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Regulatory Due Diligence Report

Transition of Government- Owned Electric Power Distribution Companies (DISCOs) to Private Ownership

June 2015

USAID POWER DISTRIBUTION PROGRAM

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USAID POWER DISTRIBUTION PROGRAM

LEGAL AND REGULATORY DUE DILIGENCE

TRANSITION OF GOVERNMENT-OWNED ELECTRIC POWER DISTRIBUTION COMPANIES (DISCOS) TO PRIVATE OWNERSHIP

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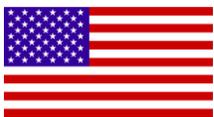
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PREFACE

Since 2010, the United States Agency for International Development (USAID) has provided active support to the Government of Pakistan (GOP) to facilitate reform of the country's electric power sector, with emphasis on improved commercial and technical performance of generation, transmission and distribution operations. The implementing partner for USAID's Power Distribution Program (PDP) to specifically address reforms for government-owned electric power distribution companies (DISCOs) is International Resources Group (IRG), an Engility company. IRG has worked closely with the DISCOs in Pakistan as well as relevant federal and provincial government offices, private sector and stakeholders on a series of distribution reform measures and programs.

In October 2014, IRG sub-contracted the Lahore-based law firm of Cornelius, Lane and Mufti (CLM) to conduct due diligence of the legal and regulatory aspects that should be understood, considered and addressed with the objective of transitioning present-day government-owned management of the DISCOs to private sector ownership and management. The outcome of this work has culminated in two reports:

1. Legal Due Diligence Report: Transition of Government of Pakistan-Owned Electric Power Distribution Companies (DISCOs) to Private Ownership; and
2. Regulatory Due Diligence Report: Transition of Government of Pakistan-Owned Electric Power Distribution Companies (DISCOs) to Private Ownership.

Munawar-us-Salam, Partner at CLM, served as Consultant Team Lead and oversaw the entire process of preparing the reports. Able assistance was provided by Usman Akram Sahi, Senior Associate at CLM, and Sayyed Mubashar Masood, Associated Counsel to CLM, as well as the entire team at CLM. Special thanks to James Connelly, Abid Latif Lodhi, Mary Louise Vitelli and Mary Webster for their guidance during preparation of these reports.

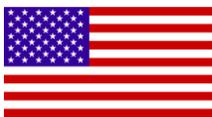
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ACRONYMS

AEB	Area Electricity Board
AEDB	Alternative Energy Development Board
APM	Authority Proposed Modification
BPC	Bulk Power Consumer
BTPL	Bahria Town (Pvt.) Limited
CCI	Council of Common Interests
CCoP	Cabinet Committee on Privatization
CEO	Chief Executive Officer
CLM	Cornelius, Lane & Mufti
CMOD	Competitive Market Operations Date
CPP	Capacity Purchase Price
CPPA	Central Power Purchasing Agency
CPPA-G	Central Power Purchasing Agency (Guarantee) Limited
CRPEA	Contract Registrar and Power Exchange Administrator
CTBCM	Competitive Trading Bilateral Contract Market
DISCO	Government-owned Distribution Company
EPP	Energy Purchase Price
FESCO	Faisalabad Electric Supply Company Limited
GENCO	Public Sector Power Generation Company
GEPCO	Gujranwala Electric Power Company Limited
GOP	Government of Pakistan
HESCO	Hyderabad Electric Supply Company Limited
IEEE	Institution of Electrical and Electronics Engineers
IESCO	Islamabad Electric Supply Company Limited
IGTDP	Integrated Five Year Rolling Generation, Transmission and Distribution Plan
IPP	Independent Power Plant / Producer
IRG	International Resources Group
KESC / K-Electric	Karachi Electric Supply Company Limited (now K-Electric Limited)



KWh	Kilo-Watt hour
LESCO	Lahore Electric Supply Company Limited
MEPCO	Multan Electric Power Company Limited
MoF	Ministry of Finance
MWP	Ministry of Water and Power
MW	Mega Watt
NBFC	Non-Banking Finance Company
NCPPI	New Captive Power Policy
NEPRA	National Electric Power Regulatory Authority
NTDC	National Transmission and Despatch Company Limited
O&M	Operation and Maintenance
PC	Privatization Commission
PC Board	Privatization Commission Board
PC Ordinance	Privatization Commission Ordinance
PDP	Power Distribution Program
PESCO	Peshawar Electric Supply Company Limited
PEPCO	Pakistan Electric Power Company (Pvt.) Limited
PPA	Power Purchase Agreement
PPP	Public Private Partnership
PPIB	Private Power and Infrastructure Board
PPIB Act	Private Power and Infrastructure Board Act
PYA	Prior Year Adjustment
RFP	Request for Proposal
QESCO	Quetta Electric Supply Company Limited
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SBP	State Bank of Pakistan
SECP	Securities and Exchange Commission of Pakistan
SECP Act	Securities and Exchange Commission of Pakistan Act
SEPCO	Sukkur Electric Power Company Limited
SGV	SyCip, Gorres, Velayo&Co., and Associates



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SO	System Operator
SPPs	Small Power Producers
SPV	Special Purpose Vehicle
TESCO	Tribal Area Electric Supply Company Limited
TDS	Tariff Differential Subsidy
TNO	Transmission Network Operator
USAID	United States Agency for International Development
WAPDA	Pakistan Water and Power Development Authority



EXECUTIVE SUMMARY

Overview

Demand for electricity in Pakistan continues to exceed supply; the efficiency, affordability and reliability of how the country's limited power supply is distributed are of critical importance. Since publication of the 1992 Power Sector Reform Plan (Reform Plan), a series of reform measures have been implemented in Pakistan's power sector. In 2013, the Government of Pakistan (GOP) issued the National Power Policy, which reaffirmed Government's intention to privatize government-owned electric power distribution companies (DISCOs) with the objective that the introduction of private investment in the sector, if properly structured, will result in improved efficiency, affordability and technical reliability of power distribution. This Policy objective was in line with GOP policies as early as 1994 that sought the introduction of private investment in power generation.

Context of Regulatory Framework for Power Sector Reforms

Prior to the Reform Plan, which provided the basis for the development of the power sector in Pakistan, the Water and Power Development Authority (WAPDA) served as the sole government agency responsible for the implementation and management of power sector operations. In effect the national power and water utility, WAPDA, comprised a "Power Wing", a "Water Wing" and various other administrative departments. With respect to power, WAPDA was structured as a vertically integrated utility engaged in generation, transmission and distribution of electric power.¹

The Reform Plan required the unbundling of WAPDA's Power Wing into separate and distinct business units for generation and distribution market segments, while the transmission segment was to be housed under a single government-owned entity with continued responsibility for the integrated operation of the electric power sector. The Reform Plan proposed that the distinct generation and distribution entities would be privatized over time.

The Reform Plan also recognized and stressed the importance of establishing an independent regulatory authority to oversee and regulate the developing power sector.

Under the Constitution of Pakistan, the Council of Common Interests (CCI) is empowered to formulate and regulate policies in relation to matters in Part II of the Federal Legislative List. 'Electricity' is a subject that falls under Part II. Judicial precedent has also laid down the principle that any privatization initiatives for electricity require CCI approval. Therefore, the Reform Plan was placed before the CCI, which provided its approval in

¹ With the exception of certain service territory in Karachi (Province of Sindh), which fell within the jurisdiction of Karachi Electric Supply Company Limited (KESCL, now K-Electric Limited).



1993 (1993 CCI Approval). In 1997, the CCI provided post-facto approval of measures taken, and approval was also given to implement further sector reforms. In 2010, the 18th Amendment to the Constitution categorized electricity as solely a federal subject; further approvals for sector privatization were obtained from the CCI in 2011 which lay the foundation of the constitutional mandate for the privatization of DISCOs.

Various actions have been taken to implement the Reform Plan. In 1997, the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (NEPRA Act) was enacted, and the National Electric Power Regulatory Authority (NEPRA) was established as the regulator of the power sector. (See Text Box)

Further, the GOP issued the '1998 Action Plan', pursuant to which WAPDA's Power Wing was unbundled. In the context of the distribution sector, eight DISCOs were incorporated as government-owned companies in 1998, which took over the distribution functions being performed by the respective eight Area Electricity Boards (AEBs) earlier operating under WAPDA. The DISCOs were granted respective Distribution Licenses by NEPRA in 2001 / 02, each for a term of 20 years, and continue to operate under the regulatory oversight of NEPRA.

As the DISCOs are incorporated companies under the Companies Ordinance, 1984 (Companies Ordinance), their corporate affairs are also regulated by the Companies Ordinance, for which the regulator is the Securities and Exchange Commission of Pakistan (SECP). The Public Sector Corporate Governance Rules have been notified and are applicable to the DISCOs, guiding conduct for conducting their corporate affairs.

Illustrative Functions and Powers of NEPRA

- Grant licenses for generation, transmission and distribution.
- Prescribe procedures and standards and enforce:
 - a. Investment programs.
 - b. Performance standards for generation, transmission and distribution companies.
- Issue guidelines and standard operating procedures.
- Determine tariffs, rates charges and other terms and conditions for supply of electric power services by the generation, transmission and distribution companies and recommend to the Federal Government for notification.
- Review organizational affairs of generation, transmission and distribution companies to avoid any adverse effect on the operation of electric power services, and for continuous and efficient supply of such services.



Framework for Privatization

In 2000, the Privatization Commission Ordinance, 2000 (PC Ordinance) was enacted, through which the Privatization Commission was established as a sovereign corporate body. The general management and administration of the Privatization Commission's affairs is undertaken by its Board (PC Board) (See text box). Pursuant to the powers vested under the PC Ordinance, various rules and regulations have been made which provide further guidance and frameworks for privatization.

All major decisions taken in a privatization process are placed before the Cabinet through the Cabinet Committee on Privatization (CCoP).

Key Functions and Powers of the PC

- Recommend privatization policy guidelines to the Cabinet.
- Prepare comprehensive privatization program for Cabinet approval and plan, manage, implement and control the approved program.
- Provide overall direction for implementation of privatization related activities, including restructuring, deregulation, and post-privatization matters in sectors designated by the Cabinet.
- Make operational decisions on privatization matters.
- Approve and take decisions and perform all acts to implement pre-privatization restructuring, labour rehabilitation and severance schemes, and all other related matters as approved by the Cabinet.
- Evaluate bids received according to criteria determined by the Privatization Commission, and formulate recommendations for consideration by the Cabinet.
- Advice to the Federal Government on measures to improve public sector companies till their privatization.

