

DUKE POWER COMPANY  
OCONEE NUCLEAR STATION

Proposed Technical Specification Revision

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3.1.2.6 Prior to exceeding six (Unit 1)  
fifteen (Unit 2)  
fifteen (Unit 3)

effective full power years of operation.

Figures 3.1.2-1A (Unit 1), 3.1.2-2A (Unit 1)  
3.1.2-1B (Unit 2), 3.1.2-2B (Unit 2)  
3.1.2-1C (Unit 3), 3.1.2-2C (Unit 3)

and 3.1.2-3A (Unit 1)  
3.1.2-3B (Unit 2)  
3.1.2-3C (Unit 3)

and Technical Specification 3.1.2.1, 3.1.2.2 and 3.1.2.3 shall be updated for the next service period in accordance with 10 CFR 50, Appendix G, Section V.B.

3.1.2.7 The updated proposed technical specification referred to in 3.1.2.6 shall be submitted for NRC review at least 90 days prior to the end of the service period for Units 1, 2 and 3.

### Bases - Units 1, 2 and 3

All components in the Reactor Coolant System are designed to withstand the effects of cyclic loads due to system temperature and pressure changes. These cyclic loads are introduced by normal load transients, reactor trips, startup and shutdown operations, and inservice leak and hydrostatic tests. The various categories of load cycles used for design purposes are provided in Table 4.8 of the FSAR.

The major components of the reactor coolant pressure boundary have been analyzed in accordance with Appendix G to 10 CFR 50. Results of this analysis, including the actual pressure-temperature limitations of the reactor coolant pressure boundary, are given in BAW-1699 and BAW-1697.

The Figures specified in 3.1.2.1, 3.1.2.2 and 3.1.2.3 prevent the pressure-temperature limit curves for normal heatup, normal cooldown and hydrostatic tests respectively. The limit curves are applicable up to the indicated effective full power years of operation. These curves are adjusted by 25 psi and 10°F for possible errors in the pressure and temperature sensing instruments. The pressure limit is also adjusted for the pressure differential between the point of system pressure measurement and the limiting component for all operating reactor coolant pump combinations.

