

1 SUMMARY OF THE PROJECT

1.1 BACKGROUND

Vedanta Limited (Cairn Oil & Gas¹) is one of the largest independent oil and gas exploration and production companies in India. On behalf of Ravva Joint Venture, Vedanta Limited - Cairn Oil & Gas (erstwhile Cairn India Limited) has been carrying out oil and gas operations in PKGM-1 Block located in the Bay of Bengal in the Krishna-Godavari Basin near Surasaniyanam Village, Uppalaguptam Mandal in East Godavari District, Andhra Pradesh.

Oil and Gas exploration and development activities in the PKGM-1 Block (also referred to as Ravva Field or Ravva Block) are being taken up as part of existing Production Sharing Contract signed for PKGM-1 Block with the Ministry of Petroleum and Natural Gas through Directorate General of Hydrocarbons, Government of India. The Block has an area of 331.26 sq. km (km²).

The oil & gas field was discovered in 1988 by ONGC (Oil and Natural Gas Corporation). On 28th October, 1994 when the Production Sharing Contract (PSC) was signed, the offshore facilities included 4 wells, 2 platforms and 2 pipelines for production of 3,000 Barrels of Oil per day (BOPD) with an onshore processing capacity of 8,600 BOPD. The Ravva JV commenced operations in 1995 and over the years increased production capacity and upgraded facilities. The operatorship of the field was transferred in 1995 to Command Petroleum (India) Pty Ltd which was subsequently in 1997 was transferred to Cairn Energy India Pty Limited (CEIL).

Vedanta Ltd (Cairn Oil & Gas) is the Operator of Ravva Joint Venture comprising of Oil & Natural Gas Corporation Limited (ONGC), Vedanta Ltd (Cairn Oil and Gas), Videocon Petroleum Ltd. (VPL) and Ravva Oil Singapore Pty. Ltd. (ROS).

Currently, within PKGM-1 Block, there exist 8 oil and gas platforms. Six platforms (RA, RB, RC, RD, RE and RF) are meant for crude oil production while two of them are natural gas producing platforms (RG and RH). Additional new offshore platform termed as RI Platform will be set up as per approval obtained through prior Environmental Clearance dated 23 Feb 2015 and CRZ Clearance dated 24 April 2017.

Within the PKGM-1 Block, there exist 55 wells of which 6 are self-flow producing, 16 are gas lift wells and 9 are injectors spread over on 8 well head platforms, inter-connecting pipelines, land terminal near Surasaniyanam Village (with oil and gas processing and water injection facilities), Single Point Mooring (SPM), Shuttle Tankers and Export pipelines for transport of crude.

¹ Cairn India Ltd. got merged with Vedanta Limited with effect from 11th April, 2017

Oil and Gas from offshore wells are routed through subsea pipelines to onshore terminal located at Surasaniyanam Village, East Godavari District, Andhra Pradesh.

1.2 *PROPOSED PROJECT*

Over the years due to aging of the reservoir, production of oil and gas has been declined. The onshore processing facility has an approved capacity to produce 50,000 barrels of oil per day (BOPD) and is presently producing approximately 15,000 BOPD. In order to maintain hydrocarbon production at approved production rates, Vedanta Ltd (Cairn Oil & Gas) now proposes the following:

1. Drilling of 123 exploratory and development wells covering 83 nos. of exploratory wells (59 nos. from standalone offshore locations & 14 nos. from existing offshore platforms and 10 nos. from proposed onshore well pads) to assess presence of hydrocarbons in prospects identified and Drill 40 nos. development (production) wells (17 nos. from the existing offshore platforms and 23 nos. from proposed onshore well pads)
2. Establishing of 8 nos. of onshore well pads; and
3. Laying of approximately 15 km of pipeline corridor connecting onshore well pads with the existing onshore oil & gas processing Ravva Terminal;

There will be no modifications/ alterations at the onshore Ravva Terminal as the processing facilities and utilities have adequate capacity to handle production capacity which as a result of proposed development will remain within the existing approved limits.

1.3 *RESOURCE REQUIREMENT*

Land Requirement

Land requirement will be for development of:

- a) Eight onshore well pads with typical size each of ~225m x 170m; and
- b) Suitable access roads of ~10m width connecting to eight onshore well pads.

Water Requirement

For the proposed development and exploratory/appraisal drilling (onshore and offshore well) a maximum of 80 to 85 m³/day of water will be required for drilling operations.

For onshore drilling activity water will be sourced from existing bore wells, located in the Ravva Terminal, while water for offshore drilling activity will be sourced from Kakinada Port.

Power Requirement

For onshore drilling of a well, power requirement will be ~2,450 kVA to be sourced through diesel generators of 3 x 1000 kVA (two working + one standby), 2 x 350 kVA (one working + one standby) and 2 x 100 kVA (one working + one standby).

For offshore drilling of a well, power requirement will be ~8,000 kVA to be sourced through diesel generators (4 x 2,000 kVA) typically installed on board the jack up rig. In addition, a diesel generator of 500 kVA will also be available for emergency power supply.

During operation phase, each well pad will have power requirement of ~380 kVA which would be met through diesel generators.

Man Power Requirement

Temporary influx of population is likely to occur during all phases of the project life cycle. However, for most of the construction works the local villagers would be employed.

For the technical jobs highly technical and trained workforce would be sourced from outside based on experience of working in the field of hydrocarbon exploration and production.

1.4

PROJECT COST

The cost of the project is estimated to be ~ INR 7,924 Crores.