



نگهداشت و افزایش تولید میدان نفتی بینک  
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:  
053 - 073 - 9184

PMR FOR F&G SYSTEM

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0003	MR	IN	120	PEDCO	GCS	BK

شماره صفحه : 1 از 20

طرح نگهداشت و افزایش تولید 27 مخزن

PMR FOR F&G SYSTEM  
نگهداشت و افزایش تولید میدان نفتی بینک

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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



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سطح الارض  
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نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه
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## 1.0 INTRODUCTION

Binak oilfield in Bushehr province is a part of the southern oilfields of Iran, is located 20 km northwest of Genaveh city .



With the aim of increasing production of oil from Binak oilfield, an EPC/EPD Project has been defined by NIOC/NISOC and awarded to Petro Iran Development Company (PEDCO). Also PEDCO (as General Contractor) has assigned the EPC-packages of the Project to "Hirgan Energy - Design and Inspection" JV.

As a part of the Project, a New Gas Compressor Station (adjacent to existing Binak GCS) shall be constructed to gather of 15 MMSCFD (approx.) associated gases and compress & transfer them to Siahmakan GIS.

### GENERAL DEFINITION

The following terms shall be used in this document.

CLIENT:	National Iranian South Oilfields Company (NISOC)
PROJECT:	Binak Oilfield Development – Surface Facilities; New Gas Compressor Station.
EPD/EPC CONTRACTOR (GC):	Petro Iran Development Company (PEDCO)
EPC CONTRACTOR/PURCHSER:	Joint Venture of: Hirgan Energy – Design & Inspection (D&I) Companies
VENDOR:	The firm or person who will fabricate or supply the equipment or material.
SUB VENDOR:	The firm or person who will have a direct contract with the Vendor or another Sub-vendor to perform a part or parts of the Work
EXECUTOR:	Executor is the party which carries out all or part of construction and/or commissioning for the project.
THIRD PARTY INSPECTOR (TPI):	The firm appointed by EPD/EPC CONTRACTOR (GC) and approved by CLIENT (in writing) for the inspection of goods.
SHALL:	Is used where a provision is mandatory.
SHOULD:	Is used where a provision is advisory only.
WILL:	Is normally used in connection with the action by CLIENT rather than by an EPC/EPD CONTRACTOR, or VENDOR.
MAY:	Is used where a provision is completely discretionary.

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## 2.0 GENERAL

- This document presents the item material requisitions for Contractor's use as appropriate.
- This material requisition covers the requirements for the design, manufacturing, testing and supply of FACP as listed in section 4. All equipment/devices/items shall conform to this requisition and all specifications which have been mentioned in attachment 1 of this material requisition.

## 3.0 REFERENCE / ATTACHED DOCUMENTS

- Specified documents in attachment 1 shall be considered as a part of this material Requisition.
- All codes and standards which have been referenced in above mentioned specs shall be considered.
- In case of any conflict between the contents of this document or any discrepancy between this document and other project documents or reference standards, this issue must be reported to the CLIENT. The final decision in this situation will be made by CLIENT.

### d. Deviations

Any exceptions/clarifications to codes/standards and specifications listed in attachment 1 must be clearly stated in a separate dedicated section of the proposal in the format submitted in attachment 3.

The proposed deviations/comments list shall include as minimum:

- Reference for the involved specification, chapter and paragraph.
- Technical justification for the non-compliance.
- Detailed description of the proposed alternative.

If no exceptions or clarifications exist, either for the complete referenced document or an individual paragraph, the VENDOR shall be considered to be in full compliance with the relevant document.



The VENDOR may propose materials of equivalent or better quality compared to those indicated in the equipment data sheet. Even these cases shall be duly included/technically supported in the deviations/clarifications list.

## 4.0 SUBJECT OF THE SUPPLY

Vendor scope of works and services are design, modifying, inspection, testing & delivery of required F&G system and FACP equipment for connecting to building detectors. The vendor shall include in the supply, all other equipment/devices/items not listed in the following, but necessary for a good design and a safe operation, taking into account process data and installation conditions such as area classification and climatic conditions.

