

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>							
شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK							شماره صفحه : 1 از 18
	پروژه BK	بسته کاری GCS	صادرکننده PEDCO	تسهیلات 120	رشته EL	نوع مدرک TB	سریال 0002	

## طرح نگهداشت و افزایش تولید 27 مخزن

## TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK

### نگهداشت و افزایش تولید میدان نفتی بینک

D01	Mar. 2025	IFI	M.Fahimi	M.Fakharian	S.Faramarzpour	
D00	Nov. 2024	IFI	M.Pourdasht	M.Fakharian	M.Sadeghian	
Rev.	Date	Purpose of Issue/Status	Prepared by:	Checked by:	Approved by:	Client Approval

Class:3

Client Doc. Number: F0Z-709330

Status:

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

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>							 شرکت توسعه و پارسا پارس HIRGAN ENERGY TE
شماره پیمان: 053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK							شماره صفحه : 2 از 18
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	
	BK	GCS	PEDCO	120	EL	TB	0002	D01

### REVISION RECORD SHEET

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	<div>نگهداشت و افزایش تولید میدان نفتی بینک</div> <div>سطح الارض</div> <div>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</div>								
شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK								شماره صفحه : 3 از 18
	نسخه	سریال	نوع مدرک	رشته	تهیهات	صادرکننده	بسته کاری	پروژه	
	D01	0002	TB	EL	120	PEDCO	GCS	BK	

TBE for LV Switchgear										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runin Sanat	Status
Item	Description									
1. General										
1.1	Name of Project / Plant	Binak Oilfield in Bushehr Province	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.2	Reference Doc.	1- IPS-M-EL-143(3) 2- LV Switchgear/MCC Single Line Diagram (BK-GCS-PEDCO-120-EL-SL-0002) 3- Specification For LV Switchgear & Motor Control Centers (BK-GNRAL-PEDCO-000-EL-SP-0001) 4- Electrical Typical Schematic Diagrams For LV Panel (BK-GCS-PEDCO-120-EL-DG-0002) 5- Electrical System Design Criteria (BK-GNRAL-PEDCO-000-EL-DC-0001) 6- Process Basis of Design (BK-GNRAL-PEDCO-000-PR-DB-0001)	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.3	Manufacturer of Cubicles	By Vendor	Ista Noavaran Niroo Co	A	Pars Tableau	A	Taban Tablo Co	A	Runin Sanat Gostar	A
1.4	Manufacturer Type No./Country Origin	By Vendor	Sivacon 8PT / Siemens	A	Normabloc-Iran	A	Sivacon 8pt	A	Sivacon 8pt	C
1.5	Standard	IEC60439, IEC60947, IPS-M-EL-143(3)	IEC61439-1, IEC60947, IPS-M-EL-143(3)	A	Confirmed	A	Confirmed	A	Confirmed	A
1.6	Type Of Cubicle - Fixed/ With draw able	With Draw Able	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.7	Rated Voltage & Variation	400 VAC & ± 10%	400 VAC & ± 5%	A	Confirmed	A	Confirmed	A	Confirmed	A
1.8	Rated Frequency & Variation	50 HZ & ± 5%	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.9	Service Voltage	400 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.10	Number Of Phases	3PH + PE + N	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.11	Number of Cubicles (With Spare)	By Vendor	18	A	21	A	26	A	20	A
1.12	Number of Bus Sections	3	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.13	Power Frequency (One Min)	1.89 KV (ACC to Table 8 of IEC 61439-1)	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.14	Impulse Withstand	6 KV (ACC to Table G.1 of IEC 61439-1)	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.15	Rated Normal Current of Bus bars	2000 A	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A

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شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK							شماره صفحه : 4 از 18
	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
	پروژه	BK						

