

Evaluation

# National Electric Power Regulatory Authority

Afia Malik

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# Introduction

- NEPRA was established under the Regulation of Generation, Transmission and Distribution of Electric Power Act (NEPRA Act No. XL 1997), to regulate the electricity services in Pakistan.
- In 2018, NEPRA Act was amended to create a legal basis for the development of a competitive electricity market by 2023.

## **Objective of Evaluation**

To review the organisational structure, governance and effectiveness of the National Electric Power Regulatory Authority (NEPRA), to identify flaws in the current regulatory infrastructure and to suggest ways to improve it.

# Organizational Structure

- NEPRA\_ *quasi-judicial* to regulate power sector.

## **Governing Body**

- Is the 'Authority' comprising Chairman and four members (one from each province).
- In the new Act, power sector experience is given preference in the selection of the chairman and four members, which is a positive change.
- To make a quorum for decision-making, the 'Authority' must have three members.
- Decision making at the top, departments only provide inputs.

***NEPRA has become increasingly more centralised; overburdening authority in routine matters.***

- Increase in regulatory meetings on every matter\_ not only delay decisions but affect its quality.
- Consultations with all stakeholders including consumers through public hearings is followed. However, time allocated to general consumers is relatively small.

## **Departments**

- NEPRA is designed with various departments correspond to each basic function of the regulatory body as in NEPRA Act, 1997, no significant change after the amended Act, to support the development of a competitive electricity market.

***Key challenge\_ lack of communications across various units.***

# Organizational Structure

- NEPRA is statutorily empowered to enhance its human resources on such terms and conditions as the 'Authority' deems fit.
- Organisation is incapacitated in terms of professionals.

***Lack of competent staff with regulatory knowledge, experience and training.***

Result is,

- Inadequacy in emergency planning;
- In the preparation to take part in national decision-making and communiqué concerning power sector challenges.
- Delays in preparing the regulatory framework required for the development of a competitive market.

To be effective, NEPRA as a regulatory body is required to have some regulatory standards, regulatory guides and internal guidance for use by the regulatory staff.

***NEPRA is no different from other organisations in Pakistan***

## Organizational Structure\_ NEPRA's *financial Resources*

Year	Fee Income	Other Income	Administrative Expenses	Finance Cost	Tax	Surplus after tax	Other Adjustments	Total Comprehensive Income
<b>2016</b>	918.96	36.2	815.1	4.1	38.2	97.8	(14.5)	83.4
<b>2017</b>	1026.4	29.4	935.6	4.0	43.8	72.4	(14.9)	57.4
<b>2018</b>	1163.4	34.8	1013.5	3.95	53.2	127.6	(15.5)	112.02
<b>2019</b>	1264.0	69.8	1047.1	3.9	114.2	168.5	(50.5)	118.1
<b>2020</b>	1405.03	115.5	1157.2	3.7	123.9	235.7	(48.02)	187.7
<b>2021</b>	1880.3	67.2	1335.2	2.9	182.6	426.8	34.6	461.4

# Regulatory Framework

- Within the broader framework of the 1997 Act, NEPRA has prescribed rules, regulations and guidelines, codes to oversee the power sector. Processes are defined clearly in the NEPRA Regulatory Framework.

After the amendment in Act,

- New rules, regulations and specifications of standards are required.
- It requires the secondary legislative instruments notified before 2018 to be brought in line with the amended NEPRA Act within one year from the date of coming into effect of the Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act, 2018.
- Three years have passed, but the requisites are not in place.
  
- The processes allow for a timely response as rules, regulations and guidelines clearly mention time frame.
- Only the capability of the organisation that can ensure that all its' regulatory decisions and requirements are met in a timely and correct manner.

At NEPRA

- Basic constraint is the *lack of ability to carry out its functions in a timely manner.*

## Licenses

- Most of the cases, the time taken in making the final decision is more than what is prescribed in the rules.
- Penalties for violating contractual terms are seldom applied.
- In the generation licensing decision, the professional ability of an operator to execute the project, financial and technical feasibility of the project are reviewed but no focus to check the capacity required or towards fuel mix.

