

# PEDEC's Ongoing Projects

## ١. Development Project of MasjedSoleiman Oil Field

### Main Objectives

- Increasing a daily production of ٢٥,٠٠٠ barrels of crude oil to the current production
- Carrying out reservoir studies, using horizontal drilling technology, installation of ESP, and producing oil from the ١٠٠-year-oil field of MasjedSoleiman

### Contract Type

The main development of the field made by a buyback contract; however, other activities such as: construction of oil pipelines for production unit, installation of poles and electric transmission lines, construction of sweet gas pipelines for consumption, and installation of radio communication systems for production unit were taken from NIOC internal resources.

### Geographical Location

It lies ١٢٥ kilometers to the northeast of Ahwaz in the city of MajsedSoleiman.

### Implementation Period

We are resolving the problems for delivery to the producer.

## **۲. Gathering Associated Gases of AMAK (Phase ۲, Environment)**

### **Main Objectives**

Phase ۲ consists of environmental activities: construction of ۹۶ kilometers of ۱۲-inch-pipelines for acid gas transmission, installation of a station for pressure-boosting and dehydration of acid gas, installations of other safety and processing systems.

By completion of phase ۲ we prevent the flare of some daily ۱۴ million cubic feet of acid gas. The produced acid gas from phase ۲ (۱۴ million cubic feet per day) will be directly transferred to RaziPetrochemical Complex.

### **Contract Type**

Buyback

### **Geographical Location**

In Khuzestan Province between Ahwaz, Ramhormoz, Shadgan and Bandar Imam Khomeini in an area of ۶,۰۰۰ meters square.

### **Implementation Period**

Ready for production in March, ۲۰۱۷

## **۳. Construction of Crude Oil Strategic Storage Tanks**

### **Main Objectives**

Phase ۱: construction of ۳ steel strategic storage tanks with the capacity of ۳ million barrels of oil in Siri, Bahregan and Ahwaz.

Phase ۲: Construction of ۷ concrete strategic storage tanks with a total capacity of ۵ million barrels of crude oil including: Omidiyeh (۳ concrete tanks for ۱ million barrels), Gureh (۴ concrete tanks for ۴ million barrels).

The project aims at preventing production fluctuation and production reductions in emergencies to ensure continuity and stability of crude oil production, and increasing the crude oil export in emergencies.

### **Contract Type**

PC

### **Geographical Location**

Gureh Project: It lies ۴۰ kilometers to the north of Gonaveh port in Bushehr by Gureh Pump House.

Omidiyeh Project: It lies ۱۴ kilometers to the west of Omidiyeh in Khuzestan province by Marun ۲ desalination unit.

### **Implementation Period**

The project will be completed by February ۲۰۱۸

## ۴. Development Project of Kish Gas Field

### Main Objectives

To protect previous investments, NIOC Board of Directors issued an approval on May ۲۳, ۲۰۱۴ upon which the Development Project of Kish Gas Field, Phase ۱ began to produce ۱ billion cubic feet of gas and ۱۱,۳۰۰ barrels of stabilized condensates.

Among the main activities of phase ۱ are: production of ۱ billion cubic feet of gas from ۱۳ production wells in clusters ۱ and ۲ in Kish Island and transferring it to the mainland, treatment of gas in the refinery and transmission of light gas through ۵۶-inch pipelines to the seventh national pipelines, and export of gas condensates through SBM.

### Contract Type

The remaining activities are being carried out from internal resources of NIOC and an MoU is signed with foreign and local companies for studying future phases of the field.

### Geographical Location

Kish Gas Field lies below Kish Island in the Persian Gulf. It is located ۶۰ kilometers to the east of Lavan Island. This field was explored in ۱۹۶۸ through ۲-D seismic operation. The gas reservoirs of Kangan and Dalan in Kish Gas Field lies at a depth of ۳,۲۰۰ to ۵,۰۰۰ meters below in the island and surrounding waters in the Persian Gulf.

The dimensions of Kish Gas Field is some ۲۵\*۳۲ kilometers and the thickness of gas columns of the reservoirs is estimated to be over ۱,۲۰۰ meters. The reservoir pressure at a depth of ۳,۸۵۰ meters below sea level is ۷,۳۷۸ pound per square inch.