The grade of shop assembly of the equipment/devices/items supplied shall be at maximum extent to facilitate site erection and pre-commissioning activities.

The vendor's supply shall include:

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No.	Item	Description	QTY. (Set)
1.	F&G SYS. and Marshalling cabinet	F&G System (including marshaling and system cabinets) for signals of GCS, SIL 3 PLC Based AS Per "Specification For Fire & Gas System" Doc No:" BK-GNRAL-PEDCO-000-IN-SP-0012" & I/O List For F&G Systems Doc No:" BK-GCS-PEDCO-120-IN-LI-0004"	1
2.	FACP	Fire Alarm Control Panel For GCS Area Buildings.	1
3.	F&G Matrix Panel	Fire & Gas Matrix Panel for GCS Area Buildings As Per Data Sheets For ESD Console/F&G Matrix Panel	1
4.	F&G Engineering/Operator Workstation	F&G Engineering/Operator Workstation with 32" LED/LCD Monitor & Required accessories including required HMI software and Software Licenses.	1
5.	Other required accessories	Accessories like cabinets, power supplies (if required), terminals, ducts, wires, relays and barriers, and other in GCS Area Buildings based on the project documents specially reference documents listed in the attachment 1.	1
6.	LAPTOP	F&G maintenance Laptop as per project Specification including required software and Software Licenses	1
7.	Software license	All required software licenses shall be prepared as per attached document.	1

## 5.0 LIMITS OF SUPPLY

### 5.1 THE VENDOR'S SCOPE OF ENGINEERING

Scope of Engineering services includes all items specified in documents, mentioned in "LIST OF REFERENCE / APPLICABLE DOCUMENTS" included in Attachment 1, but not limited to the followings:



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- Design, Engineering and Documentation Drawings, documentation and certification in accordance with section 8.0 of this requisition
- Project management including coordination with all Package Suppliers/Vendors and other subsystems Vendors.
- Systems' hardware engineering studies including:
  - System sizing
  - System architecture specification
  - System cabinets design and arrangement
  - Etc.
- Systems' software engineering including:
  - F&G System functional design specifications
  - I/O segregation and assignment
  - Control strategy and typical I/O loop specification
  - F&G System communication interface database definition
  - Specification of communication interfaces with other subsystems including coordination with subsystems' Vendors
  - Standard, graphic displays and report definition
  - Etc.
- Marshaling cabinets' engineering studies
- Distribution cabinets' engineering studies
- F&G Matrix engineering studies
- F&G System Marshaling / Distribution cabinets and F&G Matrix hardware and software factory acceptance tests.
- System integration tests (including wiring and logic/function test as per BK-GNRAL-PEDCO-000-IN-SP-0003)
- On site erection supervision, pre-commissioning, commissioning and start up assistance.
- F&G System Engineer daily assistance (on site).
- F&G System hardware technician daily assistance (on site).
- Training for F&G System shall be according to project documents (BK-GNRAL-PEDCO-000-IN-SP-0003)
- Transportation to Site (including insurance)
- Packing, marking, preparation for shipment, and delivery

## 5.2 SCOPE OF SUPPLY

The VENDOR shall assume overall responsibility for the design, manufacture, assembly, test and performance of all equipment/devices/items supplied as indicated in this requisition. This shall include, but not be limited to:

- Resolve engineering issues relating to equipment/devices/items within the scope of supply.
- Provide detailed design and documentation of all equipment/devices/items and components within the scope of supply in accordance with attachment 2 of this document.