TBE for LV Switchgear										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runin Sanat	Status
Item	Description									
1.16	Rated Short Current of Bus bars	50 KA	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.17	Rated Peak Withstand Current	125 KA	Based IEC 61439-1 Table 7 (Peak current) is considered 105kA	A	Confirmed	A	Confirmed	A	Confirmed	A
1.18	Rated Short Time Duration	1 SEC.	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.19	System Earthing	Solidly Earthed At Transformer Neutral Point	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.20	Voltage of Control Circuit	Incoming/Tie: 110 VDC Outgoing: 230 VAC (by Isolation Transformer for each Cubicle, According to BK-GCS-PEDCO-120-EL-SL-0002	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.21	Incoming Feeder Signaling Circuit	110 VDC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.22	Motor & Heater Outgoing Feeder Signaling Circuit	230 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.23	Distribution Outgoing Feeder Signaling Circuit	230 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.24	Panel Light Auto. Door Micro Switch Operated	230 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.25	Internal Safety Interlocks	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2. Environmental Conditions (Process Basis Design, BK-GNRAL-PEDCO-000-PR-DB-0001)										
2.1	Installation	Indoor, Safe Area	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.2	Max. Ambient Temperature	52 °C	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.3	Min. Ambient Temperature	5 °C	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.4	Relative Humidity (Max.)	100%	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.5	Climate	Corrosive, Hot Atmosphere	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.6	Altitude Above Sea Level	12.5 m	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3. Cubicle Construction										
3.1	Enclosure	Metal Clad	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.2	Indoor / Outdoor	Indoor	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A


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شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK							شماره صفحه : 5 از 18
	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
	BK							

TBE for LV Switchgear										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runin Sanat	Status
Item	Description									
3.3	Type of Installation	Floor Standing	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.4	Bus Bar Material	Hard Drown, High Conductivity Copper	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.5	Main Bus Bar Insulation Material	Flame Retardant, Non Hygroscopic Insulation Material	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.6	Bus Bar color	L1: Red , L2: Yellow , L3: Blue , N: Black	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.7	Shape of Main Bus Bars	By Vendor	Based on Siemens Standard	A	Acc To Tech Offer	C	2*80*10 Per phase	A	After contract	A
3.8	Neutral Bus Bar Cross Section	By Vendor	Based on Siemens Standard	A	Acc To Tech Offer	C	1*80*10	A	After contract	A
3.9	Type / Material of Main Bus Bar Supporting Insulators	By Vendor	Based on Siemens Standard	A	Acc To Tech Offer	C	1*80*10	A	After contract	A
3.10	Bus Bar Joints	Silver Plated	Confirmed	A	Confirmed	A	Tin plated (Main busbar, not only joint)	C	Confirmed	A
3.11	Bus Bar Identification	By Vendor	Based on Siemens Standard	A	Acc To Tech Offer	C	Label	A	After contract	A
3.12	Bus Bar Arrangement (Single / Duplicate)	By Vendor	Based on Siemens Standard	A	Acc To Tech Offer	C	Duplicate	A	After contract	A
3.13	Phase Bus Bar Cross Section	By Vendor	Based on Siemens Standard	A	Acc To Tech Offer	C	2*80*10 Per phase	A	After contract	A
3.14	Earth Bus Bar Cross Section	By Vendor	Based on Siemens Standard	A	Acc To Tech Offer	C	1*40*10	A	After contract	A
3.15	Bus bar Cooling Method	Air Natural	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.16	Rear / Front Access	Front Access	Rear Access (limited space in the switchgear room)	A	Confirmed	A	Rear Access (limited space in the switchgear room)	A	Confirmed	A
3.17	Incomings / Outgoings To/From The Switchgear ( Bus-Duct/Cable)	Incomings: Cable Outgoings: Cable	Confirmed Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.18	Top / Bottom Entry	Cable: Bottom	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.19	Degree of Protection	IP42	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.20	Min. Cubicle Sheet & Door Thickness For Enclosure	2 mm	Confirmed	A	Confirmed	A	2 mm for body enclosure	C	Confirmed	A
3.21	Tropic Design	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.22	Provision For Extension at Each End of Switchgear	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.23	Paint Color Shade	Ral 7032 (Light Grey)	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A


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شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK							شماره صفحه : 6 از 18
	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
	BK							

