



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

AUG 11 1993

Docket No. 70-3070

Louisiana Energy Services, L.P.
ATTN: W. Howard Arnold
President
2600 Virginia Avenue, N.W.
Suite 608
Washington, DC 20037

Dear Mr. Arnold:

We have reviewed the June 18, 1993, version of your proposed license conditions. We have two major comments:

- 1) We previously requested you to delete certain descriptive material. However, it appears that you went too far. For instance, LES has removed the commitment to treat the gaseous effluent along with the descriptive information that was contained in Chapter 5. The actual commitments need to be reinserted into the license conditions.
- 2) LES should carefully review the SAR (particularly sections 4.3 and 6.3) and extract those limiting conditions of operation that are important to safety. For example, if a particular system should not be operated above a set temperature and/or pressure, there should be a commitment in Chapter 6 of the license conditions that specifies that this system will not be operated above the temperature and/or pressure. The staff has not completed the process of reviewing the license conditions in connection with the SAR to determine if all the important requirements from the SAR are reflected by license conditions. However, the staff review is far enough along to recognize that the proposed license conditions do not adequately reflect the safety commitments from the SAR.

The enclosure contains additional comments on LES's proposed conditions. These comments should be considered in light of the above discussion. The comments provided in the enclosure are of two types: general and specific. The general comments reflect those items that should be changed throughout the document or items that LES should consider but which will not be required. The specific comments relate to the actual proposed conditions and should be addressed in your response.

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W. Howard Arnold, President

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In order to minimize impact on our review schedule, please submit revised conditions which reflect these comments as soon as possible. We are available to meet with you to answer questions and expedite the process. The project manager is Dr. Lidia Roche, 301-504-2695.

Sincerely,

Original Signed By

John W. N. Hickey, Chief
Enrichment Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

Enclosure: Comments on
License Conditions

cc: Attached list

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General Comments

1. Include a definitions section.
2. Whenever the license conditions designates a named official "or designee" as the approving official for a number of activities, add "equivalently qualified designee."
3. Specify the time frame for submitting changes on those plans where the changes do not decrease the effectiveness of the plan, e.g., Emergency Plan, FNMC Plan, Physical Security, etc.
4. Replace §§ 20.1001-20.2401 by §§ 20.1001-202402.
5. Consider implementing a tracking system which should include corrective actions from audits and inspectors findings, as well as audits.
6. There is no need to propose commitments that are already required by regulations.
7. Regarding validation of computer codes and verification of software, include the requirement that software control will be in accordance with Part 2.7, "Quality Assurance Requirements of Computer Software for Nuclear Facility Applications," of the NQA-2a-1990 Addenda to "ASME NQA-2-1989 Edition Quality Assurance Requirements for Nuclear Facility Applications" or some other acceptable software QA standard.

Specific Comments

Chapter 1 Standard Conditions and Special Authorizations

§ 1.1 Name, Address, and Corporate Information

1. First line. Delete first word i.e. "LES" before "Louisiana Energy Services, L.P....".
2. Delete second and third sentences.
3. Add site address.

§ 1.2 Site Location

4. Define the areas where licensed activities are to be conducted.
5. Delete last three sentences.

§ 1.3 License Number and Period of License

6. Delete this section.

§1.4 Possession Limits

7. Possession limits should be given in metric units with English units in parenthesis.

§ 1.4 A Special Nuclear Material

8. Add "(SNM)" after the heading "Special Nuclear Material".

9. Add another sentence at the end of the first bullet to read as follows: "That is, the measured U-235 enrichment value plus its measurement uncertainty at the 95% confidence level (expressed as absolute weight percent U-235) shall not exceed 5.000."

10. Add another sentence at the end of the second bullet which specifies the maximum amount of uranium SNM to be possessed at any one time that can exist in a chemical form other than UF_6 .

§ 1.4.B. Source Material

11. Add "(SM)" after the heading "Source Material."

12. Modify the last two lines of third bullet to read as follows: "...longer than 15 years following its removal (disconnection) from the CEC cascade enrichment system."

13. Add another sentence to the last bullet which specifies the maximum amount of SM uranium to be possessed at any one time that can exist in a chemical form other than UF_6 .

14. If LES were to possess the maximum quantity of natural and depleted UF_6 , the possession limit for source material would be exceeded by 42,400 pounds.