### Implementation Period

۱۸ months (based on Board of Directors' approval on Nov. ۲۳, ۲۰۱۴)

## Δ. Development Project of Yadavaran Oil Field

### Main Objectives

Early Production Phase, 1<sup>st</sup> stage: 20,000 barrels of crude oil

Early Production Phase, 2<sup>nd</sup> stage: 40,000 barrels of crude oil

Phase 1: to reach a daily production of 80,000 barrels of crude oil (including the 1<sup>st</sup> and the 2<sup>nd</sup> stages of the early production)

Phase 2: to reach a daily production of 180,000 barrels of crude oil (including the Phase 1)

Phase 3: to reach a daily production of 300,000 barrels of crude oil (including the Phase 2)

### Contract Type

Phase 1: buyback

Phases 2&3: under negotiation

### Geographical Location

It lies 70 kilometers to the southwest of Ahwaz (North of Khoramshahr), i.e. it is a sharing field in Kushk and Hoseiniyeh area in Iran-Iraq borderline. It is about 40 kilometers in length and 10 kilometers in width. Latest studies, findings, appraisal well tests, and dynamic model of reservoir all show that the oil in place of the field is most likely to be over 30 billion barrels of crude oil.

### Implementation Period

Phase 1 started in 2019 in presence of the president

## **۶. Development Project of North Azadegan Oil Field**

### **Main Objectives**

Phase ۱: Daily production of ۷۵,۰۰۰ barrels of crude oil

Phase ۲: Daily production of ۷۵,۰۰۰ barrels of crude oil (including Phase ۱)

Total daily production of ۱۵۰,۰۰۰ barrels of crude oil

### **Contract Type**

Phase ۱: buyback

Phases ۲: under negotiation

### **Geographical Location**

This field, as a part of Azadegan Oil Field, is some ۴۶۰ kilometers square in area. It lies some ۱۲۰ kilometers to the west of Ahwaz, in Hurohoveizah Marshi.e. in Iran-Iraq borderline (southwest of Iran). The oil in place of the field is ۶.۵ billion barrels of crude oil.

### **Implementation Period**

Phase ۱ started in Nov. ۲۰۱۶ in the presence of the president.

## **٧. Development Project of South Azadegan Oil Field**

### **Main Objectives**

Phase ١: daily production of ٣٢٠,٠٠٠ barrels of crude oil

Phase ٢: increasing the daily production of crude oil to ٢٨٠,٠٠٠ barrels

Total daily production of ٦٠٠,٠٠٠ barrels of crude oil

### **Contract Type**

Buyback (SPV) to finance the project

### **Geographical Location**

٨٠ kilometers to the west of Ahwaz, along Iran-Iraq borderline

### **Implementation Period**

٥٧ months, beginning from June ٢٢, ٢٠١٤

## **٨. Development Project of Azar Oil field**

### **Main Objectives**

The project is carried out in one phase, two stages, and with ٣٢ work packages (١٠ subsurface and ٢٢ surface work packages).

Daily production of ٩٥,٠٠٠ barrels of crude oil through drilling of ١٩ wells (١٧ production wells, ١ water disposal well, and ١ appraisal well)

Early production of ٣٠,٠٠٠ barrels of oil through drilling ١٠ wells (٧ production wells, ١ appraisal well, ١ water disposal well, and work over of ١ existing well)

### **Contract Type**

Buyback

### **Geographical Location**

It lies along Iran-Iraq borderline, i.e. ٢٠ kilometers to the southeast of Mehran.

### **Implementation Period**

Early production: February, ٢٠١٧

Final production: November, ٢٠١٨

## **۹. Development Project of North Yaran Oil Field**

### **Main Objectives**

Early production Phase: production of ۲,۰۰۰ barrels of crude oil per day within ۹ months starting from February ۲۰۱۳

Final production phase: daily production of ۳۰,۰۰۰ barrels of crude oil per day within ۵۲ months from the effective date of the HOA

### **Contract Type**

Buyback

### **Geographical Location**

Yaran Oil Field is in South Azadegan Oil Field; ۱۳۰ kilometers to the southwest of Ahwaz (west of Karoon River). It is a sharing field in Iran-Iraq borderline, i.e. in Talaeiyeh area, which is mostly located in Iraq.

### **Implementation Period**

Started in October, ۲۰۱۶ with the presence of the president

## **١٠. Development Project of South Yaran Oil Field**

### **Main Objectives**

Daily production of some ٥٠,٠٠٠ to ٦٠,٠٠٠ barrels of crude oil, if possible

### **Contract Type**

From internal resources of NIOC

### **Geographical Location**

It is ١٣٠ kilometers to the west of Ahwaz, in Iran-Iraq borderline (in Talaeiyeh area), i.e. in the southwest of the county.

