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ED-P&P (JSP)  
HB

HEADQUARTER'S OFFICE  
PETROLEUM HOUSE,  
CO.SECY'S OFFICE

November 10, 2017

Co.Secy/SMB/2017

605<sup>th</sup> Board Meeting held on  
September 08, 2017

We give below the extract from the Minutes of the 605<sup>th</sup> Board Meeting held on September 08, 2017 on the item mentioned below for your records / necessary follow-up action.

As per the directions of the Board of Directors, the concerned Functional Heads are requested to urgently provide details of action taken/action in progress/ current status etc, on the decision/s of the Board, after due clearance of the concerned Functional Directors. This would enable the Company Secretary's Dept to compile and submit the same at the next Board Meeting.

A-8: Approval for Project and Appropriation of funds for extension of Visakh-Vijayawada-Secunderabad Pipeline (VVSPL) from Vijayawada to Dharmapuri and construction of marketing terminal at Dharmapuri.

Shri J S Prasad explaining the proposal highlighted inter alia as under :

Proposal

- Board approved Visakh refinery modernization project at an estimated cost of Rs.20,928 Cr. for capacity expansion of Visakh Refinery from 8.3 MMTPA to 15 MMTPA in 591<sup>st</sup> meeting dt.20.07.2016. The post VRMP expansion white oil slate projected by VR is 11.7 MMTPA up from the existing level of 5.9 MMTPA. The scheduled project completion is by 19<sup>th</sup> July 2020.
- In order to evacuate this additional White Oil production of 5.8 MMTPA, the various deficit markets in close proximity to VR were studied and it is proposed to evacuate 3.1MMTPA to SZ markets & 3.3 MMTPA to EZ markets of HPC by coastal / rail movement.
- Various options viz. Vijayawada – Dharmapuri Pipeline, Secunderabad Solapur Pipeline & Visakh-Raipur-Nagpur Pipeline were studied for evacuating the above additional throughput through pipelines. Visakh-Raipur-Nagpur Pipeline was found to be unviable due to low Volume and long length. Industry is in discussion for developing Secunderbad-Solapur Pipeline jointly for evacuation of proposed West Coast Refinery. Vijayawada-Dharmapuri Pipeline was found to be the viable option for evacuation of VR product as compared to all the other modes of evacuation of VR product to Tamilnadu markets.

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- Based on the detailed supply demand analysis for the year 2020-21 made by Pipeline group after discussion with IMM, O&D etc., it is observed that up to 8 MMTPA can be evacuated through VVSPL by extension pipeline from Vijayawada to Dharmapuri for SZ/Tamilnadu market. The same is with predominant mix of our own markets and the most likely PSU OMC demand and with due consideration for respective PSU pipeline infrastructure plans.
- Visakh Vijayawada pipeline was commissioned in May 1998 and subsequently extended up to Secunderabad in March 2002. Phase-I capacity of Visakh-Vijayawada-Secunderabad pipeline (VVSPL) is 5.38 MMTPA.
- Board has approved Appropriation of funds for the following proposals vide 593<sup>rd</sup> meeting dtd 16.09.2016.
  - a. Rs.407 Cr. towards VVSPL Capacity expansion from 5.38 to 8.68 MMTPA and OSTT/SS Jetty subsea pipeline project.
  - b. Rs.75 Cr. towards acquisition of Dharmapuri terminal land.
  - c. Rs.10 Cr. for carrying out pre-project activities for VVSPL Extension pipelines viz. Vijayawada-Dharmapuri pipeline & Secunderabad-Solapur pipeline (VR Expansion evacuation project).
- As a part of pre-project activities of VR Expansion-Evacuation project, detailed feasibility study has been carried out by M/S. Mecon Ltd. for laying VVSPL Extension line from Vijayawada to Dharmapuri, with a green field terminal at Dharmapuri, for supplies to SZ-Tamilnadu market (except Chennai) along with a TOP at existing Kadapa Depot.
- M/S. Mecon Ltd. have submitted the detailed cost estimate as of April 2017 for VVSPL Extension line to Dharmapuri along with a new marketing terminal at Dharmapuri.
- Extension of VVSPL up to western region and connecting to Mumbai Pune Solapur pipeline (MPSPL) was also considered. However, the standalone IRR for this works out to be very low and hence it is proposed to take up this pipeline jointly with Industry.