In furtherance of the approval for privatization of the DISCOs by CCI in 2011 (based on the earlier approvals in 1993 and 1997), in 2013, CCoP approved the privatization of the Faisalabad Electric Supply Company Limited (FESCO), Islamabad Electric Supply Company Limited (IESCO) and Hyderabad Electric Supply Company Limited (HESCO). The privatization mode is described as a Public Private Partnership (PPP) model in which 26% equity and management of the DISCO would be shifted to private sector. Additionally, in June 2014, the list of DISCOs to be privatization was expanded to include Lahore Electric Supply Company Limited (LESCO), Gujranwala Electric Supply Company Limited (GEPCO), Multan Electric Power Company Limited (MEPCO), Peshawar Electric Supply Company Limited (PESCO), Quetta Electric Supply Company Limited (QESCO) and Sukkur Electric Power Company Limited (SEPCO). It remains to be verified whether the Chief Minister of the respective Province participated in the meetings of the CCoP as stated in the approval of CCI in 2011. The CCoP approval was ratified by the Cabinet in 2014.



Modes of Privatization and Privatization Policies

Various modes of privatization are provided in the PC Ordinance (See Text Box). In view of other permissible modes envisaged in the PC Ordinance, the GOP has framed privatization policies from time to time, including the 2009 Privatization Policy.

The privatization objectives to improve efficiency, reliability and performance, to reduce financial burden on the GOP and to promote and strengthen

the capital market are to be realized through privatization and efforts are to be made to safeguard consumer interests. In addition, privatization efforts shall be aimed toward competition rather than concentration of divested assets in a few hands and promote fair and reasonable compensation to employees affected by privatization.

Modes of Privatization per the PC Ordinance

- Sale of assets and business.
- Sale of shares through public auction or tender.
- Public offerings of shares through a stock exchange.
- Management or employee buyouts.
- Lease, management or concession contracts.
- Any other prescribed method.

Objective of Regulatory Due Diligence Report

In order to prepare the DISCOs to be privately owned and managed, an understanding of the legal and regulatory frameworks in which new investment and shift in ownership and management will take place is essential. In this regard, the Consultant has prepared two Due Diligence Reports: (1) this Regulatory Due Diligence Report (Report); and (2) a complementary Legal Due Diligence Report. Each report assesses various aspects to be considered in the transition of government-owned DISCOs to private ownership and management. Annexure – I provides the meaning of defined terms used in this Report.

These reports include:

- a. Review and analysis of legal and regulatory requirements which may have an impact on: (i) commercial aspects of distribution activities; (ii) private investment interest; (iii) distribution of electricity; and (iv) privatization.
- b. Review of legal and regulatory parameters affecting corporate and commercial operations once any DISCO is under private ownership and management.

The objective of this Report is to provide a comprehensive overview of the institutional arrangement applicable to DISCOs operating in Pakistan, both in the context of regulated power sector companies and privatization. The aim is to identify sector level issues relevant to privatization. The review includes observations with respect



to regulatory aspects, combined with key findings and recommendations for actions to move forward GOP's Reform Plan to privatize the DISCOs.

NOTES:

- i. This due diligence is strictly focused on electric power distribution, specifically, the status of government-owned DISCOs.
- ii. This due diligence emphasizes the regulatory aspects; legal aspects are addressed in a complementary due diligence report; financial, social, environmental, technical and other aspects may and should otherwise be addressed.
- iii. This due diligence does not consider management contracts or partial privatization or privatization processes in general.
- iv. This due diligence assesses the distribution sector and companies as a whole and does not distinguish or highlight specific DISCO attributes with respect to privatization; such follow-on detailed analysis of each DISCO is recommended.
- v. The terms “power” and “electricity” and “electric power” are used interchangeably as is standard industry practice.

Methodology

In order to prepare this Report, the Consultant has regularly consulted with IRG / PDP staff and has submitted periodic reports, which have been instructive in preparing iterative drafts and achieving expected results.

This detailed review and analysis of the regulatory framework with respect to transition of government-owned DISCOs to private ownership and management is based on:

- a. Comprehensive literature review of existing Pakistan laws, regulations, policies, and DISCO incorporation documents, and other legal and regulatory documents as made available to the Consultant.
- b. Meetings and interviews with key stakeholders including the Ministry of Water and Power (MWP), Privatization Commission (PC), NEPRA, National Transmission and Despatch Company Limited (NTDC), Central Power Purchasing Agency (CPPA) a department of NTDC, various DISCO managers, and PDP experts. In this regard, a draft regulatory due diligence report was shared with the MWP, PC and NEPRA in April, 2015 and various presentations were presented by the Consultant and



consultative sessions were held, after which this Report has been modified to reflect stakeholder responses.

- c. Assessment of GOP power sector reform objectives, completion of commitments to date, including time-based actions and status of implementation, or reasons for not implementing the same.
- d. Identification of key gaps and measures that may be taken to improve sector/distribution operations and to build investors' confidence in the Pakistan power sector for the purpose of effective privatization.

Key Findings and Recommendations

Government's power sector reform objectives envisage that government-owned DISCOs will be privatized and that private distribution companies will be responsible for planning and managing their individual systems to meet consumer demand within their respective service territory.

Some of the key findings and recommendations discussed herein include:

1. Finding: Approvals for privatization of government-owned distribution companies are in place. The privatization of all the government-owned DISCOs (except Tribal Area Electric Supply Company Limited [TESCO]) has been approved by the CCI. In addition, the CCoP has approved that DISCOs be placed in the GOP privatization program for early implementation, which has also been ratified by the Cabinet. Currently, the financial advisors for each DISCO are conducting individual due diligence for each DISCO.

Recommendation: The Consultant understands that the privatization program shall be formulated based on reports of financial advisors and thereafter approval of the CCoP and Cabinet (if required) based on privatization programs specific to each DISCO will be sought. This Report may facilitate early corrective actions, which would facilitate timely completion of privatization.

2. Finding: Participation of provinces in privatization must be clarified. It is essential that key stakeholders (Provinces) be consulted throughout the DISCO privatization process, as also directed in the approvals of CCI for privatization of the DISCOs.

Recommendation: It should be ensured that CCI directions are implemented, particularly with respect to the requirement that Provincial Chief Secretaries are to be members of the Privatization Board and that the Chief Minister of the relevant Province (i.e., where a DISCO is to be privatized) shall be a member of the CCoP for discussion on that matter. The process adopted for seeking approval by



CCoP and the PC Board for privatization of the DISCOs, is to be reviewed so as to ensure compliance with the direction of CCI with respect to participation of Provinces.

3. Finding: Development of regulatory guidance is required. A number of actions are to be taken by NEPRA to prepare a viable setting for privatization of DISCOs. The role of NEPRA and its discharge of its functions under the NEPRA Act are of crucial significance.

Recommendation: NEPRA actions to be taken include the: formulation of procedures and standards for power acquisition programs and investment programs; implementation of an integrated generation, transmission and distribution plan; and internal capacity building to be technically competent to regulate distribution operations.

4. Finding: The current Distribution Licenses of DISCOs are to expire in 2021-22 (except SEPCO and TESCO in 2031 and 2033 respectively). As per the NEPRA Act, extension in the term of the licenses is contingent upon compliance with performance standards and other rules / regulations of NEPRA. In light of the short term remaining for most of the DISCO licenses, a private investor may consider that, presuming privatization occurs any time prior to 2022, the remaining term of the Distribution License is insufficient. Further, litigation is pending adjudication with respect to carving out the service territory of Islamabad Electric Supply Company Limited (IESCO), between IESCO and NEPRA.

Recommendation: In order to provide clarity and confidence to potential private investors, MWP should prepare a clear policy on license terms, i.e., security for renewal of the term of Distribution License. This policy would require review and approval of NEPRA.

5. Finding: The Tariff determination process must be improved. The tariff determination process has not progressed to support approval of a multi-year tariff for DISCOs, which private investors will seek. Further, the tariff determination process is excessively cumbersome and slow, which impedes viability of distribution operations.

Recommendation: NEPRA and DISCOs should implement multi-year tariff determinations for DISCOs and the tariff determination procedures and processes should be streamlined in line with GOP policies and NEPRA guidelines.

6. Finding: The regulatory framework must clarify rights of way for distribution works. The Electricity Act provides guidance on these important topics but the NEPRA Consumer Service Manual and Consumer Eligibility Criteria do not provide sufficient details and description, which impedes and delays distribution operations.

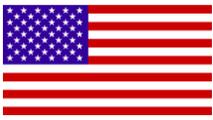


Recommendation: The legal framework provided for such rights for WAPDA, however the same are missing in the NEPRA Act, and thus no such legal structure is available to the DISCOs. It is recommended that appropriate rules and regulations should be formed to regulate this aspect.

This Report

This Regulatory Due Diligence for transition of DISCOs to private ownership and management includes nine chapters as discussed and prescribed in the Consultant Terms of Reference:

1. Framework of the Power Sector – A brief overview of: the significant legal and regulatory regime in field; the institutional arrangement having interface with the DISCOs; key aspects of the DISCOs operations; and the initiatives of GOP for privatization.
2. Regulatory Framework to Support Privatization of DISCOs – A review of the various institutions (e.g. CCI, CCoP, the Cabinet and the Privatization Commission), their respective roles in the privatization process, and laws / policies pertaining to privatization which provide the framework on which the privatization would be based. The Chapter reviews the steps taken by these authorities with respect to obtaining necessary consents and approvals, and identifies existing gaps.
3. Regulatory Framework for Distribution Operations – A review of the regulatory framework proposed under the Reform Plan, the establishment of NEPRA and its roles and functions. The Chapter analyses other sectors, which may be relevant, and provides an overview of the regulatory powers that SECP can exercise in relation to companies. The Chapter provides insight into how other regulators are regulating certain aspects, which can provide direction to a more strengthened regulatory framework for the post-privatization scenario.
4. Regulatory Compliance by Distribution Companies – A review of the various conditions, standards and regulations that a DISCO is required to meet under the NEPRA rules and regulations. DISCO compliance is reviewed, and consequences of non-compliance indicated.
5. Licensing and Tariffs – A review of the licensing and tariff regulatory framework under which the DISCOs are to operate. This includes review and analysis of the NEPRA Act, relevant rules and regulations, and the Distribution License, in which relevant aspects are highlighted for consideration. The Chapter provides a comprehensive analysis of the tariff structure, the tariff determination process, and the issues which prevail in the current structure. These are reviewed in light of recent policies and regulations of the CCI, GOP and NEPRA, through which certain guidelines have been prescribed.



