طرح نگهداشت و افزایش تولید 27 مخزن

CONTROL PHILOSOPHY

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

REVISION RECORD SHEET

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CONTENTS

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, New Gas/Condensate Pipelines (from Binak New GCS to Siahmakan GIS/Binak PU) shall be constructed.

GENERAL DEFINITION

The following terms shall be used in this document.

CLIENT:	National Iranian South Oilfields Company (NISOC)
PROJECT:	Binak Oilfield Development – Surface Facilities; Gas & Gas-Condensate Pipelines
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.
MAY:	Is used where a provision is completely discretionary.

2.0 SCOPE

The purpose of this document is to provide process control philosophy for Pipeline.

3.0 NORMATIVE REFERENCES

3.1 LOCAL CODES AND STANDARDS

- IPS-E-IN-180 Engineering Standard for Instrument Electrical Power Supply and Distribution Systems
- IPS-E-IN-190 Engineering Standard for Transmission Systems
- IPS-G-IN-220 Engineering and Installation Standard for Control Centers
- IPS-G-IN-250 Engineering & Construction Standard for Distributed Control System
- IPS-G-IN-260 Engineering and Installation Standard for Indicating Lights, Alarms and Protective System
- IPS-G-IN-270 General Standard for Instruments of Fire & Gas Detection Equipment
- IPS-G-IN-290 Engineering and Construction Standard for Programmable Logic Controllers
- IPS-M-IN-190 Material and Equipment Standard for Transmission System
- IPS-M-IN-220 Material Standard for Control Panels and System Cabinets
- IPS-M-IN-250(1) Material and Equipment Standard for Distributed Control System (DCS)
- IPS-M-IN-260 Engineering and Equipment standards for Alarm and Protective Systems
- IPS-M-IN-280 Material and Equipment Standard for Miscellaneous Items
- IPS-M-IN-290 Material and Equipment Standard for Programmable Logic
- IPS-G-IN-250 Distributed Control System

3.2 INTERNATIONAL CODES AND STANDARDS

- API 552 Transmission Systems
- API RP 550 Manual on Installation of Refinery Instrument and Control System

3.3 THE PROJECT DOCUMENTS

- BK-GNRAL-PEDCO-000-PR-DC-0001 Process Design Criteria
- BK-GNRAL-PEDCO-000-PR-DB-0001 Process Basis Of Design
- BK-PPL-PEDCO-320-PR-PI-0001 P&ID - Gas Pipeline (to Siahmakan G.I. Station)

3.4 ENVIRONMENTAL DATA

Refer to "Process Basis of Design; Doc. No. BK-GNRAL-PEDCO-000-PR-DB-0001".

3.5 ORDER OF PRECEDENCE

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.

4.0 CONTROL SYSTEM

4.1 LINE BREAK DETECTION SYSTEM

LBV-3201 and LBV-3202 shall be installed at 28.4 km and 28.6 km respectively.

There is one self-actuated /gas operated control cabinet for each way valve (LBV-valve station). This cabinet includes control equipment to control the emergency shut-off valves related to each valve.

4.2 PIG RECIEVER AND PIG LAUNCHER STATIONS

Each receiver and launcher of the pig includes the following instrumentation equipment:

- Pig signaler indicator/Switch
- Pressure gauge/Transmitter
- Shutdown valve

- The transmitter signals from pig launcher is connected to ESD system of GCS plant and Shutdown valve in pig receiver area shall connected to existing control/ESD system of SIAHMAKAN plant.
- All pig receiving and launcher signals at pig station as well as pressure signals and control signals for emergency shut-off valves and motor valves at the station are transmitted to the CONTROL / ESD system in transferring point.