§ 1.4.C. Byproduct Material

15. Delete the paragraph beginning with "Additional radionuclides may be..." including the two bullets. This is unlikely to occur in the near future. LES can not add additional radionuclides without NRC approval. LES must apply for a license amendment if it decides to apply a newly developed calibration and sample processing technology requiring use of radionuclides not specified in this section.

§1.5 Authorized Activities

16. Add specific uses of the individual byproduct radionuclides.

17. § 1.5.D. Revise this statement to read as follows: "Chemical, spectrometric, radio-chemical, and non-destructive assay analyses of SM and SNM materials, including effluents and stored waste."

18. § 1.5.E. Delete the words "hazardous" and "industrial." The NRC does not authorize treatment, etc., of hazardous and industrial wastes.

§ 1.5.1. Location Where Material Is Used

19. Do not describe processes where licensed material will be used. Just identify the locations where licensed material will be used. For example, delete the following sentences:

- First paragraph, first and last sentence.
- Second paragraph, all except first and fifth sentences.

§1.6 Exemptions and Special Authorizations

20. Commit to update the SAR and ER on a set frequency; at least once in two years.

21. Is it LES' intent to label all containers on site in accordance with 10 CFR 20? An exemption from labeling requirements could be considered.

§1.6.1 Safety Evaluation Process

22. Commit to inform the NRC regarding changes which affect but do not decrease the effectiveness of the QA program as described in the SAR.

23. Delete item (b) since it is required by regulations.

24. Add items f, g, and h to the list as follows: f) unreviewed safety issues, g) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, and h) a significant increase in individual or cumulative occupational radiation exposure.

§1.6.2 Exemptions and Special Authorizations

25. Note that 1.6.2.A is based on letter the we sent you. However, the NRC is currently reviewing this issue as applicable to all licensees and it is unresolved at this time.

26. Under B, commit to inform the NRC of a change within a definite period (e.g., 30 days) so that the staff has an up-to-date record of CEC owners, lienholders, etc..

27. Under C, add the date of the Guideline and state that it is provided as Appendix A. Section 1.8 can then be deleted.

§1.7 Financial Information and Commitments

28. The once a year reporting required by License Condition 1.7.A is probably sufficient for sale-leasebacks provided LES considers sale-leasebacks to be changes in ownership and plans to report them. However, for limited partner changes, commit to report the information sooner in case problems come up during the year (e.g., bankruptcy) in which the NRC would need to have current information. Add a statement to this section with such a commitment.

§ 1.8 Reference for Section 1

29. Delete this section. Replace "Reference 1" in Section 1.6.2.C by "Appendix A."

Chapter 2 Organization and Administration

§ 2.1 Organizational Responsibilities and Authority

30. Provide organization chart/s.

31. Under A, add the following to the end of the paragraph: "The CEC Manager shall have the authority to approve and issue Department Directives and procedures."

32. Under H, last word, capitalize first letter of the word "manager."

§ 2.2 Personnel Education and Experience Requirements

33. State that the CEC Manager shall hold, as minimum, a bachelor's degree in an engineering or scientific field and have a minimum of six years of responsible nuclear experience.

34. State that the QA Manager shall have at least two years experience in a QA organization at a nuclear facility.

35. State that all Superintendent shall hold, as a minimum, a bachelor's in an engineering or scientific field and have a minimum of four years of responsible nuclear experience.

36. State that the Health Physics Manager shall hold, as a minimum, a bachelor's in a scientific field, and three years of responsible experience in the areas of health physics, chemical safety and industrial safety.

37. The Project Manager shall hold, as a minimum, a BS degree in an engineering or scientific field and have three years of responsible nuclear experience, including one year of experience in the administration of nuclear criticality safety reviews.

38. Specify the type of equipment in the statement "training of personnel in use of equipment."

§2.3 Safety Committee

39. First paragraph, specify:

- what types of technical review will be done by FSRC.
- whether members of FSRC are also the auditors for the annual audit.

40. The safety committee should also review the training program, incident reports, root cause reports, and violations of regulations or license conditions.

41. Provide specific conditions on the selection of auditors and FSRC members.

§2.5 Training

42. Commit to providing training to FSRC members in audit procedures and on possible error modes of management control systems.

43. Include QA training in the formal, planned, and documented training program for all LES employees.

44. Training should also cover visitors and contractors.

45. Commit to provide indoctrination training to all employees before they perform work at the CEC.

46. Training should also address Part 19 issues and environmental protection.

47. Training and retraining should also include chemical and industrial hazards, in addition to radiological and criticality safety control.