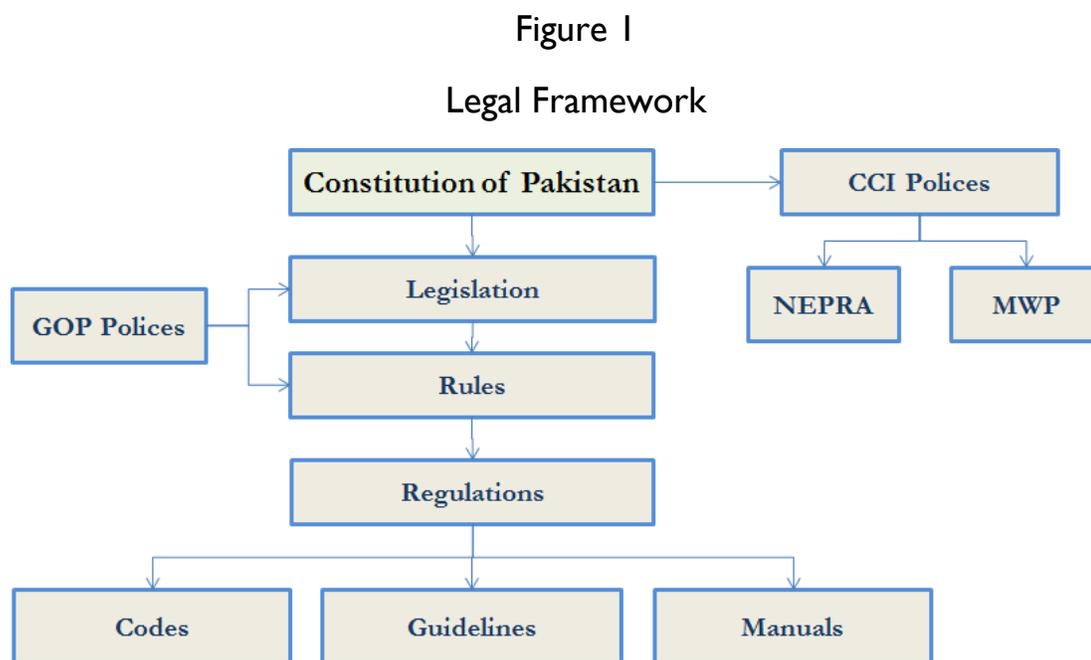
6. Market Structure – A brief review of the envisaged market structure as per the Reform Plan, and the subsequent development of the power sector. This Chapter analyses power acquisition by DISCOs other than the Power Pool, and identifies certain issues, which have arisen in this respect.
 7. Rights of Ways / Easements – A review of the legal framework under which right of ways and authority to carry out distribution works were given to WAPDA, and analysis of the current regime under NEPRA. The Chapter identifies shortcomings of the current regime.
 8. Customer Relations – A review of the applicable framework pertaining to customer relations and the various modes available for dispute resolution under various forums.
 9. Key Findings and Recommendations - This Chapter highlights the key due diligence findings that have been identified based on literature review, consultations and analysis of the regulatory framework in the previous chapters, and includes Consultant recommendations.
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CHAPTER – I FRAMEWORK OF THE POWER SECTOR

I. LEGAL FRAMEWORK

The legal hierarchy guiding Pakistan’s power sector includes certain constitutional provisions, laws, rules, regulations, guidelines, codes, manuals and policies. Annexure II provides a list of various laws, rules, regulations, guidelines and policies etc., pertinent in the context of this Report. Figure 1 provides the hierarchal arrangement for the legal framework.



The legal framework primarily includes:

1. Constitution of Pakistan: Relevant provisions are Article 9, 154 read with item no. 4 of Part II of the Federal Legislative List, 157, 158, and 161.
2. Laws: The legislative enactments in the context of Power Sector include: (i) NEPRA Act; (ii) WAPDA Act; (iii) Electricity Act; (iv) AEDB Act; and (v) PPIB Act. In addition, in the context of privatization, PC Ordinance is also relevant.
3. Rules and Regulations: NEPRA is authorized by the NEPRA Act to frame and notify Rules and Regulations:



- a. Rules require the approval of the federal government through the Cabinet Division.²
- b. Regulations do not require any approval or notification beyond that provided by NEPRA.
4. Other NEPRA Documents: NEPRA is also legally authorized to issue documents and approve codes and in some cases must have issued them:
 - a. Approved Consumer Service Manuals.
 - b. Informational Manuals and Documents.
 - c. Grid Code.
 - d. Commercial Code.
 - e. Distribution Code.
5. Power Policies issued, from time to time, including 1994 Power Policy, 2002 Power Policy, 2006 Renewable Energy Policy and National Power Policy, 2013.

Enforcement of these legal instruments is carried out by the courts of Pakistan and, where applicable, NEPRA Tribunals.

II. POWER SECTOR INSTITUTIONAL ARRANGEMENTS

Under the Constitution of Pakistan, the CCI has been established and entrusted with the function of formulating and regulating policies in relation to matters listed in Part II of the Federal Legislative List. Part II also includes electricity. Hence, policies pertaining to the power sector require approval of the CCI. Such approvals have been taken from time to time to provide constitutional mandate to the envisaged reforms of the power sector.

The line Ministry for the power sector is MWP, which operates as per the mandate provided to it in the Rules of Business, 1973. MWP has a Water and Power Division. Some of the relevant businesses falling under the Water and Power Division are:

- a. Matter relating to development of water and power resources of the country.
- b. WAPDA.
- c. Matters relating to electric utilities.

² Cabinet Division is under the Office of the Prime Minister.



d. Electricity.

For the regulation of the power sector, NEPRA was established in 1997 pursuant to the NEPRA Act, and is responsible to operate as an independent regulator of sector operations, including financial and technical compliance.

As DISCOs are incorporated entities, the Companies Ordinance applies to their affairs and management. As a result, DISCOs are subject to a variety of corporate rules that include but are not limited to Public Sector Corporate Governance Rules, which deals with appointment and removal of Board of Directors.

Today's Pakistan power market (except independent power producers or IPPs) mainly comprises of government-owned companies, illustrated in Figure 2 below, and primarily comprises:

- a. Four government-owned generation companies (GENCOs).
- b. Ten government-owned distribution companies.
- c. One National Transmission and Despatch (Grid) Company (NTDC), which until recently comprised:
 - i. Central Power Purchasing Agency
 - ii. System Operator
 - iii. Transmission Network Operator
 - iv. Contract Registrar and Power Exchange Administrator
- d. One Central Power Purchasing Agency (Guarantee) Limited (CPPA-G), recently authorized to conduct the market operations under the National Electric Power Regulatory Authority (Market Operator Registration, Standards and Procedure) Rules, 2015 (Market Rules). This is in furtherance of the process for reform of CPPA stipulated in the National Power Policy, 2013 approved by CCI and the policies framed by GOP. The sector entities, namely DISCOs and NTDC, in the first phase of transition, as per the GOP Policy and the regulatory framework, have executed contractual arrangement for operationalization of CPPA-G, leading to legal transfer of the undertaking of the following departments of NTDC:
 - i. Central Power Purchasing Agency
 - ii. Contract Registrar and Power Exchange Administrator

Thereafter, in the second phase, to be accomplished within a period of two years, this process is to be further developed by way of consultative process with all the stakeholders.

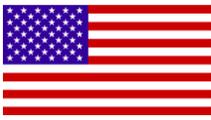
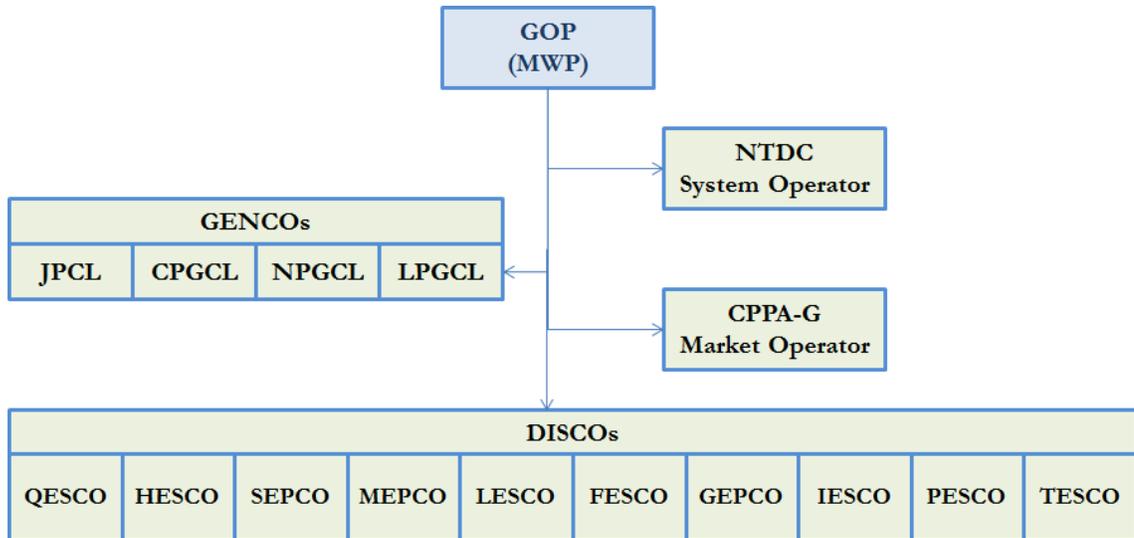


Figure 2

Government-Owned Companies



Pakistan Electric Power Company (Pvt.) Limited (PEPCO) was established in 1998 to provide stewardship of the transition of WAPDA’s Power Wing to divested market operations. However, over more than 15 years, this divestiture has not taken hold and the role of PEPCO continues to influence sector operations, including distribution operations.

Additionally, the nature of the electricity sector in Pakistan is such that government intervention continues to exist, often to a greater extent than the market structure design anticipated. Further, due to the deficit underlying power sector operations, government financial assistance is made at sector level, including a tariff subsidy for which specific procedures have been developed and involves the role of the Ministry of Finance (MoF). MWP is the government agency responsible for policy-making relevant to all power sector operations, subject to the overarching role of CCI for formulating and regulating policies in aspects with respect to “electricity”.

