



Development Plan of 28 Reservoirs
/ BIBI HAKIMEH Oilfield (EPC)



I/O List for F&G System for Nargesi

Contract No.:	Project	Package	Contractor	Fac.	Disc.	Doc. Type	Ser. No.	Rev.	Page 1 of 6
053-073-9189	BH	18	SM	100	IN	LI	0133	D02	

I/O List for F&G System for Nargesi



Rev.	Status	Date	Document Status	Prepared by:	Checked by:	Approved by:	Client Approval
D00	IFI	10-May-2023	Issued For Information	H.Shahebrahimi	B.Shamsedini	A.Samadi	
D01	IFA	26-July-2024	Issued For Approval	S.Astan	B.Yadegari	M.Setayesh	
D02	AFC	14.10.2024	Approved for Construction	A.Babalou	B.Yadegari	M.Setayesh	


Class: I

Status:

IDC: Inter-Discipline Check
IFC: Issued For Comment
IFA: Issued For Approval
IFR: Issued for Rivew
AFD: Approved For Design
AFC: Approved For Construction
AFP: Approved For Purchase
IFI: Issued For Information
AB-R: As-Built for COMPANY Review
AB-A: As-Built –Approved

سپهر
ATIRIN RAD MEHR
سپهری خام
شماره ثبت: ۴۱۴۵۵۰

<div> NISOC</div>		Development Plan of 28 Reservoirs / BIBI HAKIMEH Oilfield (EPC)						<div> SeaLand</div>							
		I/O List for F&G System for Nargesi													
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	BH	18	SM	100	IN	LI	0133	D02							
Tabulation of Revised Pages															
Page	D00	D01	D02	D03	D04	D05	Revision Description	Page	D00	D01	D02	D03	D04	D05	Revision Description
1	x	x	x												
2	x	x	x												
3	x	x													
4	x	x	x												
5	x	x	x												
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Development Plan of 28 Reservoirs / BIBI HAKIMEH Oilfield (EPC)



I/O List for F&G System for Nargesi

Contract No.:
053-073-9189

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General Notes:

- 1- All Interface signals between ESD/F&G system will be considered after issue of F&G cause & Effect.
- 2- signal of Cause& Effect will be added after issue of F&G Cause & Effect

LEGEND:

Location:	L	: Local	I/O Type:	AI	: Analog Input
	LP	: Local Panel		AO	: Analog Output
	ITR	: Instrument Technical Room		DI	: Digital Input
	CCR	: Central Control Room		DO	: Digital Output
	MCC	: Motor Control Center		DOR	: Digital Output Redundant
	DCS	: Distributed Control System		AIR	: Analog Input Redundant
	ESD	: Emergency Shutdown System		AOR	: Analog Output Redundant
	UCP	: Unit Control Panel		DIR	: Digital Input redundant
	AUX	: Auxiliary Console		SDI	: Serial Digital Input
	IRP	: Interposing Relay Panel		SDO	: Serial Digital Output
	PLC	: Programmable Logic Controller		SAI	: Serial Analog Input
	RIO	: Remote I/O DCS		SAO	: Serial Analog Output
	MTU	: Master Terminal Unit			
	RTU	: Remote Terminal Unit			
	UCP	: Unit Control Panel			
	PCS	: Process Control System			
	FGS	: Fire & Gas System			

Reference Documents:

- Fire & Gas Detector Location Layout for Nargesi(Process Area)	BH-18-SM-100-SA-PY-0363
- Specification for Fire & Gas System	BH-17-SM-100-IN-SP-0059
- Specification for Fire & Gas Sensor and Devices	BH-17-SM-100-IN-SP-0054
- Fire & Gas Cause and Effect Diagram for Nargesi	BH-17-SM-100-SA-DG-1852



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SUMMARY

PCS															
AI				AO				DI				DO			
Single		Redandunt		Single		Redandunt		Single		Redandunt		Single		Redandunt	
IS	NIS	IS	NIS	IS	NIS	IS	NIS	IS	NIS	IS	NIS	IS	NIS	IS	NIS
-	-	-	40	-	-	-	-	-	-	-	27	-	-	-	37

