



Consumers Power Company

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • Area Code 517 788-0550



November 6, 1970

Regulatory

File Cy.



Dr. Peter A. Morris, Director  
Division of Reactor Licensing  
United States Atomic Energy Commission  
Washington, DC 20545

Dear Doctor Morris:

We have the following comments to offer concerning your August 7 letter on "Uniform Monitoring, Recording, and Reporting" of radionuclide releases from nuclear power facilities.

In general, isotopic analyses cannot be performed at very low levels of release. This is particularly true when measuring halogen and particulate releases to the atmosphere and, in some cases, halogen and particulate releases to the circulating water discharge canal. As a result, when levels of release are low, gross radioactivity may be the only practical method of measuring and reporting releases in contrast to specific isotopic analyses. We feel, therefore, that a lower limit of about  $1 \times 10^{-7}$  uCi/ml gross activity in the circulating water discharge canal and  $3 \times 10^{-11}$  uCi/cc gross particulate plus halogen activity in the stack effluent should be provided below which isotopic analyses are not required.

With respect to gaseous waste recording requirements, many BWRs do not monitor tritium releases. We feel the quarterly requirement of isotopic analysis for tritium to be reasonable. However, a conservative yet valid calculation of tritium release to the atmosphere can substitute for this requirement. The calculation would make use of known tritium concentration in steam condensate, known off-gas flow rate and assumed 100% relative humidity in off gas released to the stack.

Reporting of releases requires correlation of effluent releases with statistically significant variations in off-site environmental media concentrations. The wording of the requirement seems to leave open the possibility of correlating effluent releases with environmental fluctuations of radioactive materials concentrations not of plant origin. Since the reference area method of

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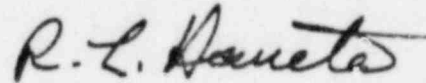
Dr. Peter A. Morris, Director  
November 6, 1970

2

environmental surveillance is employed by many facilities, it would seem prudent to correlate results with effluent releases only when the reference area model shows a difference between local and remote monitoring stations, and further only when it is likely that projected human exposures as a result of environmental monitoring exceed 5% of Part 20 standards.

All other suggested requirements are either being utilized at this time, or adjustments of a relatively minor nature can be made to provide a monitoring, recording and reporting system consistent with the guide.

Yours very truly,



R. L. Haueter  
Electric Production  
Superintendent - Nuclear

RWS/lf