



**INDIANA AND MICHIGAN POWER
D. C. COOK NUCLEAR PLANT
UPDATED FINAL SAFETY ANALYSIS REPORT**

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RADIATION MONITORING SYSTEM CHANNELS

CHANNEL	PURPOSE	ASSOCIATED TRIP FUNCTION OVERVIEW
ERS-1301, 1401, 2301, 2401	Containment Airborne Particulates - Detection	Containment ventilation isolation, prevent further release
ERS-1303, 1403, 2303, 2403	Containment Radioiodine - Detection	Containment ventilation isolation, prevent further release
ERS-1305, 1405, 2305, 2405	Containment Low Range Noble Gas - Detection	Containment ventilation isolation, prevent further release
ERS-1307, 1407, 2307, 2407	Containment Mid Range Noble Gas - Detection	Containment ventilation isolation, prevent further release
ERS-1309, 1409, 2309, 2409	Containment High Range Noble Gas - Detection	Containment ventilation isolation, prevent further release
ERS-7401, 8401	Control Room Area Monitor	Isolate Control Room Ventilation
SRA- 1905, 2905	Steam Jet Air Ejector low Range Noble Gas - Detect primary to secondary leakage	None
SRA-1907, 2907	Steam Jet Air Ejector Mid Range Noble Gas - Detect primary to secondary leakage	None
SRA- 1909, 2909	Steam Jet Air Ejector High Range Noble Gas - Detect primary to secondary leakage	None
R-17 A, R-17 B, CRS-3301, 3401, 4301, 4401	Component Cooling Water Loop Liquid Monitor - Detect leaks from RCS or RHR into the CCW system	Isolate CCW surge tank vent
RRS-1001	Waste Disposal System Liquid Effluent Monitor	Automatic valve closure to prevent further release
R-5	SFP Area Monitor	Place SFP ventilation into service
VRS-5006	SFP Area Monitor	Place SFP ventilation into service
R-19	Steam Generator Blowdown Liquid Monitor - detect primary to secondary leakage via common blowdown header	Isolate steam generator blowdown system.



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R-20, R-28	Essential Service Water Liquid Monitor – Detect leakage in the containment spray heat exchangers, (post LOCA)	None
R-24	Steam Generator Blowdown Treatment System Liquid Monitor - measure activity in the blowdown liquid after it passes the treatment demineralizer	Isolate steam generator blowdown system
VRA-1501, 2501	Unit Vent Airborne Particulates - Detection	None
VRA-1503, 2503	Unit Vent Radioiodines - Detection	None
VRS-1505, 2505	Unit Vent Low Range Noble Gas - Detection	Gas decay tank isolation valves ¹
VRS-1507, 2507	Unit Vent Mid Range Noble Gas - Detection	None
VRS-1509, 2509	Unit Vent High Range Noble Gas - Detection of accidental release	Sample pathway bypass of channels 1, 3, 5, 7 to sample pallet
SRA-1805, 2805	Gland Seal Condenser Exhaust - Low range detection	None
SRA 1807, 2807	Gland Seal Condenser Exhaust - Mid range detection	None
SRA 1809, 2809	Gland Seal Condenser Exhaust - High range detection	None
Unit Vent Continuous air flow sampler	Tritium sampling	None

¹ Available setpoint is used to accommodate: 1) normal operation, and 2) gas decay tank release.