		Development Plan of 28 Reservoirs / BIBI HAKIMEH Oilfield (EPC)										 									
		I/O List for F&G System for Nargesi																			
Contract No.: 053-073-9189		Project	Package	Contractor		Fac.	Disc.	Doc. Type		Ser. No.	Rev.	Page 5 of 6									
BH		BH	18	SM		100	IN	LI		0133	D02										
Item	Loop Number	Tag Number	Description	Type(Conventional/ Addressable)	Service	Reference No.	I/O Type	System	From	To	Signal Type	IS/NIS	Low Range	High Range	High High	Low High	Low Low	Set Point	Eng. Units	Remark	
1	NAR-MCP-01-08	NAR-MCP-01-08	MANUAL ALARM CALL POINT	Conventional	FIRE FIGHTING SHED	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
2	NAR-MCP-01-09	NAR-MCP-01-09	MANUAL ALARM CALL POINT	Conventional	FIRE FIGHTING SHED	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
3	NAR-MCP-01-05	NAR-MCP-01-05	MANUAL ALARM CALL POINT	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
4	NAR-RG-01-05	NAR-RG-01-05	YELLOW FLASHING/ROTATING BEACON	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
5	NAR-RF-01-05	NAR-RF-01-05	RED FLASHING/ROTATING BEACON	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
6	NAR-RT-01-05	NAR-RT-01-05	BLUE FLASHING/ROTATING BEACON	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
7	NAR-HOR-01-05-A	NAR-HOR-01-05	TWO TONE SOUNDER	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
8	NAR-HOR-01-05-B	NAR-HOR-01-05	TWO TONE SOUNDER	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
9	NAR-FGD-01-13	NAR-FGD-01-13	GAS DETECTOR	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
10	NAR-FGD-01-14	NAR-FGD-01-14	GAS DETECTOR	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
11	NAR-TGD-01-13	NAR-TGD-01-13	H2S GAS DETECTOR	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
12	NAR-TGD-01-14	NAR-TGD-01-14	H2S GAS DETECTOR	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
13	NAR-FD-01-13	NAR-FD-01-13	UV/IR FLAME DETECTOR	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
14	NAR-FD-01-14	NAR-FD-01-14	UV/IR FLAME DETECTOR	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
15	NAR-MCP-01-12	NAR-MCP-01-12	MANUAL ALARM CALL POINT	Conventional	CONNECTIVE HEATER	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
16	NAR-FGD-01-09	NAR-FGD-01-09	GAS DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
17	NAR-TGD-01-09	NAR-TGD-01-09	H2S GAS DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
18	NAR-FD-01-11	NAR-FD-01-11	UV/IR FLAME DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
19	NAR-FGD-01-10	NAR-FGD-01-10	GAS DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
20	NAR-TGD-01-10	NAR-TGD-01-10	H2S GAS DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
21	NAR-FD-01-09	NAR-FD-01-09	UV/IR FLAME DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
22	NAR-FGD-01-12	NAR-FGD-01-12	GAS DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
23	NAR-FGD-01-12	NAR-FGD-01-12	H2S GAS DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
24	NAR-FD-01-10	NAR-FD-01-10	UV/IR FLAME DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
25	NAR-FGD-01-12	NAR-FGD-01-12	GAS DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
26	NAR-FGD-01-12	NAR-FGD-01-12	H2S GAS DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
27	NAR-FD-01-12	NAR-FD-01-12	UV/IR FLAME DETECTOR	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
28	NAR-MCP-01-02	NAR-MCP-01-02	MANUAL ALARM CALL POINT	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
29	NAR-RG-01-02	NAR-RG-01-02	YELLOW FLASHING/ROTATING BEACON	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
