

MEMORANDUM FOR: Jack E. Rosenthal, Chief FEB 1 1991
Reactor Operations Analysis Branch
Division of Safety Programs
Office for Analysis and Evaluation
of Operational Data

PDR

FROM: Sanford L. Israel
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SUBJECT: CAUSES OF INCORRECT SYSTEM FLOWS

Enclosed is a technical review report on incorrect system flow rates observed in LERs (other than silting and other types of plugging mechanisms) for the period 1985 to the present. Twenty-nine LERs were obtained for this report period; however, the actual number of situations with incorrect system flow rates may be higher. Both high and low system flow rates were observed in these LERs and most of the events occurred in the service water system. There were a wide variety of causes attributable to these events, but design deficiencies were a major contributor. In no specific order, there were incorrect flow orifices and orientation, incorrect location of flow instrumentation, inaccurate flow instrumentation, incorrect flow information from component manufacturers, insufficient flow tests, incorrect system configuration, incorrect pump impeller, and incorrect flow calculations.

The number of events is small and the deviations are generally small which would not completely incapacitate the function being rendered by a component. There have been generic communications associated with these types of problem in service water systems which made up the majority of the events. Consequently, no further action is recommended on this subject at this time.

Original signed by

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Enclosure: As stated

Distribution: See Attached

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