

Table 4.3-1

REACTOR RECIRCULATION SYSTEM
DESIGN CHARACTERISTICS
(3952 MWt)

External Loops	
Number of Loops	2
Pipe Sizes (nominal o.d.)	
Pump Suction,in	28
Pump Discharge,in	28
Discharge Manifold,in	22 (Units 1 & 2), 12 & 22 (Unit 3)
Recirculation Inlet Line,in	12
Equalizer Line,in (Unit 2 only)	22
Design Pressure (psig)/Design Temperature(°F)	
Suction Piping	1148/562
Discharge Piping	1326/562
Pumps	1500/575
Operation at 3952 MWt (100% Core Flow)	
Recirculation Pump	
Flow gpm (approximate)	47,400
Flow,lb/hr	17.95 X 10 ⁶
Total Developed Head,ft	643
Suction Pressure (static),psia	1,056
Available NPSH*(min.),ft	558
Water Temperature (max.),°F	529
Pump Brake HP (min.),hp	6,734
Flow Velocity at Pump Suction, fps (approximate)	30.5
Variable Frequency Drives (Units 1, 2, and 3) and Power Supply	
Frequency (operating range),Hz	11.5-57.5
Total Required Power to Variable Frequency Drive (Units 1, 2, and 3)	
HP/set	7,194
HP total	14,388
Jet Pumps	
Number	20
Total Jet pump flow,lb/hr	102.5 X 10 ⁶
Throat I.D.,in	8.18
Diffuser I.D.,in	19.0
Nozzle I.D.,in. (representative)	3.14
Diffuser Exit Velocity,ft/sec	15.3

* Includes velocity head.

BFN-28

Table 4.3-1b
(Deleted)

|