

DOCUMENT TITLE:

CONTROL/ESD/F&G SYSTEM
BLOCK DIAGRAM CONFIGURATION

NOTES

LEGEND

REFERENCE DRAWING DRG. No.

KEY PLAN

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D06	JUL-2023	IFA	M.AGHARNEJAN	M.PAKHARAN	A.M.MOSESSE	
D05	DEC-2022	IFA	M.AGHARNEJAN	M.PAKHARAN	M.MERSEAD	
D04	JUL-2022	IFA	M.AGHARNEJAN	M.PAKHARAN	M.MERSEAD	
D03	MAR-2022	IFA	M.AGHARNEJAN	M.PAKHARAN	M.MERSEAD	
D02	JAN-2022	IFA	M.AGHARNEJAN	M.PAKHARAN	M.MERSEAD	
D01	NOV-2021	IFA	M.AGHARNEJAN	M.PAKHARAN	M.MERSEAD	**.**
D00	AUG-2021	IPC	M.AGHARNEJAN	M.PAKHARAN	SH.GHAJER	**.**

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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR:  HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC):  PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.

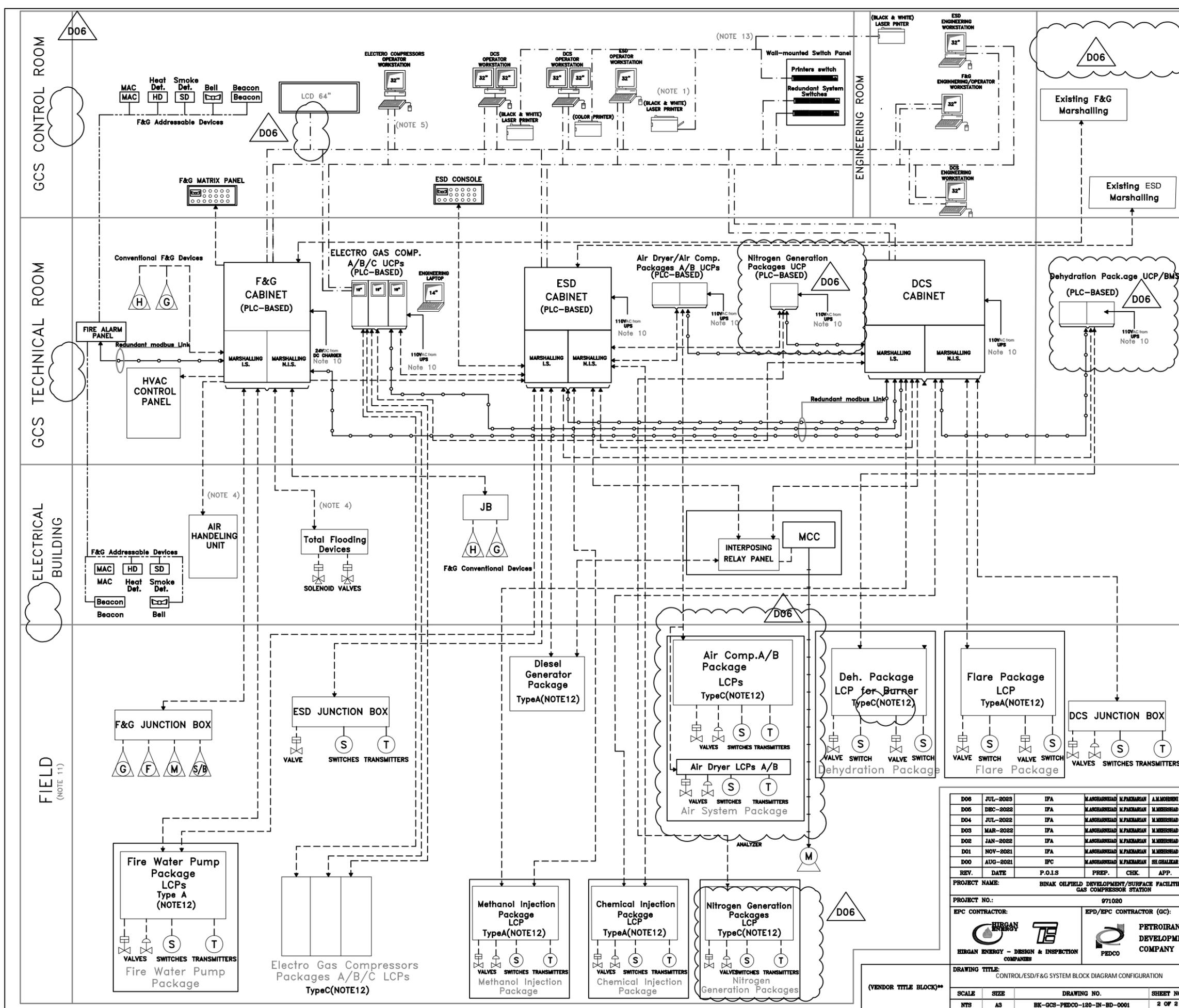
DRAWING TITLE: Control/ESD/F&G System Block Diagram Configuration

