REGULATORY ANALYSIS

STANDARD FORMAT AND CONTENT OF LICENSE APPLICATIONS FOR MIXED OXIDE FUEL FABRICATION FACILITIES

Proposed Revision 1 of Regulatory Guide 3.39 dated January 1976

Statement of the Problem

The U.S. Nuclear Regulatory Commission (NRC) first issued Regulatory Guide 3.39 in January 1976, to provide guidance on the standard format and content for license applications and integrated safety analysis (ISA) summaries to plutonium processing and fuel fabrication facilities, currently referred to as mixed oxide fuel fabrication facilities. The NRC has updated Regulatory Guide 3.39 to reference the current version of NUREG-1718, "Standard Review Plan for the Review of an Application for a Mixed Oxide (MOX) Fuel Fabrication Facility," which now describes the standard format and content for license applications and ISA summaries. Subpart H, "Additional Requirements for Certain Licensees Authorized To Possess a Critical Mass of Special Nuclear Material," of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 70, "Domestic Licensing of Special and Nuclear Material," requires applicants to establish and maintain a safety program that includes an ISA, process safety information, and management measures and to submit a description of the safety program as part of the license application.

Objective

The objective of this regulatory action is to provide current guidance on the standard format and content of license applications for MOX fuel fabrication facilities acceptable to the NRC for use in complying with NRC regulations.

Alternative Approaches

The NRC staff considered the following alternative approaches:

- Withdraw Regulatory Guide 3.39.
- Revise Regulatory Guide 3.39.

Alternative 1: Do Not Revise Regulatory Guide 3.39

Under this alternative, the NRC would not revise the guidance and would withdraw it from the list of regulatory guides. Even though this alternative involves no value or impact considerations, it would not provide any updated guidance describing the current standard format and content for license applications and ISA summaries.

Alternative 2: Revise Regulatory Guide 3.39

Under this alternative, the NRC would revise Regulatory Guide 3.39 to reflect current guidance and practices on the standard format and content for license applications and ISA summaries. The revised guide would reference NUREG- 1718, which is the standard review plan that the staff currently uses as guidance when performing safety, safeguards, and environmental reviews for a license to possess and use special nuclear material for MOX fuel fabrication facilities. This guidance also includes the construction approval review specifically related to plutonium processing and fuel fabrication. The cost to the NRC would be the one-time cost of issuing the revised regulatory guide (which is expected to be relatively

small), and since compliance is not mandatory, licensees would incur no cost and may actually experience savings because of the increased clarity in regulatory guidance available during the licensing process.

Conclusion

Based on this regulatory analysis, the staff recommends the revision of Regulatory Guide 3.39. The staff concludes that the proposed action will reflect current NRC regulations and guidance for the standard format and content of license applications and ISA summaries. Therefore, the revision of this regulatory guidance is advisable.