



The NRC should hold a formal proceeding for a MOX fuel fabrication facility

NUCLEAR CONTROL INSTITUTE

INSTITUTE FOR ENERGY AND ENVIRONMENTAL RESEARCH

Letter to the Nuclear Regulatory Commission

re: Duke Cogema Stone & Webster application for authorization to construct a [MOX](#) Fuel Fabrication Facility

March 9, 2001

Richard A. Meserve

Chairman

U.S. Nuclear Regulatory Commission

Washington, DC 20555

Dear Chairman Meserve:

We are writing to you in reference to the application recently submitted by Duke Cogema Stone & Webster (DCS) for NRC authorization pursuant to 10 CFR § 70.23(b) to construct a facility at the Savannah River Site (SRS) for the fabrication of mixed-oxide ([MOX](#)) fuel containing excess U.S. weapon-grade [plutonium](#) (WG-Pu), as well as to the anticipated submittal in June 2002 of an application by DCS for an operating license for this facility pursuant to 10 CFR § 70.23(a)(8).

We understand that it is the Commission's intention to conduct any hearings on these MOX plant applications using the informal procedures of 10 CFR Part 2 Subpart L, even though the Commission has the authority to initiate hearings using formal Subpart G procedures if it deems such hearings to be "required in the public interest" by issuing a Notice of Hearing pursuant to 10 CFR § 2.104. For the reasons stated below, we believe that the public interest would indeed be far better served if the Commission were to ensure that any MOX plant hearings would be conducted using the more rigorous procedures specified in 10 CFR Part 2 Subpart G. We therefore send this letter in support of the February 22, 2001 request by Georgians Against Nuclear Energy (GANE) and other interested parties that Subpart G proceedings be used for any MOX plant hearing.

We are aware that the Commission has recently approved the issuance of a draft rulemaking (SECY-00-0017) that would revise the Rules of Practice stated in 10 CFR Part 2. One major consequence of the proposed rule would be to greatly restrict the range of proceedings that would require Subpart G procedures, reserving such formal procedures only for enforcement hearings, uranium enrichment plant licensing proceedings (as required by statute) and reactor licensing proceedings that involve "a large number of complex issues that would clearly benefit from the use of formal hearing procedures."¹

A Commission decision to require formal procedures for MOX plant licensing hearings would appear at first glance to be in conflict with the preference for deformatizing most NRC hearing procedures that is reflected in SECY-00-0017. However, our reading of the Commission's voting record suggests a desire



to move away from a pro forma adherence to set procedures, and toward a more pragmatic and flexible approach that tailors the rigor of the hearing procedures more carefully to the significance of the matter under consideration. For example, as you state in your comments on SECY-00-0017 (quite sensibly, in our view), material licensing actions “can raise very complex and difficult issues that would benefit from the focused scrutiny that formal procedures allow” and therefore “the proposed category of cases to which formal hearing procedures would apply is too narrow in other respects.”

You go on to suggest “categories of cases that would benefit from formal procedures...” which “might include “proceedings that present complex issues, that raise difficult disputed issues of material fact or of expert opinion, or perhaps ... that involve matters for which the preparation of an environmental impact statement was necessary.” The MOX plant licensing clearly meets the last criterion, as it is the NRC’s stated intention to carry out an EIS for this action. We maintain that a MOX licensing proceeding would fall within the other two categories as well. Some of the large number of complex issues that are likely to be raised in the MOX plant licensing proceedings and would benefit from formal resolution are as follows:

- The MOX plant licensing will be the first NRC proceeding involving large-scale [plutonium](#) processing since the GESMO hearings were terminated in 1977, raising the possibility that the NRC’s core competency in plutonium issues has eroded.
- The MOX plant will be the first facility licensed under the revised 10 CFR Part 70, a highly complex rule that even at this preliminary stage has led to confusion on the part of the licensee concerning its requirements.
- The highly aggressive MOX plant licensing schedule has been determined not by the needs of the NRC staff for adequate time for information-gathering, testing and analysis, but by commitments in international agreements, raising the concern that the NRC staff will be under political pressure to rush its review.
- The MOX plant would be the first NRC-licensed fuel fabrication facility to process weapon-grade plutonium from dismantled nuclear warheads (some of which is, in its present form, alloyed with other materials), which will raise new security, safety and quality control issues.
- The MOX program is fundamentally a bilateral U.S.-Russian program, and the NRC licensing process will serve as a model for the licensing of the MOX plant in Russia, with regard to safety, safeguards, physical protection and public involvement. A failure by the NRC to conduct the proceedings under Subpart G would undermine the U.S. policy of strengthening nuclear safety and regulation in Russia and send the wrong signal at a time when the independent Russian nuclear regulatory authority GAN is under threat.
- The unusual importance of product quality control for ensuring public confidence in the safety of MOX fuel has been made apparent by the BNFL data falsification scandal and its consequences in Japan and elsewhere, implying that the licensee may have to make much more quality control data available to the public than is customary.
- Safety issues regarding the facility’s location on a highly contaminated, U.S.-Government weapons production site must be resolved.
- Public confidence must be assured with regard to the potential abuse of proprietary agreements to conceal safety information from the public.
- Public confidence must be assured with regard to the credibility of Framatome ANP and Cogema, the foreign parent companies of two of the members of the DCS consortium. For example, serious questions have arisen regarding the possible withholding of safety information by Framatome



ANP from the NRC staff regarding the embrittlement tendencies of niobium-containing cladding similar to the M5 cladding proposed for use in MOX fuel assemblies. Also, there is an ongoing judicial investigation of Cogema, for possible violation of France's storage law relating to radioactive waste of foreign origin.

- Serious unresolved issues exist regarding the licensee's plan for production and testing of MOX lead test assemblies, the availability of irradiated MOX fuel for independent testing by NRC staff, and the way in which the results of such testing will be fed back into MOX facility design and operations.

This list of "complex and difficult issues" clearly indicates that the MOX plant licensing proceeding would "benefit from the focused scrutiny that formal proceedings allow." Therefore, using the standards that you have articulated, this proceeding would benefit from a formal, Subpart G hearing. Inversely, public confidence in the MOX plant licensing process will suffer if intervenors are denied the rights of discovery and cross-examination, and a thorough resolution of these issues is not reached to the satisfaction of all parties.

Thank you for your consideration of our request. We look forward to a positive response.

Sincerely,

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