
 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>																	
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طرح نگهداشت و افزایش تولید 27 مخزن

PMR FOR GAS DEHYDRATION PACKAGE

نگهداشت و افزایش تولید میدان نفتی بینک


D02	SEP. 2022	IFI	H. Adineh	M.Fakharian	M.Mehrshad	
D01	JAN. 2022	IFI	H. Adineh	M.Fakharian	M.Mehrshad	
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Rev.	Date	Purpose of Issue/Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Class: 3

CLIENT Doc. Number: F0Z-709219

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

	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>																									
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REVISION RECORD SHEET



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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:	Joint Venture of : Hirgan Energy – Design & Inspection (D&I) Companies
VENDOR:	The firm or person who will fabricate the equipment or material.
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, supplier or VENDOR.

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MAY:

Is used where a provision is completely discretionary.

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 Gas Dehydration Package as listed below. All equipment/devices/items shall conform to this requisition and all specifications which have been mentioned in attachment 1 of this material requisition.
- The vendor's supply shall include:

No.	Item	Description	Total QTY.
1	PK-2101	Gas Dehydration Package	1


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.
- 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.

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

The supplier 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

The supplier shall supply Gas Dehydration Package that completely assembled and tested. The scope of supply is detailed at para. 5. The supplier 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.

5.0 LIMITS OF SUPPLY



5.1 SCOPE OF SUPPLY

Vendor's technical proposal shall include but not be limited to, equipment, materials specified in the following table. Hereunder articles marked with "X" shall be within Vendor's Scope of Supply and articles marked with "O" shall be considered as optional.



Description	Required by Purchaser	Bidder's Proposal (*)	Remarks
1. Dehydration Package	[X]	[]	
• Gas Dehydration Inlet Separator	[X]	[]	
• Dehydration Column	[X]	[]	
• Lean Glycol Air Cooler	[X]	[]	
• Glycol Regeneration System	[X]	[]	

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Description	Required by Purchaser	Bidder's Proposal (*)	Remarks
2. Glycol Regeneration System consists of the following items	[X]	[]	
• Still Column Condenser	[X]	[]	
• Still Column(including internals and packing)	[X]	[]	
• Stripping Column(including internals and packing)	[X]	[]	
• Glycol Surge Drum(including internals)	[X]	[]	
• Still Column Re-boiler (including internals and fuel gas coil)	[X]	[]	
• Glycol Flash Drum	[X]	[]	
• Glycol Filter Package	[X]	[]	
• Lean/Rich Glycol Heat Exchanger	[X]	[]	
• Lean Glycol Pumps	[X]	[]	
• Still Column Ejector	[X]	[]	
• Overhead Air Cooler and Water Separator Pot	[X]	[]	
3. Anti-Foam and Chemical injection Package	[X]	[]	
4. Fuel Gas Heater	[X]	[]	
5. Motor local control stations	[X]	[]	
6. Steel structure including Hangers and Pipe Support	[X]	[]	
7. Walkways, platforms, ladders & handrails	[X]	[]	
8. Staircases	[X]	[]	
9. Painting	[X]	[]	
10. Anchor bolts	[X]	[]	
11. Skid structures/baseplates with decking	[X]	[]	
12. Fire-proofing material	[X]	[]	

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Description	Required by Purchaser	Bidder's Proposal (*)	Remarks
13. All required reinforcements of skids for shipping to job site	[X]	[]	
14. All required instrumentation including valves, transmitters, gauges, trays and etc. within battery limit	[X]	[]	
15. All necessary local junction boxes, local panel, cabling/wiring, incoming and outgoing cable glands, tray, support system, etc. inside battery limit For instrument	[X]	[]	
16. Hook Up /Tubing/Tube fitting related to Instruments inside B.L	[X]	[]	
17. F&G detector and devices	[O]	[]	Including F&G. Also instrument special cables (if any) shall be provided by vendor.
18. All necessary electrical equipment within battery limit such as motors with the related incoming cable glands	[X]	[]	
19. All necessary local junction boxes, Local power distribution panels, cabling/wiring, incoming and outgoing cable glands, ladder, support system, etc. inside battery limit For electrical	[X]	[]	
20. Grounding (earthing) bosses & wiring throughout inclusive of cable glands & lugs	[X]	[]	
21. Lighting system including light poles, light fittings, junction boxes, socket outlets, power cables and cable glands.	[X]	[]	
22. Above ground cable routing with steel supports for electrical/instrument systems including cable tray/ladders, conduits and conduit fittings	[X]	[]	
23. All required piping material including valve, fitting, inter connection piping, pipe supports and etc. within battery limit Note: All Piping and Tubing to be prefabricated and match marked and a relevant MTO and isometric DWG for installation to be provided by vendor.	[X]	[]	