48. Add fire safety preparedness to the disciplines included in the indoctrination training of employees.

49. Delete the last full sentence on Page 2-9.

§2.6 Operating Procedures

50. The sentence beginning "Before initial enrichment" should be changed to reflect that procedures will be in place and all training on procedures will be conducted prior to initiation of operations. The part about availability for NRC inspection should be deleted. Procedures are always available for NRC inspection.

51. State clearly in this section that procedures will identify limits and controls important to safety.

52. State clearly in this section that there will be procedures for the maintenance and testing, of systems and components, and instrumentation (including calibration) important to safety.

53. Procedures should be reviewed for adequacy at least once every two years (Maximum intervals of 27 months).

§2.6.1 Preparation of Procedures

54. Define term "required procedure." Suggest revising first line to read: "Each procedure involving licensed materials shall be prepared"

55. In the first paragraph, "Safety-related procedures," should be changed to "Procedures important to safety."

56. Move the second paragraph to Section 2.6.
57. Clarify whether the independent review is to be outside the department or outside LES.

§2.6.2 Changes to Procedures

58. Under A, add "shall" after "preparer" and make "documents" singular.
59. Under B, revise "the change is not implemented" to "the change shall not be implemented."
60. Under C, add "one or more" after "by", delete "a" and make "reviewer" plural.
61. Under D, identify the position title under which chemical and/or radiation safety, criticality safety and MC&A reviews will be performed.
62. Include a review on the effect of changes in environmental effluents.

§2.7 Internal Audits and Inspections

63. Define audits and inspections.
64. Include preventive maintenance, training, emergency planning, and QA in the list of minimum activities to be assessed by the audit program.
65. Define "annually" and "semi-annually," such as annually = 360 ± 30 days.
66. Clarify if the audit discussed in this section is the same as that conducted by the FSRC. Page 2-12, first paragraph, to the last sentence add: "for each of the areas."
67. Page 2-12, second paragraph:
- inspections is in the midst of paragraphs concerning audits. It should be moved to the end of Section 2.7.
 - delete "routinely" and insert "in accordance with a written plan. Also in the second sentence, replace semi-annually by "quarterly."
 - third sentence: insert after "action," "shall be documented in a written report going to the appropriate manager for follow-up action."
 - clearly indicate who (by position title) is responsible for the inspection program.

§2.8 Investigations and Reporting

68. Suggest revising the first paragraph: To comply with Special Nuclear Material reporting requirements (e.g., 10 C.F.R. § 70.50), off-normal occurrences shall be reported to and investigated by the Compliance Superintendent. Reporting any reportable occurrence to the appropriate agency(s) shall be the responsibility of the Compliance Superintendent.
69. Investigations should include root cause analysis.

70. Environmental protection should also be addressed if appropriate.

Chapter 3 Radiation Protection

§3.1.1 ALARA Policy

71. There should be a commitment to prepare an ALARA report at least annually. The report should include reviews of radiological exposure and effluent release data for trends; required audits and inspections; and the use, maintenance, and surveillance of equipment for exposure and effluent control.

72. Identify the position responsible for preparing the ALARA report. Commit to submit it to the CEC Manager, and the members of the FSRC.

§3.1.2 Radiation Work Permit Procedures

73. Suggest the word closeout instead of termination of the RWP.

74. RWPs should be issued for activities at a fraction of the levels specified in the regulations.

75. The RWP should be posted at the location of the work area.

76. Second bullet. Add Radiation Control Zones (RCZs) to Radiation Control Areas (RCAs). Replace "radioactive contamination" by "radiation exposures exceeding action levels."

77. Delete the first sentence of the third bullet.

§3.1.3 Written Procedures

78. Add the word "written" between "approved" and "procedures."

§ 3.2.1 Restricted Area- Personnel Contamination Control

79. Describe the minimum protective clothing required in RCAs and RCZs.

80. Last sentence. Describe the type of monitoring personnel will be required to perform upon exiting the RCA. Include the type/s of instrument/s that will be used.

81. Third line. Add "external" before "radiation levels."

82. For clarity, separate discussions of RCA and RCZ.

§ 3.2.2 Ventilation

83. Define "TSA."

84. Second line. "Particulate" should be plural.

85. Commit to using filters. Provide filter types, their particulate removal efficiencies, their testing and criteria for replacement.