III. DISTRIBUTION COMPANIES

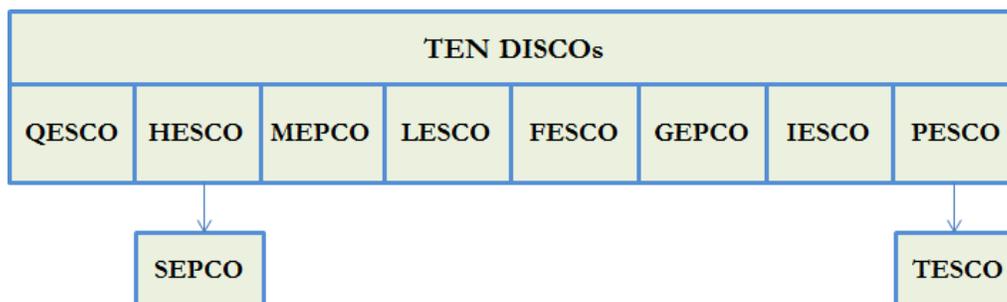
There are 10 *licensed* distribution companies (DISCOs) in Pakistan, in which the GOP owns 100% shares, that are distributing electric power to the end consumers, exclusive of the area served by K-Electric. Eight of these companies were incorporated in 1998 under the Companies Ordinance and licensed in 2001 and 2002 under the NEPRA Act. The remaining two were subsequently incorporated and licensed by carving out licensed



territories of two distribution companies out of the existing eight. Figure 3 illustrates the arrangement for the DISCOs.

Figure 3

Distribution Companies (DISCOs)



Additionally, nine distribution licenses have been issued to Small Power Producers (owner of generation facility of below 100 MW gross capacity subject to conditions stipulated therein) and one to a Captive Power Producer: most of the captive and small power producers distribute electric power to only those consumers (generally industrial) that have been specifically mentioned in their respective licenses through an isolated distribution system. Hence, their distribution territories are very small vis-à-vis the DISCO territories.

I. Key Aspects for Distribution Companies

DISCO Territory. Licensed DISCOs in Pakistan have exclusive rights to their service territories and have a universal obligation to serve any customer meeting the eligibility criteria – in other words, they cannot turn down such customer requests for power.

Governance of Government-owned DISCOs. The Office of the President legally owns the issued share capital of DISCOs and MWP has been assigned to manage these shares, effectively as custodial owner of the shares. Secretary, Water and Power, who is *ex officio* the Chairman PEPCO, holds the proxy for and on behalf of the President of Pakistan for these shares of DISCOs. As individual corporate entities, the DISCOs are legally bound to be managed and overseen by a Management Team and Board of Directors respectively. Each DISCO has its own Articles of Association³ in which standard corporate governance procedures are included. The Government has maintained close ties with the DISCOs, and also in the management of DISCOs fiscal regimes through PEPCO.

³ Companies Ordinance, 1984, Sections 26-28.



DISCO Functions. DISCOs are responsible for the supply of electricity from substations below 220kV to consumers at different distribution voltages. Each DISCO is responsible for the operation and maintenance of all distribution infrastructures within its licensed territory.

Distribution Customers. The functions of DISCOs include servicing its consumers, the numbers of which vary amongst service territories. (See text box for illustrative categories of consumers)

DISCO Management. Each DISCO has a Board of Directors, Management Team and Staff.

- a. Board of Directors – responsible for oversight of the management team, approval of company activities.
- b. Management Team – responsible for oversight of day-to-day operations, preparation of reports, daily figures, petitions for tariff.
- c. Staff – responsible for the implementation of day-to-day distribution activities.

Illustrative DISCO Customer Categories

- Residential (including lifeline).
- Commercial.
- Industrial.
- Agriculture.
- Single point bulk.
- Temporary Supplies (e.g., seasonal industries, public gathering places).
- Public Lighting.
- Residences attached to Industrial Complexes.

Financial Management. While day-to-day operational management falls under the auspices of DISCO management teams in the country, implementation of the fiscal regime of the GOP, particularly with respect to allocation of GOP subsidy, was until recently being conducted by PEPCO. PEPCO was to be disbanded as of 2010, but it remains in operation. However, on account of the operationalization of CPPA-G in June 2015, this role of PEPCO shall also be eliminated.

DISCO Performance. Performance of DISCOs is regulated by NEPRA and overseen by MWP. DISCO performance in Pakistan is threatened by unattended infrastructure, lack of financing for upgrades and poor governance. NEPRA has taken some actions to establish loss levels as part of the DISCOs performance standards; however, its ability to enforce these performance standards has not sufficiently emerged.

DISCO performance in Pakistan is monitored by at least two entities:

1. NEPRA through NEPRA Performance Standards Rules.
2. The Ministry of Water and Power through Performance Improvement Agreements.

Legally, these management oversight mechanisms make sense. From an implementation view, there is room for conflict that should be carefully considered, notably, in how the performance improvement agreements are drafted.



DISCO Relations

Pakistan Electric Power Company (PEPCO)

Since 1998, despite legally becoming companies under Pakistan law, the Government continues to play a role in distribution activities of the 10 incorporated companies. Any subsidies to the customers in the form of reduced tariff is allocated for the DISCOs and channelled through PEPCO. Following the disbandment of PEPCO and operationalization of CPPA-G, it is expected that this role of PEPCO shall be eliminated. Each DISCO is responsible for its own financial affairs, including budgeting, and calculation of tariff.

National Transmission and Dispatch Company (NTDC)

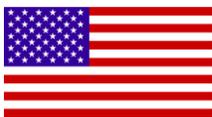
NTDC, often referred to as “The National Grid Company,” was incorporated in 1998. It was licensed to conduct transmission activities by NEPRA in 2002.

All power procured or purchased by the DISCOs until recently was to be through CPPA, a division of NTDC. Commencing in 2009, the GOP anticipated transferring all business functions of the CPPA to a newly incorporated government-owned company, CPPA-G. Active support was and is being made available by the donor community, and the first phase of operationalization of CPPA-G has been achieved in June 2015. As a consequence, the market operations are now to be discharged by CPPA-G, and resultantly, the DISCO-related power procurement function from CPPA/NTDC shall now vest in and be administered by CPPA-G.

Federal Government

- a. *Office of the President.* This office holds the issued share capital for the 10 DISCOs and has delegated custodial authority to the Ministry of Water and Power, as its Secretary is Chairman, PEPCO, to which the proxy has been issued by the President.
- b. *Ministry of Water and Power.* This Ministry plays a large role in DISCO operations and communications. Although technically responsible for policy development for the sector, in fact the MWP is a regular participant and at times the decision-maker on matters relevant to DISCO operations.
- c. *Ministry of Finance.* This Ministry oversees fiscal governance of state funds, including GOP subsidies for certain categories of customers of the DISCOs. DISCOs also interface with MoF as taxpaying businesses of Pakistan.

Provincial Governments



Each provincial government has an Electric Inspector, appointed under the Electricity Act, who has also been conferred the function of Provincial office of Inspection (under the NEPRA Act) that also has interaction with the DISCOs.

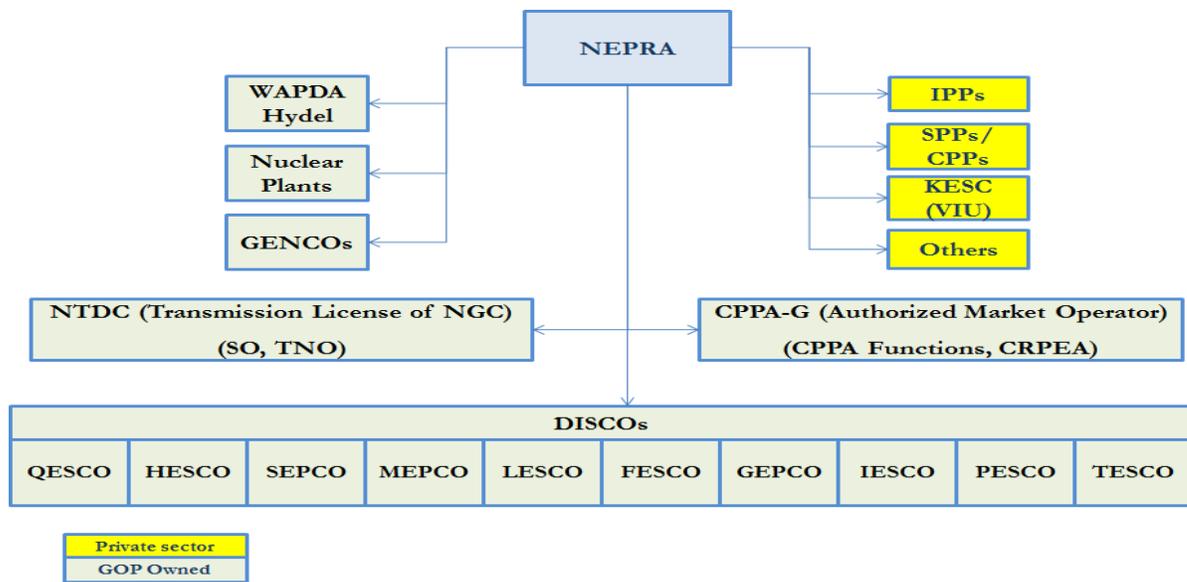
In addition, other provincial authorities, such as water & sanitation, irrigation & energy, building control, district administration etc., regularly interact with DISCOs concerning electricity matters. At times, a consumer can also approach provincial courts to address consumer complaints. Some provincial governments (or companies owned by them) have themselves been constructing and operating electricity generation projects – notably hydel/solar – in addition to awarding similar to work to the private sector.

IV. REGULATORY FRAMEWORK

In 1997, NEPRA was established under the NEPRA Act. NEPRA regulates entities engaged in the business of providing electric power services.

From 2002 to 2004, NEPRA worked with sector stakeholders and government agencies to prepare a legal framework conducive for the development and growth of a competitive power market. Presently, however, largely a single buyer market is in place. In this market, until recently, the CPPA, a division of the NTDC, served as the single buyer, which was procuring electricity on behalf of all the DISCOs. Now this function is to be discharged and administered by CPPA-G under the Market Rules and the Commercial Code. Figure 4 illustrates the power sector entities regulated by NEPRA.

Figure 4
Regulated Entities





V. INSTITUTIONAL ARRANGEMENT FOR PRIVATIZATION AND STEPS TAKEN

Judicial precedent has established that where an entity falls within the scope of the CCI (i.e., where the subject is part of Part II of the Federal Legislative List), any decisions for its privatization would also require prior approval of the CCI. “Electricity” is listed at Serial No. 4 of Part II of the Federal Legislative List. Hence, necessary consents and approvals of the CCI have been taken to privatize DISCOs.