30	NAR-RF-01-02	NAR-RF-01-02	RED FLASHING/ROTATING BEACON	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
31	NAR-RT-01-02	NAR-RT-01-02	BLUE FLASHING/ROTATING BEACON	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
32	NAR-HOR-01-02-A	NAR-HOR-01-02	TWO TONE SOUNDER	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
33	NAR-HOR-01-02-B	NAR-HOR-01-02	TWO TONE SOUNDER	Conventional	P-1301A/B - P-1302A/B	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
34	NAR-FGD-01-07	NAR-FGD-01-07	GAS DETECTOR	Conventional	HOT STRIPPING COLUMN	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
35	NAR-TGD-01-07	NAR-TGD-01-07	H2S GAS DETECTOR	Conventional	HOT STRIPPING COLUMN	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
36	NAR-FD-01-08	NAR-FD-01-08	UV/IR FLAME DETECTOR	Conventional	HOT STRIPPING COLUMN	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
37	NAR-FGD-01-08	NAR-FGD-01-08	GAS DETECTOR	Conventional	HOT STRIPPING COLUMN	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
38	NAR-TGD-01-08	NAR-TGD-01-08	H2S GAS DETECTOR	Conventional	HOT STRIPPING COLUMN	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
39	NAR-MCP-01-11	NAR-MCP-01-11	MANUAL ALARM CALL POINT	Conventional	T-1301	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
40	NAR-FGD-01-05	NAR-FGD-01-05	GAS DETECTOR	Conventional	AIR COOLER(JAC-1301)	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
41	NAR-FGD-01-06	NAR-FGD-01-06	GAS DETECTOR	Conventional	AIR COOLER(JAC-1301)	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
42	NAR-TGD-01-05	NAR-TGD-01-05	H2S GAS DETECTOR	Conventional	AIR COOLER(JAC-1301)	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
43	NAR-TGD-01-06	NAR-TGD-01-06	H2S GAS DETECTOR	Conventional	AIR COOLER(JAC-1301)	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
44	NAR-FD-01-06	NAR-FD-01-06	UV/IR FLAME DETECTOR	Conventional	AIR COOLER(JAC-1301)	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
45	NAR-FD-01-07	NAR-FD-01-07	UV/IR FLAME DETECTOR	Conventional	AIR COOLER(JAC-1301)	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
46	NAR-MCP-01-06	NAR-MCP-01-06	MANUAL ALARM CALL POINT	Conventional	AIR COOLER(JAC-1301)	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
47	NAR-MCP-01-07	NAR-MCP-01-07	MANUAL ALARM CALL POINT	Conventional	AIR COOLER(JAC-1301)	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
48	NAR-FGD-01-04	NAR-FGD-01-04	GAS DETECTOR	Conventional	CLOSE DRAIN DRUM(V-1303)	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
49	NAR-FD-01-04	NAR-FD-01-04	UV/IR FLAME DETECTOR	Conventional	V-1303 _ P-1304A/B _ P-1305	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
50	NAR-FD-01-05	NAR-FD-01-05	UV/IR FLAME DETECTOR	Conventional	V-1303 _ P-1304A/B _ P-1305	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
51	NAR-FGD-01-03	NAR-FGD-01-03	GAS DETECTOR	Conventional	P-1304A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	100					%LEL		
52	NAR-TGD-01-03	NAR-TGD-01-03	H2S GAS DETECTOR	Conventional	P-1304A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
53	NAR-TGD-01-04	NAR-TGD-01-04	H2S GAS DETECTOR	Conventional	P-1304A/B	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5			PPM		
54	NAR-MCP-01-03	NAR-MCP-01-03	MANUAL ALARM CALL POINT	Conventional	V-1303 _ P-1304A/B _ P-1305	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
55	NAR-RG-01-03	NAR-RG-01-03	YELLOW FLASHING/ROTATING BEACON	Conventional	V-1303 _ P-1304A/B _ P-1305	BH-18-SM-100-SA-PY-0363	DOR														