TBE for LV Switchgear										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runin Sanat	Status
Item	Description									
3.24	Thickness of Paint Coating	60 – 80 Micron	Confirmed	A	Confirmed	A	Confirmed	A	80-120 Micron	A
4. Circuit Breaker (ACB)										
4.1	Manufacturer / Country	By Vendor	ABB/SIEMENS West Europe	A	Schneider	A	ABB	A	Schneider	A
4.2	Manufacturer Type No.	By Vendor	3WL/3VA/Emax	A	NW/NT	A	Emax	A	NW/NT	A
4.3	Type Of Main CB (Air / Vacuum / Others)	Air	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.4	No. of Poles in Main ACB	4 Pole	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.5	Rated Insulation Voltage	1000 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.6	Rated Operating Voltage	400 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.7	Rated Current	By Vendor, Based on Load List (BK-GCS-PEDCO-120-EL-LI-0001)	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.8	Rated Breaking Current *	50 KA	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.9	Rated Making Current *	125 KA	Based on IEC 61439-1 : 105kA	A	Confirmed	A	Confirmed	A	Confirmed	A
4.10	S/C Withstanding Time	1 SEC.	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.11	Closing Time	By Vendor	5-10 s	A	Acc To Catalog	A	5-10 s	A	After contract	C
4.12	Tripping Time	By Vendor	40 ms	A	Acc To Catalog	A	40 ms	A	After contract	C
4.13	Rated Electrical Life	By Vendor	10000	A	Acc To Catalog	A	10000	A	After contract	C
4.14	Power Consumption of Closing Coil	By Vendor	5~10W	A	Acc To Catalog	A	5~10W	A	After contract	C
4.15	Power Consumption of Tripping Coil	By Vendor	5~10W	A	Acc To Catalog	A	5~10W	A	After contract	C
4.16	Power Consumption of Spring Charging Motor	By Vendor	60~90W	A	Acc To Catalog	A	60~90W	A	After contract	C
4.17	Spring Charge Motor Voltage Supply	110 VDC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.18	No. of Circuit Breaker Operating With Charged Spring	5	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.19	Anti-Pumping Feature	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.20	Shutters	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A



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شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK							شماره صفحه : 7 از 18
	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
	پروژه		BK					

TBE for LV Switchgear										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runin Sanat	Status
Item	Description									
4.21	Additional Auxiliary Contacts	By Vendor	If Required	A	Acc To Catalog	A	By Aux Relay	A	Refer to technical proposal	A
4.22	Closed/Open Position Indication	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.23	Charged/Discharged Spring Indication	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
5. MCCB										
5.1	Manufacturer of MCCB	By Vendor	ABB/SIEMENS west Europe	A	Schneider	A	ABB	A	Schneider	A
5.2	Rated Insulation Voltage	1000 VAC	690/1000 VAC	A	Confirmed	A	Confirmed	A	Confirmed	A
5.3	Rated Operating Voltage	400 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
5.4	Rated Current	According to “BK-GCS-PEDCO-120-EL-SL-0002”	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
5.5	NO. of Poles	3 Pole	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
6. MPCB										
6.1	Manufacturer of Switch-Fuse	By Vendor	SIEMENS /ABB	A	Schneider	A	ABB	A	Schneider	A
6.2	Rated Insulation Voltage	1000 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
6.3	Rated Operating Voltage	400 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
6.4	Rated Current	According to “BK-GCS-PEDCO-120-EL-SL-0002”	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
6.5	NO. of Poles	3 Pole	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7. Contactor										
7.1	Manufacturer Country	By Vendor	ABB/Siemens	A	Schneider	A	ABB	A	Schneider	A
7.2	Manufacturer Type No.	By Vendor	3RT/AF	A	LC	A	AC3	A	LC1D	A
7.3	Type of Contactor (Air / Vacuum)	Air/AC3	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7.4	Rated Insulation Voltage	1000 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7.5	Rated Operating Voltage	400 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7.6	Rated Current	By Vendor, Based On SLD	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A

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شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK							شماره صفحه : 8 از 18
	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
	پروژه	BK						