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Description	Required by Purchaser	Bidder's Proposal (*)	Remarks
24. Mating Flanges with Bolts, Nuts and Gasket	[X]	[]	
25. Name plates for all equipments and sub equipments	[X]	[]	
26. Documentation as per vendors documents requirements schedule	[X]	[]	
27. Special tools for Erection and Maintenance	[X]	[]	
28. Provisions for the protection of the components against damage during handling transport or storage,	[X]	[]	
29. Painting (prime coat, intermediate coat and finish coat) at Vendor's shop	[X]	[]	
30. Initial filling material such as Glycol, lube oil and grease, etc.	[X]	[]	
31. Touch-up paint for field repair works	[X]	[]	10%
32. Spare parts for erection, pre-commissioning, commissioning and start-up	[X]	[]	According to Vendor Recommendation and based on Project Spare Part Supply Procedure (Doc. No. E&D-QC-SP-1)
33. Spare parts for two years operation (Based on Project's Spare Part Requirement)	[O]	[]	According to Vendor Recommendation and based on Project Spare Part Supply Procedure (Doc. No. E&D-QC-SP-1)
34. Capital spare parts	[O]	[]	According to Vendor Recommendation and based on Project Spare Part Supply Procedure (Doc. No. E&D-QC-SP-1)
35. Special tools for Erection and Maintenance	[X]	[]	
36. Packing and Marking	[X]	[]	
37. Consumables for installation work	[O]	[]	
38. All items specified in purchaser's P&ID and within the package BL.	[X]	[]	

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Description	Required by Purchaser	Bidder's Proposal (*)	Remarks
39. All required facility for utility distribution in Battery Limit Note: Each utility will be supplied in one tie-in and will be returned in one tie-out so any required accessories for distribution of these utilities in Battery Limit is in the vendor's scope.	[X]	[]	
40. Heat Tracing and Insulation	[X]	[]	
41. All required Cabling and Wiring within the Battery Limit	[X]	[]	
42. First Filling of lubricant, chemical, glycol and etc.	[X]	[]	
43. Any other items not listed above but are necessary for proper and safe operation of the package	[X]	[]	



(*) : Bidder to put "C" as confirmation or "D" as deviation and to fill the related form (Att. #3) accordingly.

Notes:

- 1.Sub-Vendor List (If applicable) shall be specified in Attachment #5 which will be subject to Purchaser's Approval.
2. Vendor shall confirm and clarify suitability of above mentioned scope of supply based on technical aspect, safe operation, his experience and industrial normal practices.
3. All utilities (Instrument air, nitrogen ...) will be delivered at one point. Distribution is by Vendor.

5.2 SCOPE OF WORK

Vendor's technical proposal shall include but not be limited to works specified in the following table. Hereunder Articles marked with "X" shall be within Vendor's Scope of Work and articles marked with "O" shall be considered as optional.

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Description	Required by Purchaser	Bidder's Proposal (*)	Remarks
1. Engineering Design and Documentation	[X]	[]	(Note 3, 4)
2. simulation study	[X]	[]	
3. Manufacturing and Assembling	[X]	[]	
4. PIM (pre-inspection meeting)	[X]	[]	
5. Procurement	[X]	[]	
6. Process, performance and mechanical guarantee	[X]	[]	(Note 2)
7. Inspection and Testing at shop	[X]	[]	
8. Instrumentation installation and hook- Wiring	[X]	[]	
9. Interconnecting piping inside unit assembly,	[X]	[]	
10. Review of Purchaser's Drawings (Foundation, P&ID endorsement)	[X]	[]	
11. Surface Preparation and Painting	[X]	[]	
12. Heat tracing and Insulation work	[X]	[]	
13. Packing suitable for 12 months of outdoor storage	[X]	[]	
14. Shipping and Transportation according to Delivery Conditions	[X]	[]	
15. Mechanical Installation / assembling	[X]	[]	
16. structural Installation / assembling	[X]	[]	
17. Pipe works within battery limit	[X]	[]	
18. Electrical and instrumentation works within battery limit	[X]	[]	
19. Supervision for Installation / assembling	[O]	[]	
20. Supervision for start-up, commissioning, initial operation & test runs	[O]	[]	
21. Certification	[X]	[]	

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22. Management including coordination with sub-vendors	[X]	[]	
23. Export customs clearance	[X]	[]	
24. Obtain any export license or other official authorization for exportation	[X]	[]	
25. Vendor Shop Training for Client's Personnel (Training for Operation and Maintenance)	[O]	[]	

(*) : Bidder to put "C" as confirmation or "D" as deviation and to fill the related form (Att. #3) accordingly.

Notes:

- Each of above listed works that are to be carried out at job site should be summarized on Vendor's proposal individually (If applicable).
- The Design and Construction shall comply with all Regulations of the Project Defined Specifications, Codes and Standards.
- All technical documents to be submitted with Vendor's proposal shall be in reproducible(s) according to attachment No. 2 requirements and be written in English.
- All technical documents and drawings shall state the name of CLIENT (End user) work No., Identification No. and the name of commodity.
- For other technical requirements, Vendor shall refer to attached data sheets.

5.3 EXCLUSIONS


The following items are excluded by the supplier scope of supply and will be provided by purchaser:

- Concrete foundation (which shall be anyway designed based on supplier's technical data)
- Interconnecting power cables from local terminal boxes or distribution panel in the battery limit to MCC
- Interconnecting instrumentation wiring from local JB in the battery limit to the control room

5.4 BATTERY LIMITS

Refer to "P&ID for Gas Compression Dehydration Package with Doc.No: BK-GCS-PEDCO-120-PR-PI-0013".

All items in battery limits to be provided by Vendor.

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6.0 INSPECTION AND TESTS

The equipment shall be inspected and tested in accordance with the quality control plan issued by the supplier and approved by the PURCHASER before the award of the order. The QC plan shall at least be according to the PROJECT ITP PROCEDURE (ITP For Mechanical Installation; Doc. No. BK-GNRAL-PEDCO-000-QC-PR-0009) and data sheets (if any).

The supplier 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.

