

JAN 7 1982

Docket Nos. 50-282  
50-306  
and 50-263

Distribution	BSiegel
Docket File	RAClark
NRC PDR	Ippolito
NSIC	FCongel
TERA	WGammill
ORB#3 Rdg	TNovak
DEisenhut	
OELD	
I&E-3	
ACRS-10	
JHeltemes	
PMkreutzer-3	
PM-DDianni	
RAClark	
Gray File	

Mr. L. O. Mayer, Manager  
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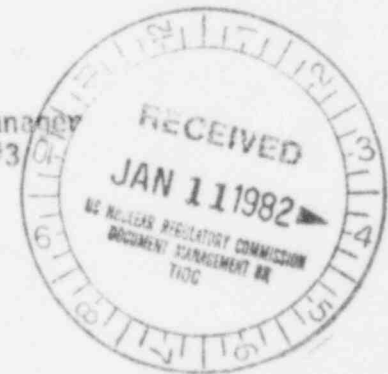
Dear Mr. Mayer:

We have completed our review of the Prairie Island Units 1&2 and the Monticello Radiological Effluent Technical Specifications (RETS) submitted by letter dated January 24, 1980. Our review also covers the Offsite Dose Calculation Manual (ODCM) and the Process Control Program (PCP). Enclosed are our comments on these documents.

In order to resolve these comments we plan to visit your corporate office and, if need be the plant during the week of February 1, 1982 (a specific time table to be determined by telecon). I expect that all differences of opinion will be resolved during this meeting and any changes to the RETS will be made to the satisfaction of all concerned. Therefore, this meeting is to be considered a working session where "on the spot" decisions will be made by those concerned (NSP/NRC) in order that an acceptable RETS for both the Prairie Island Nuclear Generating Plant and the Monticello Plant will be achieved.

Sincerely,

Original signed by:  
Byron Siegel for  
Dominic DiIanni, Project Manager  
Operating Reactors Branch #3  
Division of Licensing



Enclosures: Comments on RETS  
cc: See next page

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PDR ADOCK 05000263  
P PDR

~~AD:ORB/DL  
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1/7/82~~

OFFICE	ORB#3:DL	ORB#3:DL	PTRB	ORB#3:DL	ORB#2	RAB	ETS
SURNAME	PKreutzer	DDianni/dd	BSiegel	RAClark	Ippolito	FCongel	WGammill
DATE	1/6/82	1/6/82	1/6/82	1/7/82	1/6/82	1/6/82	1/6/82

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RADIOLOGICAL EFFLUENT TECHNICAL SPECIFICATIONS (RETS) REVIEW  
 FOR THE PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNITS 1&2

I. Statements Not in Direct Compliance With the Model RETS

The licensee statements where clarification is required are listed below in the order of the model RETS:

No.	NUREG 0472	Prairie Island RETS	Comments
1	Definitions 1.31	Definition X. (T.S. 1-7)	The word "homogeneous" is excluded from the definition of solidification. Is an approved process control program being followed such that a homogeneous solid is being produced?
2	3.3.3.9.b	3.9.A.1.c	The requirement that both reactors be in hot shutdown within 6 hours and cold shutdown within 30 hours is somewhat more conservative than the action statements required by NUREG 0472.
3	Table 3.3-12	3.9-1	There is no gross activity monitor with an automatic termination of release function on the turbine building sumps effluent line. Is there a reason for not monitoring this release point?
4	Table 3.3-12	3.9-1	Table 3.9-1 states that the monitors and samplers will be operable during releases. Is there a potential for uncontrolled releases from the monitored release points if the monitors are not in operation? An unplanned and unmonitored release would violate this specification.
5	Table 3.3-12	3.9-1	There is no gross activity monitor in the service water system effluent line. Is there a reason for not monitoring this release point?