The Cabinet has also established the Cabinet Committee on Privatization. The CCoP is comprised of 10 Ministers, including the Minister for Water and Power as well as the Minister for Privatization, with the Minister for Finance, Economic Affairs and Revenue serving as Chairman. The terms of reference of the CCoP include formulation of privatization policies for approval of the GOP / Cabinet, as well as approving the entities to be privatized. The CCoP oversees the entire privatization process, and matters are placed before the Cabinet through the CCoP. (See text box for complete Terms of Reference of CCoP)

CCoP Terms of Reference

- To formulate privatization policy for approval of the Cabinet.
- To approve the entities owned by the GOP to be privatized, on the recommendation of the Privatization Commission or otherwise.
- To take policy decisions on the inter-ministerial issues relating to the privatization process.
- To review and monitor the progress of privatization.
- To instruct PC to submit reports / information / data relating to privatization process and related matters.
- To take policy decisions on matters pertaining to privatization, restructuring, deregulation, regulatory bodies and privatization fund account.
- To approve the reference price in respect of entities to be privatized.
- To approve successful bidders.
- To consider and approve recommendations of PC on any matter.
- To assign privatization related tasks to the PC.

The PC, through the PC Board, is to carry out the privatization program of the GOP. Under the PC Ordinance, various rules and regulations have been made to provide the necessary framework for privatization.

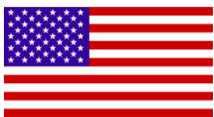
To date, there have been several attempts to privatize some DISCOs (namely FESCO, PESCO and IESCO). Discussions about privatization as well as other models for mobilizing private investment in the distribution sector, including franchise agreements and management contracts, have been considered. Still, these and full privatization actions have stalled, with the exception of KESC.

In 2005, KESC now renamed as “K-Electric”, was “privatized” to the extent of the GOP PPP model. As noted, K-Electric is not solely a distribution company but includes generation, which is an important additional attribute to consider in privatization of DISCOs in Pakistan.



The following consents / approvals have been taken to implement the Reform Plan, including the privatization initiative:

Period of Relevant Approval	Approving Body	Directive
1993	CCI	Approval of Reform Plan including WAPDA Restructuring and Privatization.
1997	CCI	Re-affirmation of Reform Plan and WAPDA Restructuring and Privatization of the eight government-owned DISCOs.
2011	CCI	In addition to reaffirming initiative for privatization of the distribution companies, it was also directed that Chief Secretaries of the Provinces would be members of the Privatization Board, and Chief Minister of the Provinces would be member of the CCoP, in respect of an item relating to privatization of a power sector entity located in that Province.
2013	CCoP	Approval of the privatization program for early implementation. It was also indicated that the PPP Model with respect to FESCO, IESCO and HESCO may be adopted.
2014	CCoP	Approval to include LESCO, MEPCO, GEPCO, PESCO, QESCO, and SEPCO for early implementation
2014	Cabinet	Ratification of decisions taken by CCoP which included nine DISCOs (excluding TESCO) to be privatized.



CHAPTER – 2 REGULATORY FRAMEWORK TO SUPPORT PRIVATIZATION OF DISCOS

I. BACKGROUND

In 2010, the 18th Amendment was made to the Constitution of Pakistan. The amendment primarily modified roles of federal and provincial governments by introducing changes in the two lists of topics for which these levels of government were responsible. These lists in the Constitution (prior to the 18th Amendment) included:

- a. Federal Legislative List, providing topics for which legislation would be the exclusive domain of the Federal Government.
- b. Concurrent List, providing topics that could be legislated by either/both the Federal and the Provincial Governments.

The 18th Amendment abolished the Concurrent List leaving a single legislative list. “Electricity”, which was previously included in the Concurrent List, was completely shifted to be part of the Federal Legislative List; hence, jurisdiction for electricity is vested with the Federal Government.

II. INSTITUTIONAL ARRANGEMENTS

I. Council of Common Interests

The Council of Common Interests is a body established under Article 153 of the Constitution of Islamic Republic of Pakistan (the Constitution). The CCI consists of the:

- a. Prime Minister (Chairman).
- b. Chief Ministers of the Provinces.

Institutional Arrangement relevant for Privatization of DISCOs

- Council of Common Interests: To formulate and regulate policies and exercise supervision and control over relevant institutions dealing with electricity.
- Ministry of Water & Power: The line Ministry.
- Cabinet Committee on Privatization: Committee formed by Cabinet with respect to privatization program of the GOP.
- Privatization Commission: Formed under the PC Ordinance, 2000, as the entity responsible to carry out the privatization programs.
- Privatization Division: The development and implementation of privatization policies and administration of the PC Ordinance.
- NEPRA: The regulator for power sector entities.



- c. Three members from the Federal Government (to be nominated by the Prime Minister from time to time).

By Constitutional mandate, the CCI⁴ with respect to electricity shall formulate and regulate policies and exercise supervision and control over relevant institutions. This Constitutional mandate has been interpreted by superior courts to mean that the CCI must approve any proposal for the privatization of power sector entities falling within its purview – this includes DISCOs.

As a consequence of the GOP's re-emphasis to privatize government-owned distribution companies, CCI approved the GOP privatization plan (2011 CCI Approval and the 2nd 2011 CCI Approval) based on the Reform Plan earlier approved by CCI in 1993 and 1997.⁵

The 2nd 2011 CCI Approval provides that the Chief Secretaries of the Provinces shall be members of the Privatization Board, and Chief Ministers of the Provinces shall be members of the CCoP, in respect of an item relating to privatization of a power sector entity located in that Province.

2. Ministry of Water and Power

Under Article 90 of the Constitution, the executive authority of the Federation is to be exercised in the name of the President by the Federal Government, consisting of the Prime Minister and the Federal Ministers. Article 99(3) specifies that the Federal Government is responsible for making rules for the allocation and transaction of its business. The relevant rules are the Rules of Business, 1973 (Rules of Business), which regulate the allocation and transaction of business by the Federal Government, including the Ministry of Water and Power. The office of President of Pakistan holds the issued share capital for the 10 DISCOs and has delegated custodial authority to the Ministry of Water and Power, as its Secretary is Chairman, PEPCO to which the proxy has been issued by the President. The office of President of Pakistan also holds the shareholding of PEPCO.

The MWP is responsible for preparing the GOP's strategic inputs in the power sector master plan and for financial planning relevant to Government funding, including contributions to the five-year plans. MWP is responsible for the co-ordination of various federal agencies and electric utilities relevant in the development and operation of the Pakistan power sector. MWP is the government agency generally responsible for policymaking and generally, overseeing the sector operations including power generation, transmission and distribution.

⁴ As provided in Article 154 of the Constitution.

⁵ See Chapter 8 of the Legal Due Diligence Report.



3. Cabinet Committee on Privatization

In 2000, the Cabinet Committee on Privatization was established, replacing the earlier Privatization Board of Pakistan and Committee of the Privatization Board of Pakistan, with the mandate to formulate rules for streamlining the operations of the Privatization Commission, through which all major decisions on privatization processes are placed before the Cabinet.

The CCoP is comprised of 10 Ministers, including the Minister for Water and Power as well as the Minister for Privatization, with the Minister for Finance, Economic Affairs and Revenue serving as Chairman. It holds meetings as and when required or for consideration of any summary for decision placed before it primarily by the PC.

Generally, the scope of the CCoP includes:

- a. Formulation of privatization policies for Cabinet approval.
- b. Policy-making on privatization, restructuring and regulatory oversight.
- c. Oversight and management of privatization funds.
- d. Approval of the entity owned by GOP to be privatized based on recommendation of Privatization Commission or otherwise.
- e. Policy-making related to inter-ministerial issues in privatization.
- f. Oversight and monitoring of all privatization processes.
- g. Approval of reference price and successful bidders for privatization tenders.

4. Privatization Commission

In 1991,⁶ the Privatization Commission was established as a federal coordination body for privatization activities conducted by the GOP. During the initial stages, separate commissions / committees were created in order to establish and implement sector specific policies (i.e., industry, finance, power), and separate committees were established to guide the privatization of telecommunications, transport and shipping companies.

⁶ January 22, 1991



In 1993,⁷ the GOP consolidated all such activities into one reconstituted “Privatization Commission”. Subsequently, upon enactment of the PC Ordinance, the Privatization Commission was established as a sovereign corporate body to take on all the operations and functions of the existing commission and dissolving that commission.⁸

5. Privatization Division

The Privatization Division, as per the Rules of Business, is responsible for the development and implementation of privatization policies and administration of the PC Ordinance. Currently, it appears that privatization forms part of one Ministry, called the Ministry of Finance, Revenue, Economic Affairs, Statistics and Privatization, which contains a separate Privatization Division.

6. National Electric Power Regulatory Authority

The NEPRA Licensing Distribution Rules also contain provisions⁹ that place certain restrictions on transfer of DISCOs’ shares. The modality and requirements of NEPRA for such approval, as also provided in the NEPRA Licensing Distribution Rules, are to be identified by the Privatization Commission in consultation with NEPRA so that there is no hurdle as far as necessary consents and approvals is concerned.

III. PRIVATIZATION FRAMEWORK

I. Privatization Commission Ordinance, 2000

The Privatization Commission was established in 2000 under the PC Ordinance as a sovereign corporate body.¹⁰ The preamble of the PC Ordinance provides that it is “expedient to establish the Privatization Commission for implementing the privatization policy of the Federal Government through a fair and transparent process”.

The general management and administration of the affairs of the Privatization Commission vests in the PC Board, which includes:

- a. Chairman.

Important Policies, Laws and Rules / Regulations for Privatization

- 1994 and 2009 Privatization Policies.
- Privatization Commission Ordinance, 2000.
- Privatization (Modes and Procedure) Rules, 2001.
- Privatization Commission (Hiring of Valuers) Regulations, 2001.
- Privatization Commission (Hiring of Financial Advisors) Regulations, 2007.

⁷ November 25, 1993

⁸ Section 3(3) of the PC Ordinance.

⁹ Rule 13.

¹⁰ Section 3 of the PC Ordinance.



- b. Secretary.
- c. Six members appointed by the GOP (or a higher number as may be determined by the GOP).

The functions and powers of the Privatization Commission are provided in Section 5 of the PC Ordinance (See Annex – III).

The PC Ordinance¹¹ provides that the term “privatization” includes a transaction by virtue of which any property, right, interest, concession or management is transferred to any person from the Federal Government or any enterprise owned or controlled, wholly or partially, directly or indirectly, by the Federal Government.

