DUKE COGEMA
STONE & WEBSTER

Ms. Melanie Galloway
Enrichment Section, Special Projects Branch
Office of Nuclear Material Safety and Safeguards
Nuclear Regulatory Commission
Washington, DC 20555-0001

15 June 2000

DCS-NRC-000012
Response Required: Yes
Response Due: TBD

SUBJECT: CONTRACT NO. DE-AC02-99CH10888 MOX FUEL PROJECT DUKE COGEMA STONE & WEBSTER COMMENTS ON U.S. NUCLEAR REGULATORY COMMISSION STAFF REVIEW OF THE U.S. DEPARTMENT OF ENERGY SURPLUS PLUTONIUM DISPOSITION FINAL ENVIRONMENTAL IMPACT STATEMENT

REFERENCE: U.S. NUCLEAR REGULATORY COMMISSION STAFF REVIEW OF THE U.S. DEPARTMENT OF ENERGY SURPLUS PLUTONIUM DISPOSITION FINAL ENVIRONMENTAL IMPACT STATEMENT (3 MAY 2000 LETTER TO MR. PETER HASTINGS FROM MS. MELANIE GALLOWAY)

Dear Ms. Galloway:

Duke Cogema Stone and Webster (DCS) appreciated the opportunity to meet with the U.S. Nuclear Regulatory Commission (NRC) staff to discuss your review of the U.S. Department of Energy (DOE) Surplus Plutonium Disposition Final Environmental Impact Statement (SPD FEIS) and our plans for the submittal of an Environmental Report (ER) for a Mixed Oxide Fuel Fabrication Facility (MFFF). We believe that continued exchange of information will help to enhance our ER submittal and your actions under the National Environmental Policy Act (NEPA). We look forward to continued information exchanges throughout this process.

The DOE decision to construct and operate the MFFF at the DOE Savannah River Site was the result of a decision making process that included two Environmental Impact Statements (EIS) and accompanying public involvement. We plan to use the results of this decision making process to the fullest extent in preparing the MFFF ER. We encourage NRC to also make the fullest use of this process including incorporation by reference from the DOE NEPA documents.

It is DCS's intention to submit an ER in accordance with the guidance in NUREG-1718, Appendix E. We are using NUREG-1555 as additional level of detail guidance, but consider NUREG-1718, Appendix E, to be the primary guidance for the MFFF ER.

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We would like to pursue additional clarification on selected comments provided by the Staff in their letter of 3 May 2000. Accordingly, the attached responses to selected NRC staff comments are intended to solicit further clarification of the NRC staff expectations and DCS intentions for the MFFF ER with respect to certain key issues. Upon review of these responses, please contact Mr. Peter Hastings at 704/373-7820 to arrange for further discussion or confirmation.

Thank you again for your cooperation in clarifying these issues.

Sincerely,

R. H. Ihde
President & CEO

Attachment: Duke Cogema Stone and Webster, LLC.
Responses to Selected NRC Staff Comments from Review of the Department of Energy Surplus Plutonium Disposition Final Environmental Impact Statement

cc: P. Hastings - DCS
T. Bowling - DE&S
T. Mathews - DCS
D. Silverman - Morgan, Lewis & Bockius LLP

DUKE COGEMA STONE AND WEBSTER, LLC.
SELECTED COMMENTS ON THE
NUCLEAR REGULATORY COMMISSION STAFF
REVIEW OF THE DEPARTMENT OF ENERGY
SURPLUS PLUTONIUM DISPOSITION
FINAL ENVIRONMENTAL IMPACT STATEMENT

In order to clarify certain key issues associated with the Environmental Report (ER) for the Mixed Oxide Fuel Fabrication Facility (MFFF), Duke COGEMA Stone and Webster, LLC (DCS) would like to comment on certain statements made by the Nuclear Regulatory Commission (NRC) staff concerning the Department of Energy (DOE) Surplus Plutonium Disposition Final Environmental Impact Statement (SPD FEIS). The relevant NRC statements are quoted followed by DCS comments on each.

A. DESCRIPTION AND ANALYSIS OF ALTERNATIVES

1. *The U.S. Department of Energy (DOE) Surplus Plutonium disposition (SPD) Final Environmental Impact Statement (FEIS) examines 12 separate alternatives (see Table 2-1 on FEIS Page 2-3). These alternatives, and any other reasonable alternative identified by Duke Cogema Stone & Webster (DCS), need to be discussed in the environmental report (ER). The NRC recognizes that, since DOE has issued a Record of Decision, it is likely that many of these alternatives are now considered impractical. The U.S. Nuclear Regulatory Commission (NRC) needs to ensure that all reasonable alternatives receive due consideration in order to meet its obligations under the National Environmental Policy Act process. Therefore, DCS needs to identify those alternatives that do not appear reasonable for detailed consideration, along with the basis for drawing such conclusions. The ER can provide less detailed discussion of the unlikely alternatives and/or reference the information provided in the FEIS.*

   Reasonable alternatives that will be fully addressed in the ER should, of course, be thoroughly documented. In weighing the alternatives, DCS need go no further than to establish whether or not substantially better alternatives are likely to be available.