No.	NUREG 0472	Prairie Island RETS	Comments
6	Table 3.3-12	3.9-1	No radioactivity recorders are listed. These instruments are required only when the alarm/trip setpoint is based on a recorder-controller.
7	Table 3.3-12 Notation No. 30	3.9-1 Notation No. 3	Can it be shown the 24 hour sampling requirement is as conservative as the 8 hour requirement stated in the model?
8	Table 4.3-12	4.17-1	A monthly source check on the liquid radwaste effluent line is considered as being less conservative than the model which requires source checks prior to each release.
9	Table 4.3-12	4.17-1	The channel check requirement for the steam generator blowdown effluent line composite sample flow monitor has not been addressed.
10	Table 4.3-12 Notation	4.17-1	The expanded definition of channel calibration as listed in the model has not been addressed.
11	Table 3.3-13	3.9-2	The waste gas holdup system does not have an associated monitoring system as required by the model. Alternatives may be acceptable if the system can be shown to be adequately monitored and regulated, so that uncontrolled releases cannot occur.
12	Table 3.3-13	Table 3.9-2	<p>Oxygen monitors only, with 2 minimum operable channels, are stated as meeting the hydrogen (2) and hydrogen or oxygen (2) monitoring requirements of the model.</p> <p>a. As oxygen is used as the limiting component for the catalytic reaction in the recombiner, is there adequate assurance that oxygen leakage into downstream portions of the system will not produce an explosive mixture (i.e., is a positive pressure maintained in the system at all times)?</p>

No.	NUREG 0472	Prairie Island RETS	Comments
12 (cont'd)			b. Is there more than one oxygen sampling location (i.e., other than the recombiner), such that other locations in the system will be monitored?
13	Table 3.3-13	Table 3.9-2	The condenser evacuation system monitoring requirements have not been met other than a noble gas monitor on the air ejector. Does the air ejector vent to a monitored exhaust system or is there a justifiable reason for not monitoring the system?
14	Table 3.3-13	Table 3.9-2	The vent header system is not stated as being monitored as is required by the model.
15	Table 3.3-13	Table 3.9-2	Exhaust flow rate monitors are not listed for the gaseous effluent release points. Is there assurance that releases are conservatively estimated using the design flow rates?
16	Table 3.3-13	Table 3.9-2	Is there an unmonitored gaseous release point for the steam generator blowdown vent such that monitoring should be required?
17	Table 3.3-13	Table 3.9-2	Can it be shown that the radwaste building exhaust area cannot receive enough radioactive material such that automatic termination of the release would be required?
18	Table 4.3-13 Notation	Table 3.9-2 Notation	The channel calibration method for the waste gas system hydrogen/oxygen monitoring systems has not been addressed (i.e., the specific composition of the standards).
19	Table 4.3-13	Table 3.9-2	The source check requirement for periodic releases (i.e., containment purge and waste gas system) is prior to each release rather than monthly.
20	Table 4.3-13 Notation	Table 3.9-2 Notation	The application of "if provided" in the channel functional test definitions is not clear.

No.	NUREG 0472	Prairie Island RETS	Comments
21	4.11.1.1.2	4.17.A.1	The surveillance requirement for the analysis of composited beta and alpha samples and the post-release calculation of these releases in accordance with the ODCM is not listed.
22	Table 4.11-1 Notation part a.	Table 4.17.3 Notation	A further clarification of the plant's usage of Sb in the Lower Limit of Detection (LLD) definition may be required.
23	Table 4.11-1 Notation d.	Table 4.17.3	No definition of a "batch release" is listed.
24	3.11.1.2 Action a	3.9.A.2	No statement requires that corrective actions to be taken "in the remainder of this quarter and during the subsequent three quarters" be listed in the special report pursuant to specification 6.9.2.
25	3.11.1.3	3.9.A.3.a	Operation of the liquid radwaste treatment system when the projected dose averaged over 31 days would exceed 0.06 mrem whole body or 0.2 mrem to any organ is required to implement the cost-benefit analysis. Otherwise, in some cases, no usage of the liquid radwaste treatment equipment would be necessary to reach the dose design objectives.
26	4.11.1.3.2	4.17.A.3	The liquid radwaste treatment equipment must be demonstrated as being operable. The 92 day requirement or a justifiable alternative that is equally as conservative.
27	Table 4.11-2	Table 4.17-4	The LLD for principal gamma emitters on waste gas storage tank samples should be $1 \times 10^{-4}$ .
28	Table 4.11-2	Table 4.17-4	The LLD for I-131 on continuous samples should be $1 \times 10^{-12}$ .
29	Table 4.11-2	Table 4.17-4	No statement showing continuous monitoring of noble gases, gross beta, and gross gamma at the effluent release points (including air ejector vents). No LLD is listed.

