







OWNER:  شرکت سست و سویی توپو ایرانیان (سهایی ناس)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT							EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	
	I/O LIST FOR NITROGEN GAS BOOSTER								
MC :  شرکت سست و سویی توپو ایرانیان (سهایی ناس)	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-06A	BU	20	VD	303	IN	LST	0034	Rev.:	Page
								00	1 of 3

I/O list shall be revised based on comments on P&ID.

## I/O LIST FOR NITROGEN GAS BOOSTER

 شرکت سست و سویی توپو ایرانیان (سهایی ناس)	 Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT
<b>Document Review</b>		
Issue Purpose:	IFA	
Result Code: AP,AN,CM,RE,NC	CM	
Next Status : IFC,IFA,IFI,AFC,AB	IFA	
Responsible Department	MECHANICAL	
Commented Date	Nov/02/2021	
<b>Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.</b>		

00	14/10/2021	For approval	WZ	KP	JR	
Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: P



- PB-1003 on local panel, for compressor ESD PB is missed in I/O list.  
 - Please clarify about HM-10001 signal, why are you considering a light for hourmeter? what does this light do?

P&ID number to be modified as per related P&ID document number.

To be specified

(Unload/Stop)

TAG NUMBER	SERVICE DESCRIPTION	INSTRUMENT TYPE	LOCATION	CONTROL SYSTEM	I/O TYPE	SIGNAL TYPE	POWER SUPPLY	IS/NIS	CALIBRATED RANGE	ENG UNIT	STATE 0	STATE 1	SET POINT LL	SET POINT L	SET POINT H	SET POINT HH	P&ID NUMBER	PROTOCOL
PIT-1003	Compressor Inlet Nitrogen Pressure Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...13.5	bar(a)	-	-	6,5	-	-	9,5	17811-03A	HART
PIT-1004	Compressor Oil System Oil Pressure Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	-1...5	bar(g)	-	-	1,5	-	-	-	17811-03A	HART
PIT-1007	Compressor Outlet Nitrogen Pressure Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	1...36	bar(a)	-	-	21	22 (Load/Start)	23 (Unload/Start)	23,5	17811-03A	HART
TIT-1001	Compressor Inlet Nitrogen Temperature Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...80	°C	-	-	-	-	56	-	17811-03A	HART
TIT-1002	Compressor 1st Stage Nitrogen Temperature Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...200	°C	-	-	-	-	-	170	17811-03A	HART
TIT-1003	Compressor Upstream After-Cooler Nitrogen Temperature Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...200	°C	-	-	-	-	-	140	17811-03A	HART
FIT-1001	Compressor Cooling Water Outlet Water Flow Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...20	m3/hr	-	-	13	-	-	-	17811-03A	HART
VT-1001	Compressor Vibration Level Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	to be advised	mm/s	-	-	-	-	-	8	17811-03A	HART
XY-1001	Compressor Inlet Solenoid Valve	SOLENOID VALVE	FIELD	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Open	Closed	-	-	-	-	17811-03A	-
XY-1002	Compressor Cooling Water Inlet Solenoid Valve	SOLENOID VALVE	FIELD	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Open	Closed	-	-	-	-	17811-03A	-
PB-1001	Compressor Start Pushbutton	PUSHBUTTON	LP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Stop	Start	-	-	-	-	17811-03A	-
PB-1002	Compressor Stop Pushbutton	PUSHBUTTON	LP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Stop	Start	-	-	-	-	17811-03A	-
PB-1004	Compressor Lamptest Pushbutton	PUSHBUTTON	LP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Lamptest	-	-	-	-	17811-03A	-
PB-1005	Compressor Start Pushbutton	PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Stop	Start	-	-	-	-	17811-03A	-
PB-1006	Compressor Stop Pushbutton	PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Stop	Start	-	-	-	-	17811-03A	-
PB-1007	Compressor Emergency Stop Button	ESD PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Emergency Stop	Normal	-	-	-	-	17811-03A	-
PB-1008	Compressor Lamptest Pushbutton	PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Lamptest	-	-	-	-	17811-03A	-
PB-1009	Compressor Accept Pushbutton	PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Not Accept	Accept	-	-	-	-	17811-03A	-
PB-10010	Compressor Reset Pushbutton	PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Not Reset	Reset	-	-	-	-	17811-03A	-
HS-1001	Compressor Local/Off/Remote Switch	SWITCH	LP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Local/Remote	-	-	-	-	17811-03A	-
XL-10001	Compressor Operational Lamp	LAMP	LP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Operational	-	-	-	-	17811-03A	-
XL-10002	Compressor Running Lamp	LAMP	LP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Running	-	-	-	-	17811-03A	-
XL-10003	Compressor Common Alarm Lamp	LAMP	LP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Common Alarm	-	-	-	-	17811-03A	-
XL-10004	Compressor Common Trip Lamp	LAMP	LP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Common Trip	-	-	-	-	17811-03A	-
XL-10006	Compressor Operational Lamp	LAMP	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Operational	-	-	-	-	17811-03A	-
XL-10007	Compressor Running Lamp	LAMP	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Running	-	-	-	-	17811-03A	-
XL-10008	Compressor Common Alarm Lamp	LAMP	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Common Alarm	-	-	-	-	17811-03A	-
XL-10009	Compressor Common Trip Lamp	LAMP	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Common Trip	-	-	-	-	17811-03A	-
HM-10001	Compressor Hourmeter	LAMP	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Hourmeter	-	-	-	-	17811-03A	-
-	Compressor Reset ESD Relay	INTERFACE RELAY	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	-	Reset	-	-	-	-	17811-03A	-
-	Compressor Forced Shutdown	INTERFACE RELAY	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Normal	Forced Shutdown	-	-	-	-	17811-03A	-
-	Compressor Main Motor Start/Stop	INTERFACE RELAY	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Stop	Start	-	-	-	-	17811-03A	-
-	Compressor Oil Heater ON/OFF	INTERFACE RELAY	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	On	-	-	-	-	17811-03A	-
-	Compressor Main Motor Running	CONTACT	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Not Running	Running	-	-	-	-	17811-03A	-
-	Compressor Main Motor Fault	CONTACT	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Fault	Healthy	-	-	-	-	17811-03A	-
-	Heater Running	CONTACT	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Not Running	Running	-	-	-	-	17811-03A	-
-	Heater Fault	CONTACT	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Fault	Healthy	-	-	-	-	17811-03A	-
XCS-108	Time Synchronisation	CONTACT	UCP	FCS	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	-	-	-	-	-	-	17811-03A	-
HS-108-SD-1	Emergency Shutdown Command	SIGNAL TO/FROM ESD	UCP	ESD	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	ESD	Healthy	-	-	-	-	17811-03A	-
XAL-108-2	Common Alarm	SIGNAL TO/FROM ESD	UCP	ESD	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Alarm	Healthy	-	-	-	-	17811-03A	-
XS-115	Interlock Switch Stop Compressor	SIGNAL TO/FROM FCS	UCP	FCS	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Stop	Not Stop	-	-	-	-	17811-03A	-

Tag no. shall be specified

Please modify to "a"

Please modify to "a"

State 0 must be Off/Local

State 1 must be Remote only

XS-115 to be deleted