quality and operating confidence, not monetary value. However, where alternative means exist for realizing equivalent benefits in regulatory action, cost is given important consideration.

II. Proposed Action

A. Description

Rulemaking, currently under consideration, would provide the regulated industry and the public an opportunity to advise on the content of a regulation requiring improvements to cope with degraded core cooling and to cope with accidents not covered adequately by traditional safety analyses. Specifically, it is the intent of this rulemaking to determine to what extent, if any, reactor plant designs and safety analyses should consider reactor accidents beyond those considered

in the current design basis accident approach, including a range of loss-of-core-cooling, core damage, and core-melting events both inside and outside historical design envelopes. Furthermore, it is the intent of this rulemaking to require more coherent consideration of this range of core damage events in the design of both normal operating systems and engineered safety features.

B. Need for the Proposed Action

A February 8, 1980 memorandum from S. J. Chilk to W. J. Dircks stated that the Commission had approved the Near-Term Operating License (NTOL) requirements of the TMI Action Plan. NTOL item II.B.8 requires that a ".....notice of intent to conduct rulemaking on requirements for design features for accidents involving severely damaged cores..." be issued. By memo from W. J. Dircks dated February 19, 1980, the Office of Standards Development (SD) was assigned lead responsibility for this work and was requested to implement this portion of the Action Plan.

C. Value-Impact of the Proposed Action

Insufficient information exists at this time to estimate either the benefits or the burden of any design or operational improvements that may be imposed to deal with degraded core cooling. An advance notice of rulemaking is intended to obtain the information from which benefit and burden judgements can be made. Accordingly, an assessment of value-impact concerning the proposed action will be held in abeyance

until industry and public comments to advance notice of rulemaking have been received.

D. Decision on the Proposed Action

The Commission has directed advance notice of proposed rulemaking. Therefore, this decision has been made. Decision concerning what improvements should be made to cope with degraded core cooling will be made after public comments are reviewed and evaluated. Similarly, cost information referred to by this preliminary value-impact statement outline will be prepared using cost data received from public comments.

III. Technical Approach

The advance notice of rulemaking questions suggest several design improvements to cope with various aspects of degraded core cooling. The questions request that industry and the public suggest additional or alternative improvements. From the public comments, technical approaches will be presented at the proposed rulemaking stage.

IV. Procedural Approach

Since rulemaking has been directed by the Commission, procedural alternatives have not been considered.

V. Statutory Considerations

A. NRC Authority

A proposed rule on this subject would fall under the authority of sections 103b.(3) and 161o. of the Atomic Energy Act of 1954, as amended.

B. Need for NEPA Assessment

The proposed action is not a major action as defined by 10 CFR 51.5(d)(3) and does not require an environmental impact statement.

VI. Relationship to Other Existing or Proposed Regulations or Policies

Recognizing the need for prompt action to correct specific design deficiencies uncovered during the Three Mile Island accident and subsequent investigations, the Commission is publishing a proposed interim rule that would require certain interim improvements to better cope with degraded reactor cores. The advance notice of rulemaking states that the proposed interim rule should not be viewed as prejudging the final action concerning the advance notice of proposed rulemaking, and that industry/public comments should be framed accordingly. Similarly, in parallel with work on degraded core cooling, Commission action is under way in related areas such as the siting of nuclear power reactors, emergency planning and accident consideration under NEPA.

VII. Summary and Conclusions

An advance notice of proposed rulemaking will be prepared.

Reference

1. R. B. Minogue's memo of April 13, 1977, contains an enclosure, "SD Staff Guidance for Preparation of Value-Impact Statements," to be used by SD staff in preparing value-impact statements. This guidance was used in preparing the foregoing value-impact statement.