No.	NUREG 0472	Prairie Island RETS	Comments
30	Table 4.11-2 Notation b	Table 4.17-4 Notation	No statement requiring analysis of grab samples following startups, shutdowns, and 15 percent power changes is listed.
31	Table 4.11-2 Notation c	Table 4.17-4 Notation	No requirement for daily tritium sampling during periods the refueling canal is flooded.
32	Table 4.11-2 Notation d	Table 4.17-4 Notation	No statement has been made that requires weekly particulate and iodine sample on effluent release points, with an analysis within 48 hours.
33	Table 4.11-2 Notation e	Table 4.17-4 Notation	There is no stated requirement for weekly tritium grab samples on the spent fuel pool effluent release point.
34	3.11.2.2.b	3.9.B.2.a	No provision has been made for reducing the dose design objectives based on (a) predicted noble gas releases from the turbine building or (b) expected public occupancy within the site boundary.
35	3.11.2.2 Action a	3.9.B.2.b	No statement requiring that corrective actions be defined "during the remainder of the calendar quarter and during the subsequent three quarters."
36	3.11.2.3 Action a	3.9.B.3.b	No statement requiring that corrective actions be defined "during the remainder of the calendar quarter and during the subsequent three quarters."
37	4.11.2.3	4.17.B.3.b	The GALE code assumption that 0.67 curies/year/plant is released may be an allowed assumption, but may be conservative.
38	3.11.2.4	3.9.B.4.a	No statement is listed that requires operation of the ventilation exhaust treatment system if the projected doses from the site when averaged over 31 days would exceed 0.3 mrem to any organ.
39	4.11.2.4.2	4.17.B.4	No requirement is stated for testing the gaseous radwaste treatment systems at least every 92 days.

No.	NUREG 0472	Prairie Island RETS	Comments
40	3.11.2.5.4 Action b	3.9.B.4.e	No statement requiring that the oxygen level be reduced to < 2% within one hour. Forty-eight hours is proposed.
41	4.11.2.6	4.17.B.4.c	No statement requiring that the quantity of material present in the tank be determined every 24 hours when radioactive materials are being added.
42	4.11.3.1	3.9.C.1	No statement is shown that requires that the radwaste solidification system be demonstrated operable at least once per 92 days in accordance with a PCP or verification of the existence of a valid contract for solidification.
43	4.11.3.2	4.17.C.1	No statement is made that one representative test specimen from at least every tenth batch of each type of wet radioactive waste shall be taken.
44	4.11.3.2.b	4.17.C.1	There is no provision for testing 3 consecutive test specimens for solidification after the original failed to solidify.
45	3.11.4 Action a	3.9.D.6	Does not state that the corrective actions should be stated in the special report which normally has a 30 day reporting period.
46	3.12.1.6	4.10.A.3	The model requires a 30 day reporting requirement whereas the plant specifies 45 days. Some flexibility may be allowed on this requirement.
47	Table 3.12-1	Table TS.4.10-1	Unless the sampling sites are redundant, 5 locations for airborne radioiodine sampling are required.
48	Table 3.12-1	Table TS.4.10-1	The analysis frequency for all samples should be listed.
49	Table 3.12-1	Table TS 4.10-1	No statement is listed for airborne particulate samples that requires a gamma isotopic analysis when the gross beta activity is > 10 times the yearly mean of control samples.



No.	NUREG 0472	Prairie Island RETS	Comments
50	Table 3.12-1	Table TS 4.10-1	On the river water sample, <sup>89,90</sup> (Q) is shown. For clarification purposes strontium should be indicated.
51	3.12.2.b	4.10.B.1	NUREG 0472 requires a report on changes in the land use census within 30 days rather than as soon as practicable.
52	3.12.a	4.10.6	No requirement is made to report the corrective actions taken when the interlaboratory comparison program indicates measurement problems.
53	6.5.1	6.5	The Unit Review Group (Operations Committee) is responsible for review functions rather than implementation.
54	6.5.2	6.2-1	Reg Guide 4.15 must be reviewed on an annual basis.
55	6.5.2	6.2-3	The audited items (i.e., the radiological environmental monitoring, the ODCM, the PCP, and Reg. Guide 4.15) should be specifically addressed.
56	6.9.1.6	6.7-7	No requirement for a map was included in the Annual Radiation Environmental Monitoring Report.
57	6.9.1.10	6.7-2	Although changes to the ODCM may not be required to be submitted within 30 days, a reporting requirement should be specified.
58	6.10	6.6	No requirement of maintaining records of analyses is shown.
59	6.13	6.5-3	The PCP should be submitted for NRC approval rather than review.
60	6.15	--	No section is listed that states the evaluation requirements for major changes to radioactive waste treatment systems.

