TABLE 3.5-5 (HBR-12)

(THIS TABLE APPLIES WHEN THE RCS IS > 350°F

INSTRUMENTATION TO FOLLOW THE COURSE OF AN ACCIDENT

NO.	INSTRUMENT	1 MINIMUM CHANNELS OPERABLE	2 OPERATOR ACTION IF CONDITIONS OF COLUMN 1 CANNOT BE MET
1.	Pressurizer Level	2	See Item 9 Table 3.5-2
2.	Auxiliary Feedwater Flow Indication (Primary Indication)		Note 1
	SD AFW Pump	1 per S/G	
	MD AFW Pump	1 per S/G	
3.	Reactor Coolant System Subcooling Monitor	1	Note 2
4.	PORV Position Indicator (Primary)	1	Note 3
5.	PORV Blocking Valve Position Indicator (Primary)	1	Note 3
6.	Safety Valve Position Indicator (Primary)	1	Note 3
7.	Pending - See February 7, 1984 Submittal		
8.	Pending - See February 7, 1984 Submittal		
9.	Pending - See February 7, 1984 Submittal		
10.	Pending - See February 7, 1984 Submittal		
11.	Pending - See February 7, 1984 Submittal		
12.	Reactor Vessel Level Instrumentation System #	1	Note 5

RVLIS - NUREG-0737 Item II.F.2.

Note 1: The three AFW lines from the MD AFW pumps and the three AFW lines from the SD AFW pump each contain one primary flow indicator (2 AFW flow paths per steam generator for a total of 6 AFW lines). These primary indicators are backed up by the narrow range steam generator level indications. If one or more of the direct AFW flow indicators becomes inoperable when the RCS is > 350°F, restore the indicator to an operable status within 7 days, or prepare and submit a special report to the NRC within the following 14 days detailing the cause(s) of the inoperable indicator(s), the actions being taken to restore the indicator(s) to an operating status, the estimated date for completion of the repairs, and any compensatory action being taken while the indicator(s) is inoperable. The action required when any of the back up indications of AFW flow are inoperable is described in Table 3.5-2.

Note 2: If both channels of the RCS subcooling monitor become inoperable when the RCS is > 350°F, restore at least one channel to an operable status within 7 days, or prepare and submit a special report to the NRC within the following 14 days detailing the cause(s) of the inoperable channels, the actions being taken to restore at least one channel to an operable status, the estimated date for completion of the repairs, and any compensatory action being taken while both channels are inoperable.

Note 3: The Pzr PORVs and Pzr PORV blocking valves both incorporate limit switches for the direct (primary) means of position indication. The back up method of position indication consists of PRT pressure and a temperature element in a common line downstream of the valves. The Pzr safety relief valves incorporate a vibration monitoring system as the primary method of valve position indication. The back up method of position indication consists of a temperature element downstream of each valve and PRT pressure. If the primary method of position indication for either the Pzr PORVs, Pzr PORV blocking valves, or Pzr safety relief valves becomes inoperable when the RCS is > 350°F, restore the primary method to an operable status within 7 days, or prepare and submit a special report to the NRC within the following 14 days detailing the cause of the inoperable primary position indication method, the actions being taken to restore it to an operable status, the estimated date for completion of the repairs, and any compensatory action being taken while the primary position indication method is inoperable. If any of the back up methods of position indication for these valves becomes inoperable, it is to be repaired as soon as plant conditions permit.

Note 4: Pending - See February 7, 1984 submittal.

Note 5: Restore the indicators to the conditions of Column 1 within 7 days or submit a Special Report to the NRC within 30 days detailing the cause(s) of the inoperable channel(s), the actions being taken to restore the inoperable channel(s) to an operable status, the estimated date for completion of repairs, and any compensatory action being taken while the channel(s) are inoperable.

TABLE 4.1-1 (Continued)

(HBR-12)

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

	Channel Description	Check	Calibration	Test	Remarks
32.	Loss of Power				
	a. 480 Emerg. Bus Undervoltage (Loss of Voltage)	N.A.	R	R	
	b. 480 Emerg. Bus Undervoltage (Degraded Voltage)	N.A.	R	R	
33.	Auxiliary Feedwater Flow**** Indication	M	N.A.	R	
34.	Reactor Coolant System** Subcooling Monitor	M	R	N.A.	
35.	PORV Position Indicator***	N.A.	N.A.	R	
36.	PORV Blocking Valve*** Position Indicator	N.A.	N.A.	R	
37.	Safety Relief Valve Position*** Indicator	N.A.	N.A.	R	
38.	Pending - See February 7, 1984 Submittal				
39.	Pending - See October 24, 1983 Submittal				
40.	Pending - See October 24, 1983 Submittal				

TABLE 4.1-1 (Continued)

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

	Channel Description	Check	Calibration	Test	Remarks
41.	Pending - See February 7, 1984 Submittal				
42.	Pending - See February 7, 1984 Submittal				
43.	Pending - See February 7, 1984 Submittal				
44.	Pending - See February 7, 1984 Submittal				
45.	Reactor Vessel Level Instrumentation System	M	R	N.A.	
46.	RCS High Point Vents	N.A.	N.A.	R	

** Instrumentation for Detection of Inadequate Core Cooling - NUREG 0578 Item 2.1.3.b.
*** Direct Indication of Power Operated Relief Valve and Safety Valve Position - NUREG 0578 Item 2.1.3.a.
**** Auxiliary Feedwater Flow Indication to Steam Generator NUREG 0578 Item 2.1.7.b.

S - At least once per 12 hours
D - At least once per 24 hours
W - At least once per 7 days
B/W - At least once per 14 days
M - At least once per 31 days
Q - At least once per 92 days
S/U - Prior to each reactor startup
R - At least once per 18 months
N.A. - Not applicable