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 supplier.
- Failure in dispatch of the required documents shall cause the supply to be considered as unfulfilled.
- PURCHASER'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 UNIT 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.

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

9.0 GUARANTEE AND WARRANTY

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

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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 (if any).

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.

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>							
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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 PURCHASER'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&D-QC-SP-1)
- 3) 2 years operational spare parts (E&D-QC-SP-1)
- 4) Packing & transportation
- 5) Other fee (if any)

12.0 SPECIAL NOTES

12.1 Kick-Off Meeting (KOM)

After the order is awarded, Vendor shall, upon receipt of Purchaser's notice, dispatch sufficient number of qualified personnel to Purchaser's office at Vendor's cost to hold the Kick-Off Meeting to confirm the procedure at least for the following categories:

- Detail procedures for correspondence, document delivery plan and Purchaser's review method and etc. shall be established.
- Document Handling procedure
- Production plan / time schedule
- Quality Control
- VPIS (Vendor Print Index Schedule)
- Invoicing procedure
- Shipping document
- Other Technical Points

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12.2 Pre-Inspection Meeting (PIM)

Before starting the fabrication and inspection jobs, a pre-inspection meeting (PIM) will be held (at the Vendor shop or Purchaser's office based on Purchaser decision) with presence of Purchaser and Third Party Inspector representatives.

12.3 Technical Quotation shall include the following items as a minimum:

- Proposal No., date and revision
- Purchaser's Requisition number
- Approximate shipping weight and dimension
- Special tools and test equipment list
- Completed Purchaser's Data Sheets
- Description of System
- Completed TBA Form
- Completed Attachment #1 (Filled designated cells)
- Filled, signed and stamped Exception, Deviation and Alternative list
- Signed and stamped pages of this Material Requisition and cover page of attachments
- Time schedule
- Earliest delivery date(s)
- Vendors reference list
- QC Plan
- Quality system certificates (ISO...)
- Origin of material being quoted (country, place and name of manufacturer)

12.4 All technical documentation and Drawings shall be in English language.


12.5 Purchaser or CLIENT's acceptance of Vendor's drawings or data with or without comments does not relieve the Vendor of the responsibility of complying with all terms, conditions, codes, standards, requirements of this requisition and project specifications.

12.6 Purchaser reserves the right to review and comment on vendor documents that have

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previously been accepted with or without comments based on project requirement.

- 12.7** Proven technologies only shall be considered in the selection of equipment. Vendor shall submit reference list with at least two years trouble-free running experience in similar duty and environment to those specified within quotations stage.
- 12.8** This Requisition sets out the minimum requirements and does not relieve the Vendor of his full responsibility for the design and reliable operation of the elements supplied. Therefore the Vendor will be liable for the correct operation of any auxiliary elements involved.
- 12.9** In the preparation of their proposal, Vendor shall fulfill all the provisions of this Requisition even if they differ from the standard supply. Whenever the Vendor cannot comply with the present Requisition for technical reasons, it shall be stated in detail in the Exception, Deviation and Alternative list (Attachment #3).
- 12.10** For satisfactory system performance and full compliance with the attached specification, all required accessories and/or components shall be provided by Vendor whether or not requested devices are herein specified.
- 12.11** Bidders may supplement their basic quotations with alternative design of significant advantages such as improving performance, delivery date, costs, etc. The supplement shall be provided with proper evidence/justification and shall be subjected to Purchaser's written approval prior to start of the work although the base offer shall be always in line with the inquiry.
- 12.12** Any comments on drawing and/or Vendor data which will be submitted in accordance with Vendor document approval process shall be incorporated by Vendor and shall not affect the contracted price as far as they are in line with the requirements of this specification and/or good industrial engineering practice.
- 12.13** Purchaser reserves the right to change the delivery sequence, interval and timing in

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order to meet the requirements of the site erection or overall construction sequence, etc. Upon Purchaser's change requests of the delivery sequence, interval and timing, Vendor shall control and expedite his work and delivery process.

12.14 No protection, paint or other filling shall be applied to the contract works before they have been inspected, tested and approved.

12.15 Spare parts for erection, pre-commissioning, commissioning and start-up:



The erection, pre-commissioning, commissioning and start-up spare parts shall be supplied together with the equipment (If requested as per Scope of Supply of this MR). All spare parts shall comply with the same standard and spec. as the original equipment and shall be fully interchangeable with the original parts.

12.16 Supply of Spare Part for two years of operation (If requested as per Scope of Supply of this MR), shall be within Vendor's scope of supply. All spare parts shall comply with the same standard and spec. as the original equipment and shall be fully interchangeable with the original parts.

12.17 Vendor shall provide utility summary within proposal stage.

12.18 VENDOR's quotation shall be in strict conformity with conditions stated in this material requisition and any attached documents. Exceptions, deviations and alternatives will be valid only if approved by PURCHASER. Vendor shall confirm full compliance with the project specification requirements except the deviation listed and Purchaser has no responsibility to discover any more deviations or alternative in other parts of Vendor proposal than the agreed submitted list.

12.19 It is Vendor's responsibility to supply/carry out all devices/measures to achieve proper and safe operation, hence if any additional device(s) is needed in the Vendor's battery limit as result of HAZOP study and it could not be proven to eliminate by Vendor's representative(s) in related HAZOP meeting, shall be supplied by Vendor, without cost impact.

