Tauseef H. Farooqi

Background

I am an Electrical Engineer and MBA from top-class Universities of Pakistan and a Columbia Business School graduate in their prestigious Executive Program in Management, Leadership, and Management, with over 31 years of experience in power sector technical, commercial, and legal matters covering project development, contract management, commercially efficient operations, profit maximization, regulatory framework and compliance, etc.

Having managed Abu Dhabi's top three (3) Power and Desalination Plants, I have 20 years of rich experience in a developed country's advanced power and water market. However, when I was selected through a highly competitive hiring process from among topnotch Pakistanis working in developed countries all over the world, I took it as a great challenge to lead and revamp Pakistan's entire power market, covering the Generation, Transmission, Distribution and Innovations Sectors.

Major Challenges

On 4th of August 2018, I took over as Chairman of the National Electric Power Regulatory Authority of Pakistan, facing what I believe are the typical challenges of an underdeveloped country's energy sector, such as:

- Serious Governance Issues
- Lack of Power Sector Planning
- Industry Players working in Silos
- Negative Impact of Interest Groups
- Power Infrastructure Needing Improvements
- Generation Mix: +62% Generation on Imported Fuel
- Regulatory Oversight: Non-Existent on Ground
- Mounting Circular Debt

Upon taking up the office of Chairman, I felt that power sector was starving from much needed and crucial reforms which I intended to rectify. I undertook a number of initiatives to transition NEPRA from being Passive to being Active, and eventually becoming a Proactive Power Regulator that it should have been from its inception. The initiatives were taken to further NEPRA's mandate of regulating the Power Sector of Pakistan to make it an affordable, reliable, and sustainable sector whilst keeping a fine balance between the Consumers' and Investors' interests. Broadly, the initiatives that I have taken along with the help of my Authority Members and Professionals can be categorized into the following three major roles:

Reform Initiatives Lead

Government Relations Strategist and Stakeholder Engagement Specialist

Lead Focused Endeavors

The summary of activities I have performed under these roles is provided in the succeeding paragraphs.

Reform Initiatives Lead

1. Enactment of IGCEP and TSEP in Pakistan

During my tenure, NEPRA (National Electric Power Regulatory Authority) introduced and approved Pakistan's first-ever IGCEP (Indicative Generation Capacity Expansion Plan) in 2021. The second iteration of IGCEP was accompanied by the TSEP (Transmission System Expansion Plan). The goal was to ensure the future integration of low-cost generation and transmission methods to establish an affordable, reliable, and sustainable electricity mix in Pakistan. The plan focused on utilizing indigenous and alternative resources to reduce dependence on imported energy sources. The IGCEP, at its core, is a long-term generation planning document that provides a way forward for meeting Pakistan's electrical demand in the most economical manner possible. Equivalently, the TSEP is a long-term transmission planning document that connects the proposed generation/supply in the IGCEP to the country's demand, ensuring that the transmission system is able to sustain a continuous supply of electricity across Pakistan. However, I realized the importance of having the IGCEP prepared in conjunction with the TSEP, rather than separately. Consequently, NEPRA has approved the Grid Code 2023, which mandates the System Operator to submit a centralized Integrated System Plan, which will be a combined generation and transmission expansion plan for the country, prepared in coordination with all relevant power sector entities. This was a must to reduce cost of electricity to free up country's vital financial resources to be invested in other vital sectors.

2. Launch of CTBCM in Pakistan

Fulfilled a 30-Year dream of this nation by launching CTBCM (Competitive Trading Bilateral Contract Market) to open up Pakistan's Wholesale Power Market by introducing Traders/Electric Power Suppliers to supply electric power to Bulk Power Consumers using more than 1 MW through Bilateral Contracts at their mutually agreed price. The Authority approved the High-level Design of the CTBCM in December 2019,

followed by the CTBCM Detailed Design and Implementation Roadmap, which was approved in November 2020. The Federal Government approved the CTBCM design in 2021 while it was also endorsed by CCI under the National Electricity Policy 2021.