Establishment of Privatization Fund¹² – Under the PC Ordinance, a “Privatization Fund” is established. All proceeds generated from the privatization of state and government-owned assets including those anticipated to be generated from privatization of DISCOs are to be deposited in the Privatization Fund.

- a. The Privatization Fund is managed and monitored by the Privatization Commission.
- b. The Privatization Commission is authorized to withdraw funds, if necessary, for operational requirements of the Commission.
- c. Remaining proceeds are held in trust for the Federal Government and distributed as follows:
 - i. 10% to be used for poverty alleviation programs.
 - ii. 90% to be used to pay off public debt.

Part V of the PC Ordinance entitled “Privatization” sets out the broad parameters for the modes or options for privatization. (See text box)

What has been made clear by GOP pronouncements is that for DISCO privatization, the sixth option “other prescribed method for privatization” is expected which is the public-private partnership option, specifically transferring all management but only 26% shares in the privatized company.

Modes of Privatization per the PC Ordinance

- Sale of assets and business.
- Sale of shares through public auction or tender.
- Public offerings of shares through a stock exchange.
- Management or employee buyouts by management or employees of SOEs.
- Lease, management or concession contracts.
- Any other prescribed method .

¹¹ Section 2(i).

¹² Section 16 of the PC Ordinance.



Illustrative highlights of the PC Ordinance relevant to DISCO privatization include:

- a. Under section 22 of the PC Ordinance, the Privatization Commission, after the approval by the Cabinet, is to carry out the privatization program in the prescribed manner.
- b. The PC Ordinance provides that the Privatization Commission shall, in consultation with the Federal Government and any concerned enterprise owned or controlled, wholly or partially, directly or indirectly by the Federal Government, give notice of its intent to privatize.¹³ Notification requirements include advertisement through publications in newspapers of wide circulation.
- c. Valuation of the property (assets) being privatized is to be undertaken by independent valuers pursuant to section 24 of the PC Ordinance.
- d. Part VII of the PC Ordinance directs the framework and procedures to be followed by the Privatization Commission to issue directions to the entity approved by the Cabinet as eligible for privatization entitled the “Regulatory and Other Provisions”. These provisions provide guidance on transition of the entity throughout the privatization process, including the modality for operations of such entities during the transition period from approval of its privatization by the Cabinet to completion of the transaction, as well as actions to be implemented so as to support the Privatization Commission to implement the privatization objectives.

2. Privatization Policies

Since the introduction of the Privatization Commission in Pakistan in 1991, the GOP has issued a number of privatization policies. The 1994 Privatization Policy is prior to the PC Ordinance and discussed briefly so as to provide the background. The 2009 Privatization Policy is subsequent to the PC Ordinance and the one in field at present.

1994 Privatization Policy

The main objectives supported by the 1994 privatization policy included:

- a. To improve upon the operational efficiency and overall performance of entities proposed to be privatized and to promote competition.

¹³ Section 23 of the PC Ordinance.



- b. To reduce the financial burden imposed on Government by public enterprises, in order to free up funds to address other Government commitments, such as support to the social sector and the development of physical and technological infrastructure toward accelerating the pace of industrialization.
- c. To promote and strengthen capital markets by broadening and deepening its base through enlarging the number of shareholders and listing new enterprises to include private investors.

The 1994 Privatization Policy provided that in meeting these objectives, efforts would be made to:

- a. Safeguard consumer interests by formulating a regulatory framework prior to privatization (particularly with respect to utilities).
- b. Promote competition in the market as a whole rather than a concentration of divested assets in a few hands.
- c. Ensure that alternative employment and reasonable compensation would be available and provided to employees made surplus as a result of privatization.

The 1994 Privatization Policy supported various privatization models with the underlying principle that sale and transfer should be transparent. Such transparency would be achieved by detailed expert analysis and monitoring that could rely on services of experienced, technically expert consultants as well as the implementation of public awareness campaigns to build confidence in the overall privatization process.

In addition to the privatization models provided in the PC Ordinance, the 1994 Privatization Policy provided the following methods that may be adopted:

- a. Use of domestic and international stock exchanges.
- b. Inviting sealed bids from prequalified bidders or without pre-qualification.
- c. Open, public auctions of specified assets, with or without pre-qualification.
- d. Management contracts with domestic or foreign operators for specified periods in cases that require technical expertise.



2009 Privatization Policy

In 2009,¹⁴ the Privatization Commission submitted a summary to the CCoP for an updated policy framework that was approved by the CCoP¹⁵, followed by Cabinet ratification of the approval of CCoP.¹⁶ A fundamental difference between the 1994 and 2009 Privatization Policies is that the 2009 Privatization Policy envisaged the concept of a specific PPP model that included:

- a. Transfer of full management of the enterprise.
- b. Sale of 26% equity.

The Privatization Commission may divest residual shareholding of the GOP at a later stage, ensuring that such divestment will not unreasonably affect the strategic partner. Features of the PPP model include:

- a. The sale of 26% would follow the methodology and mechanism framed per consultation and approval of the CCoP and PC Board. Were it determined that the proposed methodology and/or mechanism was not feasible, the PC would provide alternative options to the CCoP for consideration.
- b. Stringent pre-qualification criteria would be developed and include clear requirements for business plans, management approaches, triggers for default, termination, penalties and dispute resolution mechanisms.
- c. The transfer of full management control to the investor would include legal safeguards to guarantee that such transfer cannot be reversed. Sales Agreements would also include exit options for the GOP, remedies to GOP in case of right of first refusal, transfer restrictions and lock-in periods for strategic investors.
- d. To be appropriately represented, GOP representatives would be appointed to the Board of Directors of the privatized entity.
- e. Following privatization, the newly privatized company would operate in accordance with market rules and market conditions; such operations would determine the timing and extent of future divestment of GOP shares.
- f. The Privatization Commission would have exclusivity in undertaking brown-field PPP transactions, and all other Ministries are required to route their PPP transactions through the Privatization Commission for implementation.

¹⁴ February 12, 2009

¹⁵ February 17, 2009

¹⁶ January 6, 2010



- g. 12% shareholding to be reserved for workers in the privatized entity.

Today, the 2009 Privatization Policy continues to be the primary policy tool to guide privatization, although the process would vary for each transaction taking into account the specific sector and relevant privatization aspects particular to each undertaking.

With respect to privatization of DISCOs, the Consultant understands that the PC has appointed financial advisors to assess those DISCOs to be privatized, and PPP Mode is envisaged for privatization of IESCO, FESCO and HESCO.

The general broad parameters of the process for privatization that will apply to DISCOs comprise the following steps:

a. Pre-Privatization

- i. GOP identifies asset to be privatized and approvals of CCI and CCoP (Cabinet); legal due diligence for that asset confirms title, legal ability for asset to be privatized by hiring of financial advisor or valuator.
- ii. Options for privatization model reviewed (preferably in addition to currently proposed PPP model).
- iii. Plan for privatization is developed including time-based actions, legal and reform actions that may be required, i.e., resolution of whether public procurement law will apply; reconciliation of how power will be allocated, etc.
- iv. Reconciliation of any DISCO asset and liability aspects, including valuation of assets and liabilities.

b. Privatization Process

- i. Tender preparation is conducted, including due diligence of the assets to be privatized, financial and technical due diligence.
- ii. Public information and awareness building, stakeholder consultation and affirmation that the proposed privatization is timely and reasonable in the current market and social context.
- iii. Approval of bidding process by PC Board and CCoP.
- iv. Implementation of the approved bidding process using pre-qualification and final selection.



- v. Approval of the bid by PC Board and CCoP leading to issuance of letter of acceptance to successful bidder.
- vi. Transfer of management after receipt of 100% payment.
- c. Post-Privatization
 - i. Application of market rules, monitoring per tax, labor, and other relevant laws.

3. Rules and Regulations for Privatization

The Privatization Commission has enacted rules and regulations¹⁷ pursuant to its powers under the PC Ordinance, which regulate the implementation of any privatization program and will apply to privatization of DISCOs.

Privatization (Modes and Procedures) Rules, 2001

The Privatization Commission, with the approval of the Federal Government, has enacted the Privatization (Modes and Procedure) Rules, 2001 (Privatization Rules, 2001). Specifically, Rule 3 sets out the manner and procedure for modes of privatization (and to the extent the Privatization Commission deems necessary), which include:

- a. Legal, technical and financial due diligence to identify obstacles and suggest ways to remove them, to allow fair and independent valuation, and to prepare a suitable information and marketing memorandum.
- b. Pre-qualification terms of prospective bidders that allow GOP to adequately assess their technical and financial position to own, manage and operate the entity being privatized.
- c. Preparation of privatization/bid documents.
- d. Conducting necessary pre-bid conferences and due diligence.
- e. Creation of an enabling environment for sound private investment.
- f. Implementing the privatization process including the bidding process.

The Privatization Rules, 2001 require¹⁸ that the bidder to be selected be based on the highest bidder, provided that the bidder meets all pre-qualification criteria and has complied with the bid instructions.

¹⁷ Per section 40 of the PC Ordinance, Privatization Commission is authorized to make rules with the approval of the Federal Government. As per section 41, the Privatization Commission can make regulations, not inconsistent with the PC Ordinance or the rules (this would not require approval of the Federal Government).



Following selection, approval of the final bid is referred to the Cabinet for approval. In the instance of rejection, written justification is required.

The Rules also set forth additional modes of privatization,¹⁹ which include:

- a. Public offering of shares other than through a stock exchange.
- b. Sale of shares, assets, business and property to a person having pre-emptive right to acquire the same, subject to fulfilment of the prescribed terms.

In addition, a “negotiated sale process”²⁰ may be used where:

- a. In the opinion of the PC Board, sufficient interest for privatization has not been received.
- b. The PC Board has recommended the process to the Cabinet, and Cabinet has approved such process.
- c. The PC Board has approved the parties interested in purchasing the property being privatized.
- d. A team has been constituted by the PC Board to carry out the negotiation sale process including a representative of the relevant Ministry.
- e. The PC Board has delegated full power to the negotiation sale team for carrying out the transaction and defined the parameters for negotiation.
- f. In all events, the terms and conditions of the transfer are still to be approved finally by the Cabinet.²¹

Importantly, a special purpose vehicle (SPV) incorporated outside of Pakistan, which is wholly and directly or indirectly owned and controlled by the bidder or purchaser, and where the performances and obligations of such SPV are irrevocably and unconditionally guaranteed by the bidder or purchaser vide an instrument approved by the Privatization Commission, may acquire property in a privatization in accordance with the provisions of the PC Ordinance.²²

Note: The Privatization Commission shall have the absolute discretion to impose such eligibility criteria in the Request for Statement of Qualification documents with regards to a SPV as it may deem expedient and proper from time to time.