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12.20 Vendor shall confirm all purchaser reference documents (with considering revision numbers) which have been attached to MR for providing his technical proposal. After each stage of clarification the revised documents and new applicable documents (if any) will be sent to Vendor and the aforementioned list shall be updated as well. Vendor is responsible to consider all consequences regarding the changes in project documents and specifications through whole BID stage. After P.O. placement no cost impact could be accepted.

12.21 All material should be specified according to ASTM. In case non ASTM, AISI, ASME or SAE materials are applied, Vendor shall submit material equivalent comparison table with ASTM; classification such as C.S or S.S is not acceptable.

12.22 First filling requirements (lube oil, grease, water/glycol ...) shall be supplied by Vendor. Required lube oil for flushing of rotating equipment shall also be included in Vendor scope.

12.23 Scope of supply and work shall be fully based on Scope of supply and work in this Material Requisition (Attachment 1).

12.24 Name plates shall be made up of stainless steel.


12.25 Certifications as following shall be supplied by Vendor:

- Material Certification (For pressure parts)
- Material Certification (For Non Pressure parts)
- Hazardous Area certification for electrical items

12.26 SPIR (Spare Part Interchangeability/Identification Report) shall be fully filled out by Vendor after purchaser order.

12.27 The minimum ship loose items to be considered and informed to Purchaser.

12.28 All tie-in point connections at B.L. shall be flanged type in accordance with ANSI B16.5

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>							
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and PMS of the project. Otherwise, mating flanges with bolts, nuts and gaskets shall be supplied by Vendor and considered in the base price.

12.29 Tie-ins shall be designed so that movements and rotation tend to zero and allowable imposed loads and moments from piping conform to those values that specified in Appendix N of “Specification for Pressure Vessels”; Doc. No. "BK-GNRL-PEDCO-000-ME-SP-0001".

12.30 All gaskets shall be asbestos free.

12.31 Vendor shall provide site supervision for construction, pre-commissioning, commissioning, and start-up according to agreed per-diem rates. And Vendor shall issue a detailed program for site erection estimating the number of man/day required for supervision and specifying the technical qualification and experience for the personnel deemed necessary for the erection of the equipment after PO.


12.32 All package (equipment, interconnecting piping...) paintings including final painting shall be carried out at Vendor shop prior to delivery to site as per project paint specification.

12.33 Sound pressure level of equipment shall be less than 85 dB at 1 meter of noise source otherwise noise attenuation covers shall be supplied by Vendor.

12.34 Vendor has already been informed regarding Purchaser's utility conditions and in case any device is needed to meet Vendor's equipment requirements (such as amplifier, regulator, etc.) shall be supplied by Vendor.

12.35 Manifold flange connection with block valve at the edge of base plate for terminal point with purchaser for all utility services shall be supplied by vendor.

12.36 Motor sunshade, air finned tube coolers sunshade, cooling fan for air fin coolers (if required) shall be supplied by vendor.

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>								
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12.37 Coupling guards shall be non-sparking type.

12.38 Provision of PDMS 3D Model (12.1) is in Vendor scope.

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12.39 Vendor's supervisor, who is to be dispatched to site for installation, start-up inspection , repair and maintenance of equipment supplied by Vendor, shall perform his duty for all equipment including materials provided by his subcontractor.

12.40 Vendor's supervisor shall be sufficiently qualified to perform his duty. Vendor shall provide a resume of expected personnel for Purchaser's approval. Purchaser has right to reject the supervisor proposed by Vendor and to appoint alternative personnel.

12.41 The duty of the Supervisor shall include, but not be limited to the following:

- Witnessing of unpacking inspection of the goods
- Supervising and giving direction of assembling and installation
- Checking of the leveling and alignment
- Checking of the equipment performance
- Adjustment of safety device and instruments
- Supervising of preparation of start-up
- Supervising and giving direction of start-up operation
- Executing and/or supervising and giving direction for assembling disassembling, inspection and repair.
- Preparing of inspection and test records and miscellaneous reports
- To monitor activities time schedule
- Supervising and giving technical assistance for maintenance service(s).

12.42 Vendor shall identify and be responsible for damages to properties and/or personnel injuries resulted from the gross negligence of the Supervisor while performing duty. Any other points as per Purchase Order (PO).



 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>																									
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پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه																			
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ATTACHMENT #1