OFF-SITE DOSE CALCULATION (ODCM) QUESTIONS FOR THE  
PRAIRIE ISLAND NUCLEAR GENERATING PLANT

No.	Reg. Document	ODCM Section	
1		2.1.1.4 2.1.2.2 3.1.1.5	The equation for C.R. should be present and the units for efficiency defined.
2		2.3-1	The site specific value for the mixing effect when operating in a recycle mode is 10. How was this value determined?
3	NUREG-0133	2.3-3	The term $730/D_w$ has been removed from the equation shown in NUREG 0133 which is consistent with use of the receiving water for drinking water purposes.
4	NUREG-0133	3.1.1	The calculational methodology for determining alarm/trip setpoints for radioiodines and particulates on gaseous effluent monitors is not presented.
5	NUREG-0133	3.3-3	There is a typographical error in the term $3.17 \times 10^8$ as shown. The minus sign on the exponential is missing, should be $3.17 \times 10^{-8}$ .
6	NUREG-0133	3.3-3	In equation 3.3-3 the term $R_{ijk}$ is used, and is defined as the dose factor for each identified radionuclide $i$ , pathway $j$ , age group $a$ , and organ $k$ ; with units of $m^2$ mrem/yr per Ci/s or mrem/yr per $\mu\text{Ci}/m^3$ . Were the NUREG-0133 equations 5.3.1.1-5.3.1.5 used in calculating the values of $R_{ijk}$ ?

RADIOLOGICAL EFFLUENT TECHNICAL SPECIFICATIONS (RETS) REVIEW  
FOR THE MONTICELLO NUCLEAR GENERATING PLANT

I. Statements Not in Direct Compliance With the Model RETS

The licensee statements where clarification is required are listed below in the order of the model RETS:

No.	NUREG 0472	Monticello RETS	Comments
1	1.0	--	<p>The following definitions were not included in the RETS submittal:</p> <ul style="list-style-type: none"> <li>a. Channel calibration</li> <li>b. Channel check</li> <li>c. Channel functional test</li> <li>d. Dose equivalent I-131</li> <li>e. Gaseous Radwaste Treatment System</li> <li>f. Ventilation Exhaust Treatment System</li> </ul>
2	3.3.7.11	4.8.A	No applicability statement is shown that requires the specification to be applicable "at all times."
3	3.3.7.11	4.8.A (2)	No action statement is shown that states "that if the alarm/trip setpoints are less conservative than required, then releases should be discontinued or the channel declared inoperable."
4	Table 3.3.7.11-1	Table 3.8.1	Does the liquid radwaste monitor provide for automatic termination of the release as well as the alarm?
5	Table 3.3.7.11-1	Table 3.8.1	Is the Component Cooling Water Effluent line monitored?

No.	NUREG 0472	Monticello RETS	Comments
6	Table 3.3.7.11-1	Table 3.8.1	No radioactivity recorders are listed. These instruments need to be listed only when the alarm/trip setpoint is based on a recorder-controller.
7	Table 3.3.7.11-1	Table 3.8.1	Are there any outside liquid tanks that require tank level indicating devices?
8	Table 3.3.7.11-1 Notation 110	Table 3.8.1	The plant requirement that liquid radwaste discharges will be discontinued if the monitoring channel is inoperable is more conservative than the model.
9	Table 3.3.7.11-1 Notation 113	Table 3.8.1	The plant action requirements for the discharge canal and liquid radwaste effluent flow monitors is more conservative than required by the model.
10	Table 4.3.7.11-1	Table 4.8.1	Sensor check is not defined.
11	Table 4.3.7.11-1	Table 4.8.1	The expanded definition of channel functional test as listed in the model has not been addressed.
12	Table 4.3.7.11-1	Table 4.8.1	Are the plant functional test frequency requirements of 3 months prior to a release as conservative as the model which requires a functional test every 3 months?
13	Table 4.3.7.11-1	Table 4.8.1	Is the calibration frequency of "each operating cycle" or within 12 months of making a release as conservative as the model (i.e., a normal operating cycle is 12 months).
14	3.3.7.12	4.0.B	No action statement is shown that states "that if the alarm/trip setpoints are less conservative than required, then releases should be discontinued or the channel declared inoperable."
15	3.3.7.12	4.0.B	No statement is shown that requires the gaseous monitoring instrumentation to be set in accordance with the ODCM.