**A. Salient Features of the Detailed Feasibility Study**

**a. VDPL Extension Line:**

The proposed multiproduct (MS, HSD, SKO) Vijayawada- Dharmapuri Pipeline (VDPL) of 670 km length (approx.) will originate from existing VVSPL Vijayawada pump station in AP to the proposed Terminal at Dharmapuri in Tamilnadu with a TOP at the existing Kadapa Depot. VDPL will have a Phase I capacity of 4.24 MMTPA with a total of 4 no. pump stations and the pipeline can be expanded to 5.85 MMTPA with 3 nos. additional intermediate pump stations.

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#### **b. Dharmapuri Terminal**

Proposed Terminal at Dharmapuri will have storage capacity of approx. 2.16 lakh KL handling HSD, MS, SKO, Ethanol & Biodiesel. Terminal will also have 16-Bay Tank Truck Gantry and 54 BTPN Single Spur Tank wagon loading gantry.

#### **B. Supply Linkages:**

Product received at Dharmapuri Terminal by Pipeline will further be moved by rail to Madurai, Trichy, Coimbatore, Bengaluru & Tirunelveli whereas Sankari, Narimanam & Karur will be supplied by Road.

#### **C. Project Cost:**

Project cost as per DFR prepared by M/s Mecon is Rs 2530 Crs which is inclusive of cost provision for EPMC (@ 3.5% of capital cost), Owners expenses (@ 3.5 % of Project cost), start-up & Commissioning (@ 0.5 % of capital cost) and contingency (@5% of Overall cost) exclusive of Interest during construction.

**Total Project Cost including Interest during Construction of Rs. 147 Crs is estimated at Rs. 2677 Crs.**

#### **Working Capital Margin:**

The Working capital margin of Rs. 54 Crs has been assessed basis the incremental product inventory value required for line fill, Tank Dead Stock and five days of MS throughput volumes ex-Dharmapuri Terminal, vis a vis working capital presently used in Rail transportation namely for in transit product inventory. 25% of the net working capital is considered as Margin Money basis Visakh RTP @ Rs. 27335 per KL, as of 30/04/2017 & used in IRR calculation.

**D. Financial Appraisal:** The investment envisaged under this proposal has been appraised by M/S. Price Water house Coopers Pvt. Ltd. and is found to be viable. While arriving at logistics savings, alternative of transporting the product post VR expansion by coastal movement to Chennai and onward rail transportation to all TN locations and Bengaluru has been considered. On the total estimated investment of Rs.2677 Cr., the project IRR is coming to 15.27%. The various sensitivity case IRRs are ranging from 15.27 % to 13.55%.

**E. Project Completion Time:** The project is envisaged to be completed in 36 months from the date of Board Approval and receipt of all MoEF/SPCB clearances. It is envisaged that MoEF/SPCB clearances will take 1 year & critical forest approvals 2years from the date of Board Approval.

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F. **LAM Clause:** As per LAM Chapter V – Capital Projects, Clause 5.2 g, approving authority for Plan projects over Rs.100 Crs. is Board.

CFD vide meeting dated 19<sup>th</sup> August 2017 has concurred for putting up the proposal to Investment Committee/Board of Directors.

**Budgetary provision:** The Funding for Extension of VVPSL from Vijayawada to Dharmapuri and construction of marketing terminal at Dharmapuri will be made from 2017-18 RE for Annual Plan outlay for VVSPL expansion & OSTT-Jetty Subsea pipeline project line entry. Out of Rs. 2677 Crs fund requirement for Extension of VVPSL from Vijayawada to Dharmapuri and construction of marketing terminal at Dharmapuri, new AR of Rs 2592 Crs will be created and sum of Rs 85 Crs will be transferred from old AR no. 60169028 to this AR. Appropriated amount of Rs 85 Crs includes Rs 75 Crs towards acquisition of Dharmapuri terminal land & Rs.10 Cr. for carrying out pre-project activities of VR Expansion-Evacuation project.

