

ساخت موقعیت چاه، تاسیسات سرچاهی و خطوط جریانی مربوط به موقعیت W028



شماره پیمان:

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| PMR FOR WHCP/HPU-W028 | | | | | | | | |
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طرح نگهداشت و افزایش تولید ۲۷ مخزن

PMR FOR WHCP/HPU-W028

نگهداشت و افزایش تولید میدان نفتی بینک

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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



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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, construction of well location, access road, wellhead facilities for W028 shall be done. In addition, construction of new flow line from aforementioned well location to Binak B/C unit are in the Project scope of work.

GENERAL DEFINITION

The following terms shall be used in this document.

CLIENT: National Iranian South Oilfields Company (NISOC)

PROJECT: Binak Oilfield Development - Construction of Well

Location, Wellhead Facilities & Flowline for W028

EPD/EPC CONTRACTOR (GC): Petro Iran Development Company (PEDCO)

EPC CONTRACTOR: Joint Venture of : Hirgan Energy - Design &

Inspection(D&I) Companies

PURCHASER: Means the "Company" where this document is a part

of direct purchaser order by the "Company", and the "Contractor" where this document is a part of contract

document.

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.

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 wellhead control panel (WHCP) and related accessories 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 | WHCP-1401 | Hydraulic/pneumatic wellhead control panel and related accessories (like: pumps, high/low pilot, tanks, accumulators) | As per attached documents, Data Sheet For WHCP- Wellheads, BK- SSGRL-PEDCO-110-IN-DT-0001, and MTO For Instrument Tube and Fitting, |
| 2 | Nitrogen bottles | 8 No.s | BK-W028-PEDCO-110-IN-MT-0001, |
| 3 | Fusible plugs | 3 No. fusible plugs | Instrument Hook-up Diagram - Wellheads, BK-SSGRL-PEDCO-110- |
| 4 | Tubes and fittings | Required tube and fittings for WHCP | IN-DG-0001, Specification For |
| 5 | Required Instrument for WHCP | Pressure switches, pressure gauges, quick exhaust valve, indicators, | WHCP/HPU, BK-SSGRL-PEDCO-110- IN-SP-0001, |

3.0 REFERENCE / ATTACHED DOCUMENTS

- **a.** Specified documents in attachment 1 shall be considered as a part of this material Requisition.
- **b.** All codes and standards which have been referenced in above mentioned specs shall be considered.
- c. 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.



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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 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 wellhead control panel (WHCP) and related accessories. 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

5.1.1 MAIN DESCRIPTION

- Complete set of Hydraulic WHCP and related accessories/loose items
- Required field mounted hydraulic devices as per section 5.3 and other project documents
- Packing including suitable protection for both sea transport and road transport on rough tracks
- Preservation suitable for 18 months at Warehousing condition of the site environment
- plan and procedure for main equipment related spare parts
- Drawings, documentation and certification in accordance with attachment #2 this requisition
- Prime VENDOR to include total package technical co-ordination
- First filling of Hydraulic Oil & N2 and any consumable



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- All accessories, especial tools and spare parts as per doc.: Specification for WHCP/HPU, BK-SSGRL-PEDCO-110-IN-SP-0001
- Engineering Services

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:

The supplier 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.
- 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:
 - QA/QC organization chart and procedures that shall be submitted for approval.
 - Plan for HOLD points in the production process proposed to PURCHASER/CLIENT 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
 - Supplier shall also provide the description of the following quality activities:
 - Sub suppliers products quality
 - 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.

Vendor to finalize the specifications and quantity of the package items, these documents and items shall be confirmed by CLIENT.

5.1.2 SPARE PARTS

Following items shall be considered (supplied) and included in the bid documentation:

- Spare parts for commissioning and start-up; a qualified and complete list based on PROJECT SPARE PART SUPPLY PROCEDURE (Doc. No. E&D-QC-SP-1).
- Spare parts for two years operation; a qualified and complete list based on PROJECT SPARE PART SUPPLY PROCEDURE (Doc. No. E&D-QC-SP-1).



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Capital spare parts (as option)

Note: if spare part for some equipment is not listed in doc. No. "E&D-QC-SP-1", vendor advice will be followed in case of CLIENT approval.