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- Provide all necessary information documents in order to allow the contractor to erect, install and verify the proposed equipment/devices/items.
- Implement a quality assurance plan
- The quality plan applied to the scope of supply shall include:



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- QA/QC Organization Chart and procedures that shall be submitted for approval.
- Plan for HOLD points in the production process proposed to **CLIENT** and **EPC/EPD (GC) CONTRACTOR** for witness or approval particular activities.
- Production schedule indicating main quality manufacturing processes, inspection and tests.
- Qualification of all personnel performing tests to be reviewed by the inspector
- Vendor shall also provide the description of the following quality activities:
  - o Sub vendors' products quality
  - o Quality check and identification of the materials and equipment entering in their manufacturing shop.
- Calibration of test instruments and equipment
- Provide detailed specifications and data sheets.
- The **VENDOR** shall take the full responsibility for the whole package control/protection system and shall be responsible for SAT and commissioning of the package.

#### 5.1.1 SPARE PARTS

- The Vendor shall provide certain quantities of consumable for the installation, pre-commissioning, commissioning, Start-up and up to the end of the guarantee period.
- The quantities shall be estimated by Vendor and shall be based upon the Vendor's experience. The following two periods shall be taken into account:
  - Pre-commissioning and commissioning period where the consumption of consumable is greater
  - Normal use of the System
- The **VENDOR** shall provide lists of recommended spare parts, which shall include the original part numbers with prices for commissioning, start-up and two years operation. All spare parts shall be identified individually.
- Spare parts for commissioning and start-up; a qualified and complete list based on PROJECT SPARE PART SUPPLY PROCEDURE (Doc. No. E&C-QC-SP-1).
- Spare parts for two years operation; a qualified and complete list based on PROJECT SPARE PART SUPPLY PROCEDURE (Doc. No. E&C-QC-SP-1).
- The **VENDOR** shall be able to provide spares back up and support for the plant life of at least 20 years.
- SPIR form shall be approved by **CLIENT** prior to procurement.



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### 5.1.2 OTHER ITEMS

- Name plate

### 5.3 EXCLUSIONS

No exclusion is applicable.

### 5.4 BATTERY LIMITS

No battery limit is applicable.



### 5.5 OTHER ITEMS

- Special tools required for installation and maintenance (a qualified and complete list has to be included in the bid documentation)
- Noise acoustic protection and relevant ancillaries in order to match with max. noise level requirements (if necessary)
- Spreader bars for lifting of the panels (if necessary)
- Name plate
- Earthing plate
- Painting of all cabinet in accordance with "Specification for Control Panels and System Cabinets Doc. No. BK-GNRAL-PEDCO-000-IN-SP-0011"
- Preparation for shipment
- Packing for sea freight transportation
- Shop inspections and testing as per specification
- Free access to manufacturing plants for the PURCHASER's inspectors
- Certificates or declarations of conformance (as required) Daily rate for erection supervision (separate price)
- Daily rate for commissioning and start-up supervision (separate price)
- Training for customer's personnel (refer to BK-GNRAL-PEDCO-000-IN-SP-0003)
- All required meeting at Vendor shop/office including but not limited to:
  - KOM
  - Technical/Clarification meeting
  - Pre-Inspection Meeting

### 6.0 INSPECTION AND TESTS

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The equipment shall be inspected and tested in accordance with the Inspection & Test plan (ITP) issued by the vendor and approved by the CLIENT and EPC/EPD (GC) CONTRACTOR before the award of the order. The Inspection & Test plan (ITP) shall be at least according to the Commodity

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Procurement and Manufacturing Inspection Instruction (Docs. Nos. ICE-EID-MI-SP01-Rev01), Inspection Level of Commodity and Equipment (Docs. Nos. ICE-EID-MI-SP02-Rev01) and Data Sheets. The vendor shall in any case conduct all the tests required by contractual documents, specifications, codes and standards, manufacturer standard quality system and keep the relevant documentation. All required manufacturing and function test/inspection also Factory Acceptance Test /Site Acceptance Test and Quality Assurance requirements shall be considered in vendor responsibility as per project specification.