TBE for LV Switchgear										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runin Sanat	Status
Item	Description									
7.7	Closing Time	By Vendor	4~70mS	A	Acc To Catalog	A	4~70mS	A	After contract	A
7.8	Tripping Time	By Vendor	3~5mS	A	Acc To Catalog	A	3~5mS	A	After contract	A
7.9	Power Consumption of Elec. Bobbin	By Vendor	2W	A	Acc To Catalog	A	2W	A	After contract	A
7.10	Rated Electrical Life	By Vendor	15000	A	Acc To Catalog	A	15000	A	After contract	A
7.11	Rated Short Circuit Life	By Vendor	20000	A	Acc To Catalog	A	20000	A	After contract	A
7.12	Elect. Bobbin Voltage Supply	230 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7.13	Utilization Category	By Vendor	AC3	A	AC3	A	AC3	A	After contract	A
7.14	RC Element	Where Is Applicable	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7.15	NO. of Poles	3 Pole	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
8. Thermal Relays										
8.1	Manufacturer Country	By Vendor	ABB/Siemens	A	Schneider	A	ABB	A	Schneider	A
8.2	Manufacturer Type No.	By Vendor	3RB/RT	A	LRD	A	Thermal	A	LRD	A
8.3	Rated Operating Voltage	400 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
8.4	Single Phasing Protection	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
8.5	Thermal Relay Adjustable Range	By Vendor ( ACC to Coordination type 2 ) , According to “BK-GCS-PEDCO-120-EL-SL-0002”	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
8.6	Thermal Relay Reset Feature	Yes Via a Door Mounted Push-Button	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
9. PT'S-FIXED TYPE										
9.1	Manufacturer Country	By Vendor	Zafar/ Azmoon Trans	A	Azmoon Trans	A	Azmoon Trans	A	Azmoon Trans	A
9.2	Rated Operating Voltage	400/√3 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
9.3	Rated Secondary Voltage	110/√3 VAC , 230/√3 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
9.4	Accuracy Class	Measuring : 1 Protection : 3P	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
9.5	Burden	By Vendor	5 VA	A	20 VA	A	15 VA	A	50 VA	A




	<div>نگهداشت و افزایش تولید میدان نفتی بینک</div> <div>سطح الارض</div> <div>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</div>							
شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK							شماره صفحه : 9 از 18
	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
	پروژه	BK						


TBE for LV Switchgear										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runin Sanat	Status
Item	Description									
9.6	Single-Phase / Three-Phase	3 Phase	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
9.7	Rated Voltage Factor	By Vendor	At detail stage	A	Acc To Catalog	A	230	A	After contract	A
10. CTs										
10.1	Manufacturer Country	By Vendor	Mag Electric	A	Mag Electric	A	Mag Electric	A	Novin Harris	C
10.2	Rated Operating Voltage	400 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
10.3	Rated Primary Current	By Vendor, Based on SLD	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
10.4	Rated Secondary Current	1 A	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
10.5	Insulation Class	By Vendor	E	A	F	A	F	A	F	A
10.6	Accuracy Class	Measuring: 1 Protection: 5P10	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11. Protection										
11.1	Manufacturer Country	By Vendor	Siemens	A	Schneider	A	Schneider	A	Schneider	A
11.2	Manufacturer Designation No.	By Vendor	Reyrolle	A	Eassergy	A	Eassergy	A	Eassergy	A
11.3	Type of Protection Relays For Incomers/Tie	Multi-Function, Microprocessor Based	7SR	A	P3	A	P3	A	P3	A
11.4	No. of Contacts	MIN. 4	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11.5	Contact Rating Current	5 A	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11.6	Auto Diagnostic & Self Supervision	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11.7	Serial Link Communication Port	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
12. Measuring & Control System										
12.1	Manufacturer of Indicators / Country	By Vendor	Ziegler	A	Schneider	A	Schneider	A	BEW	C
12.2	Accuracy Class Of Indicators	CL.1	Confirmed	A	Confirmed	A	Confirmed	A	1.5	C
12.3	Manufacturer of Selector Switch	By Vendor	TRS	A	KAVEH	A	Trs / Raad	A	Schneider	A
12.4	Manufacturer of Push Buttons	By Vendor	Schneider/Raad	A	Schneider	A	Raad	C	Schneider	A

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	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
	پروژه	BK						

