

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO.123 TO FACILITY OPERATING LICENSE NO. DPR-66

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

PENNSYLVANIA POWER COMPANY

BEAVER VALLEY POWER STATION, UNIT NO. 1

DOCKET NO. 50-334

INTRODUCTION

By letter dated April 13, 1987, Duquesne Light Company, (the licensee, acting as agent for the other two licensees listed above), requested a license amendment to revise the Beaver Valley Unit 1 Technical Specifications. In response to our requests, Duquesne Light submitted supplemental information in letters dated December 2, 1987 and January 25, 1988. The amendment concerns the monitoring of radioactive gases in the three waste gas decay tanks (WGDTs) at Beaver Valley Unit 1. The proposed amendment would: (1) delete the requirement for one radiation monitor and one sample flow rate measuring device from the Technical Specifications, and allow the physical removal of these munitors from the plant; and (2) relax the conditions under which the quantities of radionuclides in the WGDTs need to be determined.

DISCUSSION AND EVALUATION

Technical Specification (TS) 3/4 3.3.10, in conjunction with Table 3.3-13, currently requires, among other things, that at least one radiation monitor (designated as RM-GW-101) be operable and at least one sample flow rate measuring device be operable while filling any of the three WGDTs. TS Table 4.3-13 lists the frequency for checking the operability of these monitors. In the event that at least one radiation monitor is not operable during filling operations, the TS requires "ACTION 35", which specifies that the quantities of radioactive material in each WGDT must be determined every 24 hours. In the event that at least one sampler is not operable during filling operations, the TS requires "ACTION 28", which states that effluent releases may continue provided that the flow rate is estimated every 4 hours.

The licensee has proposed amending the TS to delete the requirement for a radiation monitor and the associated sample flow rate measuring device and allow the physical removal of these monitors from the plant. The licensee states that the radiation monitor for the WGDTs has a history of inoperability, and that this monitor was originally installed as an alternative to manual sampling of the WGDTs. The removal of the monitor, and the associated sample flow rate measuring device, will not increase the quantities of airborne radioactive effluents released from the plant during normal operations since the monitor's alarm only alerts the operator to divert the waste gas feed to another WGDT. The gaseous waste/process vent system (i.e., RM-GW-108A&B) downstream of the WGDTs controls the releases of radioactive gases to the environment, and provides an alarm and initiates automatic closure of the WGDT discharge valves. We therefore find the proposed deletion of radiation monitorand associated flow rate measuring device from Tables 3.3-13 and 4.3-13 acceptable. The physical removal of these devices is also acceptable.

The licensee proposed to delete TS 4.11.2.5.2, which pertains to operability requirement of the above radiation monitor. Since we already found removal of the monitor acceptable, we also find deletion of TS 4.11.2.5.2 acceptable.

In addition, the licensee proposed to amend TS 4.11.2.5.1 which requires, among other things, that the quantity of radioactive material contained in each WGDT must be determined to be within a limit of 52,000 curies of noble gases every 24 hours when radioactive gases are being added to the WGDTs, and the WGDT monitor is not operable. The reason for the noble gas activity limit is to limit doses to individuals in the event of an uncontrolled release of the contents of a WGDT (see TS Bases 3/4.11.2.5 on page B 3/4 11-5). The licensee proposed amending TS 4.11.2.5.1 so that the quantity of radioactive material in each tank will only have to be determined when radioactive materials are being added to the WGDTs and when the gross concentration of radionuclides in the primary coolant is greater than 100 microcuries per milliliter.

The licensee's January 25, 1988 letter demonstrates that the quantities of noble gases in each WGDT will be less than the TS limit of 52,000 curies when the gross concentration of radionuclides in the primary coolant is less than or equal to 100 microcuries per milliliter. In addition, the total body exposure to an individual located at the nearest exclusion boundary for two hours immediately following the onset of a release from one of the WGDTs will not exceed 0.5 rem. We therefore find the proposed change to TS 4.11.2.5.1 acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: April 7, 1988

Principal Contributor: Edward F. Branagan

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