UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
Thomas S. Moore, Chairman
Charles N. Kelber
Peter S. Lam

In the Matter of	)	May 31, 2002
DUKE COGEMA STONE & WEBSTER	)	Docket No. 070-03098-ML
(Savannah River Mixed Oxide Fuel Fabrication Facility)	)	ASLBP No. 01-790-01-ML

DUKE COGEMA STONE & WEBSTER'S
FIRST SET OF INTERROGATORIES TO
GEORGIANS AGAINST NUCLEAR ENERGY AND
BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE

Duke Cogema Stone & Webster ("DCS") hereby makes the following formal discovery requests of the Georgians Against Nuclear Energy ("GANE") and the Blue Ridge Environmental Defense League ("BREDL").

I. General Definitions

1. "Admitted Contentions" refers to those Contentions admitted by the Atomic Safety and Licensing Board in the *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility) Memorandum and Order (Ruling on Standing and Admissibility of Contentions), LBP-01-35 (Dec. 6, 2001).

2. "CAR" refers to the Construction Authorization Request prepared by Duke Cogema Stone & Webster, accepted for docketing by the Nuclear Regulatory

Commission on March 28, 2001, and any supplements or amendments thereto, as included in the Hearing File for this proceeding.

3. "CAR RAI Response" refers to Duke Cogema Stone & Webster's responses to the NRC Staff's Requests for Additional Information on the CAR, as included in the Hearing File for this proceeding.

4. "Consultant" shall mean any paid or unpaid person who provides professional or technical input, advice, and/or opinion to GANE or BREDL, regardless of whether that person is used specifically for this case or is a regular GANE or BREDL employee or official.

5. "DCS" or "Applicant" refers to Duke Cogema Stone & Webster.

6. "ER" refers to the Environmental Report prepared by DCS as part of its CAR, accepted for review by the Nuclear Regulatory Commission on January 29, 2001, and any supplements or amendments thereto, as included in the Hearing File for this proceeding.

7. "ER RAI Response" refers to DCS' responses to the NRC Staff's Requests for Additional Information on the ER, and all supplemental responses thereto as included in the Hearing File for this proceeding.

8. "Hearing" refers to the hearing before the NRC Atomic Safety and Licensing Board on the Mixed Oxide Fuel Fabrication Facility CAR and ER.

9. The "MOX Facility" refers to the proposed Mixed Oxide Fuel Fabrication Facility to be located on the Department of Energy's Savannah River Site in South Carolina.

10. "NRC" refers to the Nuclear Regulatory Commission.

11. "SRP" refers to the NRC's *Standard Review Plan for the Review of an Application for a Mixed Oxide (MOX) Fuel Fabrication Facility*, NUREG-1718 (2000).

12. "DSER" refers to the NRC's *Draft Safety Evaluation Report on the Construction Authorization Request for the Mixed Oxide Fuel Fabrication Facility* (April 30, 2002).

II. Instructions

A. Scope of Discovery. The interrogatories herein cover all information in the possession, custody or control of GANE and BREDL, including – but not limited to – information in the possession, custody or control of officers, employees, agents, servants, representatives, consultants, legal advisors, attorneys, or other persons directly or indirectly employed or retained by them, or anyone else acting on their behalf or otherwise subject to their counsel.

B. Basis for Response. In responding to each interrogatory, identify the regulatory, scientific, technical, legal, and any other bases on which you base your response, regardless of whether the interrogatory explicitly requests this information. Include citations to any and all statutes, regulations, guidance, standards, or caselaw upon which you rely, and to any reports, documents, or expert opinion upon which you rely.

C. Lack of Information. If GANE or BREDL currently lacks information to answer any interrogatory completely, please identify:

1. The responsive information currently available;

2. The nature of the responsive information currently unavailable;

3. Efforts which you intend to make to secure the information currently unavailable; and

4. When you anticipate receiving the information currently unavailable.

D. Supplemental Responses. Each of the following interrogatories is a continuing one. *Cf.* 10 CFR § 2.740(e). In the event that at any later date GANE or BREDL obtains or discovers any additional information which is responsive to these interrogatories, they shall supplement their responses to these interrogatories promptly.

E. Estimates. Interrogatories calling for numerical or chronological information shall be deemed, to the extent that precise figures or dates are not known, to call for best estimates. In each instance that an estimate is given, it should be identified as such, together with the source of information underlying the estimate.

F. Oath and Objections. Each interrogatory must be answered separately and fully in writing under oath or affirmation, unless it is objected to, in which event the reasons for objection shall be stated in lieu of an answer. The answers shall be signed by the persons making them, and the objections by the attorney or other GANE representative making them.

III. General Interrogatories

These General Interrogatories apply to all Admitted Contentions, and are in addition to the Specific Interrogatories which follow:

GENERAL INTERROGATORY NO. 1 State the name, business address, and job title of each person who was consulted and/or who supplied information for: (a) drafting each of the Admitted Contentions; and (b) responding to these interrogatories. Identify for which specific contentions and interrogatories each such person was consulted and/or supplied information.

If the information or opinions of anyone who was consulted in connection with your response to an interrogatory differs from your written answer to that interrogatory, please describe in detail the differing information or opinions.

GENERAL INTERROGATORY NO. 2 For each Admitted Contention, give the name, business address, profession, employer, area of professional expertise, education, relevant experience, and qualifications of each person whom you expect to call as a witness at the Hearing to the extent such information has not been provided in response to the Atomic Safety and Licensing Board's April 30, 2002 Memorandum and Order. For purposes of answering this interrogatory, the education and experience of the expected witnesses may be provided by attaching to the response a resume of each person. In addition, provide a list of all publications authored by the expected witness within the preceding ten years, and a list of any other cases in which the person has given testimony, at any time, as an expert at a trial, hearing, or deposition.

GENERAL INTERROGATORY NO. 3 For each Admitted Contention: (a) describe the subject matter on which each witness is expected to testify at the Hearing; (b) describe the facts and opinions to which each witness is expected to testify, including a summary of the grounds for each opinion; and (c) identify the documents (including all

pertinent pages or parts thereof), data or other information which each witness has reviewed and considered, or is expected to consider or to rely on for his or her testimony.

