



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

November 15, 1979

Docket No. 50-313
and 50-368

LICENSEE: Arkansas Power & Light Company (AP&L)
FACILITY: Arkansas Nuclear One, Units 1 and 2 (ANO-1&2)
SUBJECT: SUMMARY OF MEETING OF OCTOBER 23, 1979, IN BETHESDA, MARYLAND,
REGARDING RADIOLOGICAL EFFLUENT TECHNICAL SPECIFICATIONS (RETS)

Introduction

By letter dated March 9, 1979, and May 10, 1979, AP&L submitted proposed RETS for ANO-1 and 2 respectively. By letter dated July 9, 1979, AP&L submitted the Off-site Dose Calculation Manual (ODCM) for ANO-1&2. Revision A to the ODCM was submitted by letter dated October 22, 1979. As a result of our review of the RETS and the ODCM, we developed positions which were provided AP&L (Enclosure 1) to form a basis for our discussions with AP&L. The purpose of this meeting was to discuss with AP&L our positions and those changes necessary to make their RETS and ODCM acceptable to the staff. Enclosure 2 provides a list of attendees.

Discussion

The initial discussion related to the staffs positions for the inclusion of requirements of 40 CFR Part 190 into the RETS and inclusion of Technical Specifications for Solid Radioactive Waste into the RETS. With regard to 40 CFR 190, this is an EPA requirement. However, NRC has been delegated to implement the requirement. For this reason, it must be included in the Technical Specifications. As a practical measure, because there are no other nuclear facilities near ANO-1&2, the dose commitment to an individual would be from ANO-1&2 only. With regard to the Solid Radioactive Waste Technical Specifications, there is a history of incidents involving the receipt of unacceptable solid waste at burial sites. The authorities of those states which have burial sites have expressed concern many times in the past. The licensee was informed that we believe a Technical Specification on Solid Waste will minimize the frequency of unacceptable waste delivered to the burial sites and assure the state authorities that the final solid waste product will be from a controlled process. Therefore, it is our position that RETS will contain a Technical Specification on Solid Radioactive Waste, and it will include the Solid Waste Process Control Program (SWPCP). The licensee was encouraged to submit the SWPCP. Following is a discussion of the changes to the RETS for ANO-2 necessary to make them acceptable to the staff.

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1. Specification for liquid and gaseous monitoring at all times

The requirements that the licensee proposed in Tables 3.3-12, 3.3-13, 4.2-12, and 4.3-13 provide that monitoring is only required when ever releases were being made. Our position is that monitoring would be applicable at all times for liquid and gaseous effluent. The AP&L position was that some systems would be off when not releasing effluent and therefore the monitor would be off. Our position is that the monitor should be "operable" at all times, i.e. it could be turned off but it should be operable if turned on at any time.

2. Monitor for the regenerative waste processing system

The staff's position is that Tables 3.3-13/4.3-13 should provide for monitors for the regenerative waste process system.

3. Monitor for the service water systems

The staff's position is that Tables 3.3-13/4.3-13 should provide for monitors for the service water system. AP&L was concerned that the limiting condition of operation (LCO) in the event of the monitor was inoperable would mean that the service water system would need to be shut down. Such a condition during any mode of operation is unacceptable. We committed to provide AP&L guidance on an acceptable LCO.

4. Other tanks applicable in Tables 3.3-13/4.3-13

We were concerned that the condensate storage tank and other tanks were not identified for monitoring. The licensee indicated that there were no other tanks applicable in Tables 3.3-13/4.3-13.

5. LCO's required in the event monitors are inoperable

Many LCO's in the the event of inoperable equipment do not have a time limit. We requested the licensee to put a time limit of 30 days on such action statements. AP&L was concerned that in the event that the inoperable equipment could not possibly be returned to service within 30 days, the LCO would imply that the plant would need to shut down. We indicated that, if such an event occurred, the licensee could request relief through a request for a Technical Specification change. It was recognized that this may not be a proper LCO and therefore we would provide the licensee guidance on what is acceptable.