01

LIST OF REFERENCE / APPLICABLE DOCUMENTS

No.	Document No.	Document Title	Rev.
Process			
1	BK-GCS-PEDCO-120-PR-SP-0001	Duty Specification For Gas Dehydration Package	D03
2	BK-GNRAL-PEDCO-000-PR-DB-0001	Process Basis of Design	D07
3	BK-GNRAL-PEDCO-000-PR-DC-0001	Process Design Criteria	D02
4	BK-GCS-PEDCO-120-PR-PI-0013	P&ID - Gas Compression Dehydration Package	D04
5	BK-GCS-PEDCO-120-PR-LI-0003	Tie In List	D02
6	BK-GNRAL-PEDCO-000-GE-PR-0001	HAZOP Study Procedure	D00
Safety			
1	BK-GCS-PEDCO-120-SA-SP-0002	Specification For Hazardous Area Classification	D00
2	BK-GCS-PEDCO-120-SA-PY-0002	Hazardous Area Classification Layout	D00
3	BK-GNRAL-PEDCO-000-SA-SP-0007	Specification For passive Fire protection	D00
4	BK-GCS-PEDCO-120-SA-PY-0003	Fire Proofing Zone Layout	D00
5	BK-GNRAL-HD-000-SA-HP-0001	EPC Waste Management Plan	D00
Mechanical			
1	BK-GNRAL-PEDCO-000-ME-DC-0001	Mechanical Design Criteria	D01
2	BK-GCS-PEDCO-120-ME-SP-0003	Specification for Centrifugal Pump for Process Services.	D04
3	BK-GCS-PEDCO-120-ME-SP-0001	Specification For Air Cooled Heat Exchangers	D00
4	BK-GNRAL-PEDCO-000-ME-SP-0001	Specification For Pressure Vessel	D01
5	BK-GCS-PEDCO-120-ME-SP-0008	Specification For Chemical Injection Package	D01
6	BK-GCS-PEDCO-120-ME-SP-0011	Specification For Control volume Pump (API 675)	D04
7	BK-GNRAL-PEDCO-000-ME-DW-0001	Standard Detail Drawing For Pressure Vessels and Heat Exchangers	D01
8	BK-GCS-PEDCO-120-ME-SP-0014	Specification For Nitrogen Package	D04
General Document & Procedures			
1	BK-GNRAL-PEDCO-000-QC-PR-0015	Specification For Welding Procedure	D00
2	BK-GNRAL-PEDCO-000-QC-PR-0022	Specification For Final Data book	D00
3	BK-GNRAL-PEDCO-000-QC-PR-0045	Packing, Marking, Transportation Procedure	D00
4	ICE-EID-MI-SP01-Rev01	دستورالعمل بازرسی، خرید و ساخت کالا	
5	E&D-QC-SP-1	دستورالعمل تامین قطعات یدکی راه اندازی و راهبری دو سالانه	
Piping			
1	BK-GNRAL-PEDCO-000-PI-SP-0008	Specification For Material Requirements in Sour service	D00
2	BK-GCS-PEDCO-120-PI-SP-0001	Piping Material Specification (PMS)	D01
3	BK-GNRAL-PEDCO-000-PI-DC-0001	Piping Design Criteria	D03
4	BK-GNRAL-PEDCO-000-PI-SP-0004	Specification For Metallic Pipes	D05

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No.	Document No.	Document Title	Rev.
5	BK-GNRAL-PEDCO-000-PI-SP-0005	Specification For Fittings, Flanges, Gaskets and Bolts	D02
6	BK-GNRAL-PEDCO-000-PI-SP-0009	Specification For Manual Valves	D00
7	BK-GNRAL-PEDCO-000-PI-SP-0006	Specification for Painting	D04
8	BK-GNRAL-PEDCO-000-PI-SP-0001	Specification For color coding and marking	D00
9	BK-GNRAL-PEDCO-000-PI-SP-0007	Specification For Lining (Internal Protection of Equipment By Painting)	D00
10	BK-GNRAL-PEDCO-000-PI-SP-0003	Specification For the Design of Piping in Mechanical Packages	D00
11	BK-GNRAL-PEDCO-000-PI-SP-0010	Specification for Plant Piping Systems Pressure Testing	D00
12	BK-GNRAL-PEDCO-000-PI-SP-0011	Specification for Welding of Plant Piping System	D00
13	BK-GNRAL-PEDCO-000-PI-SP-0017	Specification for Cleaning and Flushing	D02
14	BK-GNRAL-PEDCO-000-PI-SP-0019	Specification for insulation	D02
Electrical			
1	BK-GNRAL-PEDCO-000-EL-DC-0001	Electrical System Design Criteria	D02
2	BK-GNRAL-PEDCO-000-EL-SP-0010	Specification For LV Induction Motors	D03
3	BK-GNRAL-PEDCO-000-EL-SP-0014	Specification For Power & Control Cables	D03
4	BK-GNRAL-PEDCO-000-EL-SP-0006	Specification For Earthing & Lightning System	D03
5	BK-GNRAL-PEDCO-000-EL-SP-0008	Specification For Bulk Materials	D04
6	BK-GNRAL-PEDCO-000-EL-SP-0011	Specification For Electrical Requirements of Packaged Units	D03
7	BK-GNRAL-PEDCO-000-EL-DW-0002	Typical Installation Details For Earthing and Lightning Protection System	D03
8	BK-GCS-PEDCO-120-EL-PY-0001	Overall Earthing Layout	D00
9	BK-GNRAL-PEDCO-000-EL-DW-0004	Typical Installation Details & Notes For Power System	D03
I & C			
1	BK-GNRAL-PEDCO-000-IN-SP-0001	Specification For Instrumentation	D04
2	BK-GNRAL-PEDCO-000-IN-SP-0009	Specification For Fire & Gas Sensor and Devices	D04
3	BK-GNRAL-PEDCO-000-IN-SP-0005	Specification For Control valves	D03
4	BK-GNRAL-PEDCO-000-IN-SP-0007	Specification For Pressure Safety Valves (PSV)	D03
5	BK-GNRAL-PEDCO-000-IN-SP-0004	Specification For Instrument and Control of Package Unit System (PU)	D04
6	BK-GCS-PEDCO-120-IN-PY-0002	Control Room Cable Route Layout	D00
7	BK-GNRAL-PEDCO-000-IN-SP-0006	Data Sheets For ON/OFF & Shutdown Valves	D03
Civil & Structure			
1	BK-GNRAL-PEDCO-000-CV-DC-0001	Civil Design Criteria	D00
2	BK-GNRAL-PEDCO-000-ST-DW-0002	Standard Drawing For Anchor Bolts	D02
3	BK-GNRAL-PEDCO-000-ST-SP-0003	Specification For Fabrication Of Steel Structures	D02
4	BK-GNRAL-PEDCO-000-ST-SP-0004	Specification For Grouting	D2
5	BK-GNRAL-PEDCO-000-ST-SP-0005	Specification For Erection Of Steel Structures	D2



