

CONTROL/ESD/F&G SYSTEM OVERALL BLOCK DIAGRAM  
FOR NARGESI

NOTES

ABBREVIATIONS & LEGEND



ATRIN RAD MEHR  
سهامی خاص  
شماره ثبت: ۴۱۴۵۵۰

REFERENCE DRAWINGS		DRG. No.
Specification for Emergency Shutdown System		BH-17-SM-100-IN-SP-0058
Specification for Control System		BH-17-SM-100-IN-SP-0057
Specification for Panels and Cabinets		BH-17-SM-100-IN-SP-0056
Specification for Instrument and Control of Package Unit System		BH-17-SM-100-IN-SP-0055

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DEVELOPMENT OF 28 RESERVOIRS/  
BIBI HAKIMEH OILFIELD (EPC)

REVAMPING OF PRODUCTION & DESALTING UNITS OF BIBI HAKIMEH 1&2





TITLE:  
**CONTROL/ESD/F&G SYSTEM OVERALL BLOCK DIAGRAM  
FOR NARGESI**

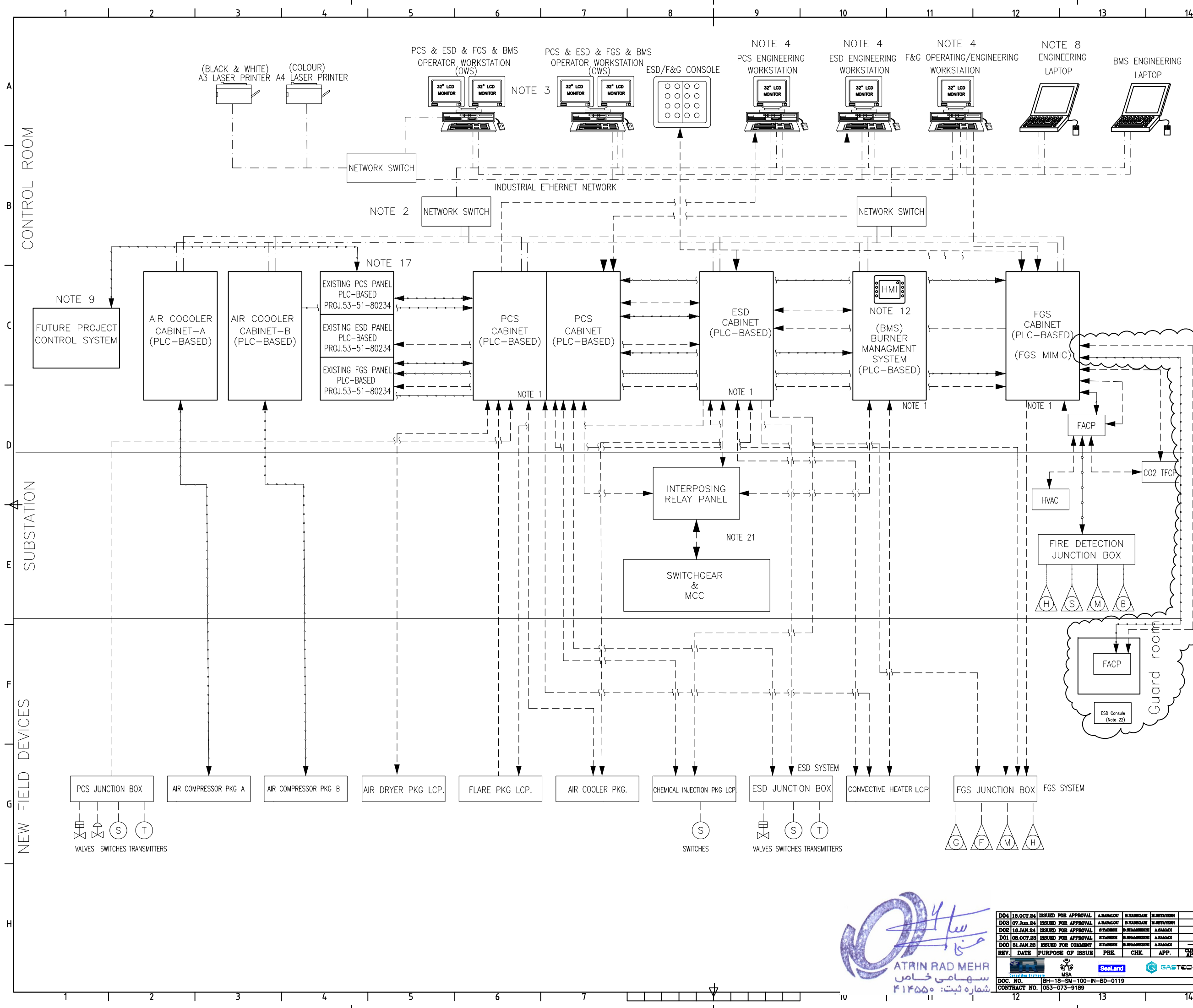
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BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NUMBER	SHEET REVISION
51-53-971022	F	2	I	---	1/2 D04