No.	NUREG 0472	Monticello RETS	Comments
16	Table 3.3.7.12-1	Table 3.8.2	Is the plant requirement that the condenser air ejector noble gas monitors and hydrogen monitors be in operation during power operation only, as conservative as the "at all times" model requirement?
17	Table 3.3.7.12-1	Table 3.8.2	No particulate or iodine samplers are shown to be associated with the main condenser exhaust. Can it be shown that these releases are monitored at another point (i.e., the plant stack)?
18	Table 3.3.7.12-1	Table 3.8.2	Redundant hydrogen monitors on the two recombiner trains are stated as meeting the explosive gas monitoring requirement. Do each of the monitors have redundant operating channels?
19	Table 3.3.7.12-1	Table 3.8.2	Are all systems addressed in the model RETS released via release points monitored with particulate and iodine samplers and also sample and stack flow instruments?
20	Table 3.3.7.12-1 Notation 122	Table 3.8.2	The model requires that the flow rate be estimated every 4 hours whereas the submittal allows eight hour estimates.
21	Table 3.3.7.12-1 Notation 123	Table 3.8.2	The plant requirement that the reactor reach hot standby in 30 minutes if the condenser air ejector noble gas monitor is inoperable is more conservative than RETS notation 123. It appears that this requirement is the result of another technical specification.
22	Table 3.3.7.12-1 Notation 126	Table 3.8.2	The plant requirement that operation of the compressed storage subsystem be terminated if hydrogen monitoring capability is lost does not appear to meet the RETS requirement of 14 days operation with one channel or to hot standby within 6 hours with two channels inoperable.

No.	NUREG 0472	Monticello RETS	Comments
23	Table 4.3.7.12-1	Table 4.8.2	The expanded definitions of sensor check, channel calibration, and channel functional test have not been addressed.
24	Table 4.3.7.12-1	Table 4.8.2	The channel check for particulate and iodine samplers has not been included in the surveillance requirements.
25	Table 4.3.7.12-1	Table 4.8.2	The calibration of stack flow rate monitors has not been addressed.
26	Table 4.3.7.12-1	Table 4.8.2	The model requires that channel calibrations be performed quarterly whereas the plant specifies "once each operating cycle." This is less conservative as the operating cycle is normally 12 months.
27	Table 4.3.7.12-1	Table 4.8.2	For calibration of the hydrogen monitors, the volume percents of hydrogen and oxygen are not specified.
28	Table 4.3.7.12-1	Table 4.8.2	Channel functional tests are to be performed monthly rather than quarterly.
29	4.11.1.1.2 4.11.1.3	4.8.A	The post release analysis of composited samples and the collection of liquids from continuous discharge points have not been addressed (i.e., no continuous release points).
30	3.8.A	Figure 3.8.1	The figures should probably be placed in the ODCM rather than the technical specifications. (This figure is shown in several sections.)
31	Table 4.11-1	Table 4.8.3	Are continuous releases not addressed because the plant has no liquid continuous releases?
32	Table 4.11-1	Table 4.8.3	The P-32 analysis requirement has been eliminated.
33	Table 4.11-1 footnote d	Table 4.8.3 footnote b	The mixing technique for sampling batch releases should be a method described in the ODCM as required by the model.

No.	NUREG 0472	Monticello RETS	Comments
34	3.11.1.2 Action a	3.8.A.2.b	No statement is included that requires the defined corrective actions to reduce "the cumulative dose to within 3 mrem total body and 10 mrem to any organ for the remainder of the calendar year."
35	4.11.1.3.2	4.8.A.3	The requirement that the liquid radwaste treatment equipment be demonstrated operable every 92 days has not been addressed.
36	3.11.1.4	3.8.A.4	Are there outside permanent tanks that should have a $\leq 10$ curie capacity?
37	Table 4.11-2	Table 4.8.4	Are there waste gas storage tanks such that monitoring should be required?
38	Table 4.11-2	Table 4.8.4	The model RETS requires that grab samples be taken of the containment purge following 15% thermal power changes. This assumes that the containment may be purged when the reactor is operating.
39	Table 4.11-2 footnote d	Table 4.8.4 footnote c	The footnote does not state the analysis periods after sampling required by the model or the 15% thermal power change requirements.
40	Table 4.11-2 footnote e	Table 4.8.4	No statement is made which requires weekly tritium samples be taken from the spent fuel pool ventilation exhaust.
41	3.11.2.2 Action a	3.6.B.2	The action statement does not state that releases must be reduced so as to limit the cumulative dose rate for the remainder of the calendar year to 10 mrad gamma and 20 mrad beta.
42	4.11.2.3	4.8.B.3	Dose calculations are to be calculated cumulatively for the current calendar quarter and calendar year.