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053-073-9189		BH	18	SM		100	IN	LI		0133		D02									
Item	Loop Number	Tag Number	Description	Type(Conventional/ Addressable)	Service	Reference No.	I/O Type	System	From	To	Signal Type	IS/NIS	Low Range	High Range	High High	High	Low	Low Low	Set Point	Eng. Units	Remark
69	NAR-TGD-01-02	NAR-TGD-01-02	H2S GAS DETECTOR	Conventional	FLARE K.O DRUM PIT	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS	0	50	10	5					
70	NAR-FD-01-03	NAR-FD-01-03	UV/IR FLAME DETECTOR	Conventional	FLARE K.O DRUM PIT	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
71	NAR-FD-01-02	NAR-FD-01-02	UV/IR FLAME DETECTOR	Conventional	FLARE K.O DRUM PIT	BH-18-SM-100-SA-PY-0363	AIR	FGS	Field	FGS	4-20mA	NIS									
72	NAR-MCP-01-16	NAR-MCP-01-16	MANUAL ALARM CALL POINT	Conventional	FLARE K.O DRUM PIT	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
73	NAR-MCP-01-14	NAR-MCP-01-14	MANUAL ALARM CALL POINT	Conventional	DRY GAS SEAL	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
74	NAR-MCP-01-01	NAR-MCP-01-01	MANUAL ALARM CALL POINT	Conventional	AIR RECEIVER	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
75	NAR-RG-01-01	NAR-RG-01-01	YELLOW FLASHING/ROTATING BEACON	Conventional	AIR RECEIVER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
76	NAR-RF-01-01	NAR-RF-01-01	RED FLASHING/ROTATING BEACON	Conventional	AIR RECEIVER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
77	NAR-RT-01-01	NAR-RT-01-01	BLUE FLASHING/ROTATING BEACON	Conventional	AIR RECEIVER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
78	NAR-HOR-01-01-A	NAR-HOR-01-01	TWO TONE SOUNDER	Conventional	AIR RECEIVER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
79	NAR-HOR-01-01-B	NAR-HOR-01-01	TWO TONE SOUNDER	Conventional	AIR RECEIVER	BH-18-SM-100-SA-PY-0363	DOR	FGS	Field	FGS	24 Vdc	NIS									
80	NAR-MCP-01-13	NAR-MCP-01-13	MANUAL ALARM CALL POINT	Conventional	AIR RECEIVER	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
81	NAR-MCP-01-02	NAR-MCP-01-02	MANUAL ALARM CALL POINT	Conventional	CHEMICAL INJECTION STORAGE AND PACKAGE SHELTER	BH-18-SM-100-SA-PY-0363	DIR	FGS	Field	FGS	24 Vdc	NIS									
82	NAR-FACP-01-01	NAR-FACP-01-01	PRE ALARM SIGNAL	-	FACP for guard house	BH-18-SM-100-SA-PY-0361	DIR	FGS	Guard House	FGS	24 Vdc	NIS									
83	NAR-FACP-01-02	NAR-FACP-01-02	ALARM SIGNAL	-	FACP for guard house	BH-18-SM-100-SA-PY-0361	DIR	FGS	Guard House	FGS	24 Vdc	NIS									
84	NAR-FACP-01-03	NAR-FACP-01-03	FIRE SIGNAL	-	FACP for guard house	BH-18-SM-100-SA-PY-0361	DIR	FGS	Guard House	FGS	24 Vdc	NIS									
85	NAR-FACP-01-04	NAR-FACP-01-04	FAULT SIGNAL	-	FACP for guard house	BH-18-SM-100-SA-PY-0361	DIR	FGS	Guard House	FGS	24 Vdc	NIS									
86	NAR-FACP-02-01	NAR-FACP-02-01	PRE ALARM SIGNAL	-	FACP for Switchgear and Transformer Room	BH-18-SM-100-SA-PY-0361	DIR	FGS	rr and Transfor	FGS	24 Vdc	NIS									
