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APR 13 1982

MEMORANDUM FOR: Brian Sheron, Acting Chief
Reactor Systems Branch

FROM: M. Srinivasan, Chief
Power Systems Branch

SUBJECT: PROBABILITIES AND CONSEQUENCES OF LOCA/LOSS OF OFFSITE
POWER (LOOP) SEQUENCES

We have been discussing with the Reliability and Risk Assessment Branch (RRAB) of DST the need to perform systematic studies of the probabilities and consequences of various LOCA/LOOP sequences to determine if sequences other than coincident LOCA/LOOP are of sufficiently high probability to be considered as a design basis event. In essence, this request focuses on a known issue addressed by the staff as Technical Issue Number 4 in NUREG-0138 on "Loss of Offsite Power Subsequent to Manual Safety Injection Reset Following a LOCA." In the event of manual reset of the SIAS followed by a loss of offsite power during the injection phase, prompt operator action may be required to restart LOCA loads. For conditions other than the design basis (coincident LOCA/LOOP), design variations, such as proper loading to improper or no loading at all, may exist in the logics for control of the application of loads to ESF buses.

To limit the scope of the RRAB analysis, it becomes necessary to establish the time frame within which the probabilities and consequences of various LOCA/LOOP sequences are to be analyzed. Since the nature of such a determination appears to fall within the scope of RSB's expertise, we ask your assistance in this matter to provide us the following:

1. The time frame (starting with a LOCA initiation) after which it is permissible to manually reload diesel generator buses (assuming subsequent LOOP occurrences) with required loads to maintain the plant in a safe condition.
2. The time frame (starting with a LOOP) after which, should a LOCA subsequently occur, manual action is permissible to realign from safe shutdown loads to ECCS loads to mitigate the LOCA.

Contact:
O. Chopra
x29493

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We intend to use your response as a basis for limiting the scope of RRAB analysis on this subject.

If you have any questions regarding this, please contact Om Chopra at x29493.

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M. Srinivasan, Chief
Power Systems Branch
Division of Systems Integration

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DATE	4/9/82	4/9/82	4/9/82	4/13/82			

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