LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENT
3.16.2 A radiological environmental monitoring program shall be conducted as specified in Table 3.16-1. APPLICABILITY: At all times. ACTION: a. In the event the radiological environmental monitoring program is not conducted as specified in the Table 3.16-1, prepare and submit to the Commission in the Annual Radiological Environmental Report the reasons for not conducting the program in accord with the Table 3.16-1 and the plans for preventing a recurrence. b. When the radioactivity in a sampled environmental medium, averaged over a calendar quarter, (1) exceeds an appropriate value listed in Table 3.16-3 or (2) if not listed, is attributable to DAEC effluents and causes a potential annual dose exceeding two times the quarterly dose limit stated in Specification 3.14.3 or 3.15.4, prepare and submit to the Commission within 30 days from the end of the affected calendar quarter a Special Report which includes an evaluation of any release conditions, environmental factors or other conditions which caused the value(s) of Table 3.16-3 or two times the quarterly dose limit to be exceeded. If the radioactivity in environmental sample(s) is not attributable to	4.16.2.1 Analyses required in Table 3.16-1 shall achieve the detection capabilities specified in Table 3.16-2. 4.16.2.2 Land Use Census DAEC shall conduct annually a land use census within three miles of the Station to identify radiologically important changes in land use.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENT
releases from the Station, the Special Report is not required: instead the sample(s) result(s) shall be reported and explained in the Annual Radiological Environmental Report.	
c. When environmental sampling medium is not available from a sampling location or the location is no longer appropriate, the cause and the location where replacement samples were obtained and/or will be obtained shall be reported in the Annual Radiological Environmental Report.	
d. In the event a location is identified at which the calculated personal dose associated with one or more exposure pathways exceeds by 20% the maximum calculated dose associated with like pathway(s) at a location where sampling is conducted as specified by the Table 3.16-1, then the pathway(s) having maximum exposure potential at the newly identified location will be added to the radiological monitoring program at a subsequent Operations Committee meeting, if samples are reasonably attainable at the new location. Like pathway(s) monitored (sampled) at a location, excluding the control station location(s), having a lesser associated calculated personal dose may be deleted from the program at the time the new pathway(s) and location are added.	

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENT
Information Deleted	Information Deleted

TABLE 3.16-1

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample Type	Minimum Number of Sampling Stations	Sampling and Collection Frequency	Type and Frequency of Analysis
Airborne Particulates	five	Continuous operation of sampler with sample collection at least once per week or as required by dust loading	o Analyze for gross beta activity $\geq$ 24 hours after filter change. o Perform gamma isotopic analysis on each sample having gross beta activity >10 times the yearly mean of control sample. o Perform gamma isotopic analysis on composite (by sampling location) of samples collected during each quarter.
Airborne Radioactive	five	Continuous operation of sampler with sample collection at least once per week	Analyze each cartridge for I-131.
Ambient Radiation	thirty-eight	Two dosimeters at each point continuously. Change at least once per quarter.	Read gamma radiation dose quarterly.
Surface Water	two	At least once per month.	o Gamma isotopic analysis of each sample or monthly composite (by location). o Tritium activity analysis of a composite (by location) at least once per quarter.

TABLE 3.16-1 (Continued)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample Type	Minimum Number of Sampling Stations	Sampling and Collection Frequency	Type and Frequency of Analysis
Ground Water (potable)	four	At least once per quarter. (may be composited if collected more frequenntly.)	Analyze quarterly for tritium and gross beta activity; if gross beta >10 times the annual mean of control samples, analyze for gamma emitting radionuclides.
River Sediment	one	At least once every six months	Gamma isotopic analysis of each sample.
Milk	four	At least once per two weeks (biweekly) during the grazing season. At least once per month during non-grazing season.	Gamma isotopic and I-131 analysis of each sample.
Fish	two	Two times per year. (Once during January thru July and once during August through December.)	Gamma isotopic analysis on edible portion.
Vegetation	three	Annually at harvest time. One sample of each: grain, green leafy vegetation, forage	Gamma isotopic analysis of portion.
	one	One sample of broadleaf vegetation at time of harvest	I-131 analysis

Required sample station locations are described in the Off-Site Dose Assessment Manual.

