ATTACHMENT I TO IPN-92-005

PROPOSED TECHNICAL SPECIFICATIONS CHANGES REGARDING MINIMUM NUMBER OF OPERABLE CHANNELS AND MINIMUM DEGREE OF REDUNDANCY FOR HIGH STEAM FLOW SAFETY INJECTION

NEW YORK POWER AUTHORITY
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
DPR-64

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PDR ADOCK 05000286
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TABLE 3.5-3 (Sheet 1 of 3)

INSTRUMENTATION OPERATING CONDITION FOR ENGINEERED SAFETY FEATURES

NO. FUNCTIONAL UNIT	1 NO. OF CHANNELS	2 NO. OF CHANNELS TO TRIP	3 MIN. NUMBER OF OPERABLE CHANNELS	4 MIN. DEGREE OF REDUNDANCY	5 OPERATOR ACTION IF CONDITIONS OF COL. 3 OR 4 CANNOT BE MET (Note 6)
1. SAFETY INJECTION					
a. Manual	2	1	1	0	Cold Shutdown
b. High Containment Pressure (Hi Level)	3	2	2	1	Cold Shutdown
c. High Differential Pressure Between Steam Lines	3/steam line	2/steam line	2/steam line	1/steam line	Cold Shutdown
d. Pressurizer Low Pressure (Note 3)	3	2	2	1	Cold Shutdown
e. High Steam Flow in 2/4 Steam Lines Coincident with Low T_{avg} or Low Steam Line Pressure	2/steam line	1/2 in any 2 steam lines	1/steam line in each of 3 steam lines	1/steam line in each of 3 steam lines	Cold Shutdown or main steam isolation valves closed
	4 T_{avg} Signals	2	3	2	
	4 Pressure Signals	2	3	2	
f. Pressurizer Low Pressure (Automatic Unblock)	3	2	2 (Note 5)	1 (Note 5)	Cold Shutdown

TABLE 3.5-3 (Sheet 2 of 3)

INSTRUMENTATION OPERATING CONDITION FOR ENGINEERED SAFETY FEATURES					
NO. FUNCTIONAL UNIT	1 NO. OF CHANNELS	2 NO. OF CHANNELS TO TRIP	3 MIN. NUMBER OF OPERABLE CHANNELS	4 MIN. DEGREE OF REDUNDANCY	5 OPERATOR ACTION IF CONDITIONS OF COL. 3 OR 4 CANNOT BE MET (Note 6)
2. CONTAINMENT SPRAY					
a. Manual	2	2	2	0 (Note 4)	Cold Shutdown
b. High Containment Pressure (Hi Hi Level)	2 sets of 3	2 of 3 in each set	2 per set	1/set	Cold Shutdown
3. AUXILIARY FEEDWATER					
a. Stm. Gen. Water Level-Low-Low					
i. Start Motor Driven Pumps	3/stm. gen.	2 in any stm. gen.	2 chan. in each stm. gen.	1	Reduce system temperature such that T ≤350°F
ii. Start Turbine-Driven Pump	3/stm. gen.	2/3 in each of two stm. gen.	2 chan. in each stm. gen.	1	T ≤ 350°F
b. S.I. Start Motor-Driven Pumps	(All	safety	injection	initiating	functions and requirements)
c. Station Blackout Start Turbine-Driven Pump	2	1	1	0	T ≤ 350°F
d. Trip of Main Feedwater Pumps Start Motor-Driven Pumps	2	1	1	0	Hot Shutdown

TABLE 3.5-3 (Sheet 3 of 3)

INSTRUMENTATION OPERATING CONDITION FOR ENGINEERED SAFETY FEATURES

NO.	FUNCTIONAL UNIT	1 NO. OF CHANNELS	2 NO. OF CHANNELS TO TRIP	3 MIN. NUMBER OF OPERABLE CHANNELS	4 MIN. DEGREE OF REDUNDANCY	5 OPERATOR ACTION IF CONDITIONS OF COL. 3 OR 4 CANNOT BE MET (Note 6)
4.	LOSS OF POWER					
	a. 480v Bus Undervoltage Relay	2/bus	1/bus	1/bus	0	See Note 1
	b. 480v Bus Degraded Voltage Relay	2/bus	2/bus	2/bus (See Note 2)	0	See Note 1
5.	OVERPRESSURE PROTECTION SYSTEM (OPS)	3	2	2	1	See Note 7

Note 1. If the 138KV and 13.8KV sources of offsite power are available and the conditions of column 3 or 4 cannot be met within 72 hours, then the requirements of 3.7.C.1 or 2 shall be met.

Note 2. If one channel becomes inoperable, it is placed in the trip position and the minimum number of operable channels is reduced by one.

Note 3. Permissible to bypass if reactor coolant pressure is less than 2000 psig.

Note 4. Must actuate 2 switches simultaneously.

Note 5. The minimum Number of Operable Channels and the Minimum Degree of Redundancy may be reduced to zero if the SI bypass is in the unblocked position.

Note 6. If the condition of Column 3 or 4 cannot be met, the reactor shall be placed in the hot shutdown condition, utilizing normal operating procedures, within 4 hours of the occurrence. If the conditions are not met within 24 hours of the occurrence, the reactor shall be placed in the cold shutdown condition, or the alternate condition, if applicable, within an additional 24 hours.

Note 7. Refer to Specification 3.1.A.8.

Amendment No. ~~38~~, ~~44~~, ~~54~~, ~~67~~,