86. Provide the air flow rate through the plant exhaust stack.

87. Require filters to be replaced if the filter or exhaust system fails to function properly or if the differential pressure exceeds the manufacturer's rating for the filter. The integrity of the HEPA filters should be evaluated based on some criteria (i.e pressure differential across the filter).

§ 3.2.3 Work Area Sampling

88. Set action levels for investigation and corrective action.

89. The representativeness of the work station air samplers should be checked annually as well as when process or equipment changes have been made.

90. Second paragraph. State whether the Alpha-in-air monitors are active or passive. Identify the radionuclides for which airborne concentrations will be determined using Alpha-in-air monitors. Provide the LLDs for these radionuclides.

91. Commit to provide locations of air monitors for NRC review and approval prior to operations.

92. Second paragraph, third line. Insert "air" between "continuous" and "samples."

93. Second paragraph, fourth line. Insert "and analyzed" between "changed" and "at."

94. First bullet, first line. Replace "or" by "and". Replace "leading" by "that may lead." On the second line, insert a comma after the first word ("uranium") and "concentration" should be plural.

95. Second bullet, first line. Before "following", replace "or" by "and."

96. Last paragraph. Move this paragraph to Section 3.2.6 entitled "Surface Contamination."

97. Provide action levels in terms of radionuclides air concentrations and describe the actions to be taken if these levels are exceeded.

§3.2.4 Radioactivity Measurement Instruments

98. Need in appropriate section of License Conditions, a commitment to leak test calibration sources.

99. Provide more detail in this section such as a list of instruments, their alarm set points, calibration requirements, maintenance, etc.

§ 3.2.5 Radiation Exposure

100. Replace "Whole Body:" by "TEDE:" which is the total effective dose equivalent and consists of an annual exposure resulting in a 50-year committed internal dose component and an external dose component.

101. § 3.2.5.1, second bullet. Move information contained in this bullet to Section 3.2.6 entitled "Surface Contamination." Describe the minimum protective clothing requirements for areas with removable surface contamination greater than 1000 dpm/100 cm² beta-gamma or greater than 20 dpm/100 cm² alpha.

§3.2.6 Surface Contamination

102. Describe methods of surface contamination surveys.

103. Specify survey frequencies.

104. Surveys should be conducted for areas other than just the UF6 process areas. For example the TSA, storage areas, change rooms, cafeteria, etc.

105. Specify the limits for cleanup.

§3.2.7 Bioassay Program

106. First paragraph. The first sentence may be interpreted as a commitment to perform bioassay measurements for all personnel wearing external dosimetry devices. Is this the intent? If not then provide criteria for performing bioassay measurements.

107. Commit to conduct bioassay measurements in accordance with guidance associated with 10 CFR 20. Describe the bioassay program by providing measurement methodologies, sample collection frequencies, MDAs, etc.

108. Commit to evaluating internal doses quarterly.

109. Bioassay should occur sooner than 72 hours after suspected or known exposures. Specify the time period that would allow detection of an intake of 10 mg.

110. Set action levels for work restriction.

Chapter 4.0 Nuclear Criticality Safety

111. Commit to include nuclear criticality safety limits on parameters to be controlled and corrective measures to return a parameter to its normal control band in the operating procedures.

§ 4.1.2. Management Responsibilities

112. Second paragraph. Add the following sentence at the end of the second paragraph: "This process shall consider the results of nuclear criticality safety inspections and audits."

§ 4.1.4 Operating Procedures

113. Commit to conducting nuclear criticality safety department activities, in accordance with written procedures. Such procedures shall be approved by the nuclear safety manager.

114. Following treatment of used Fomblin oil but prior to releasing the oil from safe mass control, commit to analyze two independent samples for both the waste and the recovered Fomblin oil. Agreement between sample results shall be obtained or the entire sampling and analysis process shall be repeated.

115. Commit to analyze every week at least two independent samples of the contents of each effluent collection tank in the UF₆ handling area. Agreement between sample results shall be obtained, or the tank shall be resampled. If the U content exceeds 100 ppm, LES shall sample the tank on each operating shift until the source of the uranium is identified and controlled.

116. Commit to analyze two independent samples of each TSA effluent collection tank when one-half full and prior to discharge. Agreement between results shall be obtained or the sampling process shall be repeated until agreement is obtained. If the contents exceeds 1000 grams uranium, corrective action shall include hourly sampling until the source of the uranium is identified and controlled.