87	NAR-FACP-02-02	NAR-FACP-02-02	ALARM SIGNAL	-	FACP for Switchgear and Transformer Room	BH-18-SM-100-SA-PY-0361	DIR	FGS	rr and Transfor	FGS	24 Vdc	NIS									
88	NAR-FACP-02-03	NAR-FACP-02-03	FIRE SIGNAL	-	FACP for Switchgear and Transformer Room	BH-18-SM-100-SA-PY-0361	DIR	FGS	rr and Transfor	FGS	24 Vdc	NIS									
89	NAR-FACP-02-04	NAR-FACP-02-04	FAULT SIGNAL	-	FACP for Switchgear and Transformer Room	BH-18-SM-100-SA-PY-0361	DIR	FGS	rr and Transfor	FGS	24 Vdc	NIS									
90	NAR-FACP-03-01	NAR-FACP-03-01	PRE ALARM SIGNAL	-	FACP for Site Manager Building	BH-18-SM-100-SA-PY-0361	DIR	FGS	Manager Buil	FGS	24 Vdc	NIS									
91	NAR-FACP-03-02	NAR-FACP-03-02	ALARM SIGNAL	-	FACP for Site Manager Building	BH-18-SM-100-SA-PY-0361	DIR	FGS	Manager Buil	FGS	24 Vdc	NIS									
92	NAR-FACP-03-03	NAR-FACP-03-03	FIRE SIGNAL	-	FACP for Site Manager Building	BH-18-SM-100-SA-PY-0361	DIR	FGS	Manager Buil	FGS	24 Vdc	NIS									
93	NAR-FACP-03-04	NAR-FACP-03-04	FAULT SIGNAL	-	FACP for Site Manager Building	BH-18-SM-100-SA-PY-0361	DIR	FGS	Manager Buil	FGS	24 Vdc	NIS									
94	NAR-XXA-CO	NAR-XXA-CO	Common Audible Pre Alarm	-	F&G MATRIX PANEL	BH-18-SM-100-SA-PY-0361	DOR	FGS	Control Room	FGS	24 Vdc	NIS									
95	NAR-XAB-CO	NAR-XAB-CO	Common Fire Status On Concerned Fire Zone	-	F&G MATRIX PANEL	BH-18-SM-100-SA-PY-0361	DOR	FGS	Control Room	FGS	24 Vdc	NIS									
96	NAR-GDA-CO	NAR-GDA-CO	Common Flammable Gas Status On Concerned Fire Zone	-	F&G MATRIX PANEL	BH-18-SM-100-SA-PY-0361	DOR	FGS	Control Room	FGS	24 Vdc	NIS									
97	NAR-TDA-CO	NAR-TDA-CO	Common Toxic Gas Status On Concerned Fire Zone	-	F&G MATRIX PANEL	BH-18-SM-100-SA-PY-0361	DOR	FGS	Control Room	FGS	24 Vdc	NIS									
98	NAR-FDA-CO	NAR-FDA-CO	Common Fire Status On Concerned Fire Zone	-	F&G MATRIX PANEL	BH-18-SM-100-SA-PY-0361	DOR	FGS	Control Room	FGS	24 Vdc	NIS									
99	NAR-MCA-CO	NAR-MCA-CO	Common Manual Call Point Status On Concerned Fire Zone	-	F&G MATRIX PANEL	BH-18-SM-100-SA-PY-0361	DOR	FGS	Control Room	FGS	24 Vdc	NIS									
100	NAR-BATT-02-01	NAR-BATT-02-01	BATTERY BOOST CHARGE STOPING	-	Battery Room	BH-18-SM-100-SA-PY-0362	DOR	FGS	Battery room	FGS	25 Vdc	NIS									
101	NAR-BATT-02-02	NAR-BATT-02-02	BATTERY FEEDER ISOLATION	-	Battery Room	BH-18-SM-100-SA-PY-0363	DOR	FGS	Battery room	FGS	26 Vdc	NIS									
102	NR-BD-01-SPL-OFF	NR-BD-01-SPL-OFF	SPLIT OFF COMMAND	-	guard house	BH-18-SM-100-SA-PY-0364	DOR	FGS	Split Feeder	FGS	27 Vdc	NIS									
103	NR-BD-02-HVAC-OFF	NR-BD-02-HVAC-OFF	HVAC OFF COMMAND	-	Switchgear and Transformer Room	BH-18-SM-100-SA-PY-0365	DOR	FGS	HVAC	FGS	28 Vdc	NIS									
104	NR-BD-03-SPL-OFF	NR-BD-03-SPL-OFF	SPLIT OFF COMMAND	-	Site Manager Building	BH-18-SM-100-SA-PY-0366	DOR	FGS	Split Feeder	FGS	29 Vdc	NIS									