TABLE 3.16-2

MAXIMUM VALUES OF THE LOWER LIMIT OF DETECTION FOR ENVIRONMENTAL SAMPLE ANALYSIS

	Environmental Medium					
Analysis	Water (pCi/1)	Airborne Particulate or Gas (pCi/m3)	Fish (pCi/kg, wet)	Milk (pCi/1)	Food Products (pCi/kg, wet)	Sediment (pCi/kg, dry)
gross beta	4	1×10^{-2}				
^{3}H	2000[a] 3000[b]					
^{54}Mn	15		130			
^{59}Fe	30		260			
$^{58}Co, ^{60}Co$	15		130			
^{65}Zn	30		260			
^{95}Zr	30					
^{95}Nb	15					
^{131}I	1[a]	7×10^{-2}		1	60	
^{134}Cs	15	5×10^{-2}	130	15	60	150
^{137}Cs	18		150	18	80	180
^{140}Ba	60	6×10^{-2}		60		
^{140}La	15			15		

[a]LLD for Drinking Water
[b]LLD for samples of water not used as a source of drinking water

5.0 Radiological Environmental Monitoring Program Sampling Station Locations

Sampling station locations identified in Table 5-1 correspond to the minimum required number of radiological environmental monitoring program sampling stations in Technical Specifications Table 3.16-1.

6.14 OFFSITE DOSE ASSESSMENT MANUAL (ODAM)

6.14.1 Changes to the ODAM may be made by IELP provided:

1. Change(s) shall be submitted to the Commission by inclusion in the next Semiannual Radioactive Material Release Report after the change(s) was made effective and shall contain:

   a. Sufficiently detailed information to totally support the rationale for the change. Information submitted should consist of a package of those pages of the ODAM to be changed with each page numbered and provided with an approval and date, together with appropriate bases or evaluations justifying the change(s);

   b. a determination that the change(s) will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and

   c. documentation of the fact that the change has been reviewed by the Operations Committee.

2. Change(s) to radiological environmental monitoring program required sampling station locations, ODAM Table 5-1, shall be submitted to the Commission by inclusion in the next Annual Radiological Environmental Report.

3. Changes shall become effective after review by the Operations Committee and approval by the Plant Superintendent-Nuclear.

3.16.1 and 4.16.1 BASES

1. Dose

Specification 3.16.1 is provided to comply with the dose limitation requirement of 40CFR190. This specification requires the assessment of dose to demonstrate that a person (a nearby resident) has not receive a radiation dose exceeding that specified in 40CFR190. There is no other licensed nuclear fuel cycle facility within 50 miles of DAEC, thus it is assumed that the dose from other uranium fuel cycle facilities is negligible.

3.16.2 and 4.16.2 BASES

1. Radiological Environmental Monitoring

The radiological environmental monitoring program, including the land use census, is conducted to satisfy the requirements of 10CFR Part 50, Appendix I, Section IV.B.2 and.3 The minimum radiological monitoring program required by this specification provides measurements of radiation and of radioactive materials in those exposure pathways and for thos radionuclides which lead to the highest potential radiation exposures of individuals resulting from the station operation. This monitoring program thereby supplements the radiological effluent monitoring program by verifying that the measurable concentrations of radioactive materials and levels of radiation are not higher than expected on the basis of the effluent measurements and modeling of the environmental exposure pathways.

The land use census is conducted annually to identify changes in use of the unrestricted area in order to recommend modifications in monitoring programs for evaluating individual doses from principal exposure pathways.

