Rajpipla Pipeline Project (Vanthevad -Rajpipla Section): <u>Diversion of 0.6160. Hect.</u> (Bharuch SF Div. - 0.0400 Hect. + Narmada Forest Div. - 0.5560 Hect. + Narmada SF Div. - 0.0200 Hect.) Of Protected Forest / Reserved Forest Land (Road Side Strip land) for laying 18"dia Natural Gas Pipeline along with OFC from Village Amboli, Taluka Ankleshwar, Dist Bharuch to Rajpipla City, Taluka Nandod, Dist Narmada.

Annexure - 4

PROJECT REPORT

INTRODUCTION:

Gujarat State Petronet Limited (GSPL), having the registered office of the company situated in the State of Gujarat at Gandhinagar.

Gujarat State Petronet Limited, (GSPL) is currently in the business of Natural Gas distribution throughout pipeline and supplying Natural Gas to more than 85000 satisfied industries, commercial and domestic customer in the cities of Gujarat State.

As a part of the project, GSPL has planned to lay 18"dia Natural Gas Pipeline along with OFC from GSPL tap off staion in Village Amboli, Taluka Ankleshwar, District Bharuch to Village Rajpipla, Taluka Nandod, District Narmada to supply natural gas to Rajpipla City and its surrounding areas in Narmada District, of Gujarat State. The proposed pipeline will also be laid by crossing the existing ROW of various roads at a depth of 1.2 meter below the lowest ground level. GSPL will cross the various Roads by Trench less Technique Horizontal Directional Drilling (HDD) Method. An OFC will also will also lay along with the pipeline for monitoring purpose, which will be integral part of the pipeline.

One of the main objects to be pursued by the company on its incorporation is to design lay, construct and install pipeline for gas transportation and other installation including related equipment's, pipes, valves fillings, meters and other allied accessories necessary and useful for the supply of gas.

Investigation: -

The route has been carefully selected to minimize total length and forests based on desktop study and reconnaissance survey carried out by consultants M/s. Secon Pvt. Ltd.

The alignment is selected in such a way that while crossing the area under forest cutting of trees is minimized / avoided.

Design:-

The entire pipeline will be designed to withstand a Maximum Design Pressure of 98 Barg. The design code that generally will be followed would be ASME B31.8 PNGRB technical guidelines. However, good engineering practices and other guidelines from other international standards like OISD (Oil Industries and Safety Directorate) will be followed as felt necessary to make the pipeline operation standard and safe. 20% excess flow capacity will be built in to pipe size to provide flexibility to the customer and to absorb hourly fluctuations of its consumption and spread its committed quantity over 24 hours.

Pipe material: -

Pipe material would be American Petroleum Institute (API) grade steel, inspected at mills through third party inspection agency. All valves would be full-bore ball with gas/gas-oil actuators for operation. Entire pipeline would be pig-gable. All pipe fittings would be matching type and class.

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Corrosion protection: -

The pipeline will be coated with 3 layers of Polyethylene (PE). All field joints will be coated with Raychem sleeve or equivalent followed by Holiday detection to ensure continuity of corrosion protective layer. A suitable, impressed current cathodic protection system will be provided as an additional protection to the pipeline.

A competent pipe laying contractor will be engaged for this work. The project will be monitored at site and office levels through latest project management software system like MS.

The pipeline will be constructed as per the latest international standards like ASME B31.8 and PNGRB technical guidelines. All good engineering practices will be followed during fabrication and laying of the pipe including usage of approved welding procedures, qualified welders and will identified consumable. Radiography of weld joints will be carried out as per applicable standard. Periodic pigging of the pipeline during construction will ensure expeditious completion and smooth commissioning. Entire execution will be supervised by a competent Third Party Inspection (TPI) agency who will in turn test and certify the pipeline trial commissioning will also be done under the supervision of this TPI.

Investments:-

The estimated total cost of the project is Rs. 80 Cr. Approx.

Time Schedule:

The completion schedule for this project is 2022 -23.

Place : Gandhinagar Date : 14/05/2022 For, Gujarat State Petronet Ltd

Rajesh Suhane AGM (R & C)