***Officials at NEPRA complain about the non-availability of the national electricity plan to guide them.***

- Limited role of NEPRA in Power Purchase Agreements\_ prices and guarantees offered to new entrants in the generation sector did not allow competition among the generation companies.
- Contrary to NEPRA regulation, which says that the review and approval of a project are based on least-cost considerations, new contracts have been justified in filling the demand and supply deficit.
- NEPRA determines the generation tariff that will apply to a power plant and the PPA must follow.
- NEPRA Licencing (Generation) Rules, 2000, allowed NEPRA for additional terms and conditions for the good cause. But it is the lack of regulatory oversight that today Pakistan power sector is in a “capacity trap.”
- For distributed generation\_ rules are specified. Evidence suggests new entrants (particularly solar) have faced difficulties in getting through the various initial stages of approval.

## Tariff Determination

- NEPRA Tariff Standards and Procedure Rules (1998) provide guidelines for process and parameters for setting tariffs.
- Before the amendment in NEPRA ACT, NEPRA determined consumer-end tariffs for each distribution company (DISCOs) separately. In the Amended Act, 2018, NEPRA shall determine a uniform tariff for distribution licensees wholly-owned and controlled by a common shareholder, based on consolidated accounts. NEPRA is bound to take guidance from National Electricity Policy to determine, modify or revise rates, charges.
- Tariff structure in Pakistan is not based on regional and consumer-specific long-run marginal cost but is used as an instrument to achieve political and socio-economic objectives.
- Over the years, the determinations process has seen issues in terms of delays; and the regulator not allowing prudent cost.

For both licences and tariff determination

*It would be unfair to attribute all issues to NEPRA. Sometimes delays are from the side of licences or because of legal challenges or government interventions due to political considerations.*

*But still, it is **primarily the regulator which will have to take responsibility and lead reform in this area, especially in terms of providing guidelines and solutions.***



## Performance Standards & Enforcement

- On papers, the regulatory framework for service quality is there. All the companies (generation, transmission and distribution) are bound by law to meet these standards for quality, supply and commercial service; otherwise, they would be eligible for a fine or penalty.

In general, ***the enforcement mechanism is extremely weak at NEPRA. Fines are rarely applied; also, there is no consistent approach to apply a penalty if the company fails to meet standards. No evidence of recovery of these fines.***

- NEPRA role is limited to sending an advisory to the government with reference to DISCO's performance. The authority itself is unable to enforce these performance standards.
- As the reported data revealed, in the last five years, on average about 92 per cent of complaints were resolved. Any information from other resources is not available to counter check NEPRA claims.

# Competitive Market Development

- Under the amended act, the regulator has been granted powers to monitor and enforce the competitive market.
- The successful transition towards a competitive market requires de facto regulatory performance which is dependent on significant preparation not only at NEPRA but all other related institutions.
- Departments at NEPRA are not yet ready for this change. Management has little knowledge of different competitive market models\_ their strengths and weaknesses.

# Regulatory Governance

## **Independence**

- By the provisions of the Act, NEPRA is an autonomous organisation.
- Amendments in the law, where have given more powers in some factors, have compromised regulatory independence in majority of the other factors.
- Empowered to issue such directives, codes, guidelines, circulars or notifications as are necessary to carry out the purposes of this Act and the rules and regulations made hereunder.
- Previously, NEPRA was empowered to make or repeal rules or regulations. In the amended Act, it is only authorised to recommend rules, or to make or repeal regulations.
- In matters of tariffs, NEPRA is not autonomous.
- Financially NEPRA is independent.

## **Accountability & Transparency**

- By law, NEPRA is required to prepare its Annual Reports and the State of Electric Power Services Report and submit to the Council of Common Interests (CCI) and the Federal government. These reports are published regularly but never evaluated at any level.
- Law allowed access to public files open in a convenient form for public inspection; but only those files which authority deems fit.
- Its financial accounts are openly available and audited. Moreover, transparency at NEPRA is ensured through public participation in the decision-making process by holding public hearings.

# Regulatory Governance

## Expertise

- In the past, NEPRA leadership had problems in terms of regulatory expertise. As people from bureaucracy or military didn't have power sector background. By the time, the regulator (member) may develop some understanding of the complexities of the sector his tenure is over.
- With reference to other staff, NEPRA has not been able to develop expertise in relevant areas that may facilitate effective interventions in the future.

## Credibility

- Direct involvement of ministers/ bureaucrats in pricing and licensing decisions can affect regulatory credibility and investment decisions (as in CPEC power projects).
- In the absence of regulatory credibility, investors being aware of organisational risks associated with their investments will demand high tariffs (as happened in IPPs case) to compensate for increased risk.