 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 GAS DEHYDRATION PACKAGE							شماره صفحه : 24 از 35	
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	PEDCO	120	ME	MR	0002		D02

No.	Document No.	Document Title	Rev.
6	BK-GNRL-PEDCO-000-ST-SP-0006	Specification For Fire-Proofing	D3



ATTACHMENT #2

VENDOR DOCUMENTS MIN. REQUIREMENT



Item No.	Document	With Bid	TIME SCHEDULE			
			For Review		Final Issue	
		Copies No./Type (7)	Copies No./Type (1)	Solar days (2)	Copies No./Type (1)	Calendar days (3)
MANAGEMENT						
001	Vendor Document Index and Schedule (See attachment 2)	4N	6C+E		6C+E	
002	Organization Brief	3N	6C+E			
003	Schedule Level 1, 2, 3 & 4 showing Engineering, Procurement, Fabrication, Inspection, Testing, and Delivery Plan.	4N	6C+E		6C+E	
004	Physically Progress Report (Every 2 Weeks))		6C+E			
005	Project Organization Chart	3N	6C+E			
006	Reference List	3N				
007	Vendor Catalogue	3N				
QUALITY						
008	Quality Assurance Manual /Quality Management System Certificate (according to latest rev. of ISO)	4N			6C+E	
009	Preliminary Inspection and Test Plan	4N				
010	Inspection and Test Plan		6C+E		6C+E	
HSE						
011	HSE Procedure		6C+E		6C+E	
012	Noise & Vibrations Calculations / Reports (If any)		6C+E		6C+E	
013	ESD Instructions		6C+E		6C+E	

	<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 GAS DEHYDRATION PACKAGE							شماره صفحه : 25 از 35	
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	PEDCO	120	ME	MR	0002		D02


Item No.	Document	With Bid	TIME SCHEDULE			
			For Review		Final Issue	
		Copies No./Type (7)	Copies No./Type (1)	Solar days (2)	Copies No./Type (1)	Calendar days (3)
INTERFACE						
014	Electrical & Instrumentation Cable Schedule (for all systems)		6C+E		6C+E	
015	Electrical & Instrumentation Wiring Drawings (for all systems)		6C+E		6C+E	
016	Package Data Sheets	4N	6C+E		6C+E	
020	Reliability, Availability, Maintainability Calculations/Reports	4N	6C+E		6C+E	
021	Performance Curves		6C+E		6C+E	
022	PFD's	4N	6C+E		6C+E	
023	Functional Description		6C+E		6C+E	
024	General Arrangements Drawings	4N	6C+E		6C+E	
025	Mechanical Equipment List	3N	6C+E		6C+E	
026	Electrical Equipment List	3N	6C+E		6C+E	
027	Control, Instrument & Cable List		6C+E		6C+E	
028	Interface Block Diagrams	3N	6C+E		6C+E	
029	Junction Box, Local Panels & Cabinets: wiring diagrams & termination drawings		6C+E		6C+E	
030	Functional Logic Diagram		6C+E		6C+E	
031	P & ID's	3N	6C+E		6C+E	
032	Utility Consumption List	3N	6C+E		6C+E	
033	Power Supply Requirements	3N	6C+E		6C+E	
034	Single Line Diagram	3N	6C+E		6C+E	
035	Earthing Details	3N	6C+E		6C+E	
036	Weight / Centre of Gravity Drawings & Data's		6C+E		6C+E	
037	External Static and Dynamic Forces & Moments (present during test, start-up, normal/maximum operation, shutdown, and other conditions of service)		6C+E		6C+E	
038	Wind and Seismic Loads including shear and moment forces on supports and		6C+E		6C+E	

 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 GAS DEHYDRATION PACKAGE							شماره صفحه : 26 از 35
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	
	BK	GCS	PEDCO	120	ME	MR	0002	D02



Item No.	Document	With Bid	TIME SCHEDULE			
			For Review		Final Issue	
		Copies No./Type (7)	Copies No./Type (1)	Solar days (2)	Copies No./Type (1)	Calendar days (3)
	foundation.					
039	Anchor Bolt Details Drawings (incl. size, type, locations relative to the equipment center-lines in three planes).		6C+E		6C+E	
040	Ladder & Platform Detail Drawing		6C+E		6C+E	
041	Steel Structure Detail Drawing		6C+E		6C+E	
ENGINEERING						
042	Detailed Functional Design Specification		6C+E		6C+E	
043	Detailed Overall Description		6C+E		6C+E	
044	Mechanical Detailed Specifications (one per component)		6C+E		6C+E	
045	Detailed Design / Fabrication Drawings for Equipment & Auxiliary Parts		6C+E		6C+E	
046	Cross Sectional Drawings with Part Lists		6C+E		6C+E	
047	Assembly Drawings		6C+E		6C+E	
048	Design Calculation Notes		6C+E		6C+E	
049	Pressure Parts Calculations		6C+E		6C+E	
050	Piping Detailed Specifications (one per component)		6C+E		6C+E	
051	Piping Routing		6C+E		6C+E	
052	Valves & Instruments Location Drawings (incl. provisions for operational and maintenance access)		6C+E		6C+E	
053	Electrical Detailed Specifications (one per component)		6C+E		6C+E	
054	Electrical Cables Routing (incl. cable trays & junction boxes)		6C+E		6C+E	
055	Electrical Equipment Location Drawings (incl. provisions for operational and maintenance access)		6C+E		6C+E	
056	Protection Device Operating Curves		6C+E		6C+E	
057	Electrical Control Schematics		6C+E		6C+E	

