## Past Brothers' Power Sector Has Similar Symptoms-E

**11 of 11**

**Conclusion**

- Iran has the cheapest electricity prices in the world at $0.002 per kWh, Syria is next at $0.003 per kWh and Cuba joint-third cheapest at $0.006 per kWh
- The facts ailing the power sector are all too well known. They are recognised and need acting upon on priority to set things right under tight time schedule.
    - Status quo or ostrich approach is not an option anymore.
    - Sector is venerable to severe shocks due to international events.
- Successive governments have pursued a policy of increase in installed base of thermal power generation after conducting a fair power supply and demand analysis including evacuation capacity.
    - IGCEPs and TSEP/TSI have been undertaken and PPIB has pursued projects. Interlinks be installed and HVDC utilization improved.
    - The impact of devaluation and economic downturn was not foreseen and requires steps to review closure of inefficient plants, evaluate the quantum of installed, dependable generation capacity and intermittent RE to determine if actually half or more of power generation installed capacity remains intentionally idle.
    - It be urgently evaluated, as to how quickly and at what cost can the inefficient power plants in the public sector be not declared redundant and moved out of the system like Bangla Desh due to their PPAs nearing maturity or having expired and others by negotiating advance termination of agreements, if economical.
    - It will also encourage CTBM implementation
- Since years, government has been considering privatising public Discos under different modes.
    - It is about time the government finalizes an approach including reviving them under PIDC or PPMC and moved on.
    - The human capital development and project management skills needed to timely execute transmission and distribution projects within the timelines specified in PPAs.
    - The level of power distribution companies' losses and pilferage is not sustainable and requires enforcement of writ, charging actual cost based tariff and giving targeted subsidies to establish RE units in areas with high losses resulting in revenue based load shedding to install solar panels.

- The power purchase agreements made by the governments with the IPPs have added lesser capacity than was envisaged.
  - There is an urgent need to revisit upfront tariff policy initiated in 2005 and renewed in 2007
  - Ensuring that new projects are based on a bidding process as base case in IGCEP 2024 highlights the demand and installed capacity of the whole country is 37,224 MW and 56,046 MW, respectively by the year 2034 and total NPV required to manage generation infrastructure construction, operations and maintenance in the base case scenario indicates 63.31 billion US$ NPV investment requirements both in terms of CAPEX and OPEX of electric power generation by the year 2034
  - Already transparent capacity payments to IPPs be further considered to reduce 'open-ended and liberal" clauses.
  - The shortterm benefit of high energy and lender costs will increase conservation, reduce energy import bill and improve productivity.
  - This is not sustainable due to government inaction as will impact competitiveness of industry and employees with electricity demand decrease and rooftop solar increase adding more to idle capacity resulting in higher tariff.
- Increasing demand and conservation with following measures will also contribute in reducing capacity payments and possibly imported fuel bill
  - Residence be offered electrons and LPG only
  - Indigenous gas be withdrawn from captive power plants, residences and shifted for power generation.
  - In 2023-2024, the indigenization ratio of energy is 74.2% that increases with a steep slope to 76.5% by 2027 due to inclusion of hydro, wind and solar based power plants. There is an overall increase to 87.13% by the year 2034
  - Power generation based on imported fuel is planned to be reduced to 13% (with RFO having no contribution at all in the energy mix, whereas imported coal (due contractual binding) and RLNG is contributing just 9% and 4% in the total energy requirements, respectively)
  - Increase to 56% (46% of hydropower and 10% of variable renewable energy vs 6.5% of total current installed base)
  - And share of indigenous fuels stand at 31%, i.e., 9% of local coal, 5% of local gas and 17% of nuclear in the overall energy mix by the year 2034
  - Hydropower generation capacity has picked up upon CPEC funding as probably was ignored due its high Capex.

Thus challenges will not evaporate nor can they be ignored. The power sector model of the country in its present configuration of installed base, energy mix and capacity payments to IPPs, unchallenged power pilferage is not sustainable and needs to be addressed urgently.

**References**

https://www.researchgate.net/publication/358978662_The_Power_Sector_of_Bangladesh_2021_Excess_Capacity_and_Capacity_Charge_is_weighing_down_the_Bangladesh_Economy_Increase_efficiency_in_an_emergency_manner_with_transition_to_100_Renewables

https://www.tbsnews.net/economy/budget/no-more-capacity-charge-rental-private-power-plants-when-renewing-contract-642026

https://www.linkedin.com/posts/sassi-francesco_us-exxonmobil-turkeys-botas-activity-7194294249859756034-FObw?utm_source=share&utm_medium=member_ios

https://www.linkedin.com/posts/mohammed-alqahtani-603a36a4_lng-partnerships-gas-activity-7196758837352136705-zWbZ?utm_source=share&utm_medium=member_ios

https://www.energyupdate.com.pk/2024/05/16/time-to-act-accelerating-renewables-for-a-sustainable-reliable-affordable-energy-future/

https://www.linkedin.com/posts/zeinabibrahim_various-carbon-pricing-types-that-hold-the-activity-7195538461674635264-v-cf?utm_source=share&utm_medium=member_ios

https://pakobserver.net/new-development-brings-new-opportunities-provides-new-impetus-and-resolves-new-challenges/

Exclusive Article H.E. Jiang Zaidong Ambassador of the People's Republic of China to Pakistan

State of Industry Reports

SOEs Policy Report 2023

https://www.thenews.com.pk/print/1189988-147mw-patrind-hydropower-project-korean-firm-wins-case-against-ntdc-in-london-court-of-arbitration

https://www.thenews.com.pk/print/1189901-pakistan-plans-to-get-tenor-of-1536bn-chinese-ipps-debt-extended