117. Commit to limit the Chemical Laboratory area to not more than 7.0 kilogram of uranium. The administrative limit shall be ensured maintaining a current inventory by logging transfers into and out of the laboratory.

118. Last paragraph. Provide the action levels and actions to be taken if these levels are exceeded, for accumulation of uranium in filters and duct work.

119. Commit to surveying ventilation ducts servicing the enriched uranium processing areas annually (maximum interval of 15 months).

§ 4.1.5 Posting

120. Provide details regarding posting of criticality safety limits in the TSA.

§Section 4.1.6 Preoperational Testing and Inspection

121. Insert "criticality" before "safety evaluations."

§ 4.1.7 Design Procedures

122. Commit to establish a configuration control program and, within 90 days of the issuance of the license, submit it to the NRC for approval. The configuration control program shall, as a minimum, include the following:

a. For all possession, use, and storage activities with enriched uranium at the facility, LES shall maintain written records of: (1) the current description of all enriched uranium processes at the facility, (2) a current identification of potential criticality accidents which were identified by a systematic hazards analysis process for all current activities, (3) for each of the potential criticality accidents identified above, a current safety analysis which identifies all necessary limits on parametric controls to prevent an inadvertent critical configuration, and (4) administrative requirements to ensure that the engineered systems to limit the parametric controls will be installed, maintained, and operated as designed.

b. For each potential criticality accident identified above, LES shall implement and maintain independent engineered or administrative controls such that the double contingency principle of ANSI/ANS-8.1 is satisfied.

c. In addition to identifying the limits and controls in (a) above, LES shall document the requirements for maintenance, surveillance, personnel training, posting, and control of written procedures to ensure the effectiveness of the limits and controls.

123. Prior to the use of vacuum pumps, LES shall provide to the NRC a safety analysis which demonstrates the use of the solid angle method for safely spacing vacuum pumps, and shall obtain NRC approval of the use of the solid angle method.

§ 4.2.2 Multiple Units or Arrays

124. Prior to using the MONK code for CEC process design changes which are made without NRC approval, state that a summary report on the MONK code will be provided. The report shall specify the range of applicability and other parameters specified in ANSI/ANS-8.1. The validation report shall be maintained at the CEC facility.

125. Commit to maintain a minimum 30-centimeter spacing, edge-to-edge, between units spaced by the surface density method.

§ 4.2.4 Special Controls

126. Delete the first sentence. It is not a license condition.

127. For the centrifuges, cascades, and assay units, commit to:

a. Limit the maximum inside diameter of the centrifuge housings to the safe diameter specified in Table 4.2-1 of the Proposed License Conditions.

b. Introduce no enriched uranium as feed material to the cascades.

c. Provide control room monitoring of cascade header pressure, power, feed supply power, feed supply pressure and valve position, cooling water temperature and flow, product take-off system pressure and valve position, and tails take-off system pressure and valve system. For unusual monitoring results, procedures shall describe corrective action including shutdown requirements.

d. Provide no interconnections which would allow enriched uranium to flow to the feed system.

e. For each authorized enrichment campaign, calculate the control valve settings and instruct the operators, in writing, of the correct valve settings. The new valve settings shall be independently confirmed and recorded. If resulting pressures do not compare with predicted pressures, corrective actions shall be initiated.

f. For each new campaign, analyze the UF_6 product for enrichment within 24 hours and compare the results with predicted results. If an adjustment is required, the actions in (f) above shall be repeated.

g. Analyze samples from each cascade at least every 6 months (maximum 7 month intervals) for enrichment. Adjustments to operating parameters shall be made, if necessary, as in (f) and (g) above.

128. For the product take-off system, commit to:

a. Verify by cylinder weight, baroscope inspection, and vacuum testing that no internal contaminants are present before the cylinder is brought to the loadout area.

b. Limit the contents of each product cylinder to the authorized fill limit by use of the continuously monitored load cell system. Prior to initial use of the load cell system, a maintenance and test program shall be developed and implemented.

c. Vent volatile gases to the Product Vent System. Investigations shall be conducted and corrective actions taken whenever a predetermined number of vent cycles per cylinder has occurred.

d. During and after filling cylinders in the product filling station and prior to moving the cylinder, solidify the UF_6 only with cool air.

e. Heat product cylinders for blending or sampling only in autoclaves and only by using electrically heated air. The autoclave pressure and temperature shall be automatically controlled, continuously monitored, and alarmed during the heating cycle. After blending or sampling, but prior to moving the cylinders, solidify the UF_6 by circulating water in structurally independent cooling coils which are external to the autoclave.

f. Limit the hydrogen to uranium ratio to not more than 1.0.