6. Containment purge monitoring system

The staff's position was that the action statement concerning inoperable monitoring system should be to suspend purging. ANO-2 is not permitted to purge in modes 1, 2, 3, or 4. The licensee will review their system for conformance to the staff's position.

7. Monitoring for explosive gaseous mixtures

Our position was that the monitor which should be added is the monitor of the gas which would be added to an existing gas to provide the explosive mixture. For instance, if tanks collect hydrogenated gases, then oxygen should be monitored and have the Technical Specification limits.

8. Analysis of liquid waste

Our position is that P-32 and Fe-55 should be analyzed. The licensee believed this is too costly and time consuming. The staff considers the position to be firm.

9. Turbine building gaseous sampling

AP&L committed to provide for sampling in the turbine building.

10. Dose Commitment to Individuals

The staff's position is that dose commitments from liquid effluents and gaseous effluents should include an annual dose.

11. Radioactive Gaseous and Liquid Waste Systems

The staff's position is that the system should be operable at all times, i.e. they will operate whenever turned on at any time. Also, the dose values should be those which are specified in NUREG-0472. The licensee indicated that the gaseous waste system was not operable but would be by the time the RETS are implemented.

12. Total curies TS in liquid holdup tank

A total curies should be applicable to the liquid holdup tank.

13., 14., 15., TS for explosive mixtures, solid waste system, and 40 CFR 190

These subjects were discussed separately in 7 above and the initial discussion above respectively.

For the most part, the staff's comments in the particular sections of ANO-2 RETS also applied to the applicable sections of the ANO-1 RETS. We provided the licensee a copy of the RETS for ANO-1 TS which was in the format of ANO-1 TS but with our narrative. We requested the licensee to use our narrative when revising the RETS for ANO-1.

The Offsite Dose Calculation Manual (ODCM) was reviewed separately. AP&L hand delivered Revision A of the ODCM dated October 22, 1979. We provided the licensee guidance and the Branch Technical position on radiological monitoring.

The RETS for ANO-1&2 as they relate to meteorology was discussed separately and a list of concerns, Enclosure 3, was provided and discussed with the licensee.

Conclusion

The licensee was requested to revise the proposed RETS and ODCM for ANO-1&2 consistent with our comments and discussions and resubmit the revised RETS and ODCM within 30 days.



G. S. Vissing, Project Manager
Operating Reactors Branch #4
Division of Operating Reactors

Enclosures:

1. Open Items - ANO-1&2
Tech Specs
2. List of attendees
3. RETS Comments (Meteorology)

1385 150

OPEN ITEMS - ANO-1 TECH SPECS

1. For Tables 3.5.6-1, 3.5.7-1, 4.27.1-1, 4.27.2-1, same comment as ANO-2 comment #1.
2. In Table 3.5.6-1 same comment as ANO-2 #3.
3. In Table 3.5.6-1 same comment as ANO-2 #4.
4. In Table 3.5.6-1, action B, same comment as ANO-1 #5. Also Table 3.5.7-1, action B and C, same comment.
5. In Table 3.5.7-1, same comment as ANO-2 #7.
6. In Table 3.7.7-1, same comment as ANO-2 #6.
7. In Table 3.5.7-1, indicate whether there are iodine and particulate samples in the vents - if not, indicate how you will determine level of release.
8. In Specification 3.22.2, 3.23.2, and 3.23.4, same comment as ANO-2 #10.
9. In Specification 3.22.3 and 3.23.5, same comment as ANO-2 #11.
10. Same comment as ANO-2 #12.
11. Same comment as ANO-2 #13.
12. Same comment as ANO-2 #14.
13. Same comment as ANO-2 #15.
14. Same comment as ANO-2 #9.
15. In Table 4.27.1-1 and 4.27.2-1, indicate what the channel functional test will demonstrate and the channel calibration for ANO-1.