¹⁸ Rule 4.

¹⁹ Rule 5 and Section 25(f) of the PC Ordinance.

²⁰ Rule 6(1) Negotiated Sale Process defined as “negotiations between the Commission and an interested party for the sale and transfer of the property to be privatized where the conditions specified in sub rule (1) of rule 6 apply”.

²¹ Rule 6(2) of the Privatization Rules, 2001.

²² Rule 7 of the Privatization Rules, 2001.



Privatization Commission (Hiring of Valuers) Regulations, 2001

The Privatization Commission has also issued Privatization Commission (Hiring of Valuers) Regulations, 2001. Under these regulations, it has been envisaged that if a valuer is required to conduct a fair and independent valuation of property to be privatized, the terms of reference for the valuation shall include:

- a. A brief history of the entity/assets to be privatized.
- b. The financial status of the entity/assets to be privatized.
- c. A description of the product line/assets/service of entity to be privatized.
- d. If any, a description of land, buildings, plants and machinery relevant to the privatization.
- e. The current assets and liabilities relevant to the privatization.
- f. The current state of the industry in which the property/assets/services to be privatized is operating.

A panel of valuers is to be maintained by the Privatization Commission. Any terms of reference to be implemented for valuers as part of any privatization process are to be sent to at least three members of the PC valuers panel. The Privatization Commission is to select the valuer quoting the lowest rate, but another valuer may be selected in which case the reasons shall be recorded in writing.

Note: With respect to distribution, because it is such a technical grouping of assets and business functions, it is recommended that a distribution technical expert be included in any such PC panel.

Privatization Commission (Hiring of Financial Advisors) Regulations, 2007

The Privatization Commission has also issued Privatization Commission (Hiring of Financial Advisors Regulations), 2007. Under these, the PC Board is empowered to decide whether a privatization is to be treated as a “major privatization” and warrants appointment of a financial advisor,²³ which decision is to be taken on a summary prepared by the Privatization Commission. Major Privatization is defined as a privatization which: (i) envisages transfer of management control; and (ii) where the size and complexity of the privatization warrants appointment of a financial advisor; or (iii) where the Board of PC, on recommendation of PC, resolves that the transaction is a major privatization even if conditions (i) and (ii) are not met. It may be noted that these Regulations may be waived in part where circumstances so warrant and the PC Board so

It appears that the privatization of DISCOs would fall within the definition of “major privatization”.

²³ Financial advisor is an external advisor hired by the Privatization Commission with the approval of the PC Board to advise on a major privatization. Interested parties are to submit their proposals in line with RFPs prepared by the transaction manager. The regulations provide that the RFP would require parties to submit their qualifications and how they would structure the transaction. Other criteria to be taken into account while considering appointment is discussed below.



authorizes.²⁴ It appears that the privatization of DISCOs would fall within the definition of “major privatization”.

For each privatization, a Transaction Manager is to be appointed by the PC. The regulations provide that the Transaction Manager shall, prior to advertising for a Financial Advisor, prepare a Request for Proposal (RFP) package for approval of the Chairman of the PC Board.²⁵ The RFP package should require the parties to submit, among other things:

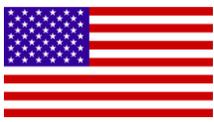
- a. Technical proposal – Information on how they would structure the transaction, and their qualifications for conducting business operations.
- b. Financial proposal – Separately, a financial proposal is also to be submitted.

The regulations further describe the detailed procedure for evaluation of the proposals, which includes assessment of expertise, experience, proposed work plan and methodology, and effectiveness of presentation. Pre-qualified bidders are then invited to attend the bid opening, in which the final scores are determined on the basis of weight applied to technical and financial proposals.

If approved by the PC Board, the bidder shall be invited for contract negotiations with the PC Board. Successful negotiations result in appointment of the Financial Advisor. In case of failure, the second ranked bidder is to be invited for negotiation.

²⁴ Regulation 13.

²⁵ Regulation 4.



CHAPTER – 3 REGULATORY FRAMEWORK FOR DISTRIBUTION OPERATIONS

I. BACKGROUND

The Reform Plan to restructure the Pakistan power sector received CCI Approvals in 1993 and 1997. Amendments were made to the WAPDA Act to facilitate the unbundling of sector segments by the conversion of AEBs to be incorporated DISCOs, generation plants to be incorporated Public Sector Power Generation Companies (GENCOs), and transmission functions to be conducted by the incorporated NTDC.

In 1997, WAPDA contracted consultant services that resulted in the “SGV Work Program and Methodology”, which has been the cornerstone implementation plan for the unbundling of WAPDA.

The Reform Plan contemplated transition of the power sector from a vertically integrated model to a competitive power market, referred to as the Competitive Trading Bilateral Contract Market (CTBCM). As part of this market arrangement, the establishment and operation of an independent regulator was essential. In 1997, the NEPRA Act was enacted in order to establish an independent regulatory body over the sector, which was NEPRA. Part of NEPRA’s mandate was to promote a competitive power market.

The GOP understood that market transition would take time as structural adjustments took hold, and establishment of NEPRA as the sector regulator was required not only to transition the market, but to be firmly entrenched to regulate power sector operations pre- and post-privatization.

II. REGULATORY APPROACHES

The Reform Plan assessed various approaches to regulating the power market that included:

- a. The comprehensive regulation approach, requiring the regulator to monitor the day-to-day activities of regulated entities.
- b. A light-handed regulatory approach that structured financial incentives to induce efficient management, acceptable prices, and the non-discriminatory provision of the regulated service.

The role of the regulator and the appropriateness of its regulation would evolve through each phase of transition of the power market. Initially, it was suggested that the uncertainties associated with privatization and



the early stage of a competitive market setting in Pakistan would require more aggressive approaches to regulation. Therefore, before competition was fully developed, but while the power sector was undergoing significant changes, it was agreed that an active regulator would be necessary.

The Reform Plan confirmed that the regulator would include DISCOs under its regulatory oversight as it would oversee generation, transmission, despatch, and power pool operations. Because NTDC and the DISCOs would effectively operate as monopolies with captive customers, it was envisaged that the regulator would have to help develop and police performance compliance that would govern the coordination, despatch and pooling of generation facilities, as well as the operation of the national transmission grid. The regulator would also regulate such entities' corporate activities to ensure that they do not get involved in activities inconsistent with their primary responsibilities.²⁶

Most importantly, the Reform Plan stipulated that private investors would only be willing to make substantial investments in the power sector if an independent regulatory authority was established with clearly delineated authority to secure and regulate the power market, i.e., to:

- a. Clearly define power market structures and arrangements as well as operating rules for each segment of the sector (generation, transmission, distribution).
- b. Develop transmission-pricing arrangements.
- c. Design and implement wholesale electricity market rules and regulations.
- d. Develop principles and mechanisms for subsidy.

Accordingly, the GOP recognized that it would take years to firmly establish a competitive power market, and therefore proposed that the regulator would implement several important functions with respect to the supply of electric power that include:

- a. Monitoring sector operations to ensure that Pakistan's power needs were met, and that either the regulator or some other government authority would be responsible for authorizing publicly financed investment in power facilities.
- b. Ensuring adequate transmission and distribution services that initially could be accomplished by monitoring planning of the transmission entity and DISCOs and, to the extent competitive discipline is inadequate, through rate regulation.

²⁶ The simplest methodology was noted to be prohibition for such entities investment in generation plants. Absent such prohibition, the regulator would be required to monitor transactions to protect cross-subsidies and the various abuses that result from affiliated transactions.



- c. If the DISCOs sell power to captive customers, the regulator could review least cost planning efforts, the use of conservation, system design, operation, maintenance practices, and contingency plans.
- d. Establishing and monitoring operation of the national grid, the power pooling and despatch system. Regulation would be necessary to ensure the coordinated economic despatch of generation and to provide pricing stability. The degree of regulatory involvement would depend upon the design of the power pooling/despatch system. Ideally, the regulator would work cooperatively with the Pakistan power sector in designing the rules for power pooling and control despatch. Once pool and despatch operations were established, regulatory involvement could be limited to monitoring pool operation and assessing the merits of any proposed changes to grid/pool operation.
- e. The regulator may also be responsible for monitoring the provision of subsidized services.

III. REGULATION OF THE DISTRIBUTION SECTOR

Private investment in power distribution may be regulated as follows:

- a. NEPRA is the exclusive regulator for both public and private sector operations.
- b. Private Power and Infrastructure Board (PPIB) is the facilitating body with respect to “private power” under the PPIB Act.
- c. Alternative Energy Development Board (AEDB) is the facilitating body with regard to renewable energy.
- d. SECP is the regulator for corporate affairs of the DISCOs being incorporated companies.

I. National Electric Power Regulatory Authority

The 1997 CCI Approval conferred impetus to the preparatory actions taken by the GOP to implement the Reform Plan as a consequence of the 1993 CCI Approval. Resultantly, the NEPRA Act was promulgated on December 16, 1997, and NEPRA was established.

The NEPRA structure includes:

- a. A Chairman – appointed for four-year term by a Government Committee formed under the Office of the Prime Minister.
- b. Four Members – from each Province – four-year terms.
- c. Vice Chair is a member appointed for a one-year term by legally prescribed rotation.

Hierarchy of Laws Guiding NEPRA

- Constitution of Pakistan
- NEPRA Act
- NEPRA Rules
- NEPRA Regulations
- NEPRA Internal Guides
- (*i.e., Decisions, Codes, Manuals*)



1. *Functions of NEPRA*

NEPRA is exclusively responsible for regulating the provision of electric power services, i.e., generation, transmission and distribution of electric power, and all other services incidental thereto.²⁷ NEPRA authority and functions include:²⁸

- a. Granting licenses for generation, transmission and distribution of electric power.
- b. Prescribing procedures and standards for investment programs by generation, transmission and distribution companies.
- c. Prescribing and enforcing performance standards for generation, transmission and distribution companies.
- d. Establishing a uniform system of accounts by generation, transmission and distribution companies.
- e. Prescribing fees, including license fees (i.e., for grant, renewal).
- f. Prescribing fines for contravention of the provisions of the NEPRA Act.
- g. Reviewing orders, decision and determinations, settling disputes between the licensees.
- h. Issuing guidelines and standard operating procedures for efficient, affordable and reliable power services.
- i. Determining tariffs, rates charges and other terms and conditions for supply of electric power services by the generation, transmission and distribution companies and recommending to the Federal Government for notification.
- j. Reviewing organizational affairs of generation, transmission and distribution companies to avoid any adverse effect on the operation of electric power services, and for continuous and efficient supply of such services.
- k. Encouraging uniform industry standards and code of conduct for generation, transmission and distribution companies.
- l. Performing any other function incidental or consequential to its regulatory authority and functions.