## 7.0 VENDOR DOCUMENTATION REQUIREMENTS & SCHEDULE

- Vendor document shall be according to attachment 2 of this document.
  - All documents, preliminary or final, are to be stamped and signed by the VENDOR.
  - Failure in dispatch of the required documents shall cause the supply to be considered as unfulfilled.
- D02 EPC and EPC/EPD (GC) CONTRACTOR's approval does not relieve vendor, in any way, from his obligation to fulfill the requirements of the purchase order documents.
- All vendor drawings and documents shall be in English language.



All drawings and documents are to be identified as per clause 1 **“GENERAL DEFINITION”**

## 8.0 VENDOR RESPONSIBILITY

VENDOR shall be responsible for the design, engineering, co-ordination, supply, delivery, testing, final check-out and satisfactory operation of the equipment/devices/items. The engineering coordination also includes responsibility for handing and expediting drawings.

Preparation of complete final book, Training courses (as per BK-GNRAL-PEDCO-000-IN-SP-0003) and assistance during Pre-Commissioning/Commissioning/Startup are also in VENDOR responsibility as per project specification.

Also, VENDOR shall be responsible for ensuring that all relevant information and documentation is passed on the sub-VENDORS.

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## 9.0 GUARANTEE AND WARRANTY

All material and Equipment/Devices/Items in VENDOR's scope of work/supply shall be guaranteed by VENDOR.

The guarantee period shall be eighteen (18) months from the date of delivery or twelve (12) months from the installation date of each equipment/packages at site

VENDOR shall guarantee the performance of supplied items.

VENDOR shall guarantee that the Equipment/Device/Item is suitable for the operating conditions herein specified, and that all materials and components are free from any defects; verifications of all calculations are in VENDOR's responsibility.

VENDOR shall unconditionally guarantee the materials and workmanship of all material and/or services. If, within the guarantee period, any defects occur which are due to faulty material and/or services included in his scope (design, manufacturing, inspection, testing, supply & etc.), VENDOR shall, at his own expense, repair or adjust the condition, or replace the material and/or services to the complete satisfaction of CLIENT's representative. These repairs, replacement or adjustments shall be made only at such time as will be least detrimental to the operation of the CLIENT's business.

VENDOR warrants promptly repairing or replacing the defective parts in the warranty period.



Vendor shall ensure a correct and safe operation of the unit, providing all safety protection Devices.

Vendor shall be responsible for the safe, reliable, continuous functioning of the Equipment/Devices/Items.

VENDOR is fully responsible for the design of package for correct and safe operation based on project requirement during package life time; therefore, VENDOR shall specify any documents/specifications which may be required for design, manufacture and finalizing of Equipment/Devices/Items to avoid any problems during the package operation at site before P.O; otherwise, VENDOR shall be hold responsible for any corresponding deviation from expectations from the Equipment/Devices/Items.

## 10.0 DEVIATION

VENDOR's proposal shall be prepared in strict compliance with the requirements set forth in the relevant specifications of tender documents.



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VENDOR shall include in his proposal the statement of compliance with the tender documents should VENDOR wish to submit exception to the requirements of tender documents. They shall be submitted for CLIENT's approval.

## 11.0 PRICE BREAKDOWN

Breakdown price of following items shall be included in the proposal, as well as total price.

- 1) Material and Fabrication for each Section Separately
- 2) Pre-commissioning & commissioning spare parts (E&C-QC-SP-1)
- 3) 2 years operational spare parts (E&C-QC-SP-1)
- 4) Packing & transportation

 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	PMR FOR F&G SYSTEM							شماره صفحه : 13 از 20
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	
	BK	GCS	PEDCO	120	IN	MR	0003	D02