129. On a quarterly basis (maximum interval of 4 months), commit to inspect the product and product blending desublimers to verify that no solid uranium compounds remain in the desublimers after the UF_6 is transferred to the product cylinders. If uranium solids are present, the material shall be removed prior to reuse of the desublimers system.

130. For each product and product blending desublimers system, commit to:

a. Use only chemical traps, pumps, and piping which satisfy the geometric limits specified in Table 4.2-1, of the Proposed License Conditions.

b. Maintain a positive pressure nitrogen atmosphere between the inner desublimers vessel and the outer shell. The positive pressure shall be continuously monitored and alarmed to detect loss of atmosphere.

c. Heat and cool the desublimers vessel by freon in external closed loop heating and cooling coils.

d. Fit each inlet and outlet pipe with two valves in series, each of which is automatically operated by signal from continuous monitoring pressure and temperature sensors.

e. Record the number and frequency of cylinder vents to control the desublimers inventory and to detect abnormal venting intervals. Any abnormal venting shall be investigated.

f. Develop and implement a preventative maintenance and test program for the nitrogen pressure monitor alarm system, the pressure temperature sensors and valve system, and the vent frequency and interval monitoring system.

131. For chemical traps for mobile pump sets, commit to:

a. Limit the trap inside diameter to 18.5 centimeters.

b. Limit the pump free volumes to not more than 7 liters.

c. Limit the K_{eff} of each pump set to not more than 0.93.

d. Provide a frequency for weighing and replacing the activated carbon in the chemical traps.

132. Provide a survey frequency for verifying that no uranium is accumulating in the contingency dump traps. Provide action levels and corrective actions to be taken if the action levels are exceeded.

133. For contingency dump traps, commit to:

- a. Limit the inside diameter of the dump traps to not more than 51.7 centimeters.
- b. Prior to use, independently verify and document that the contingency traps have been loaded with the correct amount and type of NaF power and pellets.
- c. Replace the trap media immediately following an emergency dump.

134. For process piping, commit to limit inside diameters of process piping to not more than 21.9 centimeters. When the process requires pipe bends or pipe intersections, the piping shall fit inside a maximum 18 centimeter inside diameter envelope.

Chapter 5 Environmental Protection

135. Add page numbers to the figures and tables.

§5.1 Effluent Control Systems

136. At a minimum, there should be a commitment that effluent streams are treated.

§5.1.1 Gaseous Effluents

137. Filters should be removed at least daily and analyzed for gross alpha and not weekly as stated.

138. Composites of the daily samples should be done quarterly and analyzed for uranium with an LLD of less than or equal to $1\text{E-}18 \mu\text{Ci/ml}$.

139. Clarify whether action levels and LLDs are for the weekly or quarterly analysis. Action levels and LLDs should be set for both the daily and quarterly samples.

140. Suggest adding a commitment as follows: "If a parameter important to the dose assessment changes, a report shall be submitted within 30 days which describes the changes in parameters and includes an estimate of the resultant change in dose commitment. In the event the calculated dose to any member of the public in any consecutive 12-month period is about to exceed the limits specified in 40 CFR 190.10, immediate steps shall be taken to reduce emissions so as to comply with 40 CFR 190.10. A report shall be prepared and submitted to the Commission within 30 days which identifies the cause of exceeding the limit and the corrective actions to be taken to reduce release rates."

141. In Table 5.1-1, why are the action levels different for the 3 units? They should be the same.

§5.1.2 Liquid Effluents

142. In the first paragraph LWD should be spelled out.

143. In the second paragraph, the reference to Part 20 release limits should contain the Part 20 Table number.

144. It is not clear if the LWD or the STS sample is the one to be used to show compliance with Part 20. Please clarify.

145. Composites of the compliance sample should be done and sampled quarterly for uranium and for Tc-99. Specify LLD for these samples.

146. The LLD for the STS sample should be much lower than (at least a factor of 10) as opposed to at the range of the action level.

