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Memorandum

TO: The Files

DATE: February 14, 1967

THRU: Roger S. Boyd, Chief
Research & Power Reactor Safety Branch, DRL

FROM: D. R. Muller Donald R. Muller
Research & Power Reactor Safety Branch, DRL

SUBJECT: NSP MONTICELLO, DOCKET NO. 50-263

Bob Wilcox called yesterday (February 13, 1967) and informed me that the ACRS would like to have a Sub-committee meeting on March 3, 1967, on the subject application. He stated that they would not want further presentations on the reactor vessel, but would like presentations on the following:

1. Implications of fuel rod failure on normal operation, expected transients, and accidents. This should be presented within the framework of the recent Committee interest in TVA; i.e., might some types of mechanical failure interfere with subsequent core cooling?

2. For each city (Minneapolis and St. Paul), what is the present demand for water on:

   a. the average day during a year,
   b. the average day during a maximum month,
   c. during a maximum week, and
   d. the maximum 24-hour demand during any day?

   What comparable demands are forecasted for 20 and 40 years hence?

   What is the present volume of storage for <u>treated</u> water in each distribution system (i.e., elevated reservoirs, not pipe storage)?

   Please tabulate these reservoirs as to volume and elevations of maximum and minimum water levels, for both cities.

   What additions are being planned?

3. What would happen to the volume and concentration of liquid wastes at the time of an MCA? For example, in the event of a pipe line break in the primary system and consequent operation of the LPCI and/or HPCI systems and possibly complete core flooding, what total quantities of water would be involved?

Would all of this water be contained within tanks and sumps, or would there be overflow to the river or to the ground nearby?

Please provide a mass balance of the water pumped during an MCA and its disposition.

If any such water might escape to the river, what radio-nuclides might it contain and in what concentrations?

4. How long will it take a slug of pollutant at Monticello to pass the Minneapolis water intake at the absolute minimum flow averaging 400 cfs?

I called Mr. Al Ward of NSP on February 13 and passed on the foregoing information and questions to him.

Distribution:
E. G. Case
D. R. Muller
J. Shea
B. Grimes
K. Woodard
DRL Reading
R&PRSB Reading