## ATTACHMENT 1

D02

### LIST OF REFERENCE / APPLICABLE DOCUMENTS

No.	Document No.	Document Title	Rev.
<b>Instrument</b>			
1.	BK-GNRAL-PEDCO-000-IN-SP-0012	Specification For Fire & Gas System	D03
2.	BK-GCS-PEDCO-120-IN-DC-0001	Fire & Gas Detection Design Criteria	D06
3.	BK-GCS-PEDCO-120-IN-DG-0009	F&G Cause and Effect Diagram for Process Area	D03
4.	BK-GCS-PEDCO-120-IN-DG-0010	F&G Cause and Effect Diagram for Building	D01
5.	BK-GCS-PEDCO-120-IN-DG-0008	Instrument & F&G Junction Box Termination Diagram	D03
6.	BK-GCS-PEDCO-120-IN-LI-0009	Instrument /F&G Cable List	D03
7.	BK-GCS-PEDCO-120-IN-LI-0004	I/O List For F&G Systems	D04
8.	BK-GCS-PEDCO-120-IN-LI-0005	Panels & Junction Box List	D04
9.	BK-GCS-PEDCO-120-IN-BD-0001	Control/F&G SYSTEM/F&G System Block Diagram Configuration	D08
10.	BK-GCS-PEDCO-120-IN-PY-0001	Control Room Layout & Arrangement Drawing	D04
11.	BK-GCS-PEDCO-120-IN-DT-0017	Data Sheets For F&G SYSTEM Console/F&G Matrix Panel	D03
12.	BK-GCS-PEDCO-120-IN-PY-0005	F&G Location Layout for Process Area	D04
13.	BK-GCS-PEDCO-120-IN-PY-0006	F&G Location Layout for Buildings	D03
<b>Process</b>			
14.	BK-GNRAL-PEDCO-000-PR-DB-0001	Process Basis of Design	D08
15.	BK-GCS-PEDCO-120-PR-PH-0002	Control Philosophy	D02
<b>General</b>			
16.	ICE-EID-MI-SP01-Rev01	دستور العمل بازرسی، خرید و ساخت کالا	D01
17.	ICE-EID-MI-SP02-Rev01	دستور العمل انتخاب سطح بازرسی کالا و تجهیزات	D01
18.	E&C-QC-SP-1	دستور العمل تامین قطعات یدکی راه اندازی و راهبری دو سالانه	D00
19.	BK-GNRAL-PEDCO-000-QC-PR-0022	Specification For Final Data Book (FDB) Requirements	D00
20.	BK-GNRAL-PEDCO-000-QC-PR-0045	Packing, Marking, Transportation Procedure	D00



**\*\*NOTE: THE LATEST REVISION OF PROJECT DOCUMENT IN ATTACHMENT 1 TO BE CONSIDERED AS REFERENCE BY VENDOR.**

 <b>NISOC</b>	<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	<b>PMR FOR F&amp;G SYSTEM</b>							شماره صفحه : 14 از 20	
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	PEDCO	120	IN	MR	0003	D02	



## ATTACHMENT 2

### VENDOR DOCUMENTS MIN. REQUIREMENT

NO.	DESCRIPTION	WITH BID	AFTER ORDERING				AT THE FINAL INSPECTION (4)
		Q./TYPE (1)	Q./TYPE (1)	DELIVERY DATE (2)	PURPOSE (3)	FINAL ISSUE	
MANAGEMENT							
1	Vendor Document Index and Schedule	4N	6C+E	2W	A	6C+E	X
2	Organization Brief	4N	6C+E	2W	I	6C+E	
3	Schedule Level 1, 2, 3 & 4 showing Engineering, Procurement, Fabrication, Inspection, Testing, and Delivery Plan.	4N	6C+E	3W	A	6C+E	X
4	Physically Progress Report (Every 2 Weeks))		6C+E	2W			
5	Project Organization Chart	4N	6C+E	2W			X
6	Reference List	4N	6C+E	2W	I	6C+E	
7	Vendor Catalogue	4N	6C+E	2W	I	6C+E	X
QUALITY							
8	Quality Assurance Manual /Quality Management System Certificate / Quality Control Plan (according to latest rev. of ISO)	4N	6C+E		A	6C+E	
9	Preliminary Inspection and Test Plan	4N	6C+E				
10	Inspection and Test Plan	4N	6C+E	3W	A	6C+E	
HSE							
11	HSE Procedure		6C+E	4W	A	6C+E	X
ENGINEERING							
12	VENDOR Document Schedule	4N	6C+E	4W	A	6C+E	X
13	Power Consumption List	4N	6C+E	4W	A	6C+E	X
14	Detailed Devices Catalogues	4N	6C+E	4W	A	6C+E	X