### **Implementation Period**

١٨ months (according to the approval of NIOC Board of Directors for production from the field). Date of completion: January ٢٠, ٢٠١٥

٤٨ months (according to the approval of NIOC Board of Directors, with installation of facilities). Date of completion: July ٢١, ٢٠١٧

## ١١. Construction of West Karoon Pump House and Other Facilities

### Main Objectives

Receiving crude oil from West Karoon Oilfields and transmitting it to oil export ports

### Contract Type

EPC

### Geographical Location

- Construction of ٣٢, ٣٤-inch transmission pipelines for heavy crude oil from West Karoon Pump House to Bahregan
- Construction of Omidiyeh Pump House: it is located ٣ kilometers to the northwest of Omidiyeh
- Cathode protection of ٣٢, ٣٤-inch pipelines from West Karoon Pump House to Bahregan (about ٣.٥ kilometers)
- Construction of West Karoon Pump House: it is located ٣.٠ kilometers to the southwest of Ahwaz by Khoramshahr-Ahwaz road
- Construction of ٣٠-inch transmission pipelines for light crude oil from West Karoon Pump House to Omidiyeh (about ٣.٥ kilometers)
- Construction of ٤٢-inch transmission pipelines for extra heavy crude oil from West Karoon Pump House to Gureh reservoirs (about ٣.٠ kilometers)
- Increasing the capacity of Omidiyeh Pump House: it is located by Omidieyh Pump House
- Increasing the capacity of West Karoon Pump House: it is located by West Karoon Pump House

### Implementation Period

Construction of ٣٢, ٣٤-inch transmission pipelines and Omidiyeh Pump House, and Cathode protection of ٣٢, ٣٤-inch pipelines have been completed successfully.

Construction of West Karoon Central Pump House is about completion and it will be totally over by the ٢٠١٧, Q٢. Other sections are putting out to tender.

## ۱۲. National Metering Project

### Main Objectives

- Following the article ۱۲۹.G of the Fifth Development Plan
- Determining the country's hydrocarbon balance and ending up with clear cut numbers in supply and change in oil products
- Detection and controlling the waste of oil product
- Paving the way for signing contracts for supplying food to customers and facilitating the implementation of the article ۴۴ of Iranian statute

### Contract Type

EPCCF

### Geographical Location

The project is implemented with ۷۱ stations under ۷ main management units including the Ministry of Petroleum (MoP), National Iranian Oil Company (NISOC, IOOC, ICOFC, AOGC and IOTC), National Iranian Gas Company (NIGC) and National Iranian Oil Refining & Distribution Company (NIORDC) in ۱۵ provinces in the country

### Implementation Period

The contractor's key activities will be completed after finalizing the contract, receiving the time sheet, and its approval based on the contractor's monthly reports.

## ۱۳. Dispatching Project

### **Main Objectives**

- Integrating, controlling and monitoring the production and transfer of the oil and gas from wells to domestic and export bases of supply
- Ensuring the consumers about the oil and gas production system using prediction and probability function
- Planning and programing to provide oil and gas while developing the fields
- Gathering and analysis of mechanized information
- Preparing reports for precise and on time information distribution to NIOC senior managers to make appropriate decisions
- Planning for maintenance while providing production management
- Facilitating the implementation of article ۴۴ of Iranian statute

### **Contract Type**

EPCF (It will be determined after carrying out basic studies and holding tenders)

### **Geographical Location**

Establishment of ۲۵ monitoring centers in six subsidiaries of National Iranian Oil Company (NIOC) including: IOOC, POGC, AOGC, IOTC, NISOC, and ICOFC].

### **Implementation Period**

۲۴ months (the current study period by the consulting company)

## ۱۴. Construction of West Karoon Power Plant

### Main Objectives

- Power supply to West Karoon Oil Fields including, North and South Azadegan, North and South Yaran, Yadavaran, gas and liquid gas plants NGL ۳۲۰۰ and West Karoon Pump House
- Construction of ۴۰۰ and ۲۳۰ kV electric posts
- Construction of ۱۵۰ kilometers of ۲۳۰ KV power line
- Construction of water transmission pipelines and appropriate refinery to supply water for the power plant
- Construction of gas transmission pipelines between the power plant and NGL ۳۲۰۰ and gas pressure regulating station to supply gas for the power plant

### Contract Type

BOO

### Geographical Location

It is located ۴۵ kilometers to the southwest of Ahwaz (by gas and liquid gas plants NGL ۳۲۰۰)

### Implementation Period

- Construction of West Karoon Power Plant: ۳۶ months
- Construction of ۱۰۰ kilometers of ۲۳۰ KV power line: ۲۴ months
- Construction of ۵۰ kilometers of ۲۳۰ KV and ۴۰۰ KV power lines: ۲۴ months
- Construction of ۴۰۰ KV electric posts of ShahidBaghaei: ۲۴ months
- Construction of ۲۳۰ kV electric posts of West Karoon projects: ۲۴ months
- Consolidation of bed structure and piling operation of the site of West Karoon Power Plant: ۹ months