Table 14.5-1
TRANSIENT ANALYSES POWER/FLOW STATE POINTS
(100P = 3458 MWt, 100F = 102.5E6 lbm/hr)

TRANSIENT	30P/52F	75P/52F	75P/108F	100P/81F	102P/81F	100P/100F	100P/105F	102P/105F	102P/100F
Load Rejection No Bypass							X		
LRNBP/EOC-RPT-OOS							X		
Loss of Condenser Vacuum								X	
Turbine Stop Valve Closure/TT								X	
TSVC/TT-NBP, HP							X		
TSVC/TT-NBP, LP	X								
Closure of All MSIVs								X	
Closure of One MSIV								X	
Loss of Feedwater Heater-REDY					X				
Loss of Feedwater Heater-PANACEA				X					
Inadvertent Pump Start					X				
Pressure Regulator Failure Open									X
Inadvertent Opening of a Relief Valve									X
Loss of Feedwater Flow									X
Loss of Auxiliary Power Transformers									X
Loss of Auxiliary Power - Grid Connections								X	
Recirculation Flow Control Failure-Decreasing Flow									X
One Recirculation Pump Trip									X
Two Recirculation Pumps Trip						X (VFD)			
One Recirculation Pump Seizure									X
Recirculation Flow Control Failure-Increasing Flow		X							
Startup of Idle Recirculation Loop	X	X							
FW Control Failure-Maximum Demand			X				X		
FWCF - EOC-RPT-OOS							X		
FWCF - TBP-OOS							X		

Table 14.5-2
TRANSIENT ANALYSES INITIAL CONDITIONS
(Power Uprate)

Parameter	GE UFSAR Analysis (at percent power)	Framatome ANP Reload Analysis
Thermal Power, MWt	3458 (100%) / 3527 (102%)	3458 (100%)
Core Flow, Mlb/hr	102.5	102.5
Core Flow Range (% of current rated)	81-105	81-105
Vessel Steam Flow and FW flow, Mlb/hr	14.24 (100%) / 14.57 (102%)	14.15
Analysis Dome Pressure, psia	1055 (100%) / 1070 (102%)	1050
Analysis Turbine Pressure, psia	995 (100%) / 1010 (102%)	985
Feedwater Temperature, °F	382 (100%) / 384 (102%)	382
Turbine Bypass Capacity	25.2% of rated vessel steam flow	
Number of MSRVs	13	13
MSRV type	Target Rock	Target Rock
Opening response of relief functions	0.15 s	0.15 s
Opening delay of relief functions	0.4 s	0.45s
MSRV Capacity ,% rated steam flow (Based on 1090 psig setpoint)	73.8% [i] (12 valves)	73.8% [i] (12 valves)
MSRV Setpoint, (number of valves @ psig) (+3% setpoint tolerance included)	4 @ 1174[ii] 4 @ 1185 5 @ 1195	4 @ 1169[ii] 4 @ 1179 4 @ 1190
MCPR Safety Limit	1.10	Cycle Specific
Recirculation Flow Control	VFD Flow Control	VFD Flow Control
Core Average Gap Conductance (Btu/s-sq. ft -Deg F)	0.3972	Case Dependent
High Neutron Flux Scram Setpoint	125.4% of rated power	125.4% of rated power
High Pressure Scram Setpoint, psig	1106	1101
High Pressure ATWS-RPT setpoint, psig	1153	1177
Reactor L8 Water Level, in avz[iii]	588	588
Reactor L3 Water Level, in avz[iii]	518	518
Reactor L2 Water Level, in avz[iii]	448	448
Reactor L1 Water Level, in avz[iii]	372.5	372.5

i Referenced to rated vessel steam flow at 3458 MWt. The absolute MSRV capacity at 1090 psig does not change with power uprate.
ii Considered only 3 out of 4 due to 1 MSRV-OOS
iii Above vessel zero