



A Navratna Company

QUEST

A Glimpse into the world of Engineers India Limited



Hydrocarbons and Beyond

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Delivering Excellence through People

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Oil & Gas

EIL wins PMC Services Contract for expansion of Refinery in Bangladesh

Venturing into a new territory to increase its international footprint and to tap the potential in developing countries, EIL recently won its largest ever single consultancy assignment in Bangladesh.

EIL formally entered into a contract with Bangladesh Petroleum Corporation (BPC), which was signed on 19th April 2016 in presence of Hon'ble Minister for Petroleum and Natural Gas (IC), Mr. Dharmendra Pradhan; Hon'ble State Minister for Power and Energy of Bangladesh, Mr. Nasrul Hamid; C&MD – EIL, Mr. Sanjay Gupta and other senior officials of EIL, BPC and Eastern Refinery Limited (ERL). BPC will implement the ERL Unit-2 project at a cost of USD 1.7 bn over the next three years. ERL refinery was set up at Patenga in 1968 with refining capacity of 1.5 MMTPA, which after the implementation of this project would go to 4.5 MMTPA.

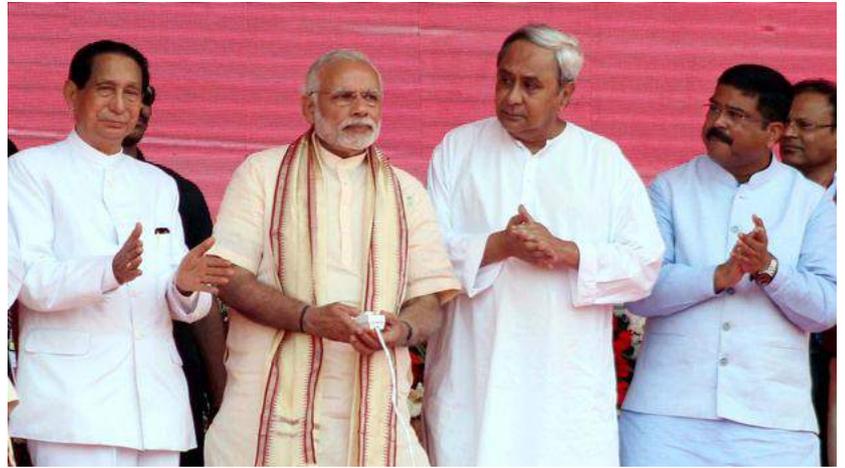
Mechanical Completion of RO Plant at Gujarat Refinery

The Mechanical Completion for all works under Installation of RO (Reverse Osmosis) Plant at Gujarat Refinery, Vadodra has been recently achieved. This Refinery is owned by Indian Oil Corporation (IOCL) and EIL was hired as the engineer-in-charge. The RO Plant has a capacity of 1200 cubic Meter per hour. The Effluents from the Effluent Treatment Plant are reprocessed through this RO Plant to feed the Permeate and cooling water requirement of Gujarat refinery. The plant has been completed in a record time of 16 months.

BS-VI Compliance at IOCL (Indian Oil Corporation Ltd.)

EIL has completed configuration studies for upgradation of various fuel supplies at IOCL's different locations to make them compliant to BS-VI fuel quality specifications. Basic design and engineering activities have also been initiated by EIL to meet the completion targets set by MoPNG.

IOCL Paradip Refinery dedicated to the nation



IOCL's Paradip Refinery in Odisha was dedicated to the Nation on February 7, 2016 by Hon'ble Prime Minister of India Sh Narendra Modi in presence of Hon'ble Minister for Petroleum and Natural Gas (Independent Charge), Mr. Dharmendra Pradhan, C&MD – EIL, Mr. Sanjay Gupta and other senior officials. EIL had provided engineering and construction supervision services for SPM (Single Point Mooring), Pipeline & Jetty facilities for this refinery. Additionally, EIL had also provided PMC services for CPP (Captive Power Plant) here. During the initial stage of the project, EIL had also executed the dredging and reclamation project for creating the land parcel for the refinery complex.