G. **Approval:**

View above approval of Board of Directors is sought for approval of Project and appropriation of Rs. 2677 Crore to execute the proposed project with completion period of 36 months from the date of Board Approval and receipt of all MoEF/SPCB clearances as per the details given under:

- (a) Vijayawada Dharmapuri Pipeline along with associated facilities, at an estimated cost of Rs. 1949 Cr., including Pre-project interest (PPI) of Rs 107 Cr.
- (b) New Terminal at Dharmapuri at an estimated Capital cost of Rs. 728 Cr., including land cost of Rs.75 Cr. and Pre-project interest (PPI) of Rs 40 Cr.

The Investment Committee of the Board at its Meeting held on 7/9/2017 reviewed the proposal and recommended for placing before the Board for its consideration.

**Discussion Points :**

- The salient aspects of the proposal covering the Board approval obtained earlier, implementation of VR expansion and thereby increase in the white oil production at VR and the need for evacuation of the products from Visakh Refinery , DFR and Reconnaissance survey of the project carried out, various evacuation scenarios, product demand considered for the year 2021-22 including growth rates upto 2029-30 on most conservative basis, major facilities envisaged, total project cost, revenues i.e savings in alternate transportation, net cash flows, IRR for the project, sensitivity analysis, project completion schedule etc., were highlighted to the Board.





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- To a query from the Board it was stated that obtaining land for setting up of terminal at Dharmapuri will not be a constraint since District Purchase Committee is involved. Further presently there are no problems in laying of pipeline for product movement at the Tamilnadu end as other companies like IOC, GAIL have also obtained permission for laying of pipelines for movement of products. However, the pipeline to be laid in Tamilnadu to connect Dharmapuri Terminal is kept minimum.
- It was stated that the pipeline project is expected to be completed co-terminus with commissioning of Visakh Refinery expansion project.
- To a query from the Board it was stated that the project will be completed within three years from the date of obtaining Environmental Clearance. The Board observed that the project needs to be completed expeditiously by March 2021. For this purpose all efforts should be made to obtain the Environmental Clearance within a period of nine months, and not one year as envisaged in the proposal.
- To a query from the Board it was stated that the feasibility of various options for movement of products were fully examined and the options selected for this purpose as proposed is the best option. Other options of product movement in future from MRPL, HMEL, RRP etc have also been examined.

**Decision :**

The Board after due deliberations accorded its approval to the Proposal and adopted the following Resolutions :

- **RESOLVED** that approval of the Board of Directors be and is hereby accorded for Extension of Visakh-Vijayawada-Secunderabad Pipeline (VVSPL) from Vijayawada to Dharmapuri.
- **RESOLVED** further that approval of the Board of Directors be and is hereby accorded for appropriation of Rs.2677 crore (Rupees Two Thousand Six Hundred Seventy Seven Crore only) to execute the proposed project with completion period of 45 months from the date of approval of the project (including 9 months for receipt of MoEF /SPCB clearances), as per details given below :-
  - Vijayawada Dharmapuri Pipeline along with associated facilities at an estimated cost of Rs.1949 crore (Rupees One Thousand Nine Hundred Forty Nine Crore only), including Pre-project interest (PPI) of Rs.107 crore (Rupees One hundred Seven Crore only)

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- New Terminal at Dharmapuri at an estimated Capital Cost of Rs.728 crore(Rupees Seven Hundred Twenty Eight Crore Only), including land cost of Rs.75 crore (Rupees Seventy Five Crore Only) and Pre-project interest (PPI) of Rs.40 crore (Rupees Forty Crore Only).

Shrikant M Bhosekar  
Company Secretary

Vb

Cc: Director – M