

**Comment Resolution for Safety Evaluation of BWROG-TP-11-022, Revision 1
“Pressure-Temperature Limits Report Methodology for Boiling Water Reactors”**

The BWROG commented on the proposed Condition stated in the indented paragraph in Section 4.0, “Conditions and Limitations,” of the draft safety evaluation (SE) report (SER). The proposed wording in the draft SE is as follows:

Each applicant referencing this LTR shall provide the lowest service temperatures for all ferritic RCPB [reactor coolant pressure boundary] components that are not part of the RPV [reactor pressure vessel] based on their initial RT_{NDT} values and demonstrate that this requested information will not be in conflict with the lowest operating temperature established in the P-T limits.

The BWROG proposed the following Condition in lieu of the above:

Each applicant referencing this LTR shall confirm that the lowest service temperatures for all ferritic RCPB components that are not part of the RPV have not been reduced below the values contained in the component design specifications. This confirmation, when provided with the RPV P-T [pressure-temperature] limit curves will demonstrate that the requirements of 10 CFR [Part] 50 Appendix G remain satisfied for all components of the RCPB.

The BWROG’s basis for this was:

The proposed condition in the NRC SER states that applicants must provide the lowest service temperature for all ferritic components of the RCPB, that are not part of the RPV based on their initial RT_{NDT} values. The requirements for bolting, piping, pumps, and valves with wall thickness less than 2.5 inches do not result in development of a RT_{NDT} ; rather, these components require only that three Cv [Charpy V-Notch] specimens are tested at a temperature lower than the LST [lowest service temperature] as defined in the design specification. Components with wall thickness greater than 2.5 inches do require determination of a RT_{NDT} . Most, if not all, ferritic components in the BWR [boiling water reactor] RCPB, other than the RPV, do not have wall thicknesses greater than 2.5 inches; therefore, the requirement to establish a LST based on an initial RT_{NDT} will not be possible to satisfy.

The NRC staff resolution is:

Each applicant referencing this LTR shall confirm that, in addition to the requirements in the ASME [American Society of Mechanical Engineers] Code, Section XI, Appendix G, the lowest service temperatures for all ferritic RCPB components that are not part of the RPV, are below the lowest operating temperature in the proposed P-T limits.

Two acceptable ways of satisfying this condition are for the licensee to demonstrate that:

1. The lowest operating temperature in the proposed P-T limits is the same as, or higher than, that in the first set of P-T limits approved for initial operation.
2. The lowest service temperatures for the ferritic components in the RCPB, contained in the component design specifications, are less than the minimum temperature in the proposed P-T limits.

ATTACHMENT