POWER GENERATION SECTOR

The Market

Energy is vital to industry, transport, infrastructure, information technology, agriculture, household uses and more Pakistan is facing severe energy shortages since 2006. The main reasons include inadequate capacity addition, limited exploration and ineffective exploitation of hydro, coal and renewable potential and inefficient use of energy resources. The situation leads to a demand supply gap resulting in the load-shedding of electricity and gas in the country. The development of indigenous energy resources, such as coal, hydro, alternative and renewable sources, is critical for sustainable economic growth, as envisaged in the Vision 2025. As a result of government continued focus, the power sector is one of the major recipients of Federal PSDP share. Further, 74 per cent of the total China-Pakistan Economic Corridor (CPEC) projects are energy projects, which include: coal, hydro and wind. With all efforts in hand around 5304 MW, power projects are expected to be completed by the year 2016-17. The strategy aims at making electricity more affordable by improving and diversifying the fuel mix and fully harnessing country's renewable energy potential as well as domestic coal.

China-Pakistan Economic Corridor (CPEC) envisages projects in energy and infrastructure, with a total financial outlay of around US$ 46 billion. During July-March 2017, although installed capacity increased to 25,000 MW from 23,000 MW during corresponding period last year, however there was decline in generation as it remained 85,206 GW/h during July-March FY 2017 compared to 101,970 during July-March FY 2016. During FY17, power generation through thermal remained at 64 percent while 30 percent through hydro and nuclear posted at 6 percent.

The Opportunity

Pakistan has large, economically viable resources in wind, solar, biomass, waste, geothermal and hydel power, waiting to be harvested.

HYDRO

Over 60,000 MW Hydel potential exists in northern areas of Pakistan

COAL

175 billion tons total potential of Thar Coal is estimated, equivalent to 50 billion TOE (more than Saudi Arabia and Iran oil reserves)

WIND

The wind map of Pakistan identifies that the country has a potential of about 340,000 MW.

The Gharo-Keti Bander wind corridor, in the South of Pakistan, having an approximate potential of 50,000 MW, is the most attractive for investors at this point due to good resource potential as well as its close proximity to major load centres and the National Grid. Development of Imported and Local Coal Based Power Generation Projects

- 1320 MW Imported Coal based power project at Port Qasim, Karachi by Sinohydro Resources Limited and Al Mirqab Capital.
- 1320 MW Imported Coal based Power Project at Sahiwal by M/s. Huaneng Shandong Ruyi (Pakistan) Energy (Private) Limited.
- 1320 MW Thar Coal based Power Project at Thar Block-II Sindh by M/s. Engro Powergen Thar Limited.
- 300 MW local Coal based power project at PindDadan Khan by M/s. China Machinery Engineering Corporation (CMEC).
- 1320 MW Thar Coal based power project at Thar Block-I by M/s. Shanghai Electric Group Company Limited.
- 1320 MW Imported Coal based Power project at Hub Balochistan by M/s. Hub Power Company Limited.
- 660 MW Imported Coal based Power Project at Port Qasim by M/s. Lucky Electric Power Company Limited.
- 350 MW Imported Coal based Power Project at Port Qasim by M/s. Siddiqsons Energy Limited.
- 163 MW Imported Coal based Power Project at Arifwala, Punjab by M/s. Grange Power Limited (GPL).
- 1320 MW Thar Coal based Power Project at Thar Block-VI, Sindh by Oracle Coalfields PLC, England

Development of Hydropower Projects:

- 102 MW Gulpur Hydropower Project
- 720 MW Karot Hydropower Project
- 870 MW SukiKinari Hydropower Project
- 1100 MW Kohala Hydropower Project
- 590 MW Mahl hydropower project
- 58 MW Turtonas-Uzghor hydropower project
- 80 MW Neckeherdm-Paur hydropower project
- 350 MW Athmuqam hydropower project

Development of R-LNG Based Power Projects:

Processing of around 3600 MW R-LNG based power projects by Quaid-e-Azam thermal Power Limited and National Power Park Management Company Limited.

Development of around 1,000 MW R-LNG based power projects through International Competitive Bidding.

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