5.1.3 OTHER ITEMS

- Special tools required for installation and maintenance
- · Name plate
- Earthing plate
- Painting of all items in accordance with "Painting Specification".
- Preparation for shipment
- · Packing for sea freight transportation
- Shop inspections and testing as per specification
- Free access to manufacturing plants for the CLIENT/EPC CONTRACTOR'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
- All required meeting at Vendor shop/office including but not limited to:
- KOM
- · Technical/Clarification meeting
- Pre-Inspection Meeting
- · Interconnecting tubes and fittings between WHCP and wellhead
- · Interconnection tube between WHCP

5.2 EXCLUSIONS

The following items are excluded by the vendor scope of supply and will be provided by CLIENT/EPC CONTRACTOR:

- · Installation interconnecting tubes to sample points
- Installation connecting tubes for WHCP drain system.

5.3 BATTERY LIMITS

WHCP shall be a self-sufficient panel. The battery limits are summarized as follows:

- All internal equipment, control devices, tubes, trays, pipes, ... inside WHCP as per project document shall be supplied by WHCP vendor.
- SSV and SSSV hydraulic interconnection tube from WHCP to Xmass tree valve shall be supplied as loose item by WHCP vendor.
- Fusible plugs loop (tubes, plugs and all required accessories spare parts, special tools as per specification) shall be supplied by WHCP 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 Commodity Procurement Manufacturing Inspection Instruction (Doc. No. ICE-EID-MI-SP01-Rev01, ICE-EID-MI-SP02-Rev01).

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 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.

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.

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.

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/ 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 (END-QC-SP-1)
- 3) 2 years operational spare parts (END-QC-SP-1)



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| | <u> </u> | صادر کننده بسته کاری | تسهیلات صادر کننده بسته کاری | رشته تسهیلات صادر کننده بسته کاری | نوع مدرک رشته تسهیلات صادر کننده بسته کاری | سریال نوع مدرک رشته تسهیلات صادرکننده بسته کاری | |

شماره صفحه: ۱۱ از ۲۰

4) Packing & transportation



ساخت موقعیت چاه، تاسیسات سرچاهی و خطوط جریانی مربوط به موقعیت W028



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| | PMR FOR WHCP/HPU-W028 | | | | | | | | |
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| سخه سریال نوع مدرک رشته تسهیلات صادرکننده بسته کاری پروژه | | | | | | | | | |
| BK | W028 | PEDCO | 110 | IN | MR | 0001 | D04 | | |

شماره صفحه: ۱۲ از ۲۰

ATTACHMENT 1

11.1 <u>LIST OF REFERENCE / APPLICABLE DOCUMENTS</u>

| | | | _ |
|--------|-----------------------------------|--|-------|
| No. | Document No. | Document Title | Rev. |
| Instru | ument | | |
| 1. | BK-SSGRL-PEDCO-110-IN-SP-0001 | Specification For WHCP/HPU | D04 |
| 2. | BK-GNRAL-PEDCO-000-IN-SP-0001 | Specification For Instrumentation | D04 |
| 3. | BK-SSGRL-PEDCO-110-IN-DG-0002 | WHCP Hydraulic Diagrams- Wellheads | D03 |
| 4. | BK-SSGRL-PEDCO-110-IN-DT-0001 | Data Sheet For WHCP- Wellheads | D05 |
| 5. | BK-SSGRL-PEDCO-110-IN-DG-0001 | Instrument Hook-up Diagram - Wellheads | D04 |
| 6. | BK-W028-PEDCO-110-IN-MT-0001 | MTO For Instrument Tube and Fitting - W028 | D03 |
| 7. | BK-SSGRL-PEDCO-110-IN-DC-0002 | Instrument & Control System Design Criteria | D03 |
| Piping | g | | |
| 8. | BK-SSGRL-PEDCO-110-PI-SP-0001 | Piping Material Specification | D03 |
| 9. | BK-W028-PEDCO-110-PI-DW-0001 | Plot Plan Drawing - W028 | D01 |
| Proce | ess | | |
| 10. | BK-W028-PEDCO-110-PR-PI-0001 | P&ID - W028 | D0٦ |
| 11. | BK-SSGRL-PEDCO-110-PR-PH- 0005 | ESD Philosophy | D02 Z |
| Gene | ral | | |
| 12. | ICE-EID-MI-SP01-Rev01 | دستورالعمل بازرسی، خرید و ساخت کالا | D01 |
| 13. | ICE-EID-MI-SP02-Rev01 | دستورالعمل انتخاب سطح بازرسی کالا و تجهیزات | D01 |
| 14. | E&D-QC-SP-1 | دستورالعمل تامین قطعات یدکی راه اندازی وراهبری دو سالانه | D00 |
| 15. | BK-GNRAL-PEDCO-000-QC-PR- 0022 | Specification For Final Data Book (FDB) Requirements | |
| 16. | BK-GNRAL-PEDCO-000-QC-PR- 0045 | Packing, Marking, Transportation Procedure | D00 |