 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک</p> <p>سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>							
شماره پیمان: 053 - 073 - 9184	PMR FOR F&G SYSTEM							شماره صفحه : 15 از 20
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	
	BK	GCS	PEDCO	120	IN	MR	0003	D02

NO.	DESCRIPTION	WITH BID	AFTER ORDERING				AT THE FINAL INSPECTION (4)
		Q./TYPE (1)	Q./TYPE (1)	DELIVERY DATE (2)	PURPOSE (3)	FINAL ISSUE	
15	Equipment List and Cabinet Bill Of Material		6C+E	4W	A	6C+E	X
16	Control System Software Catalogue	4N	6C+E	4W	A	6C+E	X
17	Software System - Specifications		6C+E	4W	A	6C+E	
18	Hardware System - Specifications		6C+E	4W	A	6C+E	
19	Loop Diagrams		6C+E	4W	A	6C+E	X
20	I/O assignment		6C+E	4W	A	6C+E	
21	Graphic Pages printout		6C+E	4W	A	6C+E	X
22	System Architecture and Network	4N	6C+E	4W	A	6C+E	X
23	Cable Termination's/Connection Diagrams		6C+E	4W	A	6C+E	X
24	Panel/F&G SYSTEM Console Layout		6C+E	4W	A	6C+E	X
25	Power Distribution Diagram		6C+E	4W	A	6C+E	X
26	System Software/logic printout		6C+E	4W	A	6C+E	X
27	Earthing Diagram		6C+E	4W	A	6C+E	
28	Reliability/Availability/FEMA Report		6C+E	4W	A	6C+E	
29	MODBUS Mapping List		6C+E	4W	A	6C+E	X
PROCUREMENT							
30	List of Sub-Vendors (table giving: part of equipment, tag no., sub-vendor reference)	4N	6C+E	4W	A	6C+E	
31	Unpriced copy of sub-orders	4N	6C+E	4W	I	-	
32	Packing Spec. / Shipping Schedule	4N	6C+E	4W	I	-	
33	Weight List/ Shipping List	4N	6C+E	4W	I	6C+E	
34	Mechanical & Performance Guarantees	4N	6C+E	4W	I	-	
TESTING							
35	Manufacturing, Test & Inspection Procedures	4N	6C+E	4W	A	6C+E	X
36	Performance & Functional Test Procedure		6C+E	4W	A	6C+E	X
37	Factory Acceptance Test (FAT) Procedure		6C+E	4W	A	6C+E	X

 <b>NISOC</b>	<b>نگهداشت و افزایش تولید میدان نفتی بینک</b> <b>سطح الارض</b> <b>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</b>								
	<b>PMR FOR F&amp;G SYSTEM</b>						شماره صفحه : 16 از 20		
شماره پیمان: 053 - 073 - 9184		پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته IN			نوع مدرک MR