In order that radiological environmental monitoring stations may be relocated to reflect current conditions, the locations of stations required by Table 3.16-1 are described in a section of the Off-Site Dose Assessment Manual. Revisions thereto are administered in accordance with Specification 6.15. IELP may conduct additional environmental monitoring in addition to the requirements of Specifications 3.16.2 and 6.11.1.e.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENT
3.15.2.1 The dose rate in the unrestricted area (see FSAR Figure 1.5-1) due to radioactive noble gas released in effluents shall not exceed 500 mrem/year to the total body or 300 mrem/year to skin. 3.15.2.2 The dose rate in the unrestricted area due to I-131, I-133, H-3, and radioactive particulates having half lives greater than 8 days that are released in effluents shall not exceed 1500 mrem/year to any organ. APPLICABILITY: Whenever monitoring or sampling is required. ACTION: When the dose rate exceeds a limit in 3.15.2, decrease the release rate without delay to comply with the limit.	4.15.2 Compliance with 3.15.2 shall be assessed on the basis of results of measurements specified in Table 4.15-2 and according to methodology stated in the ODAM.

underestimated. Dose assessment methodology described in the ODAM for gaseous effluent will be consistent with the methodology in Regulatory Guides 1.109 and 1.111. Cumulative and projected assessments of dose made during a quarter are based on historical average, i.e., quarterly averaged conditions measured at DAEC. Assessment made for the annual radiological environmental report will be based on annual averages of atmospheric conditions during the period of release.

3.15.2 and 4.15.2 BASES

Gaseous Effluent Concentration

This specification is intended to ensure that the concentration of radioactive material in the unrestricted area beyond the site boundary due to gaseous effluents from DAEC will maintain doses within the annual dose limits to unrestricted areas provided in 10CFR Part 20. Compliance with these limits also reasonably assures that radioactive material in gaseous effluents will not result in exposure of a member of the public in an unrestricted area to annual averaged concentrations exceeding the limit in 10 CFR Part 20.106. The occupancy time of members of the public who may occassionally be on the site is expected to be low enough to compensate for any less atmospheric dispersion on site than to the environs offsite.

Assessment of compliance is based upon an effluents measurement program defined in Table 4.15-2 and methodology stated in the ODAM. The resolving time of the measurements, ie., the sample integration time, bounds the minimum averaging time of the effluent measurements.

3.0 Gaseous Effluent

3.1 Introduction

The Station discharges gaseous effluent through a stack and discharges ventilation air from the reactor and radwaste buildings through the reactor building vents. Ventilation air from the Turbine Building may be discharged through the Turbine Building vents or through the Reactor Building vent. These gaseous effluent streams, radioactivity monitoring points, and effluent discharge points are shown schematically in Figure 3-1. Gaseous release point locations and elevations at the Station are described in Table 3-1. Gaseous discharges from the stack are treated as an elevated release while discharges via the building vents are assumed to be ground-level releases.

3.2 Radioactivity in Gaseous Effluent

For the purpose of estimating offsite radionuclide concentrations and radiation doses, measured radionuclide concentrations in gaseous effluent and in ventilation air exhausted from the Station are relied upon. Table 4.15-2 in the Technical Specifications identifies specific radionuclides in gaseous discharges for which sampling and analysis is done.

When a radionuclide concentration is below the LLD for the analysis, it is not reported as being present in the sample. Each radionuclide measured in an effluent may be assumed to be discharged uniformly during the sampling period.

3.3 Dose Equivalent Rate Offsite

Specification 3.15.2 provides limits on dose equivalent rates associated with airborne radioactive materials concentrations in the unrestricted area due to airborne effluents from the Station. Compliance is assessed on the basis of measurements specified in Table 4.15-2.