TBE for LV Switchgear										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runin Sanat	Status
Item	Description									
12.5	Manufacturer of Indication Lamps	By Vendor	Schneider/Raad	A	Schneider	A	Raad	C	Schneider	A
12.6	Manufacturer of Terminals	By Vendor	Raad	A	Raad	A	Raad	A	Raad	A
12.7	Manufacturer of AUX. Relays	By Vendor	Omron	A	Weidmueller	A	Omron	A	Weidmueller	A
12.8	Remote Control Indication / Alarm / Inter trip / ET C.	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
12.9	Mimic Diagram	Not Applicable	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
12.10	Size of Control Wiring	2.5 mm2 for CT'S 1.5 mm2 for Other	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
12.11	Ammeter / Voltmeter Manufacture	By Vendor	Ziegler	A	BEW	C	BEW	C	BEW	C
12.12	Ammeter / Voltmeter Class	CL.1	CL: 1.5	C	Confirmed	A	Confirmed	A	1.5	C
12.13	Ammeter / Voltmeter range	According to “BK-GCS-PEDCO-120-EL-SL-0002”	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
12.14	Multi Meters Manufacture	By Vendor	Schneider	A	Schneider	A	DM6200 Schneider	A	Schneider	A
12.15	Multi Meters Class	CL.0.5	Confirmed	A	Confirmed	A	Confirmed	A	1	C
13. Miscellaneous										
13.1	Routine Tests Foreseen	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
13.2	Type Tests Foreseen	No, If Certified	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
13.3	Two Years Op. & Comis. Spare Parts Proposed	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
13.4	Special Tools	Yes, If Required	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
13.5	Accessories	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
13.6	Mimic Diagram for Each Cubicle	Yes for Incoming	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
13.7	Dimension of One Cubicle (H X W X D)	By Vendor	Acc. to arrangement layout based on front or rear access	A	Acc. to arrangement layout based on front or rear access	A	Acc. to arrangement layout based on front or rear access	A	Acc. to arrangement layout based on front or rear access	A
13.8	Overall Dimension (H X W X D)	By Vendor	After Detail Desig	A	Acc. to arrangement layout based on front or rear access	A	Acc. to arrangement layout based on front or rear access	A	Acc. to arrangement layout based on front or rear access	A
13.9	Weight of One Cubicle	By Vendor	250~320 Kg per cel	A	250~320 Kg per cel	A	250~320 Kg per cel	A	250~320 Kg per cel	A

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	نسخه	سریال	نوع مدرک	رشته	تهیهات	صادرکننده	بسته کاری	پروژه	
	D01	0002	TB	EL	120	PEDCO	GCS	BK	

TBE for LV Switchgear										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runin Sanat	Status
Item	Description									
13.10	Total Weight of Cubicles	By Vendor	After Detail Desig	A	After Detail Desig	A	After Detail Desig	A	After Detail Desig	A
13.11	Time Schedule Prepared	By Vendor	Based on Offer	A	Confirmed	A	After P.O	A	After contract	A
13.12	Delivery Time	By Vendor	120 Day	A	Confirmed	C	3months	A	After contract	C
13.13	Any Deviations From Spec.	By Vendor	Based on Offer	C	Confirmed	C	As Attached	C	Refer To Technical Proposal	C
14. Accessories										
14.1	Illumination (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.2	Lifting Lugs (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.3	Space Heater With Thermostat (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.4	C.B. Position Indicator	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.5	Door Key (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.6	C.B. Charging / Retracting (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.7	Voltage and Current Test Block for Protection Rel ays (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.8	Lamp Test Facility (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Based On SLD	C
14.9	Automatic Shutter (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.10	Floor Frame (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.11	C.B. Transfer Trolley (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.12	Name Plate & Front Tag & Rear Side Tag (Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
14.13	Telescopic Rotary Handle for MCCB(Y/N)	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
15. Mechanical Interlock										
15.1	Door Shall Not Able To Open When C.B. Is Closed	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
15.2	Impossibility of C.B. Rack-In / Rack-Out When C. B. Is Closed	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
15.3	Padlock for C.B.	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A

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	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
	BK							



TBE for LV Switchgear										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runin Sanat	Status
Item	Description									
15.4	MCCB Open / Close From Closed Door Through Lockable Telescopic Rotary Handle	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
16. Panel Space Heater Technical Data										
16.1	Voltage	230 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
16.2	Power Consumption	By Vendor	100 W	A	80 W	A	100W	A	60 W	A
17. Panel Light Technical Data										
17.1	Type No.	By Vendor	LED	A	LED	A	LED	A	LED	A
17.2	Voltage	230 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
17.3	Power Consumption	By Vendor	8 W	A	5 W	A	8 W	A	5 W	A

**Status Legends:**  
A=Acceptable  
N=Not Acceptable  
N/A=Not Applicable  
INA=Information Not Available  
C=Clarification is Required  
CA= Conditionally Acceptable  
M = Requirement is Mandatory

	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>							
شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK							شماره صفحه : 13 از 18
	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
	پروژه	BK						

