One-page descriptive note on each project costing Rs 1000 crore & above

1. Name of the Project: Numaligarh Refinery Expansion Project (NREP)

- Name of CPSE executing the Project: Numaligarh Refinery Limited
- Project Information/ Brief of the Project (including cost): The approved cost of the project is Rs. 28,026 crore. Revised Cost Estimate of Rs. 33,901 crore is under approval and being reviewed at MoP&NG. The expansion project has been segregated into two parts, namely, a) 6 million refinery at Numaligarh and b) Paradip-Numaligarh Crude pipeline along with crude oil import terminal. Accordingly, budget allocations have also been segregated for monitoring and control. Anticipated project completion is December 2025.

• Reasons for selecting greenfield/brownfield:

- **a)** As the 6 Million refinery project is implementing inside the existing the refinery premises, hence the project is considered as brownfield project.
- **b)** The crude oil pipeline from Paradeep to Numaligarh is a cross country pipeline wherein the projects requires acquisition of land and ROU.

• Benefit/Advantage of the Project:

- Self-sufficiency in fulfilling the growing demand of auto fuels in East and North-East Region.
- Production of LPG will result in reduction import of the product to Northeast India.
- o Export opportunities to neighbouring countries like Myanmar, Bangladesh, etc.
- Build opportunities for diversification to petrochemicals in future by producing propylene.
- Employment opportunities for over 10000 skilled and unskilled workers in the region.

2. <u>Name of the Project: Petrochemical Project</u>

- Name of CPSE executing the Project: Numaligarh Refinery Limited
- Project Information/ Brief of the Project (including cost): The project involves setting up of a 360 KTPA Poly Propylene Unit (PPU) and its associated facilities at Numaligarh. The approved cost for the project is Rs. 7,231 crore.

• Reasons for selecting greenfield/brownfield:

As the project is implementing inside the existing the refinery premises, hence the project is considered as brownfield project.

 Benefit/Advantage of the Project: The entire project will be integrated with the units being set up as part of Numaligarh Refinery Expansion Project (NREP). VGO Hydrotreating facilities will be part of the RPTU (Residue Processing and Treating Unit) being set up under NREP. Propylene Recovery Unit will be set up downstream of PFCC (Petro Fluidized Catalytic Cracker) unit of NREP for separation of Propylene which will be a feedstock for Polypropylene Unit.

- 3. Name of the Project: Investment in Assam Bio Ethanol Private Ltd. (JV)
- Name of CPSE executing the Project: Numaligarh Refinery Limited
- Project Information/ Brief of the Project (including cost): NRL is executing a 2G bio-refinery project in the state of Assam through its Joint Venture Company Assam Bio-Refinery Pvt. Limited (ABRPL). NRL owns 50% share in the JV company ABRPL and remaining 50% equity is shared between two Finnish companies viz. M/s Fortum BV3 and M/s Chempolis. Approved cost of the project is INR 4,200 crore. NRL's investment in the JV is INR 138 crore.
- Reasons for selecting greenfield/brownfield:

As the project is implementing in the acquired land, hence the project is considered as greenfield project.

• Benefit/Advantage of the Project:

- Ethanol produced will be used to blend with Motor Spirit in line with Govt. of India's aim of achieving 20% ethanol blending by the year 2025.
- The bio refinery project aims to reduce greenhouse gas emissions, reduce crude oil import dependency and achieve forex savings, provide remunerative income to marginal farmers, and to create employment opportunities by way of engagement of local population in the region.
- Indirect employment will be generated in bamboo plantation and supply chain. As per the planned bio-mass aggregation model, bamboo will be aggregated, dried and chipped mostly in rural area before transportation to Numaligarh.
- It is envisaged that Ethanol will substitute petrol to the same extent and thereby reduce import of crude required for production of petrol in the country.
- 4. Name of the Project: Diesel Hydrotreater Unit of 0.7 MMT
- Name of CPSE executing the Project: Numaligarh Refinery Limited
- Project Information/ Brief of the Project (including cost): In line with "Auto Fuel Vision Policy 2025" and Government of India's directives to produce clean fuel, NRL had set-up 0.7 MMTPA ultra-low-sulphur-diesel hydro-treating (DHDT) unit with technology from M/s Haldor Topsoe, Denmark. The new DHDT plant has been set up in 2018 within the existing refinery premises of NRL at Numaligarh in Assam at a cost of Rs. 1031 crore. Ceremonial inauguration of the plant was done remotely from Guwahati by Hon'ble Petroleum Minister on 3rd February 2018 at the Oil and Gas pavilion of the Global Investors' Summit Advantage Assam.
- Current Status: The project was commissioned in 2018.
- Reasons for selecting greenfield/brownfield:

As the project was implemented inside the existing the refinery premises, hence the project is considered as brownfield project.

• Benefit/Advantage of the Project: To enable production of BS-VI grade HSD to comply with the Auto Fuel Policy of Govt. of India.