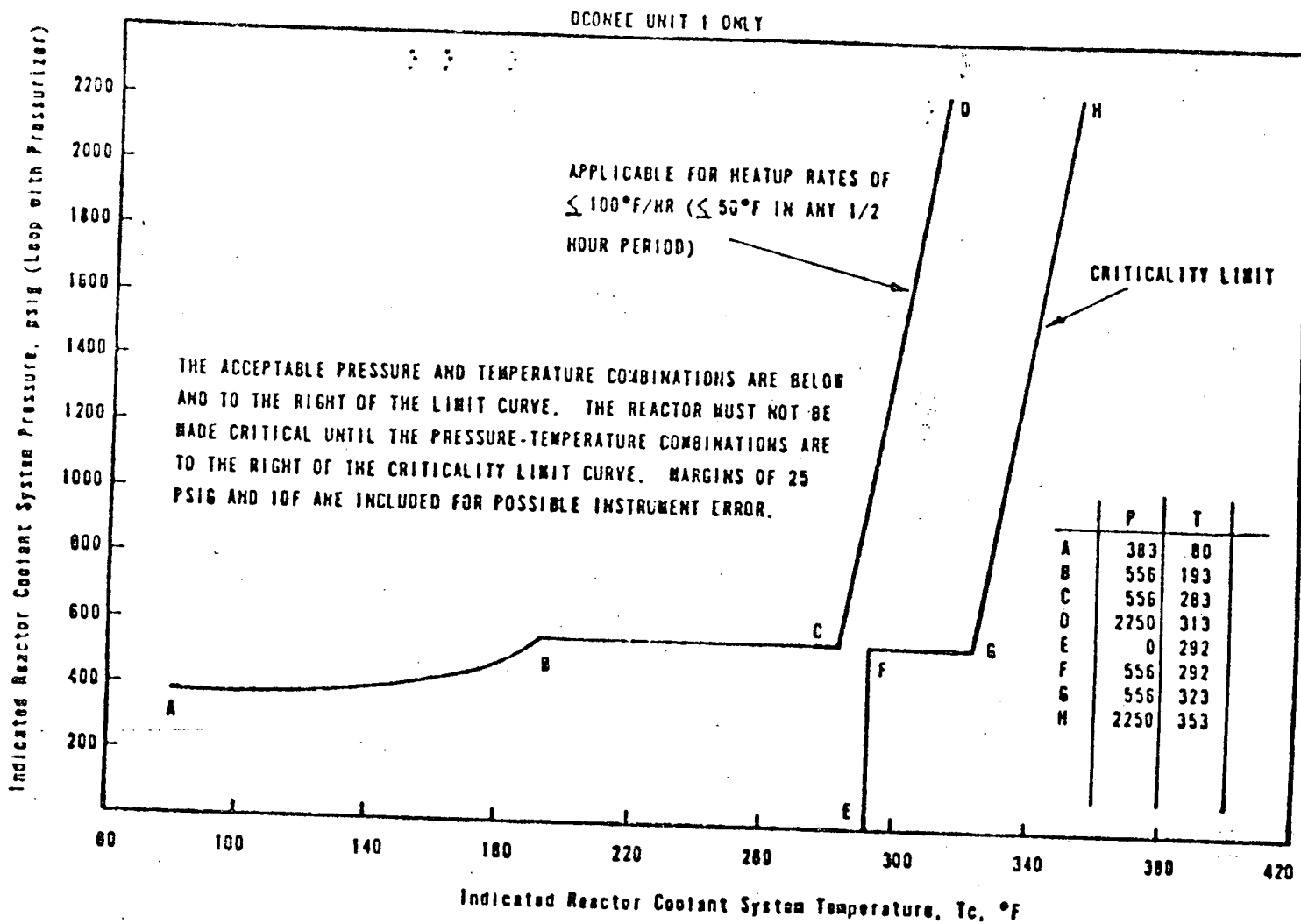
The cooldown limit curves are not applicable to conditions of off-normal operation (e.g., small LOCA and extended loss of feedwater) where cooling is achieved for extended periods of time by circulating water from the HPI through the core. If core cooling is restricted to meet the cooldown limits under other than normal operation, core integrity could be jeopardized.

The pressure-temperature limit lines shown on the figures specified in 3.1.2.1 for reactor criticality and on the figures referred to in 3.1.2.3 for hydrostatic testing have been provided to assure compliance with the minimum temperature requirements of Appendix G to 10 CFR 50 for reactor criticality and for inservice hydrostatic testing.

The actual shift in  $RT_{NDT}$  of the beltline region material will be established periodically during operation by removing and evaluating, in accordance with Appendix H to 10 CFR 50, reactor vessel material irradiation surveillance specimens which are installed near the inside wall of this or a similar reactor vessel in the core region, or in test reactors.

The limitation on steam generator pressure and temperature provides protection against nonductile failure of the secondary side of the steam generator. At metal temperatures lower than the  $RT_{NDT}$  of +60°F, the protection against nonductile failure is achieved by limiting the secondary coolant pressure to 20 percent of the preoperational system hydrostatic test pressure. The