		TBE for LV Capacitor Bank									
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)		Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runnin Sanat	Status
Item	Description										
1. General Information											
1.1	Quantity		1 Set for Each LV Switchgear (Note 2)	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.2	Tag Numbers		CB01 & CB02	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.3	Applicable Standards		IEC 60831 IPS-M-EL-181(2) IPS-M-EL-143(3)	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.4	Applicable Document		BK-GNRAL-PEDCO-000-EL-SP-0012 BK-GCS-PEDCO-120-EL-CN-0011 BK-GNRAL-PEDCO-000-EL-SP-0001	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
1.5	Manufacturer's Name		By Vendor	Ista Noavaran Niroo Co	A	Pars Tableau	A	Taban Tablo	A	Runnin Sanat	A
2. Environmental Conditions (Process Basis Design, BK-GNRAL-PEDCO-000-PR-DB-0001)											
2.1	Location		Binak Oilfield in Bushehr Province	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.2	Hazardous Area Classification		Safe	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.3	Max. Outdoor Ambient Temperature		50°C	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.4	Minimum Indoor Ambient Temp.		-5°C	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.5	Maximum Indoor Relative Humidity		100%	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.6	Altitude (Above Sea Level)		12.5 m	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.7	Seismic Factor		Zone 3	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
2.8	Installation		Indoor	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3. Electrical Data											
3.1	System Voltage		400V AC ±10%	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.2	System Frequency		50 Hz ±5%	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.3	No. of Phases		3	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.4	Control Voltage		230 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.5	Space Heater Voltage		230 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A



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	نسخه	سریال	نوع مدرک	رشته	تهیهات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
BK								

TBE for LV Capacitor Bank										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runnin Sanat	Status
Item	Description									
3.6	Bus-Bar Rated Current	315A	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.7	Short Time Withstand Current	50 kA, 1 Sec.	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.8	Bus-Bars Material	Heat Shrink Copper	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
3.9	Bus-Bars Joints	Silver Plated	Confirmed	A	Confirmed	A	Tin plated (Main busbar, not only joint)	A	Confirmed	A
4. Enclosure Data										
4.1	Enclosure Type	Free Standing/Fixed Type / Front Access	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.2	Degree of Protection	IP 42	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.3	Cable Entry	Bottom (by Cable Gland)	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.4	Type & Size of Power Cable	According to “BK-GCS-PEDCO-120-EL-CN-0003” ( 4C×120 mm2 CU/XLPE/SWA/PVC )	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.5	Control Cable	2×(5C× 4 mm2) for Current & Voltage Sample	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.6	Material	Painted Sheet Steel	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.7	Color	RAL 7032	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.8	Dimensions (HxWxD)	By Vendor	At detail stage	A	At detail stage	A	2200*800*800	A	At detail stage	A
4.9	Sheet Steel Thickness (Body/Frame)	2mm/2.5mm	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
4.10	Weight	By Vendor	300 ~ 350 Kg	A	300 ~ 350 Kg	A	300 ~ 350 Kg	A	300 ~ 350 Kg	A
5. Capacitors										
5.1	Capacitor Manufacturer/Model No./Year	By Vendor	PKC	A	Hydra	C	FARAKOH/; IFASA/ SABAKHAZEN	A	Palayesh Nirou	A
5.2	Rating of each Capacitor Bank	140Kvar = 1x20Kvar Fix + 6x20Kvar	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
5.3	Capacitor Bank Rated Current	By Vendor	At detail stage	A	At detail stage	A	At detail stage	A	At detail stage	A
5.4	Capacitor Bank Rated Voltage	440V	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A



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	D01	0002	TB	EL	120	PEDCO	GCS	
	پروژه	BK						

TBE for LV Capacitor Bank										
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runnin Sanat	Status
Item	Description									
5.5	Capacitor Bank Connection Type	Delta	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
5.6	Capacitor Unit Temp. Category	-5/D	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
5.7	Capacitor Unit Case Material	Aluminum	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
5.8	Capacitor Unit Discharge time (to 75V)	<3 Minutes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
6. Control Unit (Regulator)										
6.1	Manufacturer / Type	By Vendor	PKC	A	PKC	A	Schneider	A	Palayesh Nirou	A
6.2	Mode of Operation	Automatic & Manual	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
6.3	Number of Steps	5 Steps	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
6.4	Selector Switch	Auto/Off/Manual Selector Switch For Each Step	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7. Fuses										
7.1	Manufacturer / Type	By Vendor	ETI	A	Pichaz	A	Pichaz	A	ETI	A
7.2	Rated Current	1.5 times of Capacitor Rated Current	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7.3	Inrush Current	100 times of Capacitor Rated Current	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7.4	Rated Voltage	500V	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7.5	Service Voltage	400V±10%	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
7.6	Rated Frequency	50Hz±5%	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
8. Contactors										
8.1	Manufacturer / Type	By Vendor	Siemens	A	Schneider	A	RK / LIFASA	A	schneider	A
8.2	Rated Voltage	690V AC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
8.3	Service Voltage	400V AC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
8.4	Coil Voltage	230 VAC (Note 2)	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
8.5	Duty	AC6-b	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A