IV. Specific Interrogatories

A. GANE Contention 1 (Consideration of Safeguards in Facility Design)

INTERROGATORY NO. 1.1 Does GANE agree that the only NRC regulations containing material control and accounting ("MC&A") requirements applicable to the MOX Facility are found in 10 CFR Part 74, Subparts A, B, E and F? If not, explain the basis for your disagreement and provide citations to all other NRC regulations that contain requirements applicable to MC&A for the MOX Facility. If any regulations other than 10 CFR Part 74, Subparts A, B, E and F are identified, explain how each such regulation relates to, or establishes requirements for, MC&A at the MOX Facility.

INTERROGATORY NO. 1.2 Does GANE believe that a vulnerability assessment is required to satisfy any NRC MC&A regulation applicable to the MOX Facility? If so, identify the particular regulation and explain why GANE believes that the regulation requires a vulnerability assessment, and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 1.3 Does GANE agree that an appropriate definition of "design bases," as used in 10 CFR §§ 70.22(f) and 70.23(b), is: "the specific functions to be performed by a structure, system, or component of a facility, and the specific values or ranges of values chosen for controlling parameters as a reference bounds for design"? *See* 10 CFR § 50.2. If not, indicate what you believe would be an appropriate definition of "design basis" as used in 10 CFR §§ 70.22(f) and 70.23(b), and explain the basis for

your disagreement and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 1.4 Identify and fully explain why GANE claims that "the MC&A design basis must include a detailed description of how holdup accumulation can be effectively managed through choices for design elements," and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 1.5 Identify and fully explain why GANE claims that "the MC&A design basis must include a detailed description of how holdup accumulation can be measured with NDA systems to the degree of accuracy necessary to meet 10 CFR Part 74 requirements." Define "NDA." Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response, including but not limited to the NRC regulations that require measurement of holdup accumulation.

INTERROGATORY NO. 1.6 Identify and fully explain what "degree of accuracy" is needed for NDA systems to meet applicable NRC requirements, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response, including but not limited to the NRC regulations that establish requirements for accuracy of NDA systems.

INTERROGATORY NO. 1.7 Identify and fully explain what design features are necessary to effectively manage holdup accumulation, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response, including but not limited to the NRC regulations that require management of holdup accumulation.

INTERROGATORY NO. 1.8 Identify and fully explain what process equipment materials and geometries should be used to effectively manage holdup accumulation, in GANE's opinion.

INTERROGATORY NO. 1.9 Identify and fully explain what features, in GANE's opinion, the glovebox ventilation systems and dust collection systems should have in order to effectively manage holdup accumulation.

INTERROGATORY NO. 1.10 Identify and fully explain why GANE claims that "there is no indication that MC&A considerations were taken into account in the MFFF design."

INTERROGATORY NO. 1.11 Does GANE agree that DCS is not required to submit a Fundamental Nuclear Material Control Plan ("FNMCP") as part of the CAR? If not, explain the basis for your disagreement and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 1.12 Identify each national and international standard or recommendation, other than B.H. Erkkila et. al., "Design Impacts of Safeguards and Security Requirements for a U.S. MOX Fuel Fabrication Facility" (1997), and L. Sheinman, "Assuring the Nuclear Non-Proliferation Safeguards System" (1992), upon which GANE relies for this contention, and explain specifically how such standards or recommendations address the incorporation of MC&A considerations into design activities. Provide citations to any relevant portion or portions of such standards or recommendations.

INTERROGATORY NO. 1.13 Identify and fully explain why GANE claims that the experience of the Plutonium Fuel Production Facility ("PFPF") in Tokaimura, Japan, is relevant to the design basis for MC&A at the MOX Facility.

INTERROGATORY NO. 1.14 Identify and fully explain why GANE claims that the MOX Facility may have the same or similar MC&A design "flaws" as the PFPF.

INTERROGATORY NO. 1.15 Identify and fully explain why GANE claims that the experience of the MELOX plant in France is relevant to the design basis for MC&A at the MOX Facility.

INTERROGATORY NO. 1.16 Identify and fully explain why GANE claims that the MC&A systems for the MELOX plant in France may be deficient.

INTERROGATORY NO. 1.17 Identify and fully explain why GANE claims that the MOX Facility may have the same or similar MC&A design deficiencies as the MELOX plant in France.

INTERROGATORY NO. 1.18 Identify and fully explain why GANE claims that the Unité de Chamottage at the MELOX plant in France is "substantially similar" to the MOX Facility Scrap Processing Unit.

INTERROGATORY NO. 1.19 Identify and fully explain, in GANE's opinion, what functions the MOX Facility MC&A systems must provide, and what specific values or ranges of values are necessary for the controlling parameters for those functions.

INTERROGATORY NO. 1.20 Identify and fully explain which aspects of the MOX Facility MC&A system, in GANE's opinion, must be addressed in the CAR.

INTERROGATORY NO. 1.21 Identify and fully explain which aspects of the MOX Facility MC&A system, in GANE's opinion, are needed to provide protection against natural phenomena and the consequences of accidents.

INTERROGATORY NO. 1.22 Does GANE disagree, in any respect, with CAR RAI Response No. 188? If yes, identify and fully explain each respect in which GANE claims that CAR RAI Response No. 188 is inadequate or incorrect.

B. GANE Contention 2 (Consideration of Physical Protection in Facility Design)

INTERROGATORY NO. 2.1 Does GANE agree that the only NRC regulations containing physical protection requirements applicable to the MOX Facility are found in 10 CFR § 70.22(h)(1) and 10 CFR Part 73. If not, explain the basis for your disagreement and provide citations to all other NRC regulations that contain requirements applicable to physical security for the MOX Facility. If any regulations other than 10 CFR § 70.22(h)(1) and 10 CFR Part 73 are identified, explain how each such regulation relates to, or establishes requirements for, physical security at the MOX Facility.