The bilateral transactions under CTBCM will include:


Merchant Plants selling at marginal prices


Business-to-Business with BPCs at negotiated prices


Bilateral sales to DISCOs

Objectives of CTBCM

- Develop and align legal, policy, regulatory and institutional frameworks for CTBCM
- Provide non-discriminatory open access to all market participants
- Attract Private Sector investments and move away from Sovereign Guarantees
- Provide trading environment that results and a reduced consumer tariff
- Improve power system planning & procurement to ensure security of supply
- Enhance efficiency and liquidity through competition in the market
- Introduce payment discipline in power market via bilateral contracts & credit covers
- Increase transparency, predictability and accountability in the market

We covered following four (04) areas while developing CTBCM:

Legal, Policy, Regulatory, and Contractual Framework

Under the Legal, Policy, Regulatory and Contractual framework development, thousands of pages of policies, rules (07 Nos which includes System operator, Market operator, transmission, distribution, supplier, trader and registration Rules), regulations (16 Nos which includes licensing, registration and standards Regulations), Codes (03 Nos includes Market Commercial Code, Grid Code, Agency Code), agreements, guidelines, and standard operating procedures, etc. have been developed. The Distribution Code, IAA registration of PPIB and AEDB, as well as the Connection Agreements are in the final stages of development.

Fast-paced working is also in progress on the development of revised Security Package Documents for all generation technologies and in this regard, PPIB has completed the draft of the SPDs for the Solar and Wind generation technology which includes four agreements: Connection Agreement templates, PPA templates, Buyer Participation Agreement, and Implementation Agreement.
Institutional Reforms

Institutional Reforms

Under the institutional strengthening actions, various interventions are made and some are underway at the implementing power sector entities including DISCOs, CPPA, PPIB, AEDB, NTDC and NPCC to reinforcing their organizational capacities.

All ten (10) DISCOs have established a first-of-its-kind dedicated 20 team members department called Market Implementation and Regulatory Affairs Department (MIRAD) to undertake the Transmission Planning, Forecasting, Contract Management & Regulatory Affairs functions within DISCOs. After extensive restructuring at CPPA, the CPPA has attained strength of around 40 dedicated professionals to perform the operations of the Electricity Market Operator of Pakistan after obtaining Market Operator licence from NEPRA a year before on May 31, 2023.

The restructuring of the System Operator to bring it at par with the international standards and best industry practices, is underway. PPIB & AEDB are being merged to undertake the function of Independent Auction Administrator (IAA) of the competitive wholesale market and NEPRA is in final stage of grant of the IAA registration.

K-Electric is being integrated into the central planning of the Power System of Pakistan, with inclusion of its generation plan in the approved IGCEP. Consultations for the integration of K-Electric in the central dispatch are underway.

Technological Developments

On the technology front, NTDC has implemented the state-of-the-art Secured Metering System (SMS) by installing 711 Automatic Meter Reading (AMR) meters at all the common delivery points (CDPs) of demand and supply side across the country. The SMS project is the heart of the CTBCM, and all the market transactions will rely on the transparent and accurate meter readings at the CDPs. Supervisory Control and Data Acquisition (SCADA) is also being expanded across the NTDC network and Phase-III of the project is expected to be completed in 2025.

CPPA-G has implemented the Market Management System (MMS) to perform the day-to-day market operations and commercial settlement of transactions in a transparent manner. The MMS includes seven modules, including market participants (MPs) and service providers (SPs) registration, Monthly Settlement Management and Metering Information Management to name a few.

NPCC has implemented the System Operator Data Exchange Portal (SDXP) entailing six core processes needed for System Operations. The SDXP is now live at NPCC and helping seamless data exchange between SO and IPPs and providing all the operational data reports readily to the control room, SO management, CPPA-G, and the Market Operator. All generation companies are actively using this portal for availability and dispatch communication with SO control center.

Marginal Price Application has been developed to determine the hourly marginal prices to be used by Market Operator to settle energy imbalances. This application uses the SDXP reports as an input.

Training & Development of Human Force

The most essential, yet oft-ignored, component of any reform process are the people. However, under the power market reforms over the last four years, the power sector entities have been given extensive trainings. As of today, around 5000+ man-days of training has been undertaken. Better yet, this journey is set to continue.