No.	NUREG 0472	Monticello RETS	Comments
43	3.11.2.4	3.8.B.4	No statement is made that requires a report to be filed with the Commission if the gaseous radwaste treatment system is inoperable for more than 7 days.
44	4.11.2.4	4.8.B.4	The requirement that the gaseous radwaste treatment system be demonstrated operable every 92 days has not been addressed.
45	4.11.2.5	--	The ventilation exhaust treatment system was not addressed in the submittal.
46	4.11.2.6	3.8.B	The plant states that hydrogen monitoring will be done only "during power operation." Is this as conservative as requiring monitoring at all times?
47	3.11.2.7	3.8.B.5	The model RETS limitation on noble gas releases (beta and/or gamma) have not been directly addressed. Also the requirements the release rate is limited at the air ejector rather than following a 30 minute delay. Is this as conservative?
48	3.11.2.8	3.8.B.6	The submittal did not state that all venting or purging is to be suspended if the purge is not done through the standby waste gas treatment system.
49	3.11.3	3.8.C.1	There is no requirement for a report to the Commission if the solid radwaste system is inoperable for more than 31 days.
50	4.11.3.1	4.8.C.1	No requirement is stated that the solid radwaste system be demonstrated operable at least once every 92 days.
51	4.11.3.2	4.8.C.1	The plant response on verification of sample solidification should be developed in more detail, as discussed in the model.
52	3.11.4	3.8.D.6	The model requires a 30-day reporting requirement rather than 90 as specified in the submittal.



No.	NUREG 0472	Monticello RETS	Comments
53	3.12.1-6	4.15.B	The requirement for filing a report with the Commission when the sum of the ratios of the concentrations of environmental samples divided by the limit value is $\geq 1.0$ is not stated.
54	3.12.1.6	4.15.A	No statement is made that a report will be filed if the potential annual dose to an individual is equal to or greater than the calendar year limits specified in the model for gases and liquids.
55	Table 3.12-1	Table 4.15.1	The airborne radioiodine samples are not specified as being analyzed weekly. The weekly gamma analysis is more conservative than RETS.
56	Table 3.12-1	Table 4.15.1	Only 37 TLD locations are specified whereas 40 are required.
57	Table 3.12.1	Table 4.15.1	No tritium analysis of composited river water samples every 92 days is listed.
58	Table 3.12-1	Table 4.15.1	Only one drinking water sample is identified whereas two samples are required. Also it is assumed that a gamma scan analysis includes I-131 on the composited samples.
59	Table 3.12-1	Table 4.15	Is the shoreline sediment sample taken semiannually and is a gamma analysis performed?
60	Table 3.12-1	Table 4.15	On milk samples a gamma isotopic analysis is required on each sample and is the analysis frequency the same as the collection frequency.
61	Table 3.12-1 Notation a	Table 4.15 Notation a	A portion of the exponential term has been left out of the LLD calculation.
62	3.12.2	4.15.B	If an elevated release point is used, all 500 ft <sup>2</sup> gardens within 3 miles must be identified.