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	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	
	D01	0002	TB	EL	120	PEDCO	GCS	
	پروژه	BK						

		TBE for LV Capacitor Bank								
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)	Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runnin Sanat	Status
Item	Description									
9. Incoming Circuit Breaker										
9.1	Manufacturer / Type	By Vendor	ABB / Siemens	A	Schneider	A	ABB	A	schneider	A
9.2	Type	MCCB, 4Pole, Fixed Type	Confirmed	A	Confirmed	A	Confirmed	A	3 Pole	A
9.3	Rated Current	315A	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
9.4	Rated Short Circuit Breaking Current	50 kA	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
9.5	Rated Insulation Voltage	1000 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
9.6	Service Voltage	400V	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
9.7	Internal Protections	49, 50, 51	Confirmed	A	Confirmed	A	49 & 50	A	49 & 50	A
9.8	Voltage Protection	230 VAC	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
9.9	Trip and Status aux. switches	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
10. Voltmeter with Selector Switch										
10.1	Manufacturer / Type	By Vendor	Ziegler	A	BEW	C	Voltmeter: BEW Selectoe: TRS	C	BEW	C
10.2	Operating Range	0 -500V	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
10.3	Accuracy Class	1.5	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11. Accessories										
11.1	Panel Lighting & Space Heater with Thermostat/Hygrostat	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11.2	Door Key	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11.3	Gland Plate	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11.4	Terminal Lugs	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11.5	Commissioning Spare Parts	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11.6	Two Year Operation Spare Parts	Yes	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
11.7	Routine Test	Witnessed and Report	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A

	<div>نگهداشت و افزایش تولید میدان نفتی بینک</div> <div>سطح الارض</div> <div>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</div>								
شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK								شماره صفحه : 17 از 18
	نسخه	سریال	نوع مدرک	رشته	تهیهات	صادرکننده	بسته کاری	پروژه	
	D01	0002	TB	EL	120	PEDCO	GCS	BK	

		TBE for LV Capacitor Bank									
MR	PMR For LV Switchgear, MCC & LV Capacitor Bank (BK-GCS-PEDCO-120-EL-MR-0002)		Purchaser Requirement	Ista Noavaran Niroo	Status	Pars Tableau	Status	Taban Tablo Shargh	Status	Runnin Sanat	Status
Item	Description										
11.8	Type Test CERTIFICATE		Certificat	Confirmed	A	Confirmed	A	Confirmed	A	Confirmed	A
12. Inrush Reactor											
12.1	Inrush Reactor Requied (Y/N)		By Vendor	PKC / Zafar / Azmoon	A	PKC	A	Farakoh	A	PKC	A
12.2	Inductance (mH)		By Vendor	At detail stage	A	At detail stage	A	At detail stage	A	At detail stage	A
12.3	Type		By Vendor	At detail stage	A	At detail stage	A	At detail stage	A	At detail stage	A

**Status Legends:**  
A=Acceptable  
N=Not Acceptable  
N/A=Not Applicable  
INA=Information Not Available  
C=Clarification is Required  
CA= Conditionally Acceptable  
M = Requirement is Mandatory

	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>								
شماره پیمان:  053 - 073 - 9184	TBE FOR LV SWITCHGEAR, MCC & LV CAPACITOR BANK								شماره صفحه : 18 از 18
	نسخه	سریال	نوع مدرک	رشته	تهیهات	صادرکننده	بسته کاری	پروژه	
	D01	0002	TB	EL	120	PEDCO	GCS	BK	

Conclusion Table:

Item	Equipment	Ista Noavaran Niroo	Pars Tableau	Taban Tablo Shargh	Runin Sanat Gostar
1	LV MCC Switchgear	Acceptable	Acceptable	Acceptable	Acceptable
2	LV Capacitor Bank	Acceptable	Acceptable	Acceptable	Acceptable

Conclusion Note:

- 1- The maximum design temperature of LV switchgear is 40 °C.
- 2- Protection relay is not acceptable on the C.B ( Built-in type ) , Protection relay shall be externally type.