3.3.1 Noble Gas. Limits on radioactive noble gas in the unrestricted area is provided in Specification 3.15.2.1. Each radioactive noble gas effluent monitor is set to alarm when the noble gas in airborne

effluent from a monitored stack or vent is expected to cause a noble gas concentration at ground level offsite equal to or greater than specified in 10 CFR Part 20 Appendix B Table 2 Column 1 for the noble gas mixture. In the event an airborne effluent release from the Station causes a noble gas effluent monitor to alarm, an assessment of compliance is performed as described herein.

The quantity of radioactive noble gas released in an increment of time is measured by the radioactive noble gas effluent monitors. The distribution of radioactive noble gases in a gaseous effluent stream is determined by gamma spectrum analysis of identifiable radionuclides in effluent gas sample(s). Results of one or more previous analyses may be averaged to obtain a representative spectrum. In the event the distribution is unobtainable from measured data, the distribution of radioactive noble gases based on past data or computed by the BWR-GALE code and appearing in Table 3-2 herein may be assumed.

Compliance with 3.15.2.1 may be assessed either by comparison with the concentration limit specified in 10 CFR Part 20.106 for the noble gas mixture or by calculating the dose equivalent rate.

3.3.1.1 Total Body Dose--The total body dose equivalent rate due to noble gas gamma radiation is calculated with the equation:

$$\dot{D} = \sum_i \left(\frac{Q_i}{t} * P\gamma_i \right)_s + \sum_i \left(\frac{Q_i}{t} * \frac{X}{Q} * P\gamma_i \right)_v$$

where $\dot{D}$ = noble gas gamma dose rate to total body (mrem/hr)

Q_i/t = quantity of noble gas radionuclide i discharged (uCi) during time increment t (hr)

$P\gamma_{s_i}$ = factor converting unit noble gas nuclide i stack release to total body dose at ground level received from the overhead plume (mrem/uCi)

$P\gamma_{v_i}$ = factor converting time integrated, ground level concentration of noble gas nuclide i to air dose from gamma radiation $\left(\frac{\text{mrem}}{(\text{uCi sec})/\text{m}^3} \right)$

Specification 3.15.2.1 is evaluated by calculating the noble gas gamma dose equivalent rate offsite at 1260 meters NNW of the Station, which location is identified in Figure 3-2. At that location the reference atmospheric dispersion factor to be used in the calculation is

$$\left(\frac{X}{Q}\right)_v = 4.3 * 10^{-6} \text{ sec/m}^3$$

The noble gas plume gamma-to-total body dose factor, $P\gamma_{s_i}$, is calculated with the RABFIN program. The noble gas semi-infinite cloud gamma-to-total body dose factor, $P\gamma_{v_i}$, is in Regulatory Guide 1.109, Table B-1. Values of $P\gamma_{s_i}$ and $P\gamma_{v_i}$ applicable at 1260 meters NNW of the Station are in Table 3-4.

3.3.1.2 Skin Dose--The skin dose equivalent rate due to radioactive noble gas is calculated with the equation

$$\dot{D}_\beta = \sum_i S\beta_i \left(\frac{Q_i}{t} * \frac{X}{Q}\right)_s + \sum_i S\beta_i \left(\frac{Q_i}{t} * \frac{X}{Q}\right)_v$$

where $\dot{D}_\beta$ = noble gas beta dose rate to skin (mrem)

Q_i/t = quantity of noble gas radionuclide i (uCi) discharged during time increment t(hr)

$S\beta_i$ = factor converting time integrated ground level concentration of noble gas to skin dose from beta radiation

$$\left(\frac{\text{mrem}}{\text{uCi } \frac{\text{sec}}{\text{m}^3}}\right)$$

Compliance with Specification 3.15.2.1 is evaluated by calculating the noble gas beta dose equivalent rate offsite at a location 1260 meters NNW of the Station, which is also identified in Figure 3-2. At that location, the reference atmospheric dispersion factors to be used in the calculation are

$$\left(\frac{X}{Q}\right)_v = 4.3 \times 10^{-6} \text{ sec/m}^3 \text{ and } \left(\frac{X}{Q}\right)_s = 2.8 \times 10^{-7} \text{ sec/m}^3$$

The semi-infinite noble gas cloud-to-skin dose equivalent factors are in Table 3-4. They are also tabulated in Regulatory Guide 1.109, Table B-1.

