

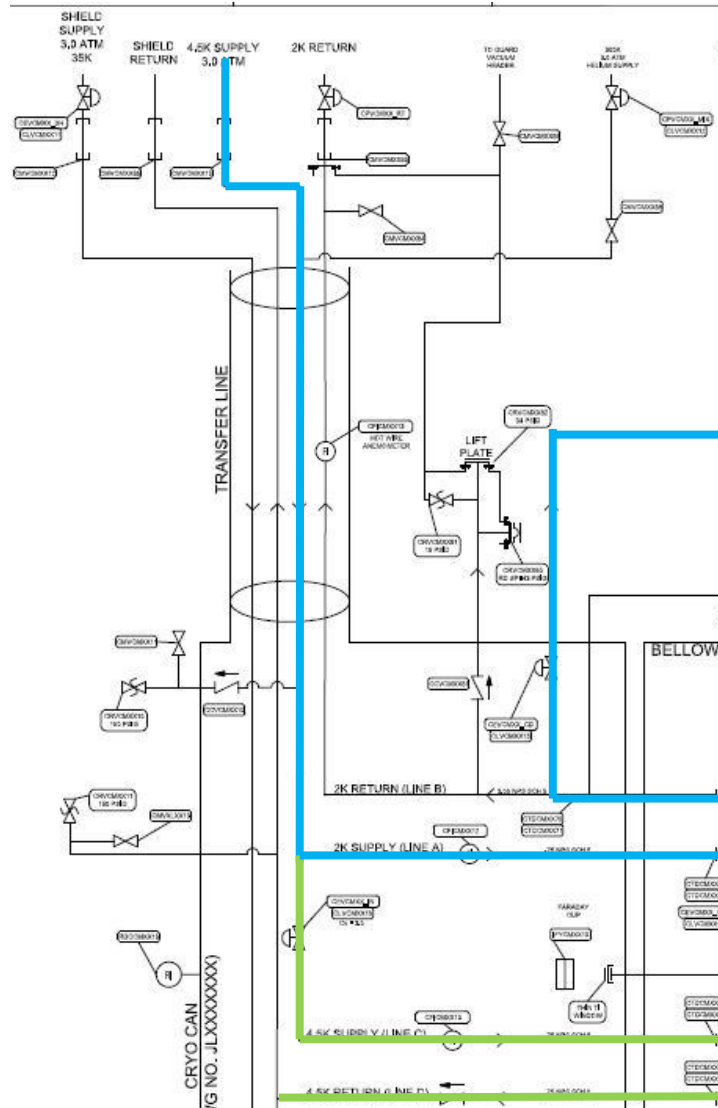
LCLS-II Cryomodule Cryo Operations in the LERF

Naeem Huque

Cooldown

Valve	Number	State
Cyro Can Inlet Valve	CEVCMXX_IN	Open
Primary Return Valve	CPVCMXX_RT	Closed
Cooldown Bypass Valve	CEVCMXX_CD	Open
Shield Return Valve	CEVCMXX_SH	Open
Cryomodule JT Valves	CPVCMXX_JT1/2	Open
Cryomodule CD Valves	CPVCMXX_CD1/2	Open
Warm Gas Mix Valve	CEVCMXX_MIX	Closed