	<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 GAS DEHYDRATION PACKAGE							شماره صفحه : 27 از 35	
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	PEDCO	120	ME	MR	0002		D02



Item No.	Document	With Bid	TIME SCHEDULE			
			For Review		Final Issue	
			Copies No./Type (1)	Solar days (2)	Copies No./Type (1)	Calendar days (3)
058	Instrument & Control Detailed Specifications (one per component)		6C+E		6C+E	
059	Instrument cables routing (incl. cable trays & junction boxes)		6C+E		6C+E	
060	Instrument Equipment Location Drawings (incl. provisions for operational and maintenance access)		6C+E		6C+E	
061	Hook-Up Diagrams		6C+E		6C+E	
062	Wiring Loops Diagrams		6C+E		6C+E	
063	Instrument Control Schematics		6C+E		6C+E	
064	Instrument Mounting & Housing Instructions		6C+E		6C+E	
065	Power Distribution & Consumption		6C+E		6C+E	
066	Cause & Effect Charts		6C+E		6C+E	
067	Original Software for Control & Monitoring System		6C+E		6C+E	
068	Software System Specifications		6C+E		6C+E	
069	Approximate Weight & Dimension	4N				
070	Shipping Detail Drawing		6C+E		6C+E	
071	Final Data Book	4N	6C+E		6C+E	
072	Pressure Loss Calculations		6C+E		6C+E	
073	Lubrication System Detailed Specifications / Drawings		6C+E		6C+E	
074	Cooling System Detailed Specifications/Drawings		6C+E		6C+E	
075	Shaft Sealing System Detailed Specifications/Drawings	4N	6C+E		6C+E	
076	Completed Equipment Datasheets	4N	6C+E		6C+E	
077	Calculation sheets for safety valves, control valves & orifice plate		6C+E		6C+E	
078	Complex loop & automation descriptions, list of alarms & shutdown with set points		6C+E		6C+E	
079	Electrical Equipment Catalogue	3N	6C+E		6C+E	

 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 GAS DEHYDRATION PACKAGE							شماره صفحه : 28 از 35	
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	PEDCO	120	ME	MR	0002		D02

Item No.	Document	With Bid	TIME SCHEDULE			
			For Review		Final Issue	
		Copies No./Type (7)	Copies No./Type (1)	Solar days (2)	Copies No./Type (1)	Calendar days (3)
080	Electrical Interface Block Diagrams		6C+E		6C+E	
081	Local Control Station of motors wiring diagram, termination drawing and general arrangement		6C+E		6C+E	
082	Gear System Detailed Specifications / Drawings		6C+E		6C+E	
083	Coupling System Detailed Specifications / Drawings		6C+E		6C+E	
084	Hazardous Area Classification Layout		6C+E		6C+E	
085	Electrical Load List		6C+E		6C+E	
086	Earthing Layout (if required)		6C+E		6C+E	
087	Lighting Layout (if required)		6C+E		6C+E	
088	Calculations		6C+E		6C+E	
089	Bill of Electrical Material		6C+E		6C+E	
090	Foundation Plan Including: Base plate layout with anchor bolt arrangement, method of standing on foundation & all data about foot print, the load which would transfer to foundation in all cases as dead, live, quake and etc.		6C+E		6C+E	
PROCUREMENT						
084	List of Sub-Suppliers (table giving: part of equipment, tag no., sub-supplier reference)(5.1.3)	4N			6C+E	
085	Unpriced copy of sub-orders		6C+E			
MANUFACTURING						
086	Weld and NDT Map		6C+E		6C+E	
087	Surface Preparation and Painting Procedures		6C+E		6C+E	

 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 GAS DEHYDRATION PACKAGE							شماره صفحه : 29 از 35	
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	PEDCO	120	ME	MR	0002		D02

Item No.	Document	With Bid	TIME SCHEDULE			
			For Review		Final Issue	
		Copies No./Type (7)	Copies No./Type (1)	Solar days (2)	Copies No./Type (1)	Calendar days (3)
088	Heat Treatment Procedures		6C+E		6C+E	
089	Welding Procedure Specification (including repair procedures).		6C+E		6C+E	
090	Welder Qualification Procedure		6C+E		6C+E	
091	Fabrication Degree	3N				
TESTING						
092	Hydrostatic / Pneumatic Testing Procedure		6C+E		6C+E	
093	Performance & Functional Test Procedure		6C+E		6C+E	
094	Non-Destructive Testing/Examination Procedures		6C+E		6C+E	
095	Factory Acceptance Test (FAT) Procedure		6C+E		6C+E	
RECORDS, REPORTS & CERTIFICATES						
097	Material Conformity Certificate		6C+E		6C+E	
098	Testing Authority Approval Certificate (if any)		6C+E		6C+E	
099	Hazardous Area Certificates.		6C+E		6C+E	
100	Ingress Protection Certificate		6C+E		6C+E	
101	Conformity Certificates (sub-supplier/equipment)		6C+E		6C+E	
102	Material Certificates Identification Diagram. (cross-reference material location ; certificates for critical components)		6C+E		6C+E	
103	Welding Procedure Qualification Record		6C+E		6C+E	
104	Welder Qualification Records.		6C+E		6C+E	
105	NDT Operator Qualifications		6C+E		6C+E	
106	Detailed NDT Reports		6C+E		6C+E	
107	Weld/ NDT Identification Diagram. (Cross-reference weld locations, WPS, welders, NDT reports).		6C+E		6C+E	
108	Dimensional Control Reports		6C+E		6C+E	

