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

Files (Docket No. 50-10)
THRU: D. L. Ziemann, Chief, ORB #2, L

REVIEW OF DRESDEN 1 EFFLUENT RELEASES

Dresden 1 annual average stack release rates for noble gases are on the order of 5% of the technical specification limits. This results in calculated dose rates at the site boundary on the order of 25 mRem per year whole body which is 2.5 times the design criteria in proposed Appendix I to 10 CFR Part 50. Annual average iodine release limits have been under 5% of technical specification limits.

Measures to limit releases to levels well below Part 20 were initiated by the Regulatory staff in July 1971. By letter dated July 22, 1971, we requested Commonwealth Edison (CE) to propose action levels for technical specifications to assure effluent releases would be well below Part 20 values. We also requested CE to submit a plan for meeting the requirements of Proposed Appendix I to 10 CFR Part 50. By letter of November 8, 1971, CE proposed action levels as requested but stated that the addition of off-gas equipment would not provide a substantial improvement to the health and safety of the public. CE did not propose a plan to meet the requirements of proposed Appendix I and has not installed additional state or the art equipment. By Change No. 21 dated June 13, 1972, we modified Dresden 1 Technical Specifications to include action levels which would assure that annual effluent releases would be well below Part 20 limits. We considered this to be an interim measure until a position on "as low as practicable" requirements for existing plants was developed.

An augmented off-gas treatment system is presently being installed at Quad-Cities 1 and 2 and at Dresden Units 2 and 3. When the Dresden Units 2 and 3 system is placed in operation, the releases from Unit 1 will exceed the combined releases of Dresden Units 2 and 3.

Other operating boiling water reactors have also been reviewed with regard to "as low as practicable". The status for other operating BWRs is as follows:

1. Millstone Unit 1 and Oyster Creek are committed to installing an augmented liquid and gaseous radwaste systems.

2. Humboldt Bay Unit No. 3 is now ordering equipment for an augmented off-gas system.

3. LACBWR's iodine off-gas release had been over 40% of technical specification limits, and they have voluntarily installed iodine filters to reduce iodine releases.

4. Nine Mile Point is modifying its liquid and gas radwaste systems.

5. Pilgrim and Vermont Yankee are installing augmented off-gas systems which are expected to be operational in autumn of 1973.

6. At Big Rock Point total gaseous releases in 1971 and 1972 have been about 1% of Part 20 limits. No augmented system has been requested or is known to be planned.

The PWRs have, in general, much lower release rates than the BWRs. Nevertheless, Connecticut Yankee is installing augmented off-gas and liquid radwaste systems to reach essentially zero release rates.

On the basis of the above, it is our judgement that Dresden 1 effluent releases are not "as low as practicable"; and, therefore, they should advise us of their plans and schedule for installation of augmented off-gas system.

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