CPPA-G in collaboration with LUMS, has established the Power Sector Center of Excellence (PSCE) that shall impart over 1000+ man-hours of training to power sector entities under 14 training programs spanning over 30 modules, after a comprehensive Training Need Assessment (TNA).
The delivery of market related trainings by CPPA-G through the PSCE is one of the main mandates of the market operator under the approved CTBCM Plan. The main objective of the PSCE initiative is to train key resources from each power sector entity through a central platform specialized in power sector trainings and equip them with the latest knowledge, skills and tools to enable them to better serve the nation.

3. NEPRA-Government Relations

Continuous efforts were made to improve the working relationship between the Regulator and the Government (Ministry of Energy-Power Division and other concerned Ministries, Regulatory Authorities, and State-Owned Enterprises). Regular meetings were held with major industry players like National Transmission and Despatch Company (NTDC) being the custodian of the Transmission System and the System Operator, Central Power Purchasing Agency Guaranteed Limited (CPPAGL) being the Procurer of Electricity on behalf of Government of Pakistan, 10 DISCOs (Distribution Companies), K-Electric being Karachi's Vertically Integrated Utility, and the rest. All stakeholders were effectively engaged to ensure that the Power Sector functioned like a well-oiled machine, with each stakeholder dispatching its duties under the regulatory framework. An example of the efforts made to bring all stakeholders under one roof was the Energy Week 2020 organized at NEPRA, which aimed to deliberate the challenges as well as propose a way forward to the numerous challenges faced by the Power Sector of Pakistan.

4. Government Advisory

During my term, I have ensured active participation of NEPRA in developing the National Electricity Policy 2021, ARE Policy 2019, National Electricity Plan, and other key assignments. NEPRA made sure that the best techno-commercial and regulatory input was made available to the Government through active advisories, especially in improving the Governance by effective consultations, encouraging the hiring of right people for the right jobs and strengthening the transmission and distribution infrastructure. In this regard, numerous meetings, in addition to detailed written correspondence, were held with Government bodies to ensure all stakeholders are on the same page in the pursuit of an affordable, reliable and sustainable future for the consumers of the Power Sector of Pakistan.

5. Sector Cohesion

Power Sector Change Management for better synchronization of the whole sector by conducting regular information exchange and dialogue sessions including events such as Energy Weeks, Meetings, Brainstorming Sessions, Seminars, Webinars with the help of Multilaterals, Techno-Commercial Sector Experts, Major OEMs, Think Tanks, Subject Specialists, Academia and Interest Groups. The Energy Week 2020 is undoubtedly one of my proudest achievements as Chairman NEPRA. The objective of Energy Week was to bring stakeholders and key players of power sector under one roof and deliberate the challenges as well as way forward for our haemorrhaged power sector that has arrested our economy in a perpetual state of loss. Energy Week provided a platform to assume the protective role of fixing energy plague and work out solutions where principles are preferred to expediency and supreme motive becomes doing things right instead of doing the right things. Unfortunately, subsequent iterations of the Energy Week could not be held due to COVID-19 restrictions and austerity measures in place.

6. Classifying Hydro as Renewable Energy

On my Advisory to the then Prime Minister of Pakistan, hydropower has now been classified as a Renewable Energy Resource, thus instantly increasing the percentage of RE from 5% to 34% in the generation mix of Pakistan. Through this step, Pakistan has declared its intent to contribute effectively to the global efforts to reduce carbon emissions and combat global warming.

7. Climate Change and Transition to Green Energy in Pakistan

The Global Climate Risk Index has ranked Pakistan as the 5th most vulnerable country in the world on account of climate change. To combat this risk, we have embarked upon a massive Green Energy Transition in Pakistan. We initiated 36 green energy projects in Pakistan including Solar, Wind, and Bagasse, worth 1635 MW. We approved 13,000 MW of solar and wind projects to be inducted in the National Grid till 2030, under the IGCEP 2021. This number went up to 20,000 in the subsequent iteration of IGCEP. This represents the ambitious target set by NEPRA for the promotion of RE projects. Further, for the first time in the history of Pakistan, we introduced Competitive Auctions and approved the RFP for a 600 MW Solar PV power generation project in South Punjab with a highly competitive consumer friendly Benchmark Tariff of US Cents 3.41 to signal a shift towards green energy. I advised the Government to set a mammoth goal of transitioning Pakistan from its current 34% of RE (5% Renewable and 29% Hydro) to 62% of RE by 2032.

