

**FLORIDA POWER CORPORATION**

**CRYSTAL RIVER UNIT 3**

**PRESSURE/ TEMPERATURE LIMITS REPORT  
REVISION 0**

Referencing Revised  
Standard Technical Specifications

## **1.0 Pressure/ Temperature Limits**

This Pressure/ Temperature Limits Report for CR-3 has been prepared in accordance with the requirements of Technical Specification Section 1.1. The pressure/ temperature (P/T) limits have been developed using the methodology provided in the references.

The following pressure-temperature limits are included in this report.

- 1) Allowable plant heatup and cooldown rates.
- 2) Plant heatup P/T curve
- 3) Plant cooldown P/T curve
- 4) Plant inservice leak and hydrostatic testing P/T curve

## **2.0 References**

1. B&W Fuel Company, topical report BAW-10046A, Rev. 2, "Methods of Compliance with Fracture Toughness and Operational Requirements of 10CFR50, Appendix G", June 1986.

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## **ALLOWABLE HEATUP AND COOLDOWN RATES**

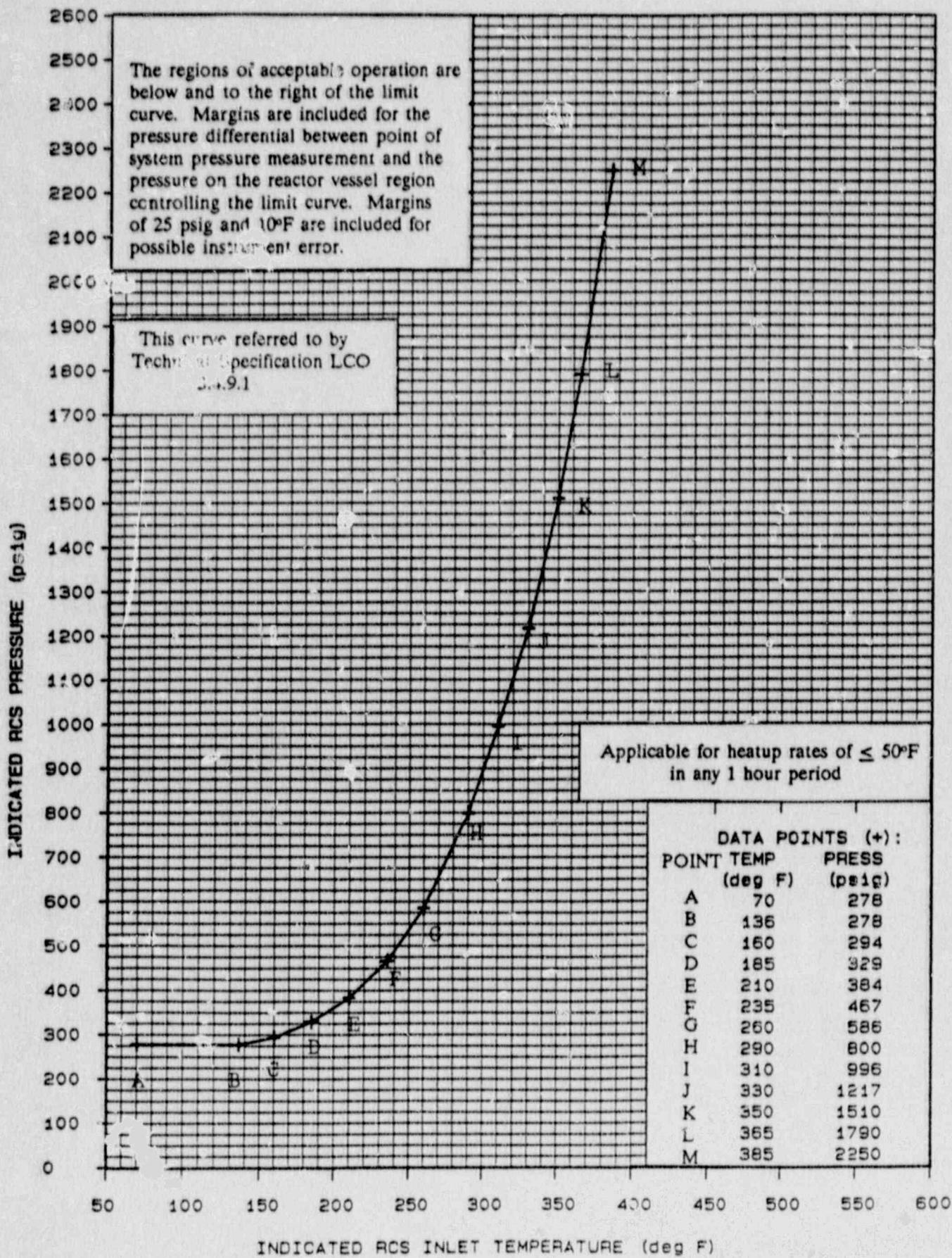
- a. A maximum heatup of 50°F in any one hour period.
- b. For the temperature ranges specified below, the cooldown rates should be as specified below in any one hour period.
  - i.  $T > 280^{\circ}\text{F}$        $\leq 100^{\circ}\text{F/hr}$  ( $\leq 50^{\circ}\text{F}$  in any 1/2 hour period)
  - ii.  $280^{\circ}\text{F} \geq T > 150^{\circ}\text{F}$        $\leq 50^{\circ}\text{F/hr}$  ( $\leq 25^{\circ}\text{F}$  in any 1/2 hour period)
  - iii.  $150^{\circ}\text{F} \geq T$        $\leq 10^{\circ}\text{F/hr}$  ( $\leq 10^{\circ}\text{F}$  in any one hour period)

