

EXHIBIT A

MONTICELLO NUCLEAR GENERATING PLANT  
DOCKET NO. 50-263

CHANGE REQUEST DATED JUNE 1, 1973  
PROPOSED CHANGES TO THE TECHNICAL SPECIFICATIONS  
APPENDIX A OF PROVISIONAL OPERATING LICENSE NO. DPR-22

Pursuant to 10 CFR 50.59 the holders of the above-mentioned license hereby propose the following changes to Appendix A, Technical Specifications:

PROPOSED CHANGE

Section 2.3.F, Bases, change the following

- Line 4, delete the words " .... as shown in FSAR Figure 14.5.3 .... "
- Line 6, change the value "105%" to "110%"
- Line 7, change the value "1.9" to "1.8"
- Line 7, revise the last sentence to read, "Reference FSAR Section 14.5.1.2.2 and supplemental information submitted February 13, 1973."

Section 2.2, Bases, change the fifth paragraph as follows:

- Line 4, change the value "1187" to "1183"
- Lines 4 and 5, replace the sentence, "In addition, the ..... above transient." with the words, "The safety valves are sized assuming no direct scram during MSIV closure."
- Line 6, change the value "1293" to "1283"

Section 2.4, Bases, change the second paragraph as follows:

- Line 5, change the words "turbine stop valve" to "main steamline isolation valve"

Bases:

2.2 The reactor coolant system integrity is an important barrier in the prevention of uncontrolled release of fission products. It is essential that the integrity of this system be protected by establishing a pressure limit to be observed for all operating conditions and whenever there is irradiated fuel in the reactor vessel.

The pressure safety limit of 1335 psig as measured in the vessel steam space is equivalent to 1375 psig at the lowest elevation of the reactor coolant system. The 1375 psig value was derived from the design pressures of the reactor pressure vessel, coolant piping, and recirculation pump casing. The respective design pressures are 1250 psig at 575°F, 1148 psig at 562°F, and 1400 psig at 575°F. The pressure safety limit was chosen as the lower of the pressure transients permitted by the applicable design codes: ASME Boiler and Pressure Vessel Code Section III-A for the pressure vessel, ASME Boiler and Pressure Vessel Code Section III-C for the recirculation pump casing, and the USAS Piping Code Section B1.1 for the reactor coolant system piping. The ASME Code permits pressure transients up to 10 percent over the vessel design pressure (1108 x 1250 = 1375 psig) and the USAS Code permits pressure transients up to 20 percent over the piping design pressure (1207 x 1148 = 1378 psig).

The design basis for the reactor pressure vessel makes evident the substantial margin of protection against failure at the safety pressure limit of 1375 psig. The vessel has been designed for a general membrane stress no greater than 26,700 psi at an internal pressure of 1250 psig and temperature of 575°F; this is more than a factor of 1.5 below the yield strength of 42,300 psi at this temperature. At the pressure limit of 1375 psig, the general membrane stress increases to 29,000 psi, still safely below the yield strength.

The reactor coolant system piping provides a comparable margin of protection at the established pressure safety limit.

The normal operating pressure of the reactor coolant system is approximately 1025 psig. The turbine trip from rated power with failure of the bypass system represents the most severe primary system pressure increase resulting from an abnormal operational transient. The peak pressure in this transient is 1168 psig. In addition, the safety valves are sized assuming no ~~direct scram~~ <sup>direct SCRAM</sup> ~~scram~~ <sup>scram</sup>.

Bases Continued:

2.2 ~~MSIV closure.~~ ~~scram in the above transient.~~ The ~~scram~~ly scram assumed is from an indirect means (high flux) and the pressure at the bottom of the vessel is limited to 12~~3~~ psig in this case. Reactor pressure is continuously monitored in the control room during operation on a 1500 psig full scale pressure recorder.