Vizag Refinery Modernisation Project (VRMP)

HPCL is implementing the expansion of its Vizag refinery to enhance its capacity from 8.33 MMTPA to 15 MMTPA. The configuration for refinery expansion is developed by EIL. VRMP will be a brownfield project which shall involve both installation of new units and revamps of existing units. The expansion project besides capacity enhancement envisages upgradation of the entire residue to achieve high distillate yields. The project will also produce fuel products complying to BS-VI quality.

BORL Refinery expansion – Bina

Bharat Oman Refineries Ltd. (BORL) is implementing a low cost expansion of its existing refinery in Madhya Pradesh, India to enhance the crude throughput from 6.0 MMTPA to 7.2 MMTPA. Post expansion, the refinery shall also become capable of producing BS-VI quality fuels.

Fertilizer

2300 MTPD Ammonia Plant of Indorama, Nigeria commissioned



2300 MTPD ammonia plant of Indorama Fertilizer Project at Port Harcourt, Nigeria was commissioned on April 17, 2016. EIL has rendered PMC services for this project wherein KBR/TOYO is the licensor and TOYO/Daewoo Nigeria Limited consortium is the EPCC contractor. Utility & offsite has been commissioned and urea plant is in the final stage of commissioning.

The Indorama Fertilizer Project consists of ammonia plant (2300 MTPD), urea plant (4000 MTPD) and material handling system. The project has been completed in record time of 36.5 months, thus becoming one of the fastest completed such project in Nigeria.

Smart City – repeat order for Rampur city

Pursuant to the successful completion of the Smart City Proposal (SCP) works for the city of Rampur, the Regional Centre for Urban and Environment Studies (RCUES), Lucknow once again bestowed faith in EIL for augmentation of the smart city proposal for the city of Rampur. The repeat order was given to EIL on nomination basis with a time duration of two months. The revised SCP for the Round II of the Smart City Challenge is required to be submitted by 30th June 2016 to MoUD. The Team EIL is presently interacting with the State Govt officials and the city officials to revise the SCP and are confident of submitting the same in the scheduled timeline.

DPR for Vijayawada Airport

EIL has bagged a prestigious assignment in Infrastructure /Aviation Sector from Airports Authority of India (AAI) to analyze and prepare a Detailed Project Report and Master Plan for Vijayawada Airport. This assignment is strategic in nature for both AAI and EIL as the collaboration would open a new business frontier for EIL in Airport Infrastructure segment. Participating in a highly competitive bidding process, EIL completed the bidding procedure in record 7 days of time and secured this opportunity. Whilst the assignment is still on, EIL has been commended at various levels of AAI for its best practices and consulting acumen in this sector.

Infrastructure

Make In India (MII)

Pursuant to the coveted Make in India initiative, a focused and sustained approach has been adopted by EIL. Primarily being in the consulting domain of oil and gas sector, EIL has been actively pursuing the drive to sensitise identified vendors of both midstream & downstream segment of hydrocarbon value chain. Under the ambit of Make In India campaign, EIL had earlier convened two interactive meets as under:

- **MII Meet – I** : Domestic Suppliers Meet at Mumbai on April 28, 2015
- **MII Meet – II** : Overseas Suppliers Meet at New Delhi on August 28, 2015

In continuation to the aforesaid efforts, an interactive workshop was organized on April 29, 2016 at EIL's Complex at Gurugram. The workshop was convened by EIL under the aegis of Ministry of Petroleum and Natural Gas (MoP&NG) and with the collaboration of M/s Deloitte, the knowledge partner of MoP&NG.

The interactive workshop was attended by more than 80 senior level representatives of Oil & Gas sector PSUs, Domestic & Overseas multinational companies.



