



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAY 9 1977

Handwritten: Jerry F. [unclear] RET
Scott [unclear] T.

MEMORANDUM FOR: T. M. Novak, Chief, Reactor Systems Branch, DSS ←
FROM: R. J. Bosnak, Chief, Mechanical Engineering Branch, DSS
SUBJECT: REACTOR SYSTEMS BRANCH TECHNICAL POSITION ON OVERPRESSURE
PROTECTION DURING STARTUP OR SHUTDOWN
Ref: T. Novak letter of April 29, 1977

As requested in the referenced letter, the Mechanical Engineering Branch has reviewed the proposed BTP and we have the following comments:

1. On p.2 of the "Background" section of the BTP, reference is made to a para. NB-3113.2 of ASME Section III as the source of the definition of upset conditions and the definition is quoted. Up until recently this was an acceptable reference; however, with the publication of the Winter 1976 addendum of Section III, changes were made to the code which include the deletion of the definitions of the four system operating conditions i.e., normal, upset, emergency and faulted. Accordingly the reference is no longer applicable. Additionally, use of these terms to identify the various stress limits in Section III has also been discontinued.

By way of additional clarification we note that the magnitude of the code stress limits have not been affected by any of these changes but the limits have been redesignated as four categories of Service Limits - A, B, C and D in lieu of the previously used normal, upset, emergency and faulted stress limits.

Plant and System Operating Conditions will continue to be referred to in the industry as normal, upset, emergency or faulted. However, definitions of these various conditions now should be found in systems oriented standards such as those published by the American Nuclear Society.

Further, a statement has been added to the code to the effect that selection of plant or system operating conditions and appropriate ASME Service Limits "can be derived from systems safety criteria documents for specific types of nuclear power systems and may be found in the requirements of regulatory authorities having jurisdiction at the site."

90017172

8001140

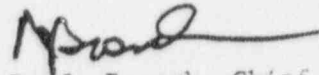
Handwritten: 303

T. M. Novak

- 2 -

For this BTP, the correct reference for the definition of a system "upset condition" should thus be obtained from an appropriate ANS standard.

2. On p.3 of the BTP, in the first paragraph, "Upset Condition Limits" should be changed to "Service Limit B criteria as defined in NB-3000 of ASME Section III." This change is necessitated by the revisions in code terminology discussed in item 1 above.
3. On page 5, the first paragraph of item 5 states that "system equipment should be of high quality". We recommend that this be clarified to require more specifically the use of Quality Group A equipment. In view of the importance of the component for which this protection is intended, we do not see how any lower quality level could be accepted.



R. J. Bosnak, Chief
Mechanical Engineering Branch
Division of Systems Safety

cc: J. Knight, SS
D. Ross, SS
R. Tedesco, SS
D. Eisenhut, OR
H. Brammer, SS
T. Ippolito, SS
R. Baer, OR
S. Pawlicki, SS
W. Butler, OR
R. Kirkwood, SS
F. Cherny, SS

90017173