



**INDIANA AND MICHIGAN POWER
D. C. COOK NUCLEAR PLANT
UPDATED FINAL SAFETY ANALYSIS REPORT**

Revision: 25.0
Table: 14.3.2-1
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Plant Input Parameters for Small Break Loss-of-Coolant Accident	
Core Rated Thermal Power-100% (MWt)	3304
Peak Linear Power, kW/ft	15.171
Fuel Type	15x15 Upgrade Fuel
Total Core Peaking Factor, F_Q	2.32
Hot Channel Enthalpy Rise Factor, $F_{\Delta H}$	1.55
Hot Assembly Average Power Factor, P_{HA}	1.38
Thermal Design Flow, gpm/loop	83,200
Nominal Vessel Average Temperature, °F	577.4 ⁽¹⁾
Nominal Pressurizer Pressure, psia	2250 ⁽²⁾
Pressurizer Pressure Uncertainty (psia)	±67
Minimum Auxiliary Feedwater Flow Rate, lbm/s per SG	14.68
Steam Generator Tube Plugging (Maximum), %	10
Initial Accumulator Water Volume, ft ³	946
Accumulator Tank Volume, ft ³ /tank	1350
Accumulator Water Temperature, °F	130
Minimum Accumulator Cover Gas Pressure (minus uncertainties), psia	600
Refueling Water Storage Tank Temperature, °F	105
Nominal Steam Pressure, psia	848.32



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Plant Input Parameters for Small Break Loss-of-Coolant Accident

SI Flow Delay Time, seconds	54
HHSI Cross-Tie Valve Position	Open (Injection & Cold Leg Recirculation) ⁽³⁾
RHR Cross-Tie Valve Position	Open (Injection) Closed (Cold Leg Recirculation)
<p>(1) Analysis supports operation over the range of nominal full-power T_{avg} values of 553.7°F – 575.4°F.</p> <p>(2) Analysis supports operation at nominal initial pressurizer pressure (without uncertainties) of 2100 psia and 2250 psia.</p> <p>(3) Conservatively modeled HHSI cross-tie valves closed in injection phase.</p>	