NO.	DESCRIPTION	WITH BID	AFTER ORDERING				AT THE FINAL INSPECTION (4)
		Q./TYPE (1)	Q./TYPE (1)	DELIVERY DATE (2)	PURPOSE (3)	FINAL ISSUE	
38	Site Acceptance Test (SAT) Procedure		6C+E	4W	A	6C+E	X
RECORDS, REPORTS & CERTIFICATES							
39	Material Conformity Certificate		6C+E	4W	I	6C+E	X
40	Testing Authority Approval Certificate		6C+E	4W	I	6C+E	X
41	Hazardous Area Certificates.		6C+E	4W	I	6C+E	X
42	Conformity Certificates (sub-vendor/equipment)		6C+E	4W	I	6C+E	X
43	Material Certificates Identification Diagram. (cross-reference material location; certificates for critical components)		6C+E	4W	I	6C+E	X
44	FAT Test Report / Certificates		6C+E	4W	A	6C+E	
45	Pre-FAT Report		6C+E	4W	A	6C+E	
46	Performance Test Report / Certificates		6C+E	4W	A	6C+E	X
47	Material Test Certificates		6C+E	4W	I	6C+E	X
48	Surface Preparation & Coating Reports		6C+E	4W	A	6C+E	
49	Test & Inspection Reports		6C+E	4W	A	6C+E	
50	Rust Prevention Report		6C+E	4W	A	6C+E	
51	IP Certificate		6C+E	4W	A	6C+E	
52	EX Certificate		6C+E	4W	A	6C+E	
53	Conformity Certificates (sub-VENDOR/equipment)		6C+E	4W	A	6C+E	
INSTALLATION							
54	Sub-Assembly Documentation		6C+E	4W	A	6C+E	
55	Sub-Assembly Drawings		6C+E	4W	A	6C+E	
56	Erection/Installation Manual (if required)		6C+E	4W	A	6C+E	
57	Handling, Transportation & Storage Instructions	4N	6C+E	4W	A	6C+E	
58	Unpacking & Inspection Instructions		6C+E	4W	A	6C+E	
59	Name Plate Documents		6C+E	4W	A	6C+E	
60	Preliminary Packing List		6C+E	4W	A	6C+E	
61	Packing List		6C+E	4W	A	6C+E	



 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک								
شماره پیمان: 053 - 073 - 9184	PMR FOR F&G SYSTEM							شماره صفحه : 17 از 20	
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	PEDCO	120	IN	MR	0003	D02	

NO.	DESCRIPTION	WITH BID	AFTER ORDERING				AT THE FINAL INSPECTION (4)
		Q./TYPE (1)	Q./TYPE (1)	DELIVERY DATE (2)	PURPOSE (3)	FINAL ISSUE	
OPERATION & MAINTENANCE							
62	Operating Instructions		6C+E	4W	A	6C+E	
63	Maintenance Instructions		6C+E	4W	A	6C+E	
64	Commissioning & Start-up Manual		6C+E	4W	A	6C+E	
65	List of Spare Parts Commissioning & Start-up	4N	6C+E	4W	A	6C+E	
66	List of Spare Parts 2 Years Operation	4N	6C+E	4W	A	6C+E	
67	List of Special Tools	4N	6C+E	4W	A	6C+E	
68	Consumables List		6C+E	4W	A	6C+E	
OTHERS							
69	Vendor Final Book Index		6C+E	4W	A	6C+E	X
70	Vendor Final Book		6C+E	4W	A	6C+E	X
71	All others documents (if required) will be listed in the order		6C+E	4W	A	6C+E	

#### NOTES:

\*\*\* The electronic file (Native/PDF) and Hardcopy version shall be provided in all stages by vendor.

(1) Q: QUANTITY, TYPE: C = COPY, R = REPRODUCIBLE, P = POLYESTER, M = MICROFILM, E = ELECTRONIC, N=NUMBER OF DOCUMENT

(2) W = CONSECUTIVE CALENDAR WEEK, M = CONSECUTIVE CALENDAR MONTH

(3) A = FOR APPROVAL - I = FOR INFORMATION

(4) X = DOCUMENTS TO BE SUBMITTED AT THE FINAL INSPECTION

(5) MECHANICAL CATALOGUE INCLUDING FINAL DRAWINGS/DOCUMENTS, UNPRICED PURCHASE ORDER & SUB- PURCHASE ORDER, MAINTENANCE DOSSIER ETC.