DCS understands that to assist NRC in NRC's obligations under the National Environmental Policy Act (NEPA) it will be useful for DCS to provide a summary level discussion of the 12 alternatives considered in the SPD EIS and the 11 disposition alternatives discussed in the *Storage and Disposition of Weapons-Usable Fissile Materials Programmatic Environmental Impact Statement* (S&D PEIS). We also understand that it may be helpful for us to provide a brief discussion of why these alternatives are no longer appropriate as alternatives to the proposed action. We plan, in the introductory material describing the MFFF, to provide a brief discussion of these alternatives and reiterate the decisions and explanations presented in the DOE Record of Decision (ROD). It is important to note that these alternatives involve multiple combinations of facilities and locations for not only the fabrication of MOX fuel but also

pit disassembly and conversion and immobilization. Thus, the alternatives considered by DOE go well beyond the scope of the presently proposed action and reasonable alternatives to be considered by the NRC. Because these alternatives were considered by an independent agency, DOE, have an established NEPA record, including a ROD, and go beyond the scope of the action before the NRC (i.e., licensing of the MFFF at the Savannah River Site) and reasonable related alternatives, DCS does not feel it is appropriate to reexamine these alternatives in any significant detail in the ER.

Likewise, DCS believes that the DOE, in its two previous EISs, has firmly established the need for the MFFF and the need for NRC to issue a license to possess special nuclear material at the MFFF at the Savannah River Site. We plan to briefly discuss the need for the MFFF, but like the other DOE decisions; we feel it is inappropriate to provide elaborate evaluations of the need in the ER.

A. DESCRIPTION AND ANALYSIS OF ALTERNATIVES

6. *DOE considered reactors and depleted UO_2 separate from the MOX FFF analysis. Such an approach, when applied to the context of the proposed facility, can provide incomplete information, especially when considering the indirect effects of the action. In analyzing the environmental impacts of a proposed action, NRC generally considers the direct and indirect environmental impacts of the action when appropriate. In the case of the MOX facility, possible indirect effects that may warrant attention include reactor use effects, depleted UO_2 transportation to the MOX FFF, and shipment of MOX fuel.*

DCS reviewed the past fuel facility ER submittals including the most recent submittals for the General Electric facility in Wilmington, NC, the Seimens facility in Richland, WA, and the Louisiana Energy Services submittal for the Claiborne Enrichment Center in LA. DCS also reviewed NRC NEPA documents for previous fuel facility license applications. None of these documents discussed the at-reactor impacts of fuel use. In light of this fact, DCS feels it is inappropriate for the MFFF ER to provide a discussion of potential indirect impacts at reactor sites when such an evaluation has not been routinely considered in any previous fuel fabrication facility submittals of which we are aware.

A. DESCRIPTION AND ANALYSIS OF ALTERNATIVES

7.b. *NRC Staff agrees with the Environmental Protection Agency's Comment 16 (see Page 3-51 in Volume III, Part A to the FEIS), which recommends an enhanced cumulative impacts analysis.*

The comment that the Staff cites was made on the Draft SPD EIS. Page 3-51 in Volume III, Part A, to the FEIS also contains the DOE response to the EPA comment. The Final SPD EIS was approved by EPA without further comment. DCS assumes that the Staff would not need to have a more detailed discussion than that which satisfied EPA's concerns.

D. MOX FFF SPECIFIC

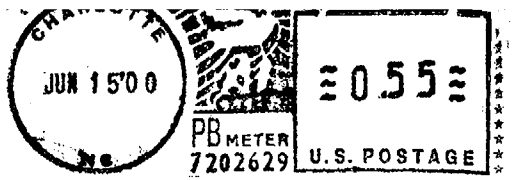
3. *The terms, "unlikely" and "extremely unlikely" used in Tables 4-43 through 4-46 should be defined in terms of probabilities and the bases for the information in the tables must be provided.*

The accident events discussed in the ER will be consistent with those presented in the Construction Authorization Request including the appropriate terminology as provided in NUREG-1718. We would like to confirm that neither the proposed new 10 CFR Part 70, nor NUREG-1718 requires the use of quantitative, probabilistic analyses in the ER.

E. NRC POLICY/REGULATIONS

3. *The ER needs to describe environmental monitoring measures (for example, sampling air, surface- and ground-water, wildlife, soil, vegetation or radioactivity) for background measurements and during construction and operation. Indicate monitoring required by other government agencies (for example, the Environmental Protection Agency).*

The guidance in NUREG-1718, Appendix E, does not address any environmental monitoring commitments. Environmental monitoring information is provided in Chapter 10 of the license application. DCS plans to address environmental monitoring as part the Construction Authorization Request and the subsequent submittal of the balance of the License Application. Additionally, South Carolina Department of Health and Environmental Control environmental monitoring requirements will be developed based on permit negotiations. These negotiations are not expected to be completed at the time the ER and the Construction Authorization Request are submitted.



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