Contract No.	LNG19-00079	SHEET	1 OF 1	DWG. NO.	143-PV-E-189314	REV	A2

REV	DESCRIPTION	Prepared By	Reviewed By	Approved By	DATE
A	Issued for Review and Acceptance	U.Moser	M.Grippa	V. Molasi	12-Aug-2020
B	Issued for Review and Acceptance	U.Moser	M.Grippa	V. Molasi	07-Sept-2020
C	Issued for Review and Acceptance	U.Moser	M.Grippa	V. Molasi	23.07.2025

LEGEND

O	=	OPEN	Ps	=	PERMISSIVE TO START	Mc	=	MANUAL MODE, CLOSE VALVE
C	=	CLOSED	Po	=	PERMISSIVE TO OPEN	Mo	=	MANUAL MODE, OPEN VALVE
T	=	TRIP	Pc	=	PERMISSIVE TO CLOSE	&	=	"AND" FUNCTION
S	=	STOP / SWITCH OFF	Io	=	INHIBIT TO OPEN	R	=	RESET
A	=	ACTIVATE / START	Is	=	INHIBIT TO START			

CAUSE

INITIATOR LOCATION	INITIATOR TAG	STATUS	INITIATOR SERVICE DESCRIPTION	P&ID / DOC N°	NOTE
advice location	advice TAG	advice status	**143-1Z-2001 Total Plant ESD**	*HOLD*	
ESD	000-1Z-0001		ESD initiated		
~~PCS~~		~~ACTIVATE~~	~~RESET PUSH BUTTON~~		
			143-2Z-6001 3523 **RICH MEG FILTER PUMP 143-P-6020 discharge pressure** 143-U-102-P20 ISOLATION	MZ-143-NOV-PR-PID-S08001-01	
FIELD	143-PT-6003A	PAHH	High High Pressure, Rich MEG Filter Pump 143-U-102-P20		
PCS		ACTIVATE	RESET PUSH BUTTON		
			143-2Z-6002 3522 **RICH MEG FILTER FEED TANK 143-U-102-TK04 slurry level** /TK04	MZ-143-NOV-PR-PID-S08001-01	Note 1.
FIELD	143-LT-6004A	LAHH	High High Level; Rich MEG filter Feed Tank 143-U-102-TK04		
PCS		ACTIVATE	RESET PUSH BUTTON		
			143-2Z-6003 RICH MEG FILTER FEED TANK 143-U-102-TK04 slurry level	MZ-143-NOV-PR-PID-S08001-01	
FIELD	143-LT-6005A	LALL	Low Low Level, Rich MEG filter Feed Tank 143-U-102-TK04		
~~PCS~~		~~ACTIVATE~~	~~RESET PUSH BUTTON~~		
			143-2Z-6004 3525 **RICH MEG FILTER PUMP 143-P-6021 discharge pressure** 143-U-102-P21 ISOLATION	MZ-143-NOV-PR-PID-S08001-01	
FIELD	143-PT-6003B	PAHH	High High Pressure, Rich MEG Filter Pump 143-U-102-P21		
PCS		ACTIVATE	RESET PUSH BUTTON		
			143-2Z-6005 RICH MEG FILTER FEED TANK 143-U-102-TK05 slurry level	MZ-143-NOV-PR-PID-S08001-01	Note 1.
FIELD	143-LT-6004B	LAHH	High High Level, Rich MEG filter Feed Tank 143-U-102-TK05		
~~PCS~~		~~ACTIVATE~~	~~RESET PUSH BUTTON~~		
			143-2Z-6006 RICH MEG FILTER FEED TANK 143-U-102-TK05 slurry level	MZ-143-NOV-PR-PID-S08001-01	
FIELD	143-LT-6005B	LALL	Low Low Level, Rich MEG filter Feed Tank 143-U-102-TK05		
~~PCS~~		~~ACTIVATE~~	~~RESET PUSH BUTTON~~		
			143-2Z-6007 3521 **Wash Water Tank 143-U-102-TK06 water level**	MZ-143-NOV-PR-PID-S08001-01	
FIELD	143-LT-6052	LAHH	High High Level, Wash Water Tank 143-U-102-TK06		
PCS		ACTIVATE	RESET PUSH BUTTON		
advice location	advice TAG	advice status	**HOLD (advice interlock number) Group Reset**	*HOLD*	
~~PCS~~		~~ACTIVATE~~	~~RESET PUSH BUTTON~~		

EFFECT

	1	2	3	4	5	6	7	8	9	10
P&ID / DOC N°	MZ-143-NOV-PR-PID-S08001-01	MZ-143-NOV-PR-PID-S15003/150041/150	MZ-143-NOV-PR-PID-S08001-01	MZ-143-NOV-PR-PID-S15003/150044/150	MZ-143-NOV-PR-PID-S08001-01					
SERVICE DESCRIPTION	Rich MEG Filter Pump 143-U-102-P20 A\	Rich MEG Sludge Pumps Isolati B\	Rich MEG Filter Pump 143-U-102-P21	Rich MEG Sludge Pumps Isolati	Wash water supply valve 143-SDV-6051					
ACTUATOR TAG	143-MPXY-C-102-P	143-2Z-35053/35063/35	143-MPXY-C-102-PM21	243-2Z-35053/35063/35	143-SXY-6051					
1										
2										
3										
4	T	X	T	X	C					
5	R	R	R	R	R					
6										
7										
8										
9	T									
10	R									
11										
12										
13										
14		T		T						
15		R		R						
16										
17										
18										
19	T									
20	R									
21										
22										
23										
24			T							
25			R							
26										
27										
28										
29		T		T						
30		R		R						
31										
32										
33										
34			T							
35			R							
36										
37										
38										
39					C					
40					R					
41										
42										
43										
44										
45	R	R	R	R	R					

These are covered by ESD trip in the Rich MEG Centrifuge Package.

NOTES

1. Pump shutdown is outside DrM scope. Assumed this will be tripped common for train 1 or train 2.

GENERAL:

1. All interlocks/initiators causing consective trips (CASCADING SHUTDOWN) will be developed.
2. Each ESDV/SDV valve can be manually opened only if the initiator status is NOT ACTIVE.
3. FOR EACH INTERLOCK A STATUS "ACTIVATE" GRAPHICAL WARNING WILL BE PROVIDED.
4. This document is used as an input to the Unit 143 MEG Regeneration Unit Cause & Effect Diagram for the total MRU (MZ-143-NOV-PR-CED-S00001) that will be used as input for the programming of the SIS.