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| PMR FOR WHCP/HPU-W028 | | | | | | | |
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| نسخه سریال نوع مدرک رشته تسهیلات صادر کننده بسته کاری پروژه | | | | | | | |
| BK | W028 | PEDCO | 110 | IN | MR | 0001 | D04 |

شماره صفحه: ۱۳ از ۲۰

ATTACHMENT 2

11.2 <u>VENDOR DOCUMENTS MIN. REQUIREMENT</u>

| | | WITH BID | | AFTER OR | DERING | | FINAL |
|-----|---|----------------|--------------------|----------------------|--------------------|----------------|---------------------|
| NO. | DESCRIPTION | Q./TYPE (1) | Q./TY PE (1) | DELIVERY DATE (2) | PURPO SE (3) | FINAL ISSUE | DOCUME NT (4) |
| | MAN | AGEMENT | - | | | | |
| 1 | Vendor Document Index and Schedule | 4N | (5) | 2W | Α | (5) | Х |
| 2 | Organization Brief | 3N | (5) | 2W | I | (5) | |
| 3 | Schedule Level 1, 2, 3 & 4 showing Engineering, Procurement, Fabrication, Inspection, Testing, and Delivery Plan. | 4N | (5) | 3W | А | (5) | Х |
| 4 | Physically Progress Report (Every 2 Weeks)) | | (5) | 2W | I | (5) | |
| 5 | Project Organization Chart | 3N | (5) | 2W | Α | (5) | Х |
| 6 | Reference List | 3N | (5) | 2W | I | (5) | |
| 7 | Vendor Catalogue | 3N | (5) | 2W | 1 | (5) | Х |
| | | QA/QC | | | | | |
| 8 | Quality Assurance Manual /Quality Management System Certificate (according to latest rev. of ISO) | | (5) | 3W | А | (5) | Х |
| 9 | Procedure Qualification Record & Welding Procedure Specification | | (5) | 3W | А | (5) | Х |
| 10 | Hydrostatic/Pneumatic Test Procedure | | (5) | 4W | А | (5) | Х |
| 11 | Quality Control Plan | | (5) | 4W | А | (5) | Х |
| 12 | Post Weld Heat Treatment Procedure | | (5) | 4W | Α | (5) | Х |
| 13 | Weld and NDT Map (if any) | | (5) | 4W | А | (5) | Х |
| 14 | Surface Preparation and Painting Procedures | | (5) | 4W | А | (5) | Х |
| 15 | Welder Qualification Procedure (if any) | | (5) | 4W | А | (5) | Х |
| 16 | Manufacturing, Inspection & Test Procedures | 3N | (5) | 4W | А | (5) | Х |
| 17 | Performance & Functional Test Procedure | | (5) | 4W | А | (5) | Х |



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| PMR FOR WHCP/HPU-W028 | | | | | | | | |
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| سخه سریال نوع مدرک رشته تسهیلات صادرکننده بسته کاری پروژه | | | | | | | | |
| BK | W028 | PEDCO | 110 | IN | MR | 0001 | D04 | |