8. Reduction in Renewable Energy Tariff

In order to increase the share of RE in the generation mix, there was a need to make RE cost-competitive in Pakistan. Accordingly, we created an enabling environment for implementation of RE projects in the country. Aided by the global reduction in prices of RE technology, we offered a tariff of US Cents 3.41 to RE projects in Pakistan, down from US Cents 17. We also achieved a lowering of ROE from 20% to as low as 13%. It is expected that this will act as a watershed moment for RE projects in Pakistan.

9. IPP Tariff Renegotiation

NEPRA played a key role in the IPP Tariff renegotiations that resulted in a saving of Rs. 870 billion over the next 20 years for our motherland.

10. Economic Merit Order (EMO)

NEPRA ensured strict monitoring and compliance of NTDC's performance regarding operation and dispatch of power plants in the country. We deducted billions of rupees on account of lingering System Constraints and cost overruns due to underutilization of efficient and cheaper power plants, resulting in lower electricity bills for consumers.

11. Provincial Grid Companies

For the first time in Pakistan, we promoted competition at the transmission level by giving Transmission Licences to Provincial Grid Companies. These licences were awarded to Sindh and KPK while a licence for Punjab is under process.

12. Loss Reduction and Recovery of DISCOs

During my tenure, we ensured improvement in the recovery, losses, and customer orientation by conducting regular sessions with the DISCOs, while penalizing them for not achieving the set targets. As a result, we brought their yearly loss target down from 15.7% to 11.2%. Through this whole exercise, it is expected the loss targets will be brought down into the single-digits.

13. Online Performance Reporting of NEPra licensees

In order to make NEPRA a Proactive Regulator, it was critical that all data available to power sector entities was stored in digital form and made available online, so that it could be analyzed for better decision-making. We therefore developed portals to collect online performance data from all the generation, transmission and distribution companies.

14. Establishment of NEPRA's Regional Offices and Complaint Redressal

We revised and modified the Consumer Service Manual after 11 years and established regional offices for redressal of consumer complaints at Multan, Faisalabad, Gujranwala, Hyderabad, Sukkur and Gwadar. This helped in raising the consumer complaints redressal volume to 39,110.

15. Industrial Support and Winter Package

We implemented the Industrial Support Package for the consumers of Pakistan (from November 2020 to October 2021) by offering a 25% tariff discount to Large Scale Manufacturing and a 50% tariff rebate to Small and Medium-sized Enterprises that helped achieve a 6% GDP growth rate in those 2 years. Subsequently, we implemented the Winter Package for the consumers of Pakistan (from November 2021 to February 2022). This increased the utilization of power plants in the country during the winter season, which is historically a low-demand season in Pakistan.

16. Subsidies Reform Program

We ensured the implementation of the Subsidies Reform Program – approved phase 1 & 2 to rationalize subsidies for various consumers to improve liquidity and thus, the financial health of the government by reducing subsidies.

Lead Focused Endeavors

17. Modern Initiatives for Enhanced Electricity Reach

NEPRA introduced the NEPRA Licensing (Microgrid) Regulations, 2022 to provide access to sustainable electricity to over 20% of Pakistan's population, which was without access to electricity. We followed it up with the issuance of 2 Microgrid Licences to power 11 villages in the country. Additionally, Wheeling and Electric Vehicle Regulations were also introduced to promote modern techniques for electricity supply and consumption.

18. Regulator-Industry Linkages

I held regular meetings with industry players (legislators, multilaterals, local & international investors, chambers of commerce, and industry experts) to better understand and resolve their issues for sector and industry growth.

19. Meeting Future Leaders of Pakistan

During my tenure, I made monthly visits to universities and invited students to NEPRA, to encourage and inspire young minds into becoming the future leaders of Pakistan.

20. Timely Completion and Submission of State of Industry (SOI) & Annual Reports

For the first time ever in the history of NEPRA, the State of Industry Report and Annual Reports were submitted within the prescribed time limit of the NEPRA Act. Also, the huge volume of data collected as part of the SOI exercise was made available on NERPA's website, in the interest of transparency and providing access to the general public.

