Why enincon’s report upon “Power Transmission In India - 2018”

59.9% OF THE ANNUAL TARGET OF ADDING 23,086 CKM OF TRANSMISSION LINES IN 2017-18 HAS BEEN ACHIEVED AS ON NOVEMBER, 2017

Power transmission sector in India acts a pivotal role in supplying electricity to the end consumers. It is imperative to note that the growth of power sector is dependent on the development of a robust and non collapsible transmission infrastructure. Post FY 2015, the country has witnessed a robust growth in the terms of renewable capacity addition, with solar being the flag bearer of this growth. Courtesy this, the country witnessed a shift in terms of power generation mix with renewable energy catering to 18.20% of the total installed capacity of approximately 330 GW (as on November, 2017). Having said so, India looks to cross 400 GW mark in terms of installed capacity by FY 2022 meaning heavy transition from current inter regional transmission capacity of 78 GW. Dedicated green energy corridors and enhancement of transformation capacity of existing sub stations, along with setting up of new sub stations will primarily drive the opportunity galore in the sector in near future. Also, since the current power traction dynamics in the country is shaping up more in the favour of open access transactions, a robust and more enabled power transmission infrastructure should be developed in order to facilitate, what is termed as “True Open Access”.

Further, the government plans to rope in an investment of USD 2.15 Billion till December, 2018 for electrifying approximately 4 crores of the rural households under Saubhagya Scheme. This demands, more inter regional power transmission transactions and capacity enhancement of intra regional power evacuation infrastructure.

India’s peak load demand is only 164 GW of the achieved installed capacity, and aggravating this situation further, some of India’s power surplus regions do not have adequate power evacuation infrastructure which could alleviate the recurring supply shortages in other parts of the nation. With the intent to facilitate the business proposition, enincon delves deep and aims to deliver a region wise fact pack and trend track analysis of power transmission infrastructure of the country.
The objective of this report is to present region wise as is and anticipated power transmission infrastructure dynamics of the country, which have been tracked in terms of existing and upcoming ckt. Kms of transmission lines and power transmission capability (in MVA). Also, region wise trend and gap evaluation of the proposed and actual capacity addition shall be done in this dossier. Also, government in 2013, announced a National Green Corridor Program (NGCP) worth INR 43,000 Crore to enable the flow of renewable energy into the National Grid Network. Detailed trend track and future forecast of Green Energy Corridor is covered in this dossier.

Further, the report covers major bottlenecks to the sector and also try to provide a detailed analysis to its solution. This report delves deep in finding out the opportunity (in USD) for upcoming transmission capacity in the country by FY 2022 and also gives a detailed insight on funding trend, smart grid trends and outlook, green energy corridors funding trends, sourcing of power equipment trends and congestion trends.
Exhibit 01: Track of Inter Regional Transmission Capacity of India, status as of November 2017 (in MW)

- Northern Region (NR)
- Western Region (WR)
- Eastern Region (ER)
- Southern Region (SR)
- North Eastern Region (NER)

As of March 2015:
- Northern Region: 46450 MW
- Western Region: 78050 MW

As of November 2017:
- Northern Region: 10690 MW
- Western Region: 12790 MW
- Eastern Region: 6000 MW
- Southern Region: 19350 MW
- North Eastern Region: 1260 MW

*Inter-regional transmission Capacity at the end of 12th Plan excludes 600 MW of 132 / 110 kV lines operated in radial mode time to time.

Source: Ministry of Power, enincon research
BUSINESS CASE FOR UPGRADEATION OF POWER TRANSMISSION INFRASTRUCTURE IN INDIA

- Government’s aim to provide 40 million electricity connections under Saubhagya Scheme
- Government plans to unleash an investment opportunity of INR 1 Lakh Crore for the transmission sector
- Incentivization of inter state open access charges by the states when power is being wheeled through renewable sources of energy
- Competitive bidding route gaining ground, encroaching increased private participation
- Approximate investment tune of INR 4697 Crore of the upcoming transmission projects under tariff based competitive bidding
- A capacity addition of 27.07 GW of renewable energy in last three and half years. Target of achieving 175 GW through renewables by FY 2022

REPORT INSIGHTS

- Impact Assessment on power sector due to lagging transmission sector
- Long term open access and inter state transmission status
- Tracking trends and estimating future capacity addition till 2022 in Northern Region
- Tracking trends and estimating future capacity addition till 2022 in Southern Region
- Tracking trends and estimating future capacity addition till 2022 in Eastern Region
- Tracking trends and estimating future capacity addition till 2022 in Western Region
- Region Wise transmission capacity assessment as per long, medium and short term open access transactions

KEY HIGHLIGHTS

- Growth rate required for transmission capacity as per addition in generation capacity
- Cumulative and Pan India power transmission deficiency track vis-à-vis generation capacity addition
- PGCIL growth numbers and projected network capacity addition
- STUs growth numbers and projected network capacity addition
- Impact assessment on power trading business due to transmission congestion in the country
- Region wise asset track of inter and intra regional transmission lines as per its developer
- Identifying cost structure of players – Estimating state wise track
- Identifying opportunity (in USD) for upcoming transmission network by FY 2022
By March 2019, all homes in the country will be provided uninterrupted 24-hour power supply throughout the year

Mr. R.K. Singh (Hon. Minister of State Power)

The impact of power generation on the transmission grid in India is expected to change significantly with a greater share of renewable energy generation. Upfront investment in creating a strong and reliable power transmission network will ensure that the grid is ready to take on the new generation paradigm

Economic Times

KEY QUERIES ADDRESSED

• What would be the market size and business potential for the players in power transmission segment?
• What would be the underlying investment tune into the power sector by FY 2022?
• What would be the total opportunity (in USD) for various value chain players in the power transmission segment by FY 2022?
• Which states will offer deep diving for players into the power transmission business pool till 2022?
• Identifying region wise areas for developing power transmission infrastructure by FY 2022.
• What is the existing capacity and estimating growth of inter regional power transmission capacity by FY 2022?
• What is the existing capacity and estimating growth of power transmission capacity by FY 2022 in Northern Region?
• What is the existing capacity and estimating growth of power transmission capacity by FY 2022 in Southern Region?
• What is the existing capacity and estimating growth of power transmission capacity by FY 2022 in Eastern Region?
• What is the existing capacity and estimating growth of power transmission capacity by FY 2022 in Western Region?
• What would be the growth track of substations and HVDC terminals till FY 2022?
MUST BUY FOR

- Power Transmission Utilities
- Power Distribution Utilities (DISCOMs)
- Original Equipment Manufacturers
- Power Traders
- Banks/Financial Institutions/Project Financing Agencies
- EPC Service Providers
- Consultants
- Research Firms/Research Institutions
- Regulatory Bodies
- Government Agencies

WHAT YOU CAN LEARN? A SNAPSHOT

- Structural overview and snapshot of power transmission sector in India
- Region wise historical trends and power transmission capacity addition forecast till FY 2022
- Gaps realized in capacity addition and the allocated targets
- Region wise tune of investment opportunities in power transmission infrastructure till FY 2022
- Best Performing State Transmission Utility
- Region Wise best performing state
- Equipment sourcing trends for power transmission utilities
- Equipment supplying trends of power transmission utilities from domestic and international manufacturers
- Funding trends in power transmission sector of India
- Region wise smart grid trends, green energy corridors in India
- Region wise opportunity track for equipment suppliers, OEMs, EPC players etc.
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Our Focus, Your Future

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