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| | | | | AFTER OR | DERING | | FINAL |
|-----|---|----------------|--------------------|----------------------|--------------------|----------------|---------------------|
| NO. | DESCRIPTION | Q./TYPE (1) | Q./TY PE (1) | DELIVERY DATE (2) | PURPO SE (3) | FINAL ISSUE | DOCUME NT (4) |
| 18 | Non-Destructive Testing/Examination Procedures | | (5) | 4W | А | (5) | Х |
| 19 | Factory Acceptance Test (FAT) Procedure | | (5) | 4W | А | (5) | Х |
| 20 | Site Acceptance Test (SAT) Procedure | | (5) | 4W | А | (5) | Х |
| | | HSE | | | | | |
| 21 | HSE Procedure | | (5) | 4W | А | (5) | X |
| 22 | ESD Instructions | | (5) | 4W | А | (5) | Х |
| | INT | ERFACE | | | | | |
| 23 | Package Data Sheets | 4N | (5) | 4W | А | (5) | Х |
| 24 | Functional Description | | (5) | 4W | А | (5) | X |
| 25 | General Arrangements Drawings | 4N | (5) | 4W | А | (5) | X |
| 26 | Part List | 3N | (5) | 4W | А | (5) | X |
| 27 | Hydraulic Functional Diagram | | (5) | 4W | А | (5) | Х |
| 28 | Utility Consumption List | 3N | (5) | 4W | А | (5) | Х |
| 29 | Earthing Details | 3N | (5) | 4W | А | (5) | Х |
| 30 | Weight / Centre of Gravity Drawings & Data's | | (5) | 4W | I | (5) | |
| 31 | External Static And Dynamic Forces & Moments (Present During Test, Start-Up, Normal/Maximum Operation, Shutdown, And Other Conditions Of Service) | | (5) | 4W | I | (5) | |
| 32 | Wind And Seismic Loads Including Shear And Moment Forces On Supports And Foundation. | | (5) | 4W | I | (5) | |
| 33 | Anchor Bolt Details Drawings (Incl. Size, Type, Locations Relative To The Equipment Center-Lines In Three Planes). | | (5) | 4W | I | (5) | |
| | ENG | INEERING | | | | | |
| 34 | Detailed Functional Design Specification | | (5) | 4W | Α | (5) | Х |
| 35 | Detailed Overall Description | | (5) | 4W | Α | (5) | X |



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| | PMR FOR WHCP/HPU-W028 | | | | | | | |
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| فه سریال نوع مدرک رشته تسهیلات صادر کننده بسته کاری پروژه | | | | | | | نسخه | |
| BK | W028 | PEDCO | 110 | IN | MR | 0001 | D04 | |

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| | | WITH BID | | AFTER OR | DERING | | FINAL |
|-----|--|----------------|--------------------|----------------------|--------------------|----------------|---------------------|
| NO. | DESCRIPTION | Q./TYPE (1) | Q./TY PE (1) | DELIVERY DATE (2) | PURPO SE (3) | FINAL ISSUE | DOCUME NT (4) |
| 36 | Mechanical Detailed Specifications (one per component) | | (5) | 4W | Α | (5) | Х |
| 37 | Detailed Design / Fabrication Drawings for Equipment & Auxiliary Parts | | (5) | 4W | Α | (5) | X |
| 38 | | | (5) | 4W | Α | (5) | |
| 39 | Assembly Drawings | | (5) | 4W | Α | (5) | |
| 40 | Design Calculation (For Hydraulic and Nitrogen supplies) | | (5) | 4W | А | (5) | |
| 41 | Instrument Hook-Up and installation Diagrams | 4N | (5) | 4W | Α | (5) | |
| 42 | Approximate Weight & Dimension | | (5) | 4W | Α | (5) | Х |
| 43 | Shipping Detail Drawing | | (5) | 4W | Α | (5) | |
| 44 | Cause & effect of the package | | (5) | 4W | Α | (5) | Х |
| 45 | Final Data Book | | (5) | 4W | Α | (5) | Х |
| | PROC | UREMEN | Т | | | | |
| 46 | List of Sub-Vendors (table giving: part of equipment, tag no., sub-vendor reference)(5.1.3) (if any) | 4N | (5) | 4W | А | (5) | Х |
| 47 | Unpriced Copy of Sub-Orders | 4N | (5) | 4W | I | - | |
| 48 | Packing Spec. / Shipping Schedule | 4N | (5) | 4W | 1 | - | |
| 49 | Weight List/ Shipping List | 4N | (5) | 4W | I | (5) | |
| 50 | Mechanical & Performance Guarantees | 4N | (5) | 4W | I | - | Х |
| | MANU | FACTURIN | IG | | | | |
| 51 | Preliminary Project Schedule | | (5) | 4W | I | - | |
| 52 | Fabrication Degree | | (5) | 4W | I | (5) | Х |
| | RECORDS, REPO | RTS & CE | RTIFIC | ATES | | | |
| 53 | Material Conformity Certificate | | (5) | 4W | ı | (5) | Х |
| 54 | Testing Authority Approval Certificate (if any) | | (5) | 4W | I | (5) | Х |
| 55 | Hazardous Area Certificates. | | (5) | 4W | I | (5) | Х |
| 56 | Ingress Protection Certificate | | (5) | 4W | I | (5) | Х |
| 57 | Conformity Certificates (sub-vendor/equipment) | | (5) | 4W | I | (5) | Х |