147. Specify the LLD for gross beta.

148. The sludge from the STS system should be sampled semiannually for uranium accumulation.

149. Suggest adding the following commitments:

- The NRC shall be informed within 30 days if the State-permitting agency revokes, supersedes, conditions, modifies, or otherwise nullifies the effectiveness of the State-issued NPDES permit for the discharge of liquid effluents.

- The NRC shall be informed within 15 days if the State-issued NPDES permit for the discharge of liquid effluents is violated.

150. Second paragraph. State whether the Sewage Treatment System effluent is released on a continuous or batch basis. Commit to conducting continuous or batch sampling accordingly.

151. Last paragraph. Add "less than or equal to" after "activity shall be."

§5.2 Environmental Monitoring

152. In the first line change the word "establish" to "implement." Specify when the program will be implemented.

153. Changes to the program specified in the license conditions cannot be made without prior NRC approval. Aspects that are not specified in the license conditions can be changed as stated.

154. Commit to review monitoring data on an annual basis for trends and evaluate impacts to the public and environment.

155. First paragraph. Add sampling of sediment to the list of media to be sampled. Insert, after "program" "in accordance with Table 5.2.1."

156. On page 5-3, 3rd paragraph, Specify the LLD for uranium and gross beta. Also add the LLDs for soil and vegetation samples.

Table 5.2-1 Radiological Monitoring Program

157. Suggest splitting this table into 2 separate tables, one for the preoperational and one for the operational program. This will make it easy to remove the preoperational requirements once the facility receives licensed material.

158. Clarify what the analysis frequency is. Describe how composite samples are done. Be sure to include the quarterly composite for air samples that is analyzed for uranium (at a minimum this should be done at the sample location for the nearest resident).

159. Reinsert a brief description of the sampling location. Include a sample number for easy reference. Delete the word "potential."

160. Storm-water sampling should be included, this could be at the hold up basin.

161. The table states that all surface water samples will be collected on a continuous basis; is this your intent?

162. Table 5.2.1, Note #2. Defines uncertainties in percentages. Change the uncertainty from percentages to whole days.

Table 5.2-2 Action Levels for Environmental Analyses

163. Add the levels for gross beta and uranium.

164. Replace " $\mu\text{Ci}/\text{ML}$ " by " $\mu\text{Ci}/\text{ml}$ " and " $\mu\text{Ci}/\text{G}$ " by " $\mu\text{Ci}/\text{g}$."

Chapter 6 Special Processes

§ 6.2 Occupational Safety

165. Provide action levels for HF and the corrective actions to be taken if these are exceeded. Provide exposure limits for HF.

§ 6.3 Back-up Utilities

166. Provide the minimum time that back-up power will be provided to criticality alarms during a loss of power event.

§ 6.5 Limiting Conditions for Operation

§ 6.5.1 Autoclaves

167. In item a, change "with any autoclave" to "any autoclave with. Add "" between "260" and "F."

168. Based on the SAR, there is no reason to believe that CEC needs to operate such that the feed autoclave pressure is higher than 44 psia, and sampling and blending autoclave pressures are higher than 87 psia.

§ 6.5.2 Yard Transporters

169. Our analysis shows that the fuel capacity should not be greater than approximately 70 gallons.

§ 6.6 Other Special Commitments

170. Add section on product and feed cylinder maintenance and surveillance.

171. None of the feed, product and tails cylinders should be stacked.

§ 6.6.1 Tails Cylinder Maintenance and Surveillance

172. Under D, after "only designated vehicle" insert "with less than 70 gallons of fuel."

173. Under F, state the frequency or time-frame for the anti-corrosion treatment.

174. Under H, need to develop procedure to resolve "significant deterioration problems in the storage yard."

175. Need to add Section 6.6.4 stating the following: "Final design of the CEC will involve the structures, equipment, equipment layout, control systems logic, and safety features presented and described in the SAR. The design and construction will be in accordance with the standards identified in the SAR."

§ 6.6.2 Liquid UF₆

176. Delete "and cannot by design."

§ 7.0 Decommissioning Plan

177. Spell out what is meant by "cessation of operations."

178. The fourth line the text should read "to levels acceptable for unrestricted use."

179. Commit to promptly cleaning up spills and contamination outside normally-contaminated plant areas.

Chapter 8 Radiological Contingency Plan

180. State that changes which do not decrease the effectiveness of a CEC plan can be made without NRC approval and that these changes should be submitted to the NRC within some set time-frame.

181. Change the title to "Emergency Plan."