SECONDARY COOLANT LOOP

RHSA OUTPUT MANIFOLD — ISOOUT

ISOTHERMAL RADIATOR (ISO1)

ISOTHERMAL RADIATOR (ISO2)

ISOTHERMAL RADIATOR (ISO3)

ISOTHERMAL RADIATOR (ISO4)

PORT ENV TEMP

STBD ENV TEMP

GENERATOR — PTCT → **RHSA INPUT MANIFOLD**

SXOUT

SCVOL   CFLOW

COOLANT VOLUME

PUMP POWER INPUT

RHSAOUT → **THERMAL EXCHANGER**   SCVOL

CFLOW

PFLUX

FLOW RATE — PPRESS

PRIMARY COOLANT LOOP

PUMPSET POWER INPUT — PUMP → **COOLANT PRESSURE**

PRIMARY COOLANT ATTRITION

COOLANT VOLUME — PCVOL → **COOLANT VAPOUR PRESSURE**

CPRESS

SCT

COOLANT STORAGE INPUT

CVP

CHAMBER (x8 segments)

THERMAL RADIATION TRANSMISSION — TRT → **REACTOR THERMAL TRANSFER** — RTT → **EXCHANGER PRIMARY INTERFACE**

RHSAOUT

PXOUT

PRE-REACTOR COOLANT TEMPERATURE

PFLUX

SXOUT

KEY

CONTROL COMPONENT	EXTERNAL SYSTEM
COMPONENT	SYSTEM
PRODUCTION COMPONENT	DISCRETE VARIABLE (any colour)
SYSTEM COMPONENT	EVENT

INTERNATIONAL STRATEGIC DEEPSPACE COMMAND

VESSEL DEVELOPMENT PROGRAM

TITLE		
REACTOR COOLANT SIMULATION OVERVIEW		
PROJECT	AUTHOR	
RCMS	LCDR HEWSON, R	
DWG/FILE		VERS
REACTORCOOLANT_SIMULATION_OVERVIEW		4.1

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