INTERROGATORY NO. 2.2 Identify and fully explain why GANE claims that "there is no indication that physical protection considerations were taken into account in the MFFF design."

INTERROGATORY NO. 2.3 Does GANE agree that DCS is not required to submit a Physical Protection Plan, Safeguards Contingency Response Plan, and Training and Qualifications Plan for Security Personnel as part of the CAR? If not, explain the basis for your disagreement and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 2.4 Identify each national and international standard or recommendation, other than INFCIRC/225/Rev. 4 (corrected), upon which GANE relies for this contention, and explain how such standards or recommendations address incorporation of physical security considerations into design activities. Provide citations to any relevant portion or portions of such standards or recommendations.

INTERROGATORY NO. 2.5 Identify and fully explain GANE's position regarding whether DCS has complied with each aspect of the national and international standards and recommendations listed in GANE's response to INTERROGATORY NO. 2.4.

INTERROGATORY NO. 2.6 Identify and fully explain each respect in which GANE claims that there might be "a direct conflict...between physical protection requirements...and safety requirements."

INTERROGATORY NO. 2.7 Identify and fully explain, in GANE's opinion, what functions the MOX Facility physical security systems must provide, and what specific values or ranges of values are necessary for the controlling parameters for those functions.

INTERROGATORY NO. 2.8 Identify and fully explain which aspects of the MOX Facility physical security system must be addressed in the CAR, in GANE's opinion.

INTERROGATORY NO. 2.9 Identify and fully explain which aspects of the MOX Facility physical security system are needed to provide protection against natural phenomena and the consequences of accidents, in GANE's opinion.

INTERROGATORY NO. 2.10 Identify and fully explain which aspects of the "facility lay out, structural design and location of physical barriers" (as that phrase is used in Contention 2) are needed to provide protection against natural phenomena and the consequences of accidents, in GANE's opinion.

INTERROGATORY NO. 2.11 Identify and fully explain what, in GANE's opinion, should be the design basis of the "facility lay out, structural design and location of physical barriers."

INTERROGATORY NO. 2.12 Does GANE agree with DCS' response to the June 21, 2001 CAR RAI referenced in GANE's Basis Statement for this contention? If not, identify the specific CAR RAI Response referenced by GANE and fully explain each respect in which GANE claims that DCS' CAR RAI Response is inadequate or incorrect.

C. GANE Contention 3 (Seismic Design)

INTERROGATORY NO. 3.1 Does GANE agree that it is appropriate to use a Regulatory Guide ("RG") 1.60 5% damping spectrum scaled up to 0.2g (acceleration of gravity) peak ground acceleration as the design earthquake for the MOX Facility? If not, identify and fully explain what design earthquake GANE believes would be appropriate for the MOX Facility, and identify the regulatory, scientific, technical, legal, and any other bases for GANE's position.

INTERROGATORY NO. 3.2 Does GANE agree that a design earthquake with a return interval of 10,000 years for the frequencies of practical structural interest is acceptable for the MOX Facility? If not, identify and fully explain what return interval GANE believes would be appropriate for the design earthquake for the MOX Facility,

and identify the regulatory, scientific, technical, legal, and any other bases for GANE's position.

INTERROGATORY NO. 3.3 Does GANE agree with the information and analysis in Sections 1.3.1.5 and 1.3.1.6 of the DSER? If not, identify the specific sentences in the DSER which GANE believes are incorrect, and identify the regulatory, scientific, technical, legal and any other bases for GANE's position.

INTERROGATORY NO. 3.4 Does GANE agree that DCS did not use a 0.375g event at 5 hertz ("hz") for its design earthquake (*i.e.*, a PC-3 spectrum for SRS), but instead used a RG 1.60 5% damping spectrum scaled up to 0.2g peak ground acceleration? If not, explain the regulatory, scientific, technical, legal, and any other bases for your disagreement.

INTERROGATORY NO. 3.5 Does GANE agree that the RG 1.60 5% damping spectrum scaled up to 0.2g peak ground acceleration is more conservative than the PC-3 spectrum for SRS? If not, explain the regulatory, scientific, technical, legal, and any other bases for your disagreement.

INTERROGATORY NO. 3.6 Does GANE agree that the RG 1.60 5% damping spectrum scaled up to 0.2g peak ground acceleration has a return interval of 10,000 years at frequencies of practical structural interest for the MOX Facility (*i.e.*, at frequencies that could affect the structural integrity of the structures of the MOX Facility)? If not, explain the regulatory, scientific, technical, legal, and any other bases for your disagreement.

INTERROGATORY NO. 3.7 Identify and fully explain why GANE claims that "conservative design criteria" for the design earthquake have not been established in the DCS CAR.

INTERROGATORY NO. 3.8 Identify and fully explain why GANE claims that "DCS has not performed a seismic analysis that is...adequate in scope."

INTERROGATORY NO. 3.9 Identify and fully explain why GANE claims that "DCS has not performed a seismic analysis that is...adequately documented."

INTERROGATORY NO. 3.10 Identify and fully explain why GANE claims that DCS' seismic analysis is not "complete, accurate and up-to-date."

INTERROGATORY NO. 3.11 Identify and fully explain each respect in which GANE claims that DCS has not considered "recent paleoseismic work on the South Carolina Coastal Plain showing more activity in the last 6000 years, and over a wider area, than previously known." Assuming this is true, what impact, if any, should this have on the design earthquake for the MOX Facility?

INTERROGATORY NO. 3.12 Identify and fully explain each respect in which GANE claims that "major events may have occurred much closer to the SRS than the Charleston Seismic Zone." This identification shall include the date, location, and magnitude of each event.

INTERROGATORY NO. 3.13 With respect to each "major event" identified in GANE's response to INTERROGATORY NO. 3.12, state whether the CAR accounts for the event.

INTERROGATORY NO. 3.14 With respect to each "major event" identified in GANE's response to INTERROGATORY NO. 3.12, state whether consideration of the

events (either individually or collectively) should result in a different design earthquake or a different return interval than identified in the CAR.