(6) ALL DOCUMENTS AND/OR DRAWINGS FOR THIS PROJECT SHALL ALSO BE SUBMITTED IN THE ELECTRONIC FILES BY

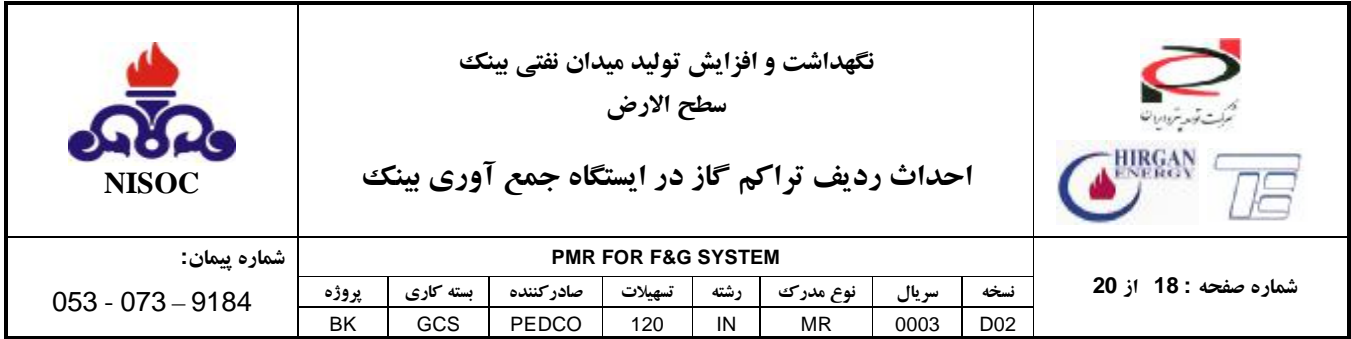
USING THE FOLLOWING SOFTWARE.

MS OFFICE WORD 2013 OR UPPER VERSION (ENGLISH) FOR WORD PROCESSING



MS OFFICE EXCEL 2013 OR UPPER VERSION (ENGLISH) FOR SPREAD SHEET

AUTO CAD 2005 (ENGLISH) FOR DRAWING

(7) IN ORDER TO DESIGN AND MANUFACTURE THE INSTRUMENTS, VENDOR SHALL CONSIDER THE SEISMIC FACTOR,



NO.	DESCRIPTION	WITH BID	AFTER ORDERING				AT THE FINAL INSPECTION (4)
		Q./TYPE (1)	Q./TYPE (1)	DELIVERY DATE (2)	PURPOSE (3)	FINAL ISSUE	
SUITABLE FOR SEISMIC UBC 97 ZONE 4, AND THE RESULTS SHALL BE PROVIDED BY VENDOR.							
(8) LIST OF DOCUMENTS WILL BE FINALIZED IN VPIS.							
(9) List of documents will be finalized in VDIS (Vendor Document Index and Schedule).							

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک</p> <p>سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>							
شماره پیمان: 053 - 073 – 9184	PMR FOR F&G SYSTEM							شماره صفحه : 19 از 20
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	
	BK	GCS	PEDCO	120	IN	MR	0003	D02

### **ATTACHMENT 3**



### **DEVIATIONS / EXCEPTIONS TO JOB SPECIFICATION**

Requisition No.:

Description:

Equipment No.:

Item No.	Description of proposed exception	Recommended revision to job specification	Reason for proposed exception	Effect on base proposal if CONTRACTOR rejects exception

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک</p> <p>سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>							
شماره پیمان: 053 - 073 – 9184	PMR FOR F&G SYSTEM							شماره صفحه : 20 از 20
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	
	BK	GCS	PEDCO	120	IN	MR	0003	D02

#### **ATTACHMENT 4**

#### **ALTERNATIVES TO JOB SPECIFICATION**

Requisition No.:

Description:

Equipment No.:

Item No.	Job Specification No. & Paragraph No.	Requirements of Job Specification	Description of Proposed Alternative	Reason for Proposed Alternative