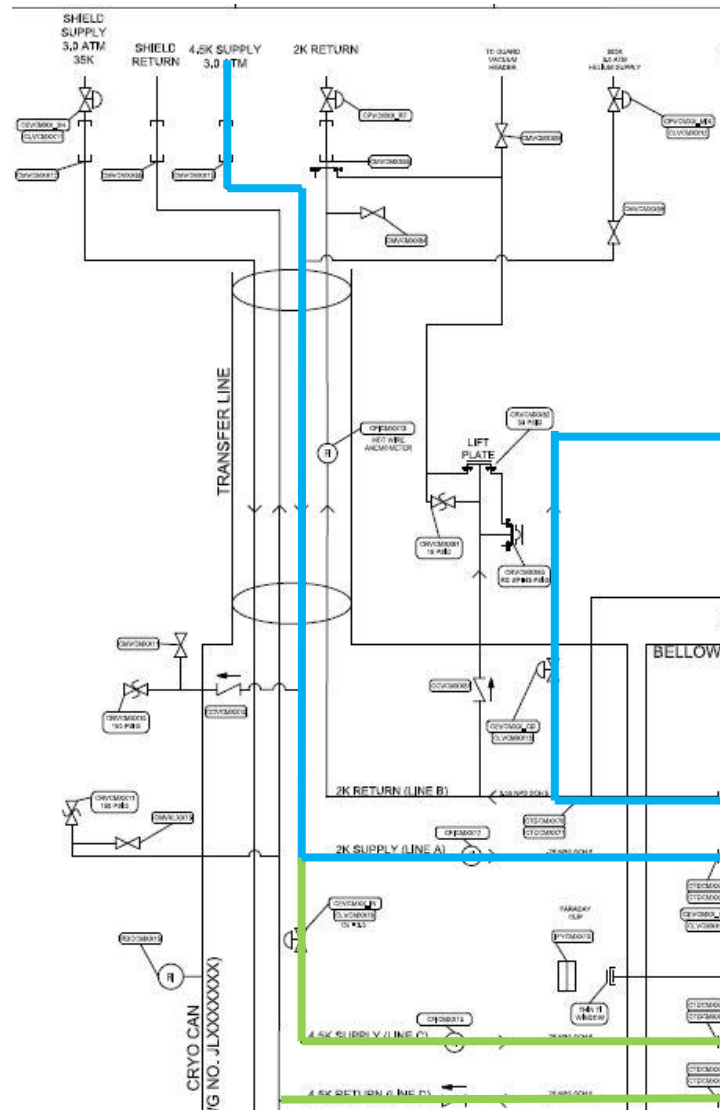
Cooldown P&ID



Fast Cooldown

Valve	Number	State
Cyro Can Inlet Valve	CEVCMXX_IN	Open
Primary Return Valve	CPVCMXX_RT	Closed
Cooldown Bypass Valve	CEVCMXX_CD	Open
Shield Return Valve	CEVCMXX_SH	Open
Cryomodule JT Valves	CPVCMXX_JT1/2	Closed
Cryomodule CD Valves	CPVCMXX_CD1/2	Open
Warm Gas Mix Valve	CEVCMXX_MIX	Closed

Fast Cooldown P&ID

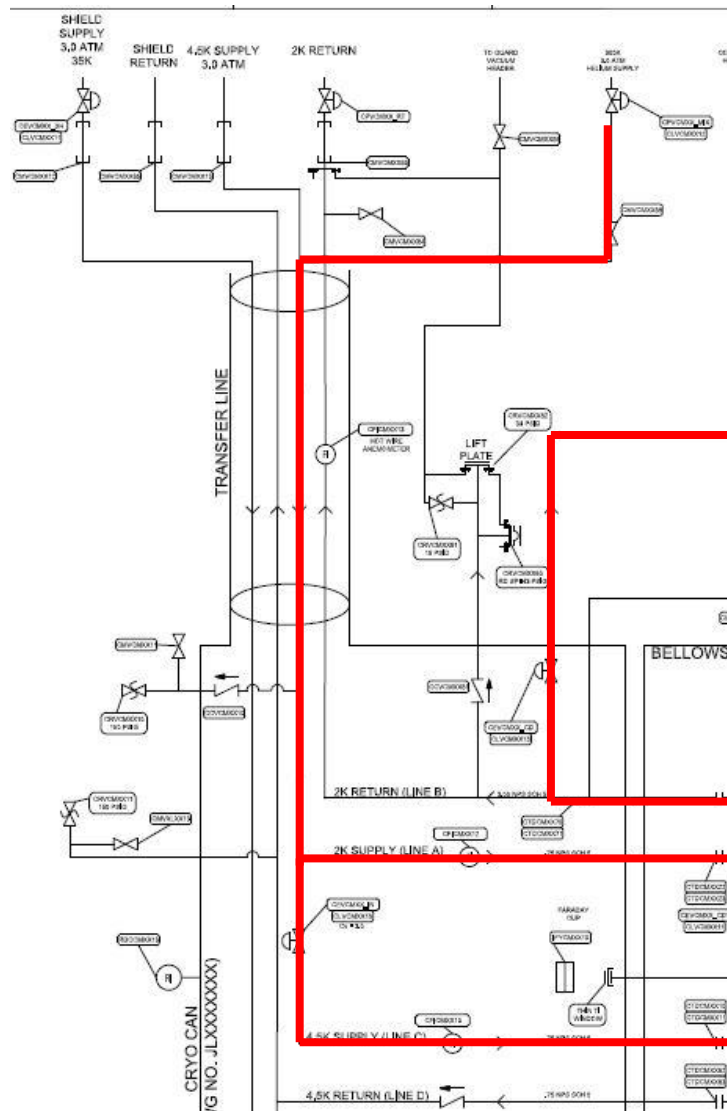


Warm-Up

Valve	Number	State
Cyro Can Inlet Valve	CEVCMXX_IN	Open
Primary Return Valve	CPVCMXX_RT	Closed
Cooldown Bypass Valve	CEVCMXX_CD	Open
Shield Return Valve	CEVCMXX_SH	Closed
Cryomodule JT Valves	CPVCMXX_JT1/2	Closed
Cryomodule CD Valves	CPVCMXX_CD1/2	Open
Warm Gas Mix Valve	CEVCMXX_MIX	Open

Cooldown and Helium Vessel Heaters to be used

Warm-up P&ID



Fast Warm-Up

Valve	Number	State
Cyro Can Inlet Valve	CEVCMXX_IN	Open
Primary Return Valve	CPVCMXX_RT	Closed
Cooldown Bypass Valve	CEVCMXX_CD	Open
Shield Return Valve	CEVCMXX_SH	Open
Cryomodule JT Valves	CPVCMXX_JT1/2	Closed
Cryomodule CD Valves	CPVCMXX_CD1/2	Open
Warm Gas Mix Valve	CEVCMXX_MIX	Open

Cooldown and Helium Vessel Heaters to be used

Fast Warm-up P&ID

