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Inspector's Evaluation

RO Inspection Report No. 50-219/7319, Meteorology

The portion of the inspection referenced above consisted of a detailed review of the licensee's meteorological program.

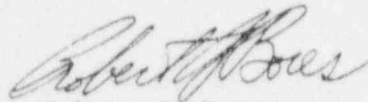
No items of violation were found during this inspection because there were no Technical Specifications dealing with this program. OC had submitted a supplement to their application for their license in which they indicated they will satisfy Safety Guide 23 when their new tower is constructed and new equipment is installed and operational. Meanwhile, there are a number of areas in the present program which are in nonconformance with the Guide.

1. The Guide requires a redundancy of recorders and sensors, or frequent inspections of these devices to insure 90% data recovery. OC had no redundancy in this manner and inspected these devices 3 times weekly despite finding a high frequency of recorder failures over the past several weeks.
2. Safety Guide 23 says that recorders for wind speed and direction, and for temperature differences should be located in the reactor control room for use during reactor operations. The only recorders for this data are located in the meteorology shack at the tower. Only the wind speed and direction at the 400 ft level are even indicated (but not recorded) in the control room. Temperature differences were not indicated in the control room.
3. The Guide indicates that a semi-annual calibration of instruments should be done. OC had been calibrating on an annual basis. (I noted the supplement to the operating license did indicate OC would calibrate semi-annually after the new tower is operational.)
4. The Guide calls for monthly or seasonal and annual joint frequency distributions of wind speed and wind direction by atmospheric stability classes to be compiled from basic reduced data. OC sent the recorder charts to Digital Graphics for reduction and key punching. It was then sent to Picker and Lowe to be used in the 6 month operating report. OC had not obtained a copy of their basic reduced data, which did not even appear in the 6 month reports. Picker and Lowe used the Wind Speed and Wind Direction data from the 400 foot level and that was all. These compilations were not made according to Stability Class. It appeared that what other information was collected, was not used at all. In this same vane, since none of the basic data was reduced on site, I have

some reservation about the lag time involved in getting the reduced data on an emergency basis if the need should arise.

5. The data that was compiled (in the 6 month report) was not adequate to allow either the licensee or the AEC staff to evaluate the meteorological conditions and determine the atmospheric diffusion factors (X/Q), for accidental or annual releases of effluents such that realistic estimates of resulting doses to the surrounding population could be made in accordance with the Guide. No attempt was made by the licensee to come up with such estimates.

In addition, when the Technical Specifications are updated to include the meteorology program, (such as, inclusion of the section developed in Supplement 4 to the application for an operating license) the type of data reduction and compilation to be done by the licensee ought to be spelled out. Data compilation should be according to the format suggested by Safety Guide 23, including wind frequencies by Stability Class, hours of data not recovered, etc. Meteorological information to be included in the 6 month report should also be spelled out.



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