21. Power with Prosperity Drive

I initiated a Corporate Social Responsibility (CSR) drive and issued the NEPRA Social Investment Guidelines, 2021 to encourage initiatives by the Power Sector licensees under the UN Sustainable Development Goals. This has resulted in 968 CSR Projects by the licensees with over Rs. 33 billion spent, creating more than 52,000 jobs, out of which around 10,000 jobs are for females. Twice in the past 2 years, NEPRA has celebrated the CSR Awards to honor the top performing Licensees and acknowledged their efforts in the development and well-being of their local communities.

22. Power with Safety Drive

In 2019, NEPRA ensured the earthing of 216,000 individual poles in Karachi and gave Rs. 3.5 million to the families of electrocuted persons, following it up with initiating of earthing of all the poles across the service territories of the remaining DISCOs. To ensure the safety of power sector officials and common people, I introduced the HSE culture by establishing HSE Directorates in each DISCO and other licensees, developed the Power Safety Code and Safety Manual, and celebrated the NEPRA HSE Awards twice to honor the top performing licensees in the HSE space.

23. Power with Security Drive

I initiated the Power with Security drive to protect the Multi-Billion Dollars' worth of Power Sector Assets from cyberattacks. I also introduced the NEPRA (Security of Information Technology and Operational Technology) Regulations, 2022 and formed the Power CERT (Computer Emergency Response Team of power sector) to ensure the cybersecurity of IT and OT of our national critical infrastructure.

24. Power with Unity Drive

We developed an online portal for creating industry and academia linkages to resolve the real-life issues faced by the power sector and use the vital brain power of our faculty and students to provide indigenous solutions.

25. Power with Equality Drive

Championing the women empowerment agenda, I hired 56% of the total female NEPRA employees purely on merit during my tenure. I was also privileged to welcome the very first female Authority Member in NEPRA since its inception in 1997. Under the Power with Equality drive, I ensured maximum representation of females in the entire power sector by working with the top management to provide job opportunities for females as well as opportunities for their growth towards leadership positions in their respective sectors.

Positions Held

Chairman: 5 Aug. 2019 – 4 Aug. 2023
NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (NEPRA)
Regulating the Generation, Transmission, Distribution, and Innovation Sectors of the Power Industry in Pakistan.

Founder & CEO: Oct. 2018 – July 2019
ALTER CONSULTING LTD – KIZAD Abu Dhabi
Providing Consultancy to Energy (Power + Fuels) & Water Projects in my following areas of expertise:
- Projects Development
- Projects Execution & Management
- Training & Development of Human Capital

Commercial Director: Mar. 2005 – Sep. 2018
Taweelah Asia Power Company (TAPCO) – Taweelah B Project
A Project by ADWEA/TAQA and CMS Energy of USA (later on sold to Marubeni)

Commercial Manager: Jan. 2003 – Mar. 2005
Shuweihat CMS International Power Company (SCIPCo) – S1 Project (1.5 B USD)
A Project by ADWEA/TAQA, CMS Energy, USA & International Power, UK

Commercial Manager: Mar. 2000– Dec. 2002
A Project by Emirates CMS Power Company (ECPC) – Taweelah A2 Project (750 M USD)

Commercial Manager: Mar. 1997 – Mar. 2000
Kot Addu Power Company Limited (KAPCO)
A Project by the Government of Pakistan, WAPDA and International Power, UK

Deputy Director Finance: Jun. 1996 – Mar. 1997
Assistant Director (Transmission & Grids Systems): July 1991 – Jun.1994
Water and Power Development Authority (WAPDA)

Sales Executive: July 1990 – June 1991
Jaffer Brother Private Limited – Selling VAX Computers by Digital Equipment Corporation

Education

COLUMBIA BUSINESS SCHOOL – Executive Program in Management (2017-2018)
World's renowned Executive Program encompassing all aspects of Strategy, Leadership, Management, Innovation, Operations, International Finance, Digital Marketing, etc.

LAHORE UNIVERSITY OF MANAGEMENT SCIENCES, PAKISTAN (LUMS) Jul. 1994 – Jun. 1996
Master of Business Administration MBA (Majors in Marketing & Finance) Asian Development Bank Scholarship.

UNIVERSITY OF ENGINEERING & TECHNOLOGY LAHORE, PAKISTAN (UET) NOV. 1985 – DEC 1989
Bachelors of Electrical Engineering BE (Telecommunications) Government of Pakistan Merit Scholarship.