INTERROGATORY NO. 3.15 Assuming a magnitude 6 event at Bluffton, SC, what if any effect does GANE believe such an event should have on the design earthquake or its return interval for the MOX Facility site?

INTERROGATORY NO. 3.16 In your opinion, would a magnitude 6 event at Bluffton, SC, result in greater ground motion acceleration at the MOX Facility site than a magnitude 7 event at Charleston, SC? If yes, identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 3.17 Identify the date, location, and magnitude of all seismic events that GANE claims were not, but should have been, addressed in the CAR.

INTERROGATORY NO. 3.18 Identify and fully explain why GANE claims that statements regarding the date, location, magnitude, and frequency of seismic events discussed in the CAR may be incorrect.

INTERROGATORY NO. 3.19 Is GANE claiming that the seismic events identified in its responses to INTERROGATORY NOS. 3.17 and 3.18 should impact the design earthquake and its return interval for the MOX Facility? If yes, explain how those events should impact the design earthquake and its return interval. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 3.20 Identify and fully explain why GANE claims that "the CAR does not adequately account for the risk of a major [seismic] event."

INTERROGATORY NO. 3.21 Identify each statement and value in CAR Sections 1.3.5, 1.3.6, and 1.3.7 that GANE claims is incorrect, and fully explain why GANE believes it is incorrect.

INTERROGATORY NO. 3.22 Identify and fully explain each respect in which GANE claims that a "quantitative site response study for the MFFF has [not] been done."

INTERROGATORY NO. 3.23 Identify and fully explain why GANE claims that the design earthquake and the potential for liquefaction at the SRS differ from those at the MOX Facility site.

INTERROGATORY NO. 3.24 Identify and fully explain why GANE claims that the seismicity of the MOX Facility site is different from that of the SRS.

INTERROGATORY NO. 3.25 Identify and fully explain why GANE disagrees with the results of the site-specific studies conducted to date, as reported in CAR Section 1.3.5.2.

INTERROGATORY NO. 3.26 Identify and fully explain why GANE claims that "the potential for intense shaking or soil liquefaction at the MFFF site has not been established."

INTERROGATORY NO. 3.27 Identify and fully explain why GANE claims that "the Probabilistic Seismic Hazard Assessment (PSHA) is incomplete."

INTERROGATORY NO. 3.28 Identify and fully explain why GANE claims that "the applicant has not provided detailed methodologies or references for spectral shape changes applied to the starting spectrum."

INTERROGATORY NO. 3.29 Does GANE agree with DCS' response to the February 28, 2001 CAR RAI referenced in GANE's Basis Statement for this contention?

If not, identify the specific CAR RAI Response referenced by GANE and fully explain each respect in which GANE claims that DCS' CAR RAI Response is inadequate or incorrect.

INTERROGATORY NO. 3.30 Identify and fully explain why GANE claims that "the approach to the PSHA has been insufficiently conservative."

INTERROGATORY NO. 3.31 Contention 3 does not contain any references to NRC regulations. Is GANE contending that DCS' design earthquake or its return interval for the MOX Facility do not comply with any NRC regulation applicable to the MOX Facility? If yes, identify each such regulation and the bases for GANE's contention that DCS' design earthquake or its return interval for the MOX Facility do not comply with that regulation.

INTERROGATORY NO. 3.32 10 CFR § 70.64(a)(2) states that the "design must provide for adequate protection against natural phenomena with consideration of the most severe documented historical events for the site." Is GANE contending that DCS' design earthquake for the MOX Facility does not comply with this regulation? If yes, provide the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response, including identification of the most severe documented historical seismic events for the site that GANE claims DCS did not consider (or did not consider adequately).

INTERROGATORY NO. 3.33 With respect to Table 1 in Contention 3, does GANE agree that the cited events on 1974/10/28, 1974/11/05, and 1988/01/23 are in fact included in CAR Table 1.3.6-1? If no, provide the bases for your answer. If yes, does this fact change any of the conclusions in Contention 3? If not, explain why not.

INTERROGATORY NO. 3.34 What is the basis for GANE's statement that the Talwani and Schaeffer paper "indicates . . . that the frequency of major events is higher in the South Carolina Coastal Plain than previously thought?"

(a) Does GANE agree that the Talwani and Schaeffer paper itself does not contain such a statement? If not, identify the passage within the paper that contains the alleged statement.

(b) Identify the person or persons who, according to GANE, "previously thought" that the frequency of major events is lower in the South Carolina Coastal Plain than the values provided in the Talwani and Schaeffer paper.

(c) Is GANE claiming that the frequency of major events in the South Carolina Coastal Plain as provided in the Talwani and Schaeffer paper is higher than the frequency of major events identified in the CAR? If yes, provide the basis for your answer.

INTERROGATORY NO. 3.35 Contention 3 states that the Talwani and Schaeffer paper identifies a scenario with "seven magnitude seven (or stronger) Charleston events in the last 6000 years." DCS has been able to identify only six such Scenario 2 events in the referenced paper (designated as Episodes A, B, C[1], E, F, and G). Please identify the seven events.

INTERROGATORY NO. 3.36 Contention 3 states that the U.S. Geological Survey's Preliminary Determination of Epicenters (URL: http:/neic.usgs.gov/neis/epic/epic_global.html) shows a magnitude of 4.9 for the August 2, 1974 event, while the CAR reports a maximum magnitude of 4.3.

(a) Do you agree that the magnitude of 4.9 that you quote from the USGS is based upon the Mn (local magnitude) scale, whereas the magnitude of 4.3 in the CAR is based upon the mb (body-wave) scale? If you do not agree, provide the basis for your answer.

(b) Do you agree that the Mn scale and the mb scale are different, and that the same earthquake may have different magnitudes on the Mn and mb scales? If you do not agree, provide the basis for your answer.

(c) Do you agree that the same USGS web page that is cited above (when using the data base for Eastern, Central and Mountain States of U.S., 1534 – 1986) shows that the August 2, 1974 event has a magnitude of 4.3 on the mb scale? If you do not agree, provide the basis for your answer.

