



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

SAFETY EVALUATION FOR CO-IMPREGNATION OF CHARCOAL FOR FILTER SYSTEM

ZION POWER STATION, UNIT NOS. 1 AND 2

LICENSE NOS. DPR-39 AND DPR-48

DOCKET NOS. 50-295 AND 50-304

Commonwealth Edison has evaluated possible co-impregnation of charcoal in the plant's air effluent filtration systems to improve the iodine removal capability of these systems as ordered by the Commission in its letter dated February 29, 1980 (Item C.2 of Appendix A). As a result of their evaluation, the licensee has concluded that it is technically feasible to utilize co-impregnant charcoal in the air effluent filtration systems at Zion Station. By letter dated April 28, 1980, the licensee has agreed to replace the charcoal with co-impregnant charcoal in the safety-related air effluent filtration systems when the present charcoal fails to meet the Technical Specifications including the test requirements for charcoal in these systems. In April 1980, the licensee conducted tests on the hydrogen control purge system, fuel building exhaust system, control room makeup air charcoal system, and drumming station charcoal system, all of which are safety-related systems and determined that all these systems passed the current license requirement on charcoal for elemental iodine removal capability. Based on our telephone conversation with the licensee, the miscellaneous vents charcoal system, the only safety-related system that was not tested in April 1980, was tested in late 1979.

We have amended the Technical Specifications relating to ESF filters in accordance with Regulatory Guide 1.52 (Rev. 2) and this will require tests on charcoal for methyl iodine removal as an improvement in the charcoal sample test analysis method. This means that the licensee will have to meet the amended requirement on charcoal testing in order to meet their commitment and satisfy the intent and purpose of the Commission's Order. We have discussed the commitment with the licensee and agree that any installed charcoal that meets the amended testing requirements on charcoal need not be replaced by co-impregnated charcoal until such time it fails to satisfy the amended Technical Specifications for engineered safety feature ventilation filter systems. This time interval shall be consistent with the frequency for retesting charcoal given in the amended Technical Specifications for each of the safety-related charcoal filter systems.

We find the licensee's commitment to upgrade the charcoal absorbers in the safety-related air filtration systems meets the intent and purpose of the Commission's Order regarding this issue and will be implemented by the Technical Specifications to the Facility Licenses DPR-39 and DPR-48 for Zion Power Station, Unit Nos. 1 and 2.

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