

TABLE 4.3.2.1-1

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
<b>1. PRIMARY CONTAINMENT ISOLATION</b>				
a. Reactor Vessel Water Level-				
1) Low, Level 3	S	M	R	1, 2, 3
2) Low Low, Level 2	N.A.	M	R	1, 2, 3
b. Drywell Pressure - High	N.A.	M	R	1, 2, 3
c. Main Steam Line				
1) Radiation - High	S	M	R	1, 2, 3
2) Pressure - Low	N.A.	M	R	1
3) Flow - High	S	M	R	1, 2, 3
d. Main Steam Line Tunnel				
Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
e. Main Steam Line Tunnel				
Δ Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
f. Condenser Vacuum - Low	N.A.	M	R	1, 2*, 3*
g. Manual Initiation	N.A.	R	N.A.	1, 2, 3
<b>2. SECONDARY CONTAINMENT ISOLATION</b>				
a. Reactor Building Vent				
Exhaust Plenum				
Radiation - High	S	M	R	1, 2, 3, and **
b. Drywell Pressure - High	N.A.	M	R	1, 2, 3
c. Reactor Vessel Water				
Level - Low Low, Level 2	N.A.	M	R	1, 2, 3, and #
d. Manual Initiation	N.A.	R	N.A.	1, 2, 3, and **

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TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
<b>3. REACTOR WATER CLEANUP SYSTEM ISOLATION</b>				
a. $\Delta$ Flow - High	S	M	R	1, 2, 3
b. Heat Exchanger Area Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
c. Heat Exchanger Area Ventilation $\Delta$ Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
d. Pump Area Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
Pump Room A	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
Pump Room B	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
e. Pump Area Ventilation $\Delta$ Temp. - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
Pump Room A	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
Pump Room B	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
f. SLCS Initiation	N.A.	R	N.A.	1, 2, 3
g. Reactor Vessel Water Level - Low Low, Level 2	N.A.	M	R	1, 2, 3
h. RWCU/RCIC Line Routing Area Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
i. RWCU Line Routing Area Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
j. Manual Initiation	N.A.	R	N.A.	1, 2, 3
<b>4. REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION</b>				
a. RCIC Steam Line Flow - High	S	M	R	1, 2, 3
b. RCIC/RHR Steam Line Flow - High	S	M	R	1, 2, 3
c. RCIC Steam Supply Pressure - Low	N.A.	M	R	1, 2, 3
d. RCIC Turbine Exhaust Diaphragm Pressure - High	N.A.	M	R	1, 2, 3
e. RCIC Equipment Room Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
f. RCIC Equipment Room $\Delta$ Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3

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TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
<b>4. REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION (Continued)</b>				
g. RWCU/RCIC Steam Line Routing Area Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
h. Drywell Pressure - High	N.A.	M	R	1, 2, 3
i. Manual Initiation	N.A.	R	N.A.	1, 2, 3
<b>5. RHR SYSTEM SHUTDOWN COOLING MODE ISOLATION</b>				
a. Reactor Vessel Water Level - Low, Level 3	S	M	R	1, 2, 3
b. Reactor Vessel (RHR Cut-in Permissive) Pressure - High	N.A.	M	R	1, 2, 3
c. Equipment Area Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
d. Equipment Area Ventilation $\Delta$ Temp. - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
e. Shutdown Cooling Return Flow Rate - High	N.A.	M	R	1, 2, 3
f. RHR Heat Exchanger Area Temperature - High	<del>X</del> N.A.	<del>X</del> SA	R	1, 2, 3
g. Manual Initiation	N.A.	R	N.A.	1, 2, 3

TABLE NOTATIONS

- \* When reactor steam pressure  $\geq$  1037 psig and/or any turbine stop valve is open.
- \*\* When handling irradiated fuel in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.
- ‡ During CORE ALTERATION and operations with a potential for draining the reactor vessel.

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