No.	NUREG 0472	Monticello RETS	Comments
63	3.12.2	4.15.B	The submittal does not require filing a report within 30 days if a sample location is found which yields a larger calculated dose than those specified in the current land use census.
64	3.12.3	4.15.C	The interlaboratory comparison must be approved by the Commission.
65	6.5.1	6.2	Insufficient information is provided to review the functions of the Unit Review Group (i.e., the plant operating committee and the Company Nuclear Review and Audit Group.
66	6.8	6.5	The procedures covering the Quality Assurance Program are not covered.
67	6.9.1.6	6.5	No statement is made requiring the Annual Report to be in the format of Reg. Guide 4.8. Does the report contain a map and a summary of the radiological monitoring program as specified?
68	6.9.1.8	6.7.4	Will the semi-annual report include summaries of the solid waste releases?
69	6.9.1.8	6.7.4	The model requires that the summary of the yearly meteorological data be reported in the January 1 semiannual report. Also, this report should contain an assessment of the radiation doses of the previous calendar year that were released from the site and to the public due to their activities inside the site boundary.
70	6.9.1.10	6.7.3	The model requires that a copy of the monthly report should be sent to the regional office of Inspection and Enforcement.
71	6.9.1.12	6.7.B.1	The plant specification for prompt notification with written followup does not specify for 1500 mrem/year to any organ other radionuclides with a half-life greater than 8 days.

No.	NUREG 0472	Monticello RETS	Comments
72	6.9.1.13	6.7.2	The model requires that the 30 day reports include the measured levels of radioactivity that exceeds the reporting limits of Table 3.12-2.
73	6.10.2	--	The model requires records to be maintained on the radiological environmental monitoring program.
74	6.14.2	--	Changes to the ODCM should be included in the monthly report.
75	6.15	--	Changes to the Radioactive Waste Treatment Systems were not included in the submittal.

OFF-SITE DOSE CALCULATION (ODCM) QUESTIONS FOR THE  
MONTICELLO NUCLEAR GENERATING PLANT

<u>Reg. Document</u>	<u>ODCM Section</u>		
10 CFR Part 20 Appendix B Table II	Table 2.1-1	1)	Table II of 10 CFR Part 20 does not list MPC values for Cs-138, Br-83, and La-141 which are listed on table 2.1-1. How were the listed MPC values obtained?
10 CFR Part 20 Appendix B Table II	Table 2.1-1	2)	Why aren't Br-82 and La-140 listed in table 2.1-1?
10 CFR Part 20 Appendix B Table II	Table 2.1-1	3)	The MPC listed in Table 2.1-1 does not agree with the 10 CFR Part 20 value for Cs-134.
	2.3-1	4)	The site specific value for the mixing effect when operating in a recycle mode is 1.86. How was this value determined?
Reg. Guide 1.109		5)	Dose from food grown on land with contaminated water has not been addressed in the ODCM submittal. Is this deletion consistent with current agricultural practices (i.e., is Mississippi river water an irrigation source)?
NUREG-0133	3.1.1	6)	The calculational methodology for determining alarm/trip setpoints for radioiodines and particulates on gaseous effluent monitors is not presented.
	3.1-9	7)	In the term $(L_i(X/Q)_s + 1.1 B_i)$ was the worst case $(X/Q)$ value assumed in calculating the values listed in table 3.1-2 for the above term?
NUREG-0133 5.3.1.1- 5.3.1.5	3.3-3	8)	In equation 3.3-3 the term $R_{ijak}$ is used, and is defined as the dose factor for each identified radionuclide $i$ , pathway $j$ , age group $a$ , and organ $k$ ; with units of $m^2$ mrem/yr per Ci/s or mrem/yr per $\mu\text{Ci}/m^3$ . Were the NUREG 0133 equations 5.3.1.1-5.3.1.5 used in calculating the value of $R_{ijak}$ ?

PROCESS CONTROL PROGRAM QUESTIONS FOR THE  
MONTICELLO NUCLEAR GENERATING PLANT

No.	Monticello PCP	
1	2.2-1	"Batch" is not adequately defined such that the amount of liquid waste that may be processed between samples is known. For quality assurance purposes a hopper tank may be too great a volume.
2	2.2-1	The model requirement (i.e., RETS 3.11.3) wherein at least one representative test specimen must be taken from at least every tenth batch of each type of wet radioactive waste has not been addressed. Non-radioactive test samples are used which may or may not be representative of the radioactive samples.
3	3-1	The procedures to be used in the event that solidification of the test sample fails have not been addressed. The testing of subsequent batches as described in section 3.11.3 of the model also has not been stated, but this requirement will be dependent on the definition of "batch" that is used.
4	3-1	Tests for foaming action of the liquid radwaste have not been addressed. Foaming can cause significant problems in the solidification process, but the requirement for testing should be based on previous plant experience.
5	2.2	The test solidification procedure has not been described and acceptance criteria for the solidified waste has not been discussed.