

## **1.0 Summary of the Project**

### **1.1 Background**

Vedanta Limited (Cairn Oil & Gas<sup>1</sup>) is one of the largest independent oil and gas exploration and production companies in India. Vedanta Ltd. (Cairn Oil & Gas) has been allocated AA-ONHP-2017/2 block by MoP&NG, GoI under the Revenue Sharing Contract (RSC) for exploration and exploitation of hydrocarbons. As per the provisions of the RSC, Vedanta Ltd. proposes to carry out oil and gas exploration (including seismic surveys, exploratory and appraisal drilling) and early production. The AA-ONHP-2017/2 onshore block covers an area of 73 Sq. Km. in Tirap districts of Arunachal Pradesh.

### **1.2 Proposed Project**

The proposed project is green field in nature. The proposed project activities include:

- i. Seismic surveys and data acquisition;
- ii. Drilling of 10 nos. of exploratory (including appraisal) wells and testing of wells;
- iii. At the post appraisal phase, well(s) will be taken to production by setting up of Early Production Units (EPU)s/ Quick Production Units (QPU)s for well fluid processing and early production of up to 4000 BOPD crude oil and 0.8 MMSCFD associated natural gas.

### **1.3 Resource Requirement**

#### **1.3.1 Land requirement will be for:**

- i. Typical Size of 300 m x 300 m (approx.) for each one well pad (drill site);
- ii. RoU of 30 m (approx.) width for accommodating suitable access roads connecting to well pads, OHL and other utilities in future.

#### **1.3.2 Water Requirement**

During seismic surveys, the water requirement will be 20 - 30 m<sup>3</sup>/day for domestic use. For the drilling activities, water requirement will be of 750 – 1300 m<sup>3</sup>/well (for mud preparation); 25 – 50 m<sup>3</sup>/day/well (for miscellaneous activities) and 20 - 30 m<sup>3</sup>/day/well (domestic use). During early production phase, for each typical EPU/QPU location, water (for process, domestic consumption and greenbelt & miscellaneous use) requirement will be 15 – 18 m<sup>3</sup>/day. The water requirement will be sourced locally through approved/ authorized sources of surface water and/ or ground water (e.g. PHD bore wells, privately owned bore wells, Irrigation Dept./ Water Resources Dept. of State Govt.). In case, required water could not be sourced from locally available approved sources, ground water will be extracted after obtaining permission from CGWA/ State Govt.

#### **1.3.3 Power Requirement**

For drilling activities, power requirement will be 2,450 kVA (approx.) and 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 the early production, power requirement will be met through state electricity grid and/ or installation of Diesel/ Gas Engine Generator(s) using produced (associated) natural gas.

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

#### 1.3.4 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.

The seismic surveys are expected to take 6 - 8 months to complete and will require a crew of 200 - 300 persons. The drilling activities will require manpower of 80 – 100 per well.

#### 1.4 Project Cost

The estimated cost of the project is given below:

- 1) Physical Surveys Cost estimated to be approximately INR 8 Crore.
- 2) Average Cost per well for exploratory & appraisal well drilling is estimated to be INR 16 Crore.
- 3) Average cost of each EPU (Early Production Unit)/ QPU (Quick Processing Unit) is estimated to be INR 44 Crore.