 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 GAS DEHYDRATION PACKAGE							شماره صفحه : 30 از 35	
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	PEDCO	120	ME	MR	0002		D02

Item No.	Document	With Bid	TIME SCHEDULE			
			For Review		Final Issue	
		Copies No./Type (7)	Copies No./Type (1)	Solar days (2)	Copies No./Type (1)	Calendar days (3)
109	Hardness Test Reports		6C+E		6C+E	
110	PWHT Charts & Reports, including calibration records of recorders (for each heat treatment)		6C+E		6C+E	
111	Pressure Test Reports / Certificates		6C+E		6C+E	
112	FAT Test Report / Certificates		6C+E		6C+E	
113	Performance Test Report / Certificates		6C+E		6C+E	
114	Noise & Vibration Test Report / Certificates		6C+E		6C+E	
115	Electric Motor Type Test Report (if any)		6C+E		6C+E	
116	Electric Motor Routine Test Report		6C+E		6C+E	
117	Cable Continuity and Resistance Test Reports		6C+E		6C+E	
118	Calibration Curves of Control Equipment		6C+E		6C+E	
119	Calibration Test Certificates		6C+E		6C+E	
120	Surface Preparation & Coating Reports		6C+E		6C+E	
121	Hydrostatic / Pneumatic Testing Certificates		6C+E		6C+E	
122	Welding Consumable Certificate		6C+E		6C+E	
123	Inspection and Test Reports(if any)		6C+E		6C+E	
124	Rust Prevention Report		6C+E		6C+E	
125	Non-Conformities Report		6C+E		6C+E	
INSTALLATION						
126	Sub-Assembly Documentation		6C+E		6C+E	
127	Sub-Assembly Drawings		6C+E		6C+E	
128	Erection/Installation Manual (if required)		6C+E		6C+E	
129	Name Plate Documents		6C+E		6C+E	
130	Handling, Transportation & Storage Instructions		6C+E		6C+E	
131	Unpacking & Inspection Instructions		6C+E			
132	Preliminary Packing List	4N				





شماره پیمان: 053 – 073 – 9184	PMR FOR GAS DEHYDRATION PACKAGE							شماره صفحه : 31 از 35	
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	PEDCO	120	ME	MR	0002		D02

Item No.	Document	With Bid	TIME SCHEDULE			
			For Review		Final Issue	
		Copies No./Type (7)	Copies No./Type (1)	Solar days (2)	Copies No./Type (1)	Calendar days (3)
132	Packing List		6C+E		6C+E	
OPERATION & MAINTENANCE						
133	Operating Instructions		6C+E		6C+E	
134	Maintenance Instructions (if required)		6C+E		6C+E	
135	Commissioning & Start-up Manual		6C+E		6C+E	
136	List of Spare Parts Commissioning & Start-up	4N	6C+E		6C+E	
136	List of Spare Parts 2 Years Operation	4N	6C+E		6C+E	
137	List of Special Tools	4N	6C+E		6C+E	
138	Lube Oil Schedule		6C+E		6C+E	
139	Software Manual (incl. Troubleshooting)		6C+E		6C+E	
140	Consumables List		6C+E		6C+E	
141	Function Test Procedure		6C+E		6C+E	
142	Safety Instructions		6C+E		6C+E	
OTHERS						
142	All others documents (if required) will be listed in the order		6C+E			

[illegible]

- (1) N= Number of document, C=Copy, E=Electronic Copy
- (2) Starting from date of order placement
- (3) Starting from reception of documentation without comments
- (4) First issue of the document is subjected to the release of payment milestone as per purchase order
- (5) Calendar days after reception of drive data
- (6) Prior to testing
- (7) One copy each bid copy

 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 GAS DEHYDRATION PACKAGE							شماره صفحه : 32 از 35
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	
	BK	GCS	PEDCO	120	ME	MR	0002	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

	<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 GAS DEHYDRATION PACKAGE							شماره صفحه : 33 از 35
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	
	BK	GCS	PEDCO	120	ME	MR	0002	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



 <p>NISOC</p>	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>								
<p>شماره پیمان: 053 – 073 – 9184</p>	PMR FOR GAS DEHYDRATION PACKAGE								<p>شماره صفحه : 34 از 35</p>
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	ME	MR	0002	D00	

ATTACHMENT #5

SUB VENDOR LIST

(To be in accordance with MOP)

Item No.	Material Description	Proposed Sub-Vendor

 <p>NISOC</p>	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>								
<p>شماره پیمان:</p> <p>053 - 073 - 9184</p>	PMR FOR GAS DEHYDRATION PACKAGE								<p>شماره صفحه : 35 از 35</p>
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	ME	MR	0002	D00	

ATTACHMENT #6

SPARE PARTS LIST

(Based on Vendor Recommendation)