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| PMR FOR WHCP/HPU-W028 | | | | | | | | |
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| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه | |
| BK | W028 | PEDCO | 110 | IN | MR | 0001 | D04 | |

شماره صفحه: ۱٦ از ۲۰

| | | WITH BID | | AFTER OR | DERING | | FINAL DOCUME |
|-----|---|----------------|--------------------|----------------------|--------------------|----------------|--------------|
| NO. | DESCRIPTION | Q./TYPE (1) | Q./TY PE (1) | DELIVERY DATE (2) | PURPO SE (3) | FINAL ISSUE | NT (4) |
| 58 | Material Certificates Identification Diagram. (cross-reference material location; certificates for critical components) | | (5) | 4W | I | (5) | Х |
| 59 | Welding Procedure Qualification Record. (if any) | | (5) | 4W | Α | (5) | Х |
| 60 | Welder Qualification Records. (if any) | | (5) | 4W | I | (5) | Х |
| 61 | NDT Operator Qualifications | | (5) | 4W | I | (5) | Х |
| 62 | Detailed NDT Reports | | (5) | 4W | Α | (5) | Х |
| 63 | Weld/ NDT Identification Diagram. (Cross-reference Weld Locations, WPS, welders, NDT). (if any) | | (5) | 4W | А | (5) | Х |
| 64 | Dimensional Control Reports | | (5) | 4W | Α | (5) | Х |
| 65 | Hardness Test Reports | | (5) | 4W | Α | (5) | Х |
| 66 | PWHT Charts & Reports, Including Calibration Records of Recorders (for each heat treatment) | | (5) | 4W | А | (5) | Х |
| 67 | Pressure Test Reports / Certificates | | (5) | 4W | Α | (5) | Х |
| 68 | FAT Test Report / Certificates | | (5) | 4W | А | (5) | Х |
| 69 | SAT Test Report / Certificates | | (5) | 4W | А | (5) | Х |
| 70 | Performance Test Report / Certificates | | (5) | 4W | Α | (5) | Х |
| 71 | Material Test Certificates | | (5) | 4W | Α | (5) | Х |
| 72 | Calibration Curves of Control Equipment | | (5) | 4W | I | (5) | Х |
| 73 | Calibration Test Certificates | | (5) | 4W | I | (5) | Х |
| 74 | Surface Preparation & Coating Reports | | (5) | 4W | А | (5) | Х |
| 75 | Hydrostatic / Pneumatic Testing Certificates | | (5) | 4W | 1 | (5) | Х |
| 76 | Welding Consumable Certificate(if any) | | (5) | 4W | I | (5) | Х |
| 77 | Test & Inspection Reports | | (5) | 4W | А | (5) | Х |
| 78 | Rust Prevention Report | | (5) | 4W | Α | (5) | Х |
| 79 | Non-Conformities Report | | (5) | 4W | Α | (5) | Х |
| 80 | Letter of Conformity | | (5) | 4W | А | (5) | Х |



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| PMR FOR WHCP/HPU-W028 | | | | | | | | |
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| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه | |
| BK | W028 | PEDCO | 110 | IN | MR | 0001 | D04 | |