Delivering the key note address, Sh. Sanjay Gupta, C&MD of EIL narrated the industry outlook of Oil & Gas sector in India along with the significant opportunities that this sector is poised to offer. Being the Refining hub of APAC region and characterised by a coast line of 7,500 km., he portrayed the Vantage India perspective. Under the premise of Make In India, he outlined the various opportunities that the upstream, midstream and downstream sector offers with specific emphasis on the LNG value chain including the cutting edge technologies and IPR on cryogenics and cold boxes.

In his concluding remark, C&MD, EIL expressed his gratitude to the esteemed clients of EIL- PSUs and other organisations of Oil & Gas sector, the partners in progress - the several vendors, suppliers and collaborators who have been instrumental in the progress trajectory of EIL.

Training and R&D

Collaboration agreement signed with IOCL for development and marketing of INDAdapt Unit

EIL-R&D recently signed a collaboration agreement with IOCL for development and marketing of adsorptive desulfurization process for gasoline. The technology, which will be marketed under the name INDAdaptG, shall enable EIL and IOCL to license process units based on indigenous technology. The reactor internals will be based on proprietary design of EIL-R&D (Research & Development).

R&D division of EIL files 5 patents

Five new patents have been filed by the R&D Division of EIL during the financial year 2015-16. Brief outline of these filed patents are as under:

- **Apparatus for low pressure H₂S absorption and process:** This patent provides an apparatus for low pressure H₂S absorption and associated process for low pressure H₂S absorption.
Trademark : EngHOG
- **Apparatus and method for removal of sulfur-containing impurities:** Efficient & economic solution using Proprietary equipment for Treating of Light Hydrocarbon using Caustic wash for Removal of Sulphur components (H₂S and mercaptan).
Trademark : EngTreat^L / EngTreat^N
- **A process for recovering hydrogen from off Gas stream and a system thereof:** Technology / Process Scheme for Recovery of Hydrogen from Hydrogen containing Refinery Offgases using Low Temperature Process (Cryogenic Process).
Trademark : EngCryo
- **Low pressure process for recovering H₂S from Claus tail gas and a system for absorbing H₂S:** It is a low pressure process for recovering H₂S from Claus tail gas.
Trademark : EngSulfTG
- **System for gas-liquid distribution on a catalyst bed in a trickle bed reactor:** This invention relates to a system for uniform gas liquid distribution on a catalyst bed in a trickle bed reactor

EIL conducts training for BAPCO, Bahrain

EIL recently conducted training for officials of Bahrain Petroleum Company (BAPCO), Bahrain. The duration of the program for different topics ranged from 2 to 20 days. The various topics on which the training was imparted were namely Centrifugal Pumps and Mechanical Seals, Electrical Calculations for sizing of transformers, circuit breakers, cables & earthing System, Pressure Relief System and Piping Design for #3 SRU apart from Structural, Architectural, Piping design etc.

EIL imparts Training to Engineers from Dangote Oil Refining Company



EIL has commenced training of 50 executive trainee engineers from M/s Dangote Oil Refining Company (DORC) in its Training and Development Centre at Gurgaon. During the month long programme, the trainee Engineers of DORC will be provided an insight into various facets of Project Management, Process Design, Detailed Engineering and Construction Management by in-house faculty. After the completion of class room training, DORC trainee engineers will join the Dangote task force for on the job training.

EIL Training and Development Centre is well equipped to provide similar and customised training to its external stakeholders.

Accolades

Ms Vartika Shukla, ED (R&D), EIL was honoured by President of India for Outstanding Woman Manager Award, at the SCOPE Excellence Awards held in April, 2016.



For feedback and/or details on sections referred, please write to us at newsletter@eil.co.in

EIL is a Navratna Engineering Consulting Organisation under the aegis of MoP&NG and has been providing services to the Hydrocarbon Industry in India and abroad for over 50 years now. Practically, all the hydrocarbon sector projects in India have seen EIL's involvement, right from 'Concept to Commissioning'.

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