3.3.2 Iodine, Tritium, and Particulates. Specification 3.15.2.2 provides a limit on iodine-131, iodine-133, H-3, and on radioactive particulates having 8 day or longer half-lives in air in the unrestricted area around the Station. In the event airborne effluent from the Station causes a radioactive noble gas effluent monitor to alarm or if the assessment required by Specification 4.15.4.2 shows Specification 3.15.4 to have been exceeded, an assessment of compliance with Specification 3.15.2.2 will be performed using a method described in this section.

3.3.2.1 Organ Dose Rate[1]--Complaince with Specification 3.15.2.2 is assessed by calculating the organ dose rate[1] corresponding to an assumed adult member of the public inhaling airborne I-131, I-133, H-3, and inhaling radioactive particulates having half-lives of 8 days or longer at the location in the unrestricted area having the maximum potential concentration of the effluents (i.e., the location at which reference meteorological data indicates minimum atmospheric dispersion from the Station (max X/Q). In the event an annual census identifies a child or infant residing where the reference dispersion (X/Q) is more than ½ of that at the location having the maximum potential concentration, then the potential organ dose rate to the child or infant due to inhaling the airborne activity concentration at his residence will be calculated instead.

The organ dose rate is calculated with the following equations. For an off gas stack discharge:

$$D_{ansk} = 10^{-6} \sum_i \left(\frac{Q_i}{t}\right)_{ks} TA_{ani} \left(\frac{X}{Q}\right)_s$$

For a vent discharge:

$$D_{anvk} = 10^{-6} \sum_i \left(\frac{Q_i}{t}\right)_{kv} TA \left(\frac{X}{Q}\right)_v$$

---

[1]For inhaled or ingested radioactive material, the consequent "dose" means the committed dose equivalent. The "dose rate" is the committed dose equivalent per unit time of exposure to the radioactive material in the environment.

where $\dot{D}_{ansk}$ = the dose equivalent rate to organ n of a person in age group a due to radionuclides identified in analysis k of a stack release where the analysis is required by Technical Specification Table 4.15-2. (mrem/hr)

$\dot{D}_{anvk}$ = the dose equivalent rate from a vent release (mrem/hr)

TA_{ani} = factor converting airborne concentration of radionuclide i to dose commitment to organ n of a person in age group a where exposure is directly to airborne material

$$\left(\frac{\text{mrem}}{(\text{Ci sec})/\text{m}^3}\right)$$

$\left(\frac{Q_i}{t}\right)_k$ $\left(\frac{Q_i}{t}\right)_k$ = quantity of radionuclide i released in a given effluent stream based on analysis k (uCi) during discharge time increment t (hr)

10^{-6} = conversion factor (Ci/μCi)

$\left(\frac{X}{Q}\right)_s$, $\left(\frac{X}{Q}\right)_v$ = atmospheric dispersion from stack and vent, respectively, to ground level at location of interest (sec/m^3)

The analysis index k may represent either

p - analysis of a grab sample

w - a weekly composite analysis

m - a monthly composite analysis

q - a quarterly composite analysis

as required by the effluent sampling and analysis program specified in Technical Specification Table 4.15-2.

For a given sample analysis, Q_i/t is the amount of a radionuclide, Q_i, released during the time increment, t, represented by the sample. Normally, radioactive material measured in effluent is assumed to be discharged uniformly over the period represented by the sample.