(d) Do you agree that the magnitude of the August 2, 1974 event as provided by the USGS and the CAR is the same, when using the mb scale? If you do not agree, provide the basis for your answer.

INTERROGATORY NO. 3.37 Do you agree that DOE Standard 1023 is appropriate guidance for developing the design earthquake for a nuclear materials facility? If not, identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 3.38 Has GANE, its consultants, or its experts performed either a deterministic or probabilistic evaluation of the appropriate design earthquake for the MOX Facility? If yes, please identify the methodology used in

performing the evaluation, the source of seismic input data for the evaluation (*e.g.*, U.S. Geological Survey, Lawrence Livermore National Laboratory, Electric Power Research Institute, etc.), and the results of the evaluation. Also, does GANE recommend a probabilistic or deterministic approach to be used for seismic design of the MOX Facility? Identify the regulatory, scientific, legal, and any other basis for GANE's recommendation.

INTERROGATORY NO. 3.39 Has GANE, its consultants, or its experts performed an evaluation of the potential for liquefaction at the MOX Facility site? If yes, please identify the methodology used in performing the evaluation, the source of seismic input data for the evaluation, the magnitude and response spectra of the earthquake used in the evaluation, the soil properties used in the evaluation, and the results of the evaluation.

INTERROGATORY NO. 3.40 Contention 3 states that the CAR cites a number of Westinghouse Savannah River Company ("WSRC") technical reports that are not available, and therefore "it is not possible to verify the assertions made in the CAR regarding the MFFF site geology." Subsequent to the filing of Contention 3, DCS docketed with the NRC references to WSRC technical reports. Has GANE reviewed these WSRC reports that have been docketed with the NRC? If yes, does GANE agree that these reports verify the assertions made in the CAR regarding the MFFF site geology and seismicity? If not, identify each assertion in the CAR that GANE contends is not verified by the WSRC reports, and provide the basis for your answer.

D. GANE Contention 5 (Controlled Area Boundary – Safety); GANE Contention 8 (Controlled Area Boundary – Environmental); BREDL Contention 9A (Radiological Protection)

All of the above proposed contentions have been consolidated into Contention 5. By letter to the ASLB and the parties dated January 18, 2002, GANE and BREDL designated GANE as the lead party on consolidated Contention 5. As a result, separate responses by both GANE and BREDL to the following interrogatories are not necessary, unless BREDL does not concur with and adopt GANE's response. In such cases, if any, BREDL should provide its own separate responses to the following interrogatories.

INTERROGATORY NO. 5.1 BREDL states that "people who travel on Highway 125, attend meetings in the A/M area, visit the SREL Library, go on public tours, . . . will not be exposed to 'educational programs' that the Applicant offers as insufficient mitigation measure."

(a) Identify the "education programs" (including a reference to the specific pages in the CAR and ER that allegedly pertain to such programs) that are referenced in this statement.

(b) What is your basis for claiming that DCS is using such education programs as a basis for mitigation?

(c) Do you agree that individuals (including persons whose assigned duties do not involve exposure to radiation or radioactive materials) who perform ongoing activities within the controlled area may be subject to the 10 CFR § 70.61(f) performance requirements applicable to workers, if the individuals receive training that satisfies 10 CFR § 19.12(a)(1)-(5) and if appropriate

notices are posted in accordance with 10 CFR § 70.61(f)(2)? If not, provide the bases for your position, including citations to any statutes, regulations, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 5.2 Do you agree that 10 CFR § 70.61 does not specify any performance requirements for members of the public who make infrequent visits to the controlled area (as distinct from members of the public who perform "ongoing activities" within the controlled area)? If not, provide the bases for your position, including citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 5.3 Identify and fully explain why GANE contends that the controlled area designated by DCS for the MOX Facility "does not satisfy the NRC's requirement that a controlled area 'means an area, outside of a restricted area but inside the site boundary, access to which can be limited by the licensee for any reason.'"

INTERROGATORY NO. 5.4 Does GANE believe that DCS is prohibited from utilizing an agreement or protocol with the DOE (under which DOE personnel or contractors will exercise access control over the MOX Facility Controlled Area at the direction of DCS) to satisfy 10 CFR § 70.61(f)? If yes, provide the regulatory, scientific, technical, legal, and any other bases for GANE's position, including citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 5.5 Does GANE believe that, in order for DCS to demonstrate the requisite control of the MOX Facility Controlled Area under 10 CFR § 70.61(f), it must have the ability to exclude individuals for reasons unrelated to protection

of those individuals from radiological hazards of the MOX Facility? If yes, provide the regulatory, scientific, technical, legal, and any other bases for GANE's position, including citations to any statute, regulation, guidance, standard, or caselaw upon which you rely. In particular, identify the specific purposes or reasons, other than radiological protection, for which the applicant must be able to control access to the Controlled Area, and explain why such control is needed to provide reasonable assurance that the health or safety of the public is adequately protected.

INTERROGATORY NO. 5.6 Does GANE agree that, during normal operation of the MOX Facility, doses at the boundary of the Restricted Area for the MOX Facility will be less than 100 mrem/yr? If not, provide the bases for your answer.

(a) If it is assumed that doses at the boundary of the Restricted Area for the MOX Facility will be less than 100 mrem/yr during normal operation, does GANE agree that DCS need not limit access to the area between the Controlled Area boundary and the Restricted Area boundary in order to comply with the limits in 10 CFR Part 20 for doses to members of the public? If not, provide the bases for your position, including citations to any statutes, regulations, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 5.7 Identify and fully explain any bases GANE has for believing that DCS will not have sufficient control over the MOX Facility Controlled Area to comply with 10 CFR § 70.61(f). Provide the regulatory, scientific, technical, legal, and any other bases for GANE's position, including citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 5.8 GANE's contention states that "DOE improperly characterizes members of the public as MOX Facility workers." Did GANE intend to refer to "DCS," rather than "DOE?" If not, identify and fully explain each respect in which DOE improperly characterizes members of the public as MOX Facility workers.