1385 151

OPEN ITEMS - ANO-2 TECH SPECS

1. The specification for liquid and gaseous monitoring should be applicable "At All Times" in Tables 3.3-12, 3.3-13, 4.3-12, 4.3-13.
2. In Table 3.3-13/4.3-13, add the monitor for the regenerative waste processing system.
3. In Table 3.3-13/4.3-13, add the monitor for the service water system.
4. In Table 3.3-13/4.3-13, are there other tanks, such as the condensate storage tank, which should be in the table? If not, why not?
5. On page 3-56, action items 18 and 20 should have maximum times of 30 days. Also on page 3-19, action items 26, 27 and 28 should have maximum times of 30 days.
6. In Table 3.3-12, the action for containment purge should be to suspend purging.
7. In Table 3.3-12/4.3.-12, add the monitors for explosive gas mixtures.
8. In Table 4.11-1, add P-32/Fe-55 sampling.
9. What sample provisions are there for turbine building sampling, i.e., is it grab sampling or continuous composite samples.
10. In specifications 3.11.1.2, 3.11.2.2 and 3.11.2.3, add the annual dose limits.
11. In specifications 3.11.1.3 and 3.11.2.4, indicate that the systems will be OPERABLE and use the dose values indicated in NUREG-0472.
12. Add the specification for total curies in liquid holdup tank.
13. Add the specification for explosive gas mixtures.
14. Add the specification for solid waste system.
15. Add the specification for 40 CFR 190.

1385 152

OCTOBER 23, 1979 MEETING

AWO-1/2

APPENDIX I

ATTENDANCE LIST

NRC

Guy S. Vissing

W. C. Burke

P. C. Wagner

D. J. Vito

D. S. Brinkman

L. Brown

J. Osloond

F. Cardile

F. Congel*

Jim Cortis*†

AP&L

David G. Mardis

Mark A. Smith

Steve Petzel

Basil Baker

Gary Fiser

*Part Time Attendance
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1385 153

ARKANSAS - RETS COMMENTS (METEOROLOGY)

Unit 1 Technical Specs (Memo from W. Cavanaugh, III to R. W. Reid, dated March 9, 1979)

Section 4.25.2 Dose, Noble Gases (p. 110ff)

Why are the "Bases" different than for "Dose, Iodine & Particulates," p. 110gg? What calculation methods will be used in the ODCM (e.g., will they be consistent with Regulatory Guides 1.109 & 1.111 or something else)? Will doses be based on historical meteorology or something else?

Unit 2 Technical Specs (Memo from W. Cavanaugh, III to J. Stolz, dated May 10, 1979)

Section 3/4.11.2.3 Dose, Radioiodines (p. B 3/4 11-4)

Will doses be based on historical meteorology or something else?

Units 1 & 2 Technical Specs

In Section 6.9, "Semiannual Radioactive Effluent Release Report" a statement should be inserted about (1) providing summary of hourly meteorological data collected during the previous year and (2) determining gaseous pathway doses (for purposes of the radioactive effluent release report submitted at the end of the year) based on meteorological conditions concurrent with the time of release of radioactive materials in gaseous effluents. (See attached "Administrative Controls" page). If you agree to (2), then the tables of short term release [$(x/q)_g$, $(x/q)_v$, $(D/q)_g$, and $(D/q)_v$, Tables 4.11-6e through Table 4.11-6h in the enclosure] are not submitted. Tables for long term release [$(X/Q)_g$, $(X/Q)_v$, $(D/Q)_g$, and $(D/Q)_v$, Tables 4.11-6a through Table 4.11-6g in the enclosure] are still submitted in the ODCM if you decide you want to submit tables of values rather than one maximum X/Q and D/Q value as you've currently done in the ODCM.

ODCM

Based on information provided to NRC for the Appendix I evaluation, the turbine building releases have caps or diffusers and we therefore consider them as ground level releases. Therefore, ground level release X/Q and D/Q values should be provided in the ODCM. If tables of X/Q and D/Q values are used in the ODCM, in the text part of the ODCM, reference the appropriate table, rather than citing a specific X/Q or D/Q value. (You do not have to use tables if you don't want to - you can stick with maximum offsite X/Q and D/Q values.)

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1385 154

MEETING SUMMARY DISTRIBUTION

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1385 155