شماره صفحه: ۱۷ از ۲۰

| | | WITH BID | | AFTER OR | DERING | | FINAL | |
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| NO. | DESCRIPTION | Q./TYPE (1) | Q./TY PE (1) | DELIVERY DATE (2) | PURPO SE (3) | FINAL ISSUE | DOCUME NT (4) | |
| 81 | Welding Inspection Reports | | (5) | 4W | Α | (5) | X | |
| 82 | VT Inspection Report | | (5) | 4W | Α | (5) | X | |
| | INST | ALLATION | | | | | | |
| 83 | Sub-Assembly Documentation | | (5) | 4W | Α | (5) | | |
| 84 | Sub-Assembly Drawings | | (5) | 4W | Α | (5) | | |
| 85 | Erection/Installation Manual (if required) | | (5) | 4W | Α | (5) | Х | |
| 86 | Name Plate Documents | 4N | (5) | 4W | Α | (5) | Х | |
| 87 | Handling, Transportation & Storage Instructions | 4N | (5) | 4W | Α | (5) | Х | |
| 88 | Unpacking & Inspection Instructions | | (5) | 4W | Α | (5) | Х | |
| 89 | Preliminary Packing List | | (5) | 4W | Α | (5) | | |
| 90 | Packing List | | (5) | 4W | Α | (5) | Х | |
| 91 | Bill of material(BOM) of panel mounted/ loose items | | (5) | 4W | Α | (5) | Х | |
| | OPERATION | & MAINTE | NANCE | | | | | |
| 92 | Operating Instructions | | (5) | 4W | Α | (5) | Х | |
| 93 | Maintenance Instructions | | (5) | 4W | Α | (5) | Х | |
| 94 | Commissioning & Start-up Manual | | (5) | 4W | Α | (5) | Х | |
| 95 | List of Spare Parts Commissioning & Start-up | 4N | (5) | 4W | Α | (5) | Х | |
| 96 | List of Spare Parts 2 Years Operation | 4N | (5) | 4W | Α | (5) | Х | |
| 97 | List of Special Tools | 4N | (5) | 4W | Α | (5) | Х | |
| 98 | Lube Oil Schedule | | (5) | 4W | Α | (5) | | |
| 99 | Software Manual (incl. Troubleshooting) | | (5) | 4W | Α | (5) | | |
| 100 | Consumables List | | (5) | 4W | Α | (5) | | |
| 101 | Function Test Procedure | | (5) | 4W | Α | (5) | Х | |
| | 0 | THERS | | | | | | |
| 102 | All others documents (if required) will be listed in the order | | | | | | | |
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| PMR FOR WHCP/HPU-W028 | | | | | | | | |
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| ک رشته تسهیلات صادر کننده بسته کاری پروژه | | | | | نوع مدرك | سريال | نسخه | |
| BK | W028 | PEDCO | 110 | IN | MR | 0001 | D04 | |

شماره صفحه: ۱۸ از ۲۰

| | DESCRIPTION | WITH BID | | FINAL | | | |
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| NO. | | Q./TYPE (1) | Q./TY PE (1) | DELIVERY DATE (2) | PURPO SE (3) | FINAL ISSUE | NT (4) |
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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 DATA BOOK
- (5) "6 C+E" COPY OF DOCUMENT.
- (6) MECHANICAL CATALOGUE INCLUDING FINAL DRAWINGS/DOCUMENTS, UNPRICED PURCHASE ORDER & SUB-

PURCHASE ORDER, MAINTENANCE DOSSIER ETC.

(7) 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

- (8) IN ORDER TO DESIGN AND MANUFACTURE THE INSTRUMENTS, VENDOR SHALL CONSIDER THE SEISMIC FACTOR.
 - SUITABLE FOR SEISMIC UBC 97 zone 4, AND THE RESULTS SHALL BE PROVIDED BY VENDOR.
- (9) LIST OF DOCUMENTS WILL BE FINALIZED IN VPIS.
- (10) VENDOR SHALL OFFER ALL MATERIAL/EQUIPMENT ONLY FROM THE LATEST APPROVED VENDOR LIST OF NIOC REFERRED TO NIOC WEBSITE."



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| PMR FOR WHCP/HPU-W028 | | | | | | | | |
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| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه | |
| BK | W028 | PEDCO | 110 | IN | MR | 0001 | D04 | |

شماره صفحه: ۱۹ از ۲۰

ATTACHMENT 3

Requisition No.:

Equipment No.:

Description:

11.3 <u>DEVIATIONS / EXCEPTIONS TO JOB SPECIFICATION</u>

| Item No. | Description of proposed exception | Recommended revision to job specification | Reason for proposed exception | Effect on base proposal if CONTRACTOR rejects exception |
|-------------|-----------------------------------|---|-------------------------------|---|
| | | | | |
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ساخت موقعیت چاه، تاسیسات سرچاهی و خطوط جریانی مربوط به موقعیت W028



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| .0414 - 114 | |

| PMR FOR WHCP/HPU-W028 | | | | | | | | |
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| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه | |
| BK | W028 | PEDCO | 110 | IN | MR | 0001 | D04 | |

شماره صفحه: ۲۰ از ۲۰

ATTACHMENT 4

Requisition No.:

Description:

11.4 ALTERNATIVES TO JOB SPECIFICATION

| E | Equipment No.: | | | | | | | | |
|---|----------------|---------------------------------------|--------------------------------------|---|------------------------------------|--|--|--|--|
| | Item No. | Job Specification No. & Paragraph No. | Requirements of Job Specification | Description of Proposed Alternative | Reason for Proposed Alternative | | | | |
| | | | | | | | | | |
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