INTERROGATORY NO. 5.9 If GANE intended to state that "DCS," rather than "DOE," improperly characterizes members of the public as MOX Facility workers for purposes of calculating radiological doses to the public during normal operations and accidents:

(a) Define "members of the public" as GANE has used that phrase in this contention. In particular, indicate whether this phrase is intended to include:

(i) SRS site workers not employed directly with operations at the MOX Facility (so-called "co-located" workers);

(ii) Personnel who may visit the SRS from time to time in the course of their professional or personal activities (such as package delivery personnel, site visitors, persons travelling through public highways on the SRS); or

(iii) Personnel whose activities do not cause them to enter the SRS and who reside outside the SRS.

(b) Identify and explain each respect in which DCS improperly characterizes members of the public as MOX Facility workers, in GANE's opinion. Provide the regulatory, scientific, technical,

legal, and any other bases for GANE's position, including citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

(c) DCS has committed to the NRC that during normal operation of the MOX Facility, doses at the Restricted Area boundary will be maintained below the dose limits set forth for members of the public in 10 CFR § 20.1301. (*See* CAR RAI Response No. 1.) Does GANE contend that if DCS complies with that commitment, it will not have satisfied NRC dose limits applicable to SRS co-located workers during normal operations? If yes, provide the regulatory, scientific, technical, legal, and any other bases for GANE's position, including citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 5.10 Identify and fully explain why GANE claims that "DCS's incorrect assumption about the appropriate controlled area boundary also adversely affects the adequacy of its physical security measures."

INTERROGATORY NO. 5.11 Identify and fully explain why GANE claims that "the design basis of the MOX Facility is not adequate to support approval of construction." Identify all bases, including reference to the specific design basis of principal systems, structures, and components, that GANE claims are inadequate or missing.

INTERROGATORY NO. 5.12 Identify and fully explain why GANE claims that the ER "incorrectly minimizes the environmental impacts of the MOX Facility on the public, by defining the public in an overly narrow way."

(a) ER Tables 5-11 and 5-13 identify the radiological consequences from normal operation and accidents at the MOX Facility. Identify each value in these tables that GANE believes is "incorrectly minimized," identify the value that GANE believes should be provided, and provide the bases for your response.

INTERROGATORY NO. 5.13 Identify and fully explain why GANE claims that the location of the Controlled Area boundary could affect either the frequency or severity of environmental impacts from the MOX Facility.

INTERROGATORY NO. 5.14 Identify and fully explain why BREDL claims that "DOE has difficulty securing [the SRS] from trespass."

INTERROGATORY NO. 5.15 Does GANE agree with CAR RAI Response Nos. 1 and 2 and ER RAI Response No. 9? If not, identify and fully explain each respect in which GANE claims that CAR RAI Response Nos. 1 and 2 and ER RAI Response No. 9 are inadequate or incorrect.

INTERROGATORY NO. 5.16 Identify each area within the SRS that you believe is open to access by members of the public. Provide the bases for your response.

INTERROGATORY NO. 5.17 Describe any bases GANE has for believing that, in the event of an emergency at the MOX Facility, DOE would not be able to limit access by the public to:

(a) Any of the public roads that run through the SRS, including Route 125, Road 1, and Road 278;

(b) The Crackerneck Wildlife Management Area and Ecological Reserve;

(c) The CSX right-of-ways for the two rail routes that run through the SRS;

(d) The Three Rivers Landfill; or

(e) Any other areas within the SRS.

INTERROGATORY NO. 5.18 Does GANE agree with the information and analyses in Sections 1.1.1.1 and 9.1.2.10 of the DSER? If not, identify the specific sentences in the DSER which GANE believes are incorrect, and identify the regulatory, scientific, technical, legal and any other bases for GANE's position.

E. GANE Contention 6 (Safety Analysis)

INTERROGATORY NO. 6.1 Identify and fully explain why GANE claims that the CAR fails to "provide[] a comprehensive assessment of all potential accident consequences." Identify all bases for this claim, including identification of inadequacies in DCS' methodology and associated parameters for identifying potential accident consequences.

INTERROGATORY NO. 6.2 GANE Contention 6 states the following: "Second it points out that the applicant has not provided sufficient information to determine the quantitative likelihoods of the accidents that it analyzes. See June 21, 2001 RAI regarding CAR at 39." In light of the response to RAI 39, the fact that this item does not exist on the NRC open item list, and the fact that no specific likelihood issues

are raised in the contention, what disagreement related to DCS' likelihood assessment does GANE still have? Explain the basis for your disagreement and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 6.3 Does GANE agree with DCS' assumption of a leak path factor of 10^{-4} based upon two banks of HEPA filters in the analysis of an internal fire bounding accident? If no, identify and fully explain what leak path factor GANE believes DCS should use in the analysis of an internal fire bounding accident. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response, and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 6.4 Does GANE agree that DCS' calculations using a HEPA efficiency of 99%, rather than the efficiency of 99.9% for the first stage HEPA filter and 99.8% for the second stage HEPA filter under accident conditions (Los Alamos report LA-10294-MS, Elder et al., "A Guide to Radiological Accident Considerations for Siting and Design of DOE Nonreactor Nuclear Facilities," (Jan. 1986); also in NUREG/CR-6410, Appendix F, p. F7), are conservative? If no, identify and fully explain what HEPA efficiency values should be used, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response, and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 6.5 Does GANE agree that structural damage to HEPA filters during an accident can be determined from the parameters listed in Table F-5 of NUREG/CR-6410? If not, identify and fully explain what parameters and what