Combining separate release points and dose rates represented by separate samples,

$$\dot{D}_{an} = \sum_k \dot{D}_{ansk}\left(\frac{f_k}{\bar{V}}\right) + \sum_v \sum_k \dot{D}_{anvk}\left(\frac{f_k}{\bar{V}}\right)$$

where $\dot{D}_{an}$ = dose equivalent rate to organ n of a person in age group a due to measured radionuclides discharged in airborne effluents during time interval V (mrem/hr)

V = time interval over which the dose rate is calculated (hours)

f = amount of time during time interval V during which effluent represented by sample k is being discharged (hours)

Time interval V normally coincides with the seven day sampling interval for iodine and particulates.

The maximum offsite exposure potential (based on Appendix C) is expected to occur at 1260 meters NNW of the Station where the reference atmospheric dispersion, to be used in the calculation is

$$\left(\frac{X}{Q}\right)_V = 4.3 \times 10^{-6} \text{ sec/m}^3 \quad \text{and} \quad \left(\frac{X}{Q}\right)_S = 2.8 \times 10^{-7} \text{ sec/m}^3$$

Currently, compliance with Specification 3.15.2.2 is evaluated by calculating an adult inhalation dose rate at 1260 meters NNW of the Station. The dose transfer factors, TA_{ani}, used in the computation are tabulated in Appendix A.

Technical Specification on Appendix I Dose Limits

In 1970, the Atomic Energy Commission adopted qualitative requirements for nuclear power reactors to keep radioactivity in effluents as low as practicable. Guidance on "design objectives" and "means to be employed" for applications for construction permits filed on or after January 2, 1971, was added as 10CFR50.34a. Requirements for technical specifications on power reactor effluents were adopted in 10CFR50.36a.

In 1975, after extensive rulemaking proceedings, the Nuclear Regulatory Commission adopted numerical guides for design objectives and limiting conditions of operation to meet the "as low as practicable" criterion for radioactive material in light-water-cooled nuclear power reactor effluents as Appendix I to 10CFRPart 50. Appendix I contains two types of guidance. One concerns the determination of "design objectives" and "means to be employed" that are acceptable to the Commission in complying with Section 50.34a. The other is concerned with "limiting conditions of operation" to be included in technical specifications. The Commission has maintained the distinction between these separate issues in both the regulations and in Appendix I. Numerical guides on design objectives are stated in Section II of Appendix I. Separately, numerical guidance on limiting conditions of operation for technical specifications is stated in Section IV of Appendix I.

It is clear that the Commission intended licensees to develop technical specifications conforming to Section IV of Appendix I.

> The provisions adopted [by the Commission for limiting conditions for operation] require the licensee to initiate action if the average dose rate offsite during any calendar quarter from materials discharged to the atmosphere exceeds 10 millirems whole body per year or 30 millirems to the skin and any organ per year, or if the average dose rate offsite during any calendar quarter from liquid effluents exceeds 6 millirems whole body per year or 20 millirems to the skin and any organ per year.*/

These quantities are equivalent to "one-half the design objective annual exposure" stated in Appendix I, Section II which Section IV states may be used to develop technical specifications under Section 50.36a(a) to keep radioactive materials in effluents to unrestricted areas ALARA.

The actions to be taken by the licensee in the event radioactive effluents to unrestricted areas during a calendar quarter result in a calculated radiation exposure greater than "one-half the design objective annual exposure" are clearly stated in Appendix I, Section IV.A. In that event, the licensee must:

1. make an investigation to identify the causes for such release rates,

*/ Opinion of the Commission in the Matter of Rulemaking Hearing [on] Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion "As Low As Practicable" for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents, 1 NRC 277, 285 (1975).

2. define and initiate a program of corrective action; and

3. report these actions to the Commission within 30 days from the end of the quarter during which the release occurred.

Thus, it is clear what the Commission intended be adopted as the limiting conditions of operation in technical specifications and what actions must be taken by the licensee if they are exceeded.

IELP has proposed technical specifications on radioactivity in effluents released to unrestricted area which it believes satisfy the regulation and the Opinion of the Commission. The appropriate limiting conditions, i.e., one-half of the design objective annual exposure during a calendar quarter, and actions to be taken are in IELP's proposed specifications 3.13.3, 3.15.3, and 3.15.4.