(VENDOR TITLE BLOCK)**

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE CLASS	SERIAL NO.	SHEET	REVISION
NTS	A3	BK-QCS-PEDCO-120-IN-BD-0001	1 OF 2	D06	D-53-073-9184	F	2 J	708943	2	D06

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:



- NOTES**
1. NETWORK CONNECTION BETWEEN PANELS/ WORK STATIONS SHALL BE IN REDUNDANT HIGH SPEED ETHERNET PROTOCOL VIA NETWORK SWITCH. EACH OWS HMI PAGE SHALL BE ABLE TO BE DISPLAYED IN OTHER STATIONS. NUMBER OF STATIONS SHALL BE FINALIZED BY CLIENT.
 2. SEPARATE JB FOR DIFFERENT SIGNAL TYPE SHALL BE USED.
 3. SPARE FOR NETWORK AND MODBUS CONNECTION TO BE CONSIDERED.
 4. EXISTING AIR HANDLING UNIT SHALL BE STOPPED OR DAMPERS SHALL BE CLOSED IN CASE OF MANUAL/AUTOMAT ACTIVATION OF TOTAL FLOODING SYSTEM VIA F&G SYSTEM.
 5. DCS WORK STATION SHALL BE CAPABLE TO MONITOR ELECTRO-COMPRESSOR AND F&G DATA.
 6. AL DEVICES SHALL BE CONSIDERED INDUSTRIAL TYPE.
 7. NUMBER OF CABINET, F&G DETECTOR, FIELD INSTRUMENTS HAS BEEN CONSIDERED IN RELATED DOCUMENTS AND THERE ARE TYPICAL.
 8. HARD WIRE CONNECTION TO BE CONSIDERED FOR ESD TRIP TO SYSTEM/PACKAGE UCP/DEVICES AS PER P&ID.
 9. FACP COULD BE INTEGRATED IN FGS DEPENDING THE VENDOR'S DESIGN.
 10. HARDWARE CONNECTION FOR MONITORING OF POWER STATUS TO BE CONSIDERED BETWEEN NEW UPS/DC CHARGER AND DCS. REQUIRED CONNECTION TO ESD AND F&G TO BE CONSIDERED.
 11. ALL FIELD DEVICES ARE IN AREA OF NEW GCS EQUIPMENT AND SIAHMAKAN PIPE LINE PIG LAUNCHER.
 12. REFER TO DOCUMENT, "SPECIFICATION FOR INSTRUMENT AND CONTROL OF PACKAGE UNIT SYSTEM (PU)".
 13. INDIVIDUALLY NETWORK CONNECTION FOR PRINTER CONNECTED TO DCS ENGINEERING WORKSTATION, TO BE CONSIDERED.

- LEGEND**
- | | | | |
|-------|---------------------|----------|----------------|
| (S) | SWITCHES | (G) | GAS DETECTOR |
| (T) | TRANSMITTER | (F) | FLAME DETECTOR |
| (V) | ON/OFF VALVE | (M) | MAC |
| (CV) | CONTROL VALVE | (S/B) | SIREN/BEACON |
| (LCP) | LOCAL CONTROL PANEL | (S) | SMOKE DETECTOR |
| (H) | HEAT DETECTOR | (MAC) | MAC |
| (B) | BELL | (Beacon) | Beacon |
| (HD) | HEAT DETECTOR | | |
| (SD) | SMOKE DETECTOR | | |
- - - - - CONTROL HARD-WIRE
 - - - - - REDUNDANT ETHERNET NETWORK
 - - - - - REDUNDANT MODBUS RTU SERIAL LINK
 - - - - - ADDRESSABLE F&G SERIAL LINK
 - - - - - ELECTRICAL WIRE

REV.	DATE	DESCRIPTION	CHECKED	BY	DATE	REV. APPR.	BY	DATE
D06	JUL-2023	IPA	M.AGHARBEJAN	M.PAKHARIAN	A.M.MOSESSE			
D05	DEC-2022	IPA	M.AGHARBEJAN	M.PAKHARIAN	M.MOSESSEAD			
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D01	NOV-2021	IPA	M.AGHARBEJAN	M.PAKHARIAN	M.MOSESSEAD	**		
D00	AUG-2021	IPC	M.AGHARBEJAN	M.PAKHARIAN	SEGHALJAN	**		

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NTS	A3	BK-OCS-PEDCO-120-IN-BD-0001	2 OF 2	D06	D-53-073-9184	F	2	J	708943	2