values of the parameters cause structural damage to the HEPA filter, and what is the HEPA filter efficiency, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.6 Does GANE agree that HEPA filters exposed to temperatures less than 200°C as shown in Table F-3 of NUREG-CR-6410 will not degrade in filter efficiency? If not, identify and fully explain what will be the efficiency of the HEPA filter when exposed to 200°C, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.7 Does GANE agree that limiting the pressure drop across the HEPA filter to less than 10 inches of water as indicated in Table F-5 of NUREG-CR-6410 will prevent structural damage to the HEPA filter under accident fire conditions? If not, identify and fully explain what limiting pressure drop will prevent structural damage to the HEPA filter, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.8 Does GANE agree that undamaged HEPA filters will have minimum efficiencies of 99.9% for the first stage and 99.8% for the second stage under accident conditions? If not, identify and fully explain what is the minimum efficiency for undamaged HEPA filters under accident conditions, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.9 Does GANE agree that spark arrestors will prevent fire brands, other burning debris and sparks suspended in the exhaust flow from reaching the HEPA filters? If not, identify and fully explain what fire brands, other

burning debris and sparks suspended in the exhaust flow will reach the HEPA filter, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.10 Does GANE agree that plugging of HEPA filters by smoke and/or water will not cause structural damage to HEPA filters if the pressure drop across the HEPA filter is limited to 10 inches of water or less? If not, identify and fully explain what structural damage will occur to HEPA filters limited to 10 inches of water, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.11 Does GANE agree that computational methods can be used to estimate the temperature of the exhaust and the mass of smoke entering the HEPA filters from bounding fires? If not, identify and fully explain what methods can be used to determine the challenge to HEPA filters from potential fires, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.12 Does GANE claim that a water spray/demister system as specified in DOE Standard DOE-STD-1066-1999 is necessary to protect HEPA filters from high exhaust temperatures due to fires even if the exhaust temperature is less than 200°C? If yes, identify and fully explain what benefit the water spray/demister has in protecting the HEPA filters from potential fires, in GANE's opinion. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.13 Identify and fully explain why GANE claim that the DCS safety analysis fails to "provide[] a credible assessment of all potential accident likelihoods," including any alleged inadequacies in DCS' methodology for determining the likelihood of potential accidents. Identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.14 Identify and fully explain why GANE claims that the safety analysis "does not provide information of sufficient detail and quality to enable the NRC to make a determination pursuant to 10 CFR § 70.23(b)." Identify and fully explain each deficiency of "detail and quality" alleged, and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 6.15 Identify and fully explain why GANE contends that the DCS safety analysis "fails to correctly identify and carry out consequence assessments for accident scenarios with 'bounding' consequences." Identify and fully explain which accident scenarios, and what bounding consequences, GANE is referring to in this contention. Identify and fully explain each perceived deficiency in identification and implementation, and identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.16 Identify and fully explain why GANE claims that DCS has "underestimated the consequences of" bounding accident scenarios.

INTERROGATORY NO. 6.17 Identify and fully explain why GANE claims that DCS "may not have applied engineered and/or administrative controls to the extent necessary to meet the performance requirements established in 10 CFR § 70.61 and the defense-in-depth requirements of 10 CFR § 70.64(b)." Identify and fully explain which

specific performance requirements GANE is referring to in this contention. Identify each perceived deficiency in engineered and/or administrative controls, and identify the regulatory, scientific, technical, legal, and any other bases on which GANE bases its response.

INTERROGATORY NO. 6.18 Does GANE contend that DCS is required to demonstrate that it meets the requirements of 10 CFR §§ 70.61, 70.62, and 70.64 in order to receive construction authorization? If yes, identify the basis for your opinion, including citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 6.19 Identify and fully explain why GANE claims that DCS is not meeting the defense-in-depth requirements of 10 CFR § 70.64(b).

INTERROGATORY NO. 6.20 Identify and fully explain each respect in which GANE contends that the DCS safety analysis "incorrectly considers the controlled area boundary of the MFFF to be coincident with the SRS site boundary when evaluating accident impacts to the public," to the extent GANE has not fully responded to this interrogatory under Section D above.

INTERROGATORY NO. 6.21 Identify and fully explain why GANE claims that DCS' "projected doses to the public [may be] considerably below the correct values."

INTERROGATORY NO. 6.22 Identify and fully explain why GANE claims that DCS "has not provided adequate justification for its choice of 'bounding' accidents."

INTERROGATORY NO. 6.23 Does GANE agree with DCS' response to the June 8, 2001 ER RAI referenced in GANE's Basis Statement for this contention? If not,

identify the specific ER RAI Response referenced by GANE and fully explain each respect in which GANE claims that DCS' ER RAI Response is inadequate or incorrect.

INTERROGATORY NO. 6.24 Identify and fully explain each bounding accident which GANE claims that DCS improperly failed to evaluate in the CAR.

INTERROGATORY NO. 6.25 Identify and fully explain why GANE claims that DCS "has not provided sufficient information to determine the quantitative likelihoods of the accidents that it analyzes."

INTERROGATORY NO. 6.26 Does GANE agree with DCS' response to the June 21, 2001 CAR RAI referenced in GANE's Basis Statement for this contention? If not, identify the specific CAR RAI Response referenced by GANE and fully explain each respect in which GANE claims that DCS' CAR RAI Response is inadequate or incorrect.

INTERROGATORY NO. 6.27 Identify the specific page and section from NUREG/CR-6410 that provides a respirable airborne release fraction ("RARF") different from that cited in the CAR, and provide the numerical value cited therein.

INTERROGATORY NO. 6.28 Identify and fully explain why GANE claims that the RARF given in NUREG/CR-6410 is not applicable to the conditions expected in the buffer storage unit of the MOX Facility during a fire.

INTERROGATORY NO. 6.29 Identify and fully explain what RARF, in GANE's opinion, is appropriate for a release from a fire in the plutonium oxide buffer storage unit of the MOX Facility.

INTERROGATORY NO. 6.30 Identify and fully explain why GANE claims that "an accident which is clearly bounding but is not analyzed in detail in the CAR is a hydrogen explosion in the sintering furnace."

INTERROGATORY NO. 6.31 Identify and fully explain why GANE claims that the defense-in-depth provisions provided by the Process Safety Instrumentation and Control ("I&C") System may be inadequate.

INTERROGATORY NO. 6.32 Identify and fully explain, in GANE's opinion, what gaps and limitations are in the data on HEPA filter efficiencies under conditions involving a hydrogen explosion in a sintering furnace.