D04	16.OCT.24	ISSUED FOR APPROVAL	A.BABALOU	B.YASBAGARI	M.SHAYEBHI	
D03	07.Jun.24	ISSUED FOR APPROVAL	A.BABALOU	B.YASBAGARI	M.SHAYEBHI	
D02	19.JAN.24	ISSUED FOR APPROVAL	S.TAMIRI	B.SHAMSHIRI	A.SAMANI	
D01	08.OCT.23	ISSUED FOR APPROVAL	S.TAMIRI	B.SHAMSHIRI	A.SAMANI	
D00	31.JAN.23	ISSUED FOR COMMENT	S.TAMIRI	B.SHAMSHIRI	A.SAMANI	
REV.	DATE	PURPOSE OF ISSUE	PRE.	CHK.	APP.	CUST APP.
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DOC. NO.	BH-18-SM-100-IN-BD-0119					
CONTRACT NO.	053-073-9189					



**NOTES**

1-Rear of the panel is marshalling cabinet.  
2-Network Switch and industrial Ethernet Network are redundant.  
3-The quantity of OWS shall be considered two numbers and included industrial dual Monitor stand arms.  
4-The quantity of PCS/ESD/FGS EWS shall be considered one number and included single monitor.  
5-The quantity of FGS/ESD EWS shall be considered one number and included single monitor.  
6-All serial communication shall be provided redundant.(PCS/ESD/BMS/FGS/Existing panels)  
7-HMI or appropriate mimic shall be considered on FGS panel.  
8-One industrial laptop shall be provided to communicate with PCS, ESD, FGS.  
9-All required interfaces shall be considered to connect with future project in different level of control system such as CPU,monitoring and network  
10- Interface between PCS Panel Project No.53-51 - 80234 and PCS Panel shall be Redundant serial link.  
11- Interface between ESD Panel Project No.53-51 - 80234 and ESD Panel shall be Hardwire.  
12- HMI shall be considered for each heater.  
13-Engineering workstation shall have all required software and hardware components for communicating with PCS,ESD,BMS,FGS panels.  
14-Reset and total emergency shut down buttons shall be considered on ESD console.  
15-A total emergency shut down lockable button shall be considered in guard house.  
16-COMMUNICATION SIGNAL IS CONSIDERED ACCORDING TO CAUSE & EFFECT DOCUMENT. ESD COMMANDS BETWEEN NEW & EXISTING SYSTEMS ARE PERFORMED ONLY THROUGH HARDWARE SIGNALS.  
17-VENDOR SHALL CONSIDER REQUIRED FACILITIES FOR CONNECTION WITH EXISTING CONTROL SYSTEMS.  
18-CYBER SECURITY REQUIREMENT SHALL BE CONSIDERED BY VENDOR(SUCH AS FIRE WALL,...).  
19-LCP OF AIR PACKAGES ARE PLC BASE  
20- EXISTING AND NEW PANELS ARE INTEGRATED  
21- CONNECTION BETWEEN SWITCHGEAR FEEDERS AND IRP IS BY ELECTRICAL DEP.  
22- FOR ESD PUSH BUTTON

**ABBREVIATIONS & LEGEND**

--- ETHERNET  
--- ELECTRONIC SIGNAL  
--- MODBUS RTU (SERIAL LINK)  
--- ADDRESSABLE SIGNAL  
LCP LOCAL CONTROL PANEL  
FGS FIRE AND GAS SYSTEM  
PCS PROCESS CONTROL SYSTEM  
ESD EMERGENCY SHUT DOWN SYSTEM  
FACP FIRE ALARM CONTROL PANEL  
CO2 TFCP CO2 TOTAL FLOODING CONTROL PANEL  
MCC MOTOR CONTROL CENTER

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SCALE:N.T.S.

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ATIRIN RAD MEHR  
سهامی خاص  
شماره ثبت: ۴۱۴۵۵۰

DO4	16.OCT.24	ISSUED FOR APPROVAL	A.ABOLGOU	B.YADROUANI	M.METAYEBI	
DO3	07.JUN.24	ISSUED FOR APPROVAL	A.ABOLGOU	B.YADROUANI	M.METAYEBI	
DO2	19.JAN.24	ISSUED FOR APPROVAL	S.TAMIMI	B.YADROUANI	A.ABOLGOU	
DO1	08.OCT.23	ISSUED FOR APPROVAL	S.TAMIMI	B.YADROUANI	A.ABOLGOU	
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