3.1-6



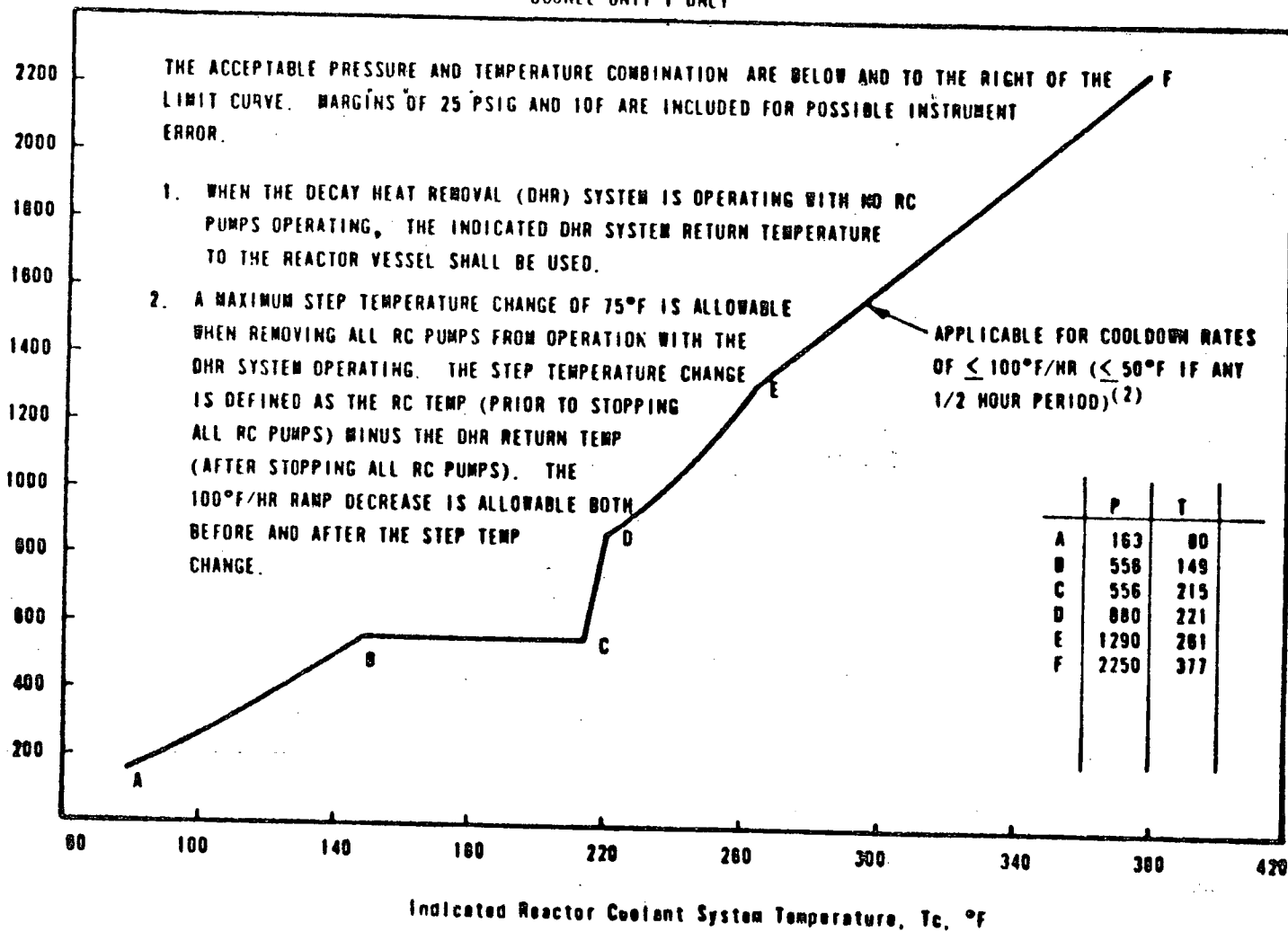
REACTOR COOLANT SYSTEM  
 NORMAL OPERATION-HEATUP LIMITATIONS APPLICABLE FOR FIRST  
 6.0 EFFECTIVE FULL POWER  
 YEARS



UNIT 1  
 OCONEE NUCLEAR STATION

Figure 3.1.2-1A

Indicated Reactor Coolant System Pressure, psig (Loop with Pressurizer)



3.1.2-7

REACTOR COOLANT SYSTEM  
 NORMAL OPERATION-COOLDOWN  
 LIMITATIONS APPLICABLE FOR  
 FIRST 6.0 EFFECTIVE FULL  
 POWER YEARS UNIT 1  
 OCONEE NUCLEAR STATION



Figure 3.1.2-2A