In addition, the NRC Staff has requested that doses equivalent to the design objective annual exposure be included as limiting conditions of operation in the technical specifications. This is more restrictive than the Commission adopted or intended.

It is clear to IELP that the Commission did not intend that design objective doses be made technical specification limits, and especially not for power reactors already operating at the time. IELP does not disregard the appropriate role of the equivalent of design objectives for reactors already operating. It has separately proposed specifications 3.13.4 and 3.15.5 on operation of radioactive effluent treatment systems. These proposed Technical Specifications on effluent treatment confirm our commitment to make every reasonable effort to keep levels of radioactive materials in effluents as low as reasonably achievable (ALARA). In 1976 Iowa Electric submitted to the NRC an evaluation of the DAEC to demonstrate conformance to the design objectives of 10 CFR Part 50, Appendix I. With the Technical Specifications proposed on effluent treatment, Iowa Electric will make every reasonable effort to treat any untreated effluent whose activity concentration is not ALARA, including operating the effluent treatment equipment shown to be cost beneficial to operate.

A prudent operator will operate with the aim of producing radioactivity concentrations in effluents a reasonable margin below a technical specification limiting condition for operation (LCO), i.e., that is at or below the design objective, or ALARA, values. It would not be appropriate for the staff to impose the design objectives as LCO's, for that would cause the prudent operator to operate aiming at some level well below the design objectives in order to be reasonably sure that he does not exceed them. That is surely not intended by Appendix I.

IELP believes that its proposed specifications, as well as the Staff's model specifications, implement Part 50, Sections 36a.(a)(1) and 36a.(b) and the Commission's intent for operating power reactors in this respect.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENT
3.16.3 Appropriate equipment shall be operated in accordance with a Process Control Program to process wet radioactive waste solids destined for disposal to a form that meets appropriate requirements of 10CFR Part 61.56 before the waste is shipped from the DAEC site. APPLICABILITY: During processing of radioactive waste solids for disposal. ACTION: 1. Suspend delivery to a transport carrier of any container of radioactive waste not complying with 10 CFR Part 61.56.	4.16.3.1 The Process Control Program shall state the essential operating parameters of the process(es), the essential characteristics of the waste from to be shipped, and the essential product verification requirements. 4.16.3.2 Before a Contractor processes radioactive waste, DAEC shall verify that he has an NRC approved Process Control Program.

3.16.3 and 4.16.3 BASES

1. Radioactive Waste Solids

This specification implements the requirements of 10CFR Part 50.36(a), the General Design Criterion 60 of 10CFR Part 50 Appendix A, and of 10CFR Part 61.56 on characteristics of low-level radioactive wastes destined for disposal by burial. Applicable requirements on packaging and delivery of packages of radioactive material to a carrier for transport stated in 10CFR Part 71 and on transportation of hazardous materials in 49 CFR 171-179 are not restated in the technical specifications.

Processing waste to meet characteristics permitted under 10 CFR Part 61.56 may include solidification, preparation for deposit in a high integrity container, or any form acceptable under Part 61 for shipment to and receipt by a license disposal facility.

It is intended that a Contractor may perform the waste processing provided he operates according to an NRC approved Process Control Program.

6.15 PROCESS CONTROL PROGRAM (PCP)

6.15.1 IELP may change the Process Control Program provided:

1. Change(s) shall be submitted to the Commission by inclusion in the next Semiannual Radioactive Material Release Report after the change(s) was made effective and shall contain:

   a. sufficiently detailed information to support the rationale for the change.

   b. a determination that the product waste form will conform to the requirements of 10 CFR Part 61.56.

   c. documentation of the fact that the change has been reviewed by the Operations Committee.

2. Change(s) shall become effective as reviewed by the Operations Committee and approval by the Plant Superintendent-Nuclear.