## Clarity of Roles

- Powers and Functions are spelt out in the Act. NEPRA and government relationship, it is clear, NEPRA will advise the Federal Government, in the formulation of the national electricity plan and policy.
- Regarding tariff it is contradictory\_ NEPRA is supposed to ensure efficient tariff structures and market design for sufficient liquidity in the power markets; while the authority is allowed to determines a uniform tariff for all distribution licensees. Efficiency cannot be ensured through uniform tariffs.

# Effectiveness

## **Balance between Consumer, Investor and Operator**

- The problems faced in the power sector in the last two decades are un-exemplary.
  - the government fiscal and financial issues due to enormous and rising circular debt.
  - consumers remained the worst sufferers\_ not only power outages; a significant increase in electricity prices.
- Excess payments have been made to power producers because of either misreporting by the producers or regulatory oversight.
- Pakistan has the highest cost of electricity across all major consumer groups in South Asia\_ thus, reducing competitiveness of our exports, thereby impacting the country's trade deficit and balance of payment.
- Large cross-subsidies (especially in the favour of domestic and agriculture consumers) and heavy tax incidence are contributing to grid defection by large consumers (industry, commercial and high-end consumers).

# Effectiveness

## **Efficiency, Reliability and Financial Viability**

- The performance of both GENCOs and DISCOs (even privatised K-Electric) remained lacking in terms of all Key Performance Indicators (KPI) for the past many years.
- These inefficiencies not only jeopardise sectors financial viability it negates NEPRA's objective to ensure reliable supply of electricity to consumers.
- NEPRA lacks the authority to make state-owned companies accountable for their performance, whether it is related to operational and commercial inefficiency or related to over-billing to consumers.
- Enforcement of service quality is weak. No mechanism to incentivise for good performance or to impose penalty in case of poor performance.

## **Privatisation and Market Competition**

- Privatisation as such was not directly the function or responsibility of NEPRA nor is it after the amended Act. But under law, NEPRA was supposed to facilitate the process to bring efficiency in the power sector and helps in ensuring competition where feasible. The privatisation process remained slow in the last two decades.
- Moving toward competition and market forces represents the major element of the sector reform program which has still not been implemented in Pakistan.

# Conclusion

- Weak administrative governance in NEPRA\_ overall institutional inability to carry out the desired function effectively.
- NEPRA is lacking in professional expertise to supervise and control the power sector as well as the powers to establish a rational pricing regime.
- Being the regulator, it was NEPRA's job for resolving all the problems in the power sector including system losses, increasing costs and high tariffs.
- It is the outcome of regulatory oversight that the circular debt emerged for the first time in 2006.
- De jure performance is high indicating a regulatory system with many of the necessary qualities for the power sector. De facto performance highlights a significantly poor regulatory functioning in practice.
- NEPRA being an autonomous organisation didn't make serious efforts to improve regulatory infrastructure in the power sector.

# Way Forward\_ Recommendations

- Capacity building\_ through the employment of more tariff specialists, a competent legal team, regulatory economists and analysts, equipped with better and advanced techniques and sufficient background knowledge of Pakistan's Power sector.
- A research wing at NEPRA may also help handle challenges related to market development, new technologies and for giving input in government policy and planning, keeping in mind the ground realities.
  - Decentralisation of decision-making powers for effective and speedy decisions in routine matters is suggested.
  - More use of information and communication technologies to minimise delays; something like e-office, digitisation of all its files/ operations can help improve in-house communications.
- For effective accountability, NEPRA reports (Annual and State of the Industry) must also be evaluated by independent experts. Above all, it is critically important to have some Key Performance Indicators (KPIs) for NEPRA; covering not just sector outcome but also internal efficiency and human resource development of the organisation.
- There is an urgent need to simplify regulatory processes, develop new tariff methodologies, revise KPIs for energy companies.
- NEPRA is in the process of making new rules/regulations/guidelines in line with the Amended Act; it has to complete task at the earliest to ensure that the requisite regulatory framework is in place, before the formal commencement of competitive wholesale market.
- In law, NEPRA is allowed to play purely an advisory role, its recommendations are required to be made publicly available, as well as the responses of the government.





Thank You