and,

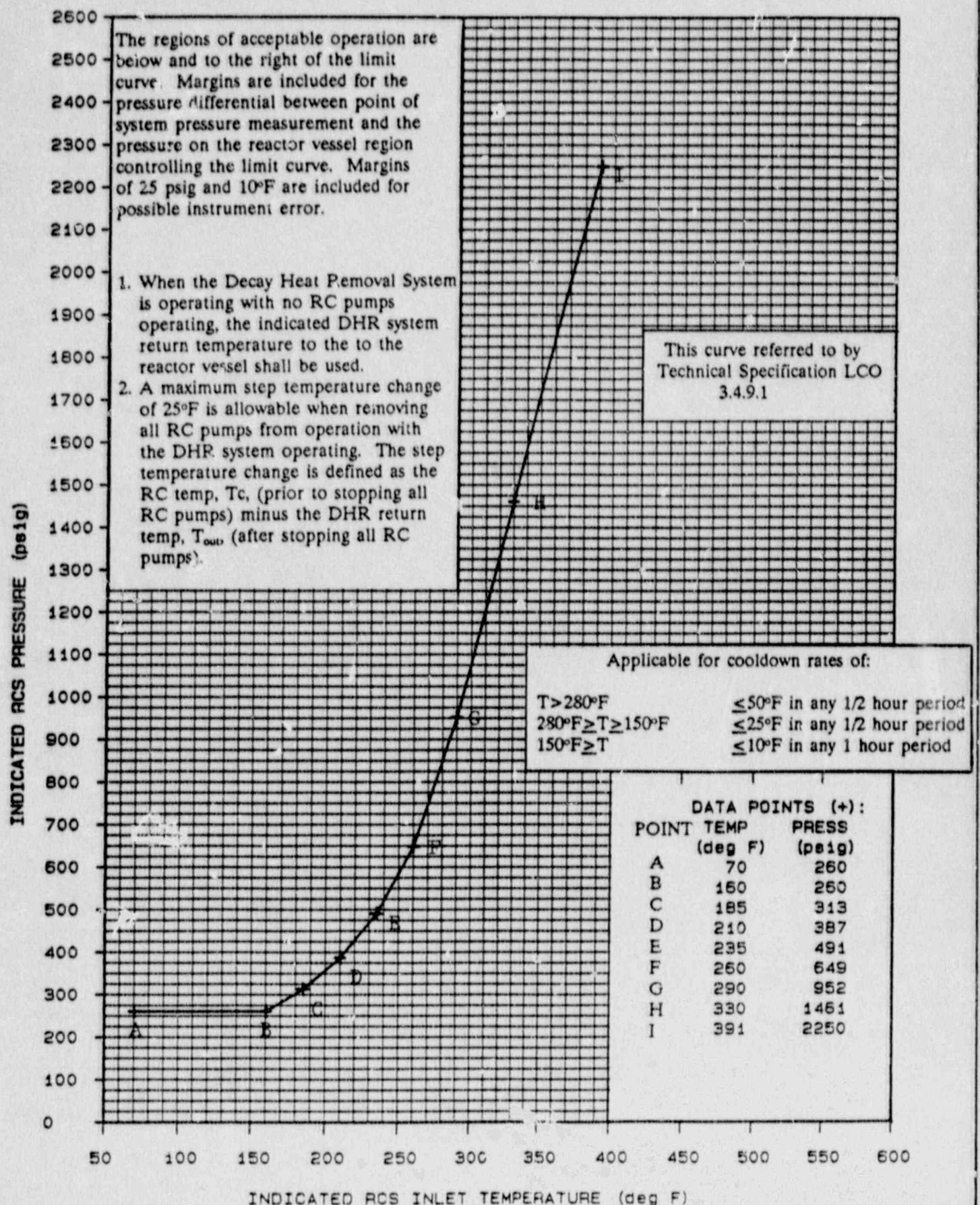
- c. A maximum temperature change of less than or equal to 5°F in any one hour period during hydrostatic testing operations above system design pressure.

These limits are referred to  
by Technical Specification  
LCO 3.4.9.1

**REACTOR COOLANT SYSTEM PRESSURE-TEMPERATURE LIMITS  
FOR HEATUP FOR FIRST 15 EFPY**



**REACTOR COOLANT SYSTEM PRESSURE-TEMPERATURE LIMITS  
FOR COOLDOWN FOR FIRST 15 EFPY**



**REACTOR COOLANT SYSTEM PRESSURE-TEMPERATURE LIMITS  
FOR INSERVICE LEAK & HYDROSTATIC TESTS FOR FIRST 15 EFPY**