INTERROGATORY NO. 6.33 With respect to the MACCS2 calculation referenced by GANE, identify and fully explain who performed the calculation, what the assumptions were in the calculation, and what the results were of the calculation.

INTERROGATORY NO. 6.34 In GANE's opinion, are there any systems, structures, or components that should have been, but were not, designated by DCS as principal structures, systems, or components ("SSCs") needed to provide reasonable assurance of protection against the consequences of potential accidents, as required by 10 CFR § 70.23(b)? If yes, identify the SSCs in question and provide the bases for your response.

INTERROGATORY NO. 6.35 Does GANE agree that the CAR does not designate the HEPA filters as a principal SSC with respect to a hydrogen explosion in the sintering furnace?

(a) Does GANE believe that the HEPA filters should be designated as a principal SSC with respect to a hydrogen explosion in the sintering furnace? If yes, provide the bases for your answer.

(b) Does GANE agree that the HEPA filters are a defense-in-depth feature with respect to a hydrogen explosion in the sintering furnace?

(c) Does GANE agree that the CAR designates the Process Safety Instrumentation and Control System as the principal SSC with respect to a hydrogen explosion in the sintering furnace?

(d) Does GANE agree that the Process Safety Instrumentation and Control System is designed with redundancies such that its function may be performed in the event of a single failure in the system? If yes, does GANE agree that the redundancies provided in this system constitute defense-in-depth under 10 CFR § 70.64(b)? If not, provide the bases for your answer.

F. GANE Contention 9 (Cost Comparison)

INTERROGATORY NO. 9.1 Identify and fully explain why GANE contends that the ER "does not provide any discussion of the costs of the proposed MOX Facility, or make a comparison to the costs of other alternatives." In particular, identify all costs of the MOX Facility that GANE believes have been omitted from the ER, and identify which costs of the MOX Facility should be compared to the costs of other alternatives. Also, identify the specific alternatives which GANE believes should be used in the cost comparison.

INTERROGATORY NO. 9.2 Does GANE contend that the ER is required to contain a discussion of the economic impacts of accidents: (a) at the MOX Facility; or (b) in the course of transportation of feed material and finished fuel? If GANE's answer is

yes to either of these questions, explain the basis for your answer and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 9.3 Describe what GANE means when it refers to the "economic costs of impacts to human health" in its Basis Statement for this contention. Does this phrase refer to any impacts not identified in response to INTERROGATORY NO. 9.1? If so, identify such impacts and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 9.4 Describe what GANE means when if refers to the "economic costs of loss of habitable land through contamination" in its Basis Statement for this contention. Does this phrase refer to any impacts not identified in response to INTERROGATORY NO. 9.1? If so, identify such impacts and provide citations to any statute, regulation, guidance, standard, or caselaw upon which you rely.

INTERROGATORY NO. 9.5 Identify and fully explain why GANE claims that "the information provided in [the DOE's Surplus Plutonium Disposition EIS] has been superseded by recent information from DOE."

INTERROGATORY NO. 9.6 Provide a specific dollar amount for each cost that GANE claims should be provided in the ER for the MOX Facility. Provide the basis for each cost.

G. GANE Contention 11 & BREDL Contention 1E (Aqueous Polishing Waste Stream)

These contentions have been consolidated into Contention 11. By letter to the ASLB and the parties dated January 18, 2002, GANE and BREDL designated GANE as the lead party on consolidated Contention 11. As a result, separate responses by both GANE and BREDL to the following interrogatories are not necessary, unless BREDL

does not concur with and adopt GANE's response. In such cases, if any, BREDL should provide its own separate responses to the following interrogatories.

INTERROGATORY NO. 11.1 Identify and fully explain why GANE contends that the ER "understates the impacts of the waste stream from aqueous polishing to remove gallium."

INTERROGATORY NO. 11.2 Identify and fully explain why GANE contends that the ER "doesn't acknowledge problems with the [aqueous polishing] process in Europe." Identify specifically what "problems with the [aqueous polishing] process in Europe" GANE is referring to in this contention, and the applicability of these problems to the MOX Facility. What information on the MOX Facility aqueous polishing process is not provided in the ER that GANE believes is necessary to adequately evaluate the environmental impacts of that process?

INTERROGATORY NO. 11.3 Identify and fully explain why GANE contends that the ER "adds to burden of radioactive waste at SRS without designing a plan for managing the waste as required under NEPA."

INTERROGATORY NO. 11.4 Identify and fully explain why GANE claims that "no plan has been proposed by DCS or NRC to accommodate this large amount of waste."

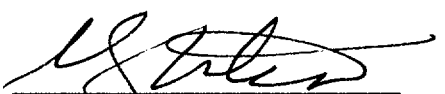
INTERROGATORY NO. 11.5 Identify and fully explain why GANE or BREDL claims that "the applicant's analysis and [environmental] report is dominated by deficiencies."

INTERROGATORY NO. 11.6 In GANE's opinion, what will be the volume and contents of the waste stream from the aqueous polishing process at the MOX Facility? Provide the bases for your response.

INTERROGATORY NO. 11.7 In GANE's opinion, what will be the environmental impacts associated with the waste stream from the aqueous polishing process at the MOX Facility? Provide the bases for your response.

Dated: May 31, 2002

DUKE COGEMA STONE & WEBSTER



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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
Thomas S. Moore, Chairman
Charles N. Kelber
Peter S. Lam

In the Matter of	)	May 31, 2002
DUKE COGEMA STONE & WEBSTER	)	Docket No. 070-03098-ML
(Savannah River Mixed Oxide Fuel Fabrication Facility)	)	ASLBP No. 01-790-01-ML

CERTIFICATE OF SERVICE

I hereby certify that copies of "Duke Cogema Stone & Webster's First Set of Interrogatories to Georgians Against Nuclear Energy and Blue Ridge Environmental Defense League" were served this day upon the persons listed below, by both e-mail and United States Postal Service, first class mail.

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Marjan Mashhadi

5/31/02

Date