

BWR OWNERS' GROUP

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BWROG - 8945
May 9, 1989

Frank Miraglia, Associate Director for Projects
Office of Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

Subject: NRC REVIEW OF NEDO-31695 -- BWR SUPPRESSION POOL TEMPERATURE
TECHNICAL SPECIFICATION LIMITS

Dear Mr. Miraglia:

Enclosed are 30 copies of the BWR Owner's Group topical report on BWR Suppression Pool Temperature Technical Specification Limits (NEDO-31695) for NRC review and approval. This report provides an updated basis for the Technical Specification (T/S) limits on the suppression pool bulk temperature for BWR plants. This report also presents a generic suppression pool temperature T/S Limiting Condition for Operation of 100°F for those plants which participated in Part 2 of the BWROG Suppression Pool Temperature Limit (SPTL) program. The updated basis and generic LCO presented in NEDO-31695 consider the impact of increased suppression pool temperature on design basis events. Plant-specific considerations, which were not within the scope of this report, that should be addressed to justify an LCO of 100°F are also identified in the report.

The enclosed report (NEDO-31695) assumes NRC acceptance of the conclusions of NEDO-30832 submitted to the NRC for review in March 1985. NEDO-30832 presented results of Part 1 of the BWROG SPTL program which was directed at eliminating the local pool temperature limit of approximately 200°F which is specified in NUREG 0783. This limit was established to address concerns about large amplitude dynamic loads resulting from unstable condensation with SRV discharges into the suppression pool based on available data with straight pipe and ram's head discharge devices. NEDO 30832 presents new data which provide the basis for elimination of this limit for SRV discharges with quenchers. Since this concern about unstable condensation was part of the original basis for T/S limits on pool temperature, the updated basis for the T/S limits presented in NEDO-31695 considers this concern to be resolved for plants with quenchers.

NEDO-31695 presents results of Part 2 of the BWROG SPTL program which provides an updated basis for the T/S limits on bulk pool temperature. These are the limit for normal operation (approximately 90°F), the scram limit (110°F), and the limit for the reactor at full pressure (120°F). This work which included the latest representative containment test data

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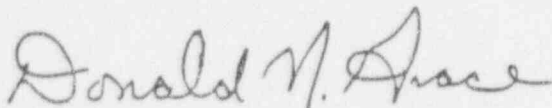
Mr. Frank Miraglia
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and assumed that the NUREG 0783 local pool temperature limit can justifiably be eliminated shows that there is margin in the limit for normal operation. NEDO-31695 presents this updated basis for the T/S limits and a generic operating limit of 100°F which will provide more operating margin. This report will be useful to the NRC and the industry in raising the normal operating limits for the pool temperature to avoid plant shutdowns or excessive operation of pool cooling systems during periods of high ambient temperatures. Avoiding unnecessary plant shutdowns and unnecessary wear on pool cooling system components will result in an overall improvement in BWR plant safety.

In summary, the BWROG feels there is significant benefit to be realized by raising the suppression pool temperature T/S limit for normal operation. The licensing topical reports submitted for Part 1 (NEDO-30832) and Part 2 (NEDO-31695) of the BWROG SPTL Program provide information supporting relaxation of this limit. Therefore, the NRC should place priority on these reviews to avoid any impact of this limit on BWR operation during the summer of 1989.

This report has been endorsed by a substantial number of the members of the BWROG; however, it should not be interpreted as a commitment of any individual member to a specific course of action. Each member must formally endorse the BWROG's position in order for that position to become the member's position.

Very truly yours,



D. N. Grace, Chairman
BWR Owner's Group

Attachment

cc:

J. Craig (NRC)
J. Kudrick (NRC)
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R. Janecek, RRG Chairman
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