



Docket PDR

UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

May 18, 1971

Roger S. Boyd, Assistant Director, BWR, Division of Reactor Licensing  
THRU: Donald F. Knuth, Chief, BWR-1, Division of Reactor Licensing

*Donald F. Knuth*  
MEETING WITH NORTHERN STATES POWER COMPANY (NSP) - MONTICELLO GENERATING  
PLANT (E-5979), CONCERNING TECH SPEC CHANGE NO. 2 - WASTE GAS SYSTEM,  
DOCKET NO. 50-263

Summary

A meeting was held on May 11, 1971, with NSP to discuss Change No. 2 to the Technical Specifications of the Monticello plant. An attendance list is enclosed.

Change No. 2 consists of proposed modifications to the gaseous radwaste system. The proposed modification will increase the holdup time of the condenser air ejector non-condensable gases from 30 minutes to 50 hours. The site boundary dose from this source alone is calculated to be 4 mRem/year, with other sources, ignored by the licensee, contributing an equal amount.

The proposed system consists of redundant hydrogen recombiners and compressors, and 5 gas storage tanks which will hold gases at 300 psig.

We informed the applicant that the proposed system is an improvement over the existing waste gas system, but it probably does not meet the "as low as practicable releases" concept.

Discussion

The proposed modifications, filed as a request for a change to the Technical Specifications, is supposed to be reviewed by the Operations Committee and in turn the recommendations submitted to the Safety Audit Committee for concurrence. The Vice-President is to take appropriate action (Table 6.1.1 of the Tech Specs). This has been emphasized to NSP on other occasions; however, the licensee stated that the safety committee had not completed its review yet. It was brought to the licensee's attention that this was a clear violation of the existing Tech Specs.

The design of the proposed gaseous radwaste system was discussed, and the licensee agreed to the following:

1. All equipment will be designed to seismic Class I requirements.
2. The five storage tanks will be located above the probable maximum flood level or will be protected from such a flood.

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3. Data on the operation of the recombiner using BWR effluents (wetting as well as iodine act as poisons on some catalysts) will be provided.
4. The equipment, from the air ejector to the compressor, will be designed to 350 psig (it is 300 psia now).
5. There will be a particulate filter upstream of the compressors.
6. The handling of the liquid discharges (dilution steam and from the recombiner) will be delineated.
7. Modifications to the system (desuperheater has been deleted, etc.) will be documented.
8. The instrumentation will be shown more clearly.
9. Attention will be paid to the stack, which is not designed to take tornadoes.
10. Operation of the unit under normal and abnormal conditions will be documented.

We informed the applicant that we did not agree with the statement in the report that "the pressurized tank holdup and charcoal holdup systems will provide identical environmental results for equal holdup time." We said we are of the opinion that a charcoal system, for approximately the same cost, could further reduce the curie release rate by a factor of 10.

Under normal operating conditions, the licensee did not take into consideration contributions from steam turbine gland seal, plant startup, HPCI turbine testing, SGTS systems operation, containment purging, shine from other radwaste tanks, and possible leakage from the proposed pressurized gaseous radwaste system. The licensee stated that the estimated release rate from the turbine gland seal system listed in the FSAR was in error; the boundary dose rate contribution should be 3.5 mRem/year instead of 0.35.

In the dose calculations, the contribution of halogens has not been considered, and therefore the thyroid dose for accident conditions has not been calculated. The licensee stated that they had the impression that halogens are collected in the recombiner. We understand that at KRB, very low concentrations of halogens have been detected downstream of the recombiner; however, we have no documented evidence.

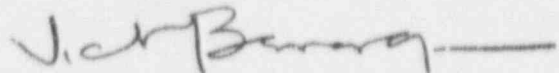
We mentioned that we could foresee some operational problems. Venting of the wrong tank due to an operational error seems quite probable.

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We informed the applicant that the proposed changes to the Technical Specifications are inadequate. We will discuss these changes after we have finished the review of the proposed system; and to expect some reduction on the allowable curie release rate.

We summarized the meeting by saying that the proposed gaseous radwaste system is an improvement over the existing one, and with some modifications it probably would be accepted. However, if it is compared to other systems proposed for other BWR's, (it is compared to the charcoal delay in the NSP report), we could not recommend it to our management as meeting the "as low as practicable" concept. A new rule is in preparation, and whenever this new rule is published, Monticello may have to make modifications if the radwaste system is installed as proposed.



Victor Benaroya, Project Leader  
Boiling Water Reactor Branch No. 1  
Division of Reactor Licensing

Enclosure:  
Attendance List

ATTENDANCE LIST

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

May 11, 1971

DRL

D. F. Knuth  
V. Benaroya  
R. Grill  
N. Thomasson

CO

C. D. Feierabend

NUS

A. W. DeAgazio

NSP

E. Ward  
C. E. Larson  
R. J. Jensen

SUNTAC

J. L. Renehan  
P. D. Arrowsmith  
J. T. Sevier

Roger S. Boyd

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Victor Benaroya, Project Leader  
Boiling Water Reactor Branch No. 1  
Division of Reactor Licensing

Enclosure:  
Attendance List

Distribution:  
Docket  
DRL Reading  
BWR-1 File  
PAMorris, DRL  
FSchroeder, DRL  
Asst. Directors, DRL  
BR. Chiefs, DRL/DRS  
EGCase, DRS  
RRMaccary, DRS  
BGrimes, DRL  
VBenaroya, DRL  
SMKari, DRL  
Compliance (2)  
HDenton, SERSG

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DATE ▶	5/18/71	5/18/71				