

SECONDARY SYSTEMS INSTRUMENT, SERVICE
AND BREATHING AIR

1.0 SECONDARY SYSTEMS

1.1 Instrument and Service Air General Instrumentation

<u>CHANNEL</u>	<u>DESCRIPTION</u>	<u>FUNCTION</u>	<u>SETPOINT</u>
PS-3000	Z-39 IA dryer bypass SOV control and alarm (manual reset SOV)	Bypass Open and alarm ↓ Bypass Closed ↑	80 psi 95 psi
MT-3000	Z-39 IA dryer outlet dewpoint monitor	Alarm ↑	-40°C
PS-3003A	K2A unloader control (auto mode)	Close ↓ Open ↑	95 psig 105 psig
PS-3003B	K2B unloader control (auto mode)	Close ↓ Open ↑	95 psig 105 psig
PS-3003C	K2A unloader control (constant run)	Close ↓ Open ↑	95 psig 105 psig
PS-3004	Instrument air compressor K2 standby start (south header)	Close ↓	90 psig
PS-3013A	Service air compressor K3A overpressure	Compressor Shut Down	↑122 psig
PS-3013B	Service air compressor K3B overpressure	Compressor Shut Down	↑122 psig
TS-3018	Instrument air compressor K2B discharge air temperature	Hi alarm	↑350°F
TS-3019	Instrument air compressor K2A discharge air temperature	Hi alarm	↑350°F
TS-3020	Service air compressor K3A discharge air temperature	Hi alarm	↑350°F
TS-3021	Service air compressor K3B discharge air temperature	Hi alarm	↑350°F

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<u>CHANNEL</u>	<u>DESCRIPTION</u>	<u>FUNCTION</u>	<u>SETPOINT</u>
PS-3029	Instrument air compressor K2B restart	Open ↓	85 psig
PS-3030	Instrument air compressor K2A restart	Open ↓	85 psig
PS-3036	Service air backup to instrument air (south header)		↓85 psig
PS-3040	Instrument air compressor K2B overpressure trip		↑115 psig
PS-3042	Instrument air compressor K2A overpressure trip		↑115 psig
TS-3048A	(S1) Z-39 IA dryer left tower heater temp switch (adjusted as necessary to obtain a maximum indicated temperature on TI-3047A in the range given)	Open ↑	235°F-265°F
	(S2) Z-39 IA dryer left tower heater temp switch (adjusted as necessary to obtain a maximum indicated temperature on TI-3047A in the range given)	Open ↑	235°F-265°F
TS-3048B	(S1) Z-39 IA dryer right tower heater temp switch (adjusted as necessary to obtain a maximum indicated temperature on TI-3048A in the range given)	Open ↑	235°F-265°F
	(S2) Z-39 IA dryer right tower heater temp switch (adjusted as necessary to obtain a maximum indicated temperature on TI-3048A in the range given)	Open ↑	235°F-265°F
PS-3050A	(S1) Z-39 IA dryer left tower inlet/purge pressure switch	Open ↑	50 psi
	(S2) Z-39 IA dryer left tower alarm pressure switch	Close ↑	50 psi
PS-3050B	(S1) Z-39 IA dryer right tower inlet/purge pressure switch	Open ↑	50 psi
	(S2) Z-39 IA dryer right tower alarm pressure switch	Close ↑	50 psi

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TS-3055	Z-39 IA dryer high inlet temp alarm switch	Close ↑	100°F
PS-3062	K3B interstage high pressure switch	Close ↓	2 psig
PS-3063	K3B unloader control	Close ↓ Open ↑	100 psig 112 psig
OPS-K3A	Oil pressure switch K3A	Open ↓	15 psig
OPS-K3B	Oil pressure switch K3B	Open ↓	20 psig
TS-3065	Service air compressor K3B service water discharge temperature	Open ↑	150°F
PS-3066A	K2A interstage pressure switch	Start perm and interstage relief	↓5 psig
PS-3066B	K2B interstage pressure switch	Start perm and interstage relief	↓5 psig
TS-3067A	K2A intercooler inlet temp	Hi alarm	↑310 °F
TS-3067B	K2B intercooler inlet temp	Hi alarm	↑310 °F
MT-3068	Z-31 IA dryer outlet dewpoint monitor	Alarm ↑	-40°F
PS-3071	K3A unloader control	Close ↓ Open ↑	100 psig 112 psig
PS-3073	Service air header low pressure alarm	Close ↓	95 psig
PS-3075	K2B unloader control (constant mode)	Close ↓ Open ↑	95 psig 105 psig
PS-3076	IA compressor K2 standby start (north header)	Close ↓	90 psig
PS-3077	Service air backup to instrument air (north header)		↓85 psig
PS-3078	Service air compressor K3 standby start	K3 auto start	↓90 psig
PC-3083	Instrument air header pressure (south header)	Low alarm	89 psi

POINT BEACH NUCLEAR PLANT
SETPOINT DOCUMENT

STPT 14.7
Revision 15
April 16, 2002

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<u>CHANNEL</u>	<u>DESCRIPTION</u>	<u>FUNCTION</u>	<u>SETPOINT</u>
PC-3084	Instrument air header pressure (north header)	Low alarm	89 psi
OPS-K2A	Oil pressure switch K2A	Close ↓ Open ↑	15 psig 17 psig
OPS-K2B	Oil pressure switch K2B	Close ↓ Open ↑	15 psig 17 psig
PS-3092A	Z-31 IA dryer left tower inlet/purge pressure switch	Open ↑	50 psi
PS-3092B	Z-31 IA dryer right tower inlet/purge pressure switch	Open ↑	50 psi
PS-3093A	Z-31 IA dryer left tower alarm pressure switch	Open ↑	50 psi
PS-3093B	Z-31 IA dryer right tower alarm pressure switch	Open ↑	50 psi
PS-3094	Z-31 IA dryer bypass SOV control and alarm (manual reset SOV)	Bypass open and alarm ↓ Bypass closed ↑	80 psi 95 psi
TS-3095A	(S1) Z-31 IA dryer tower A heater temp switch (adjusted as necessary to obtain a maximum indicated temperature on TI-3099A in the range given)	Open ↑	235°F-265°F
	(S2) Z-31 IA dryer tower A heater temp switch (adjusted as necessary to obtain a maximum indicated temperature on TI-3099A in the range given)	Open ↑	235°F-265°F
TS-3095B	(S1) Z-31 IA dryer tower B heater temp switch (adjusted as necessary to obtain a maximum indicated temperature on TI-3099B in the range given)	Open ↑	235°F-265°F
	(S2) Z-31 IA dryer tower B heater temp switch (adjusted as necessary to obtain a maximum indicated temperature on TI-3099B in the range given)	Open ↑	235°F-265°F
TS-3097	Z-31 IA dryer high inlet alarm switch	Close ↑	100°F