The NEPRA Act²⁹ provides that Provincial Government may construct electric power plants and grid stations and lay transmission lines for use within the Province. In such an event the Provincial Government may

²⁷ Section 7(1) of the NEPRA Act.

²⁸ Section 7(2) and (3) of the NEPRA Act. Only relevant powers and functions are listed.



determine tariff for distribution of electricity with the Province. Similarly, per the Constitution,³⁰ the Provincial Government may, to the extent electricity is supplied to that Province from the national grid, require supply to be made in bulk for transmission and distribution within the Province and in that event determine the tariff for distribution of electricity within the Province.

In performing its functions, NEPRA is legally required to protect interests of consumers and companies providing electric power services in accordance with guidelines laid down by the Federal Government, which guidelines must be consistent with provisions of the NEPRA Act.

2. *Licensing Role of NEPRA*

Under the NEPRA Act, any entity – public, private or quasi-private – seeking to engage in the business of generation, transmission or distribution of electric power must obtain a license from NEPRA.³¹ Thus, the first and foremost role NEPRA has in regulation of private investment, particularly with regards to distribution of electricity, is the granting of licenses. NEPRA can impose such terms and conditions on a licensee as it deems necessary.

In order to be granted a license from NEPRA, the prospective licensee must be a company registered under the Companies Ordinance.³²

NEPRA formulated the National Electric Power Regulatory Authority Licensing (Distribution) Rules, 1999 (NEPRA Licensing Distribution Rules) as well as the National Electric Power Regulatory Authority Licensing (Application & Modification Procedure) Regulations, 1999. Both shall apply to private investors.

3. *Duties and Responsibilities of Licensees*

The NEPRA Act (Section 21) sets out the duties and responsibilities of all distribution licensees. The licensee is to follow performance standards laid down by NEPRA for distribution of electric power, including any safety, health and environmental protection instructions issued by NEPRA.

The NEPRA Act provides that the licensee shall possess the exclusive right to provide distribution services for such period as is specified in its license, and to sell electric power to consumers in the service territory specified

²⁹ Section 7(4).

³⁰ Article 157.

³¹ For distribution, the relevant provision is Section 20 of the NEPRA Act.

³² Section 24 of the NEPRA Act.



in its license.³³ Current DISCO licenses (except for SEPCO and TESCO) are for 20 years starting from 2001/2002, whereas for SEPCO and TESCO, the 20-year term starts from 2011 and 2013, respectively.

The NEPRA Act also provides that once a license is issued, a licensee is under an obligation to provide distribution service and make sales of electric power within its service territory on a non-discriminatory basis.³⁴ Such requirement is not applicable with respect to:

- a. Non-paying consumers in default.
- b. Consumer involved in electricity theft.
- c. A bulk power consumer (BPC) who has contracted for electric power supply from another supplier.

The NEPRA Eligibility Criteria for Consumer of Distribution Companies Regulations, 2003 prescribes the criteria for non-discriminatory provision of distribution service by the DISCO in its service territory.

Under section 21 of the NEPRA Act and Rule 9 of the NEPRA Licensing Distribution Rules, the DISCOs have issued the Consumer Service Manual (Consumer Service Manual), after approval of the NEPRA. The Consumer Manual (updated in 2010 as per NEPRA website) sets forth instructions to be administered by all DISCOs in order to ensure safe, effective and reliable supply of electric power.

4. *Second-tier supply*

Second-tier supplier means any distribution or generation licensee authorized to carry out the authorized business, if any, of the licensee or any of its affiliates as a supplier, whether or not carried out pursuant to a power acquisition contract, of electric power to one or more bulk-power consumer within or without the service territory.

The NEPRA Act (notwithstanding Section 21) legally permits a GENCO or DISCO, for up to 15 years from the commencement of the NEPRA Act (i.e., till December 16, 2012), to sell electric power to BPCs located within the service territory of another DISCO with the approval of NEPRA. The proviso to Section 21(2)(a) also provides that a generation company may make sales of electric power to BPC within such territory as NEPRA may, subject to Section 22, for a period of 15 years, allow.

³³ Section 21 (2) The Distribution Licenses of DISCOs provide certain areas (within the geographical territory) which are carved out of the Service Territory.

³⁴ Section 21(2).



Rule 7(2) of the NEPRA Licensing Distribution Rules provides that subject to and in accordance with NEPRA rules and regulations, and unless otherwise provided in a Distribution License, NEPRA may authorize any licensee to be a second-tier supplier to one or more BPCs in respect of the Service Territory, in accordance with such terms and conditions as are specified in the second-tier supply authorization.

With respect to second-tier supply and wheeling, the NTDC License envisaged that the competitive trading bilateral contract market (CTBCM) would be in place by July 1, 2012 (CMOD) by which time a CTBCM Implementation Plan was also to be developed by NTDC and approved by NEPRA. That date has lapsed and the CTBCM is not in place. It appears that the period of 15 years prescribed in the NEPRA Act, and the respective timeline for transition of power market as envisaged in the NTDC Transmission License and discussed above, need to be considered and co-related. During this time frame it was envisaged that the power industry would move towards the CTBCM, which would come into effect by

Exclusion of Bulk Power Consumers

- The modality for NEPRA permission for BPCs was prescribed by a time bound provision applicable until December 16, 2012.
- Thereafter, permission of NEPRA was not envisaged, since such aspects were to be considered in the CTBCM implementation plan duly approved by NEPRA.
- These timelines have lapsed without complying with the integrated approach envisaged in the NTDC Transmission License.
- The provisions pertaining to power market transition have now been removed from the NTDC license.
- The timeline have further been revised through the 2015 ECC Approval (and also reflected in the NEPRA (Market Operator Registration, Standards and Procedure) Rules, 2015.
- However, no complementary amendment has been made to reflect the same for the second-tier supply and wheeling business.

CMOD, i.e. latest by July 1, 2012. The CTBCM Implementation Plan was to be devised by NTDC upon such directions of NEPRA in consultation with all authorized electricity operators and BPCs and NEPRA approval. The CTBCM Implementation Plan would also set out steps to be taken by various stakeholders, including BPCs.

5. *Procedures and Standards for Investment and Power Acquisition Program*

The NEPRA Act provided that within 18 months from its commencement in 1997, NEPRA would prescribe procedures and standards for transmission and DISCO investment and power acquisition programs.³⁵ These procedures are to advance the goal of minimizing regulatory oversight of contracts entered into by NTDC and DISCOs. To date, NEPRA has not prescribed procedures and standards for NEPRA's prior approval of the transmission companies and DISCOs' investment and power acquisition programs, although it is informed that

³⁵ Section 32.



the process is under way. However, NEPRA has notified the Interim Power Procurement (Procedures and Standards) Regulations, 2005 (2005 IPPR Regulations), which are applied on a case-to-case basis.

Illustrative power acquisition highlights are:

- a. NEPRA's approval of any investment programs or power acquisition program is to take into account the national energy plan. Upon NEPRA's approval of an investment program or a power acquisition program, NEPRA was, subject to the terms and conditions, including rates and charges for electric power, to permit the DISCO to enter into long-term contracts for power purchases. Due to the non-framing of the requisite rules by NEPRA under Section 32 of the NEPRA Act, as well as incomplete market transition, such long-term contracts have only been with CPPA of NTDC.
- b. Under the NEPRA Licensing Distribution Rules,³⁶ DISCOs are to obtain NEPRA approval by submitting their power acquisition programs to NEPRA within 90 days following the date of notification by NEPRA of the relevant rules and regulations. To date, almost two decades later, these programs have never been submitted as the requisite framework has not been notified under Section 32 of the NEPRA Act and long-term contracts have only been with CPPA of NTDC.

Today's power market is defined by demand exceeding available supply; under the NEPRA Act, a correlation is to be elucidated between the national energy plan and investment and power acquisition programs. To date, neither NEPRA nor the DISCOs have been able to achieve this correlation. Additionally, in the context of current gap in demand and supply, particular focus is required so as to frame power allocation policy for allocation of power from the power pool to the DISCOs.

6. *Industry Standards and Codes*

Section 35 of the NEPRA Act authorizes NEPRA's issuance of industry standards and codes of conduct for:

- a. Planning criteria for safety, reliability and cost effectiveness of generation, transmission and distribution facilities.
- b. Construction practices and standards of such facilities.
- c. Operating standards and procedures.
- d. Maintenance schedules.
- e. Maintenance of adequate spinning reserves and plans to satisfy demand.

³⁶ Rule 12(4)



- f. Equipment specification and standardization.
- g. Load shedding and restoration procedures.

NEPRA has approved the following:

- a. NTDC Grid Code, 2005 (Grid Code).
- b. Distribution Code, 2005 (Distribution Code).
- c. Commercial Code, 2015 (Commercial Code).

7. *Legal Status of NEPRA as a Quasi-Judicial Body*

In addition to regulating the functions and operations of entities engaged in electric power services, including the DISCOs, NEPRA is authorized to operate as a quasi-judicial body.³⁷ In support of this authority:

- a. NEPRA may establish special tribunals for resolution of contractual disputes between licensees or such other matters as NEPRA may assign.
- b. All appeals against decisions of the tribunal lie before NEPRA, whose final decision shall be treated as a decree passed by a Civil Court.
- c. Any interested person may file a written complaint with NEPRA against a licensee for contravention of any provisions of the NEPRA Act or any rules, regulations, orders issued thereunder.

In 2012, NEPRA issued regulations on procedures for filing appeals before NEPRA. NEPRA also issued Review Procedures Regulations, 2009, which prescribe the modality and procedure to be followed in cases seeking review. Although these provisions have been used from time to time for review proceedings, the trend has been that the original decisions are typically not overturned.

8. *Reporting Requirements*

Under the NEPRA Act, NEPRA is to submit to the CCI and the Federal Government an annual report that addresses:

- a. The overall conduct of its regulatory affairs.
- b. The state of the country's power sector including: ownership, operation, management, efficiency and control of electric power facilities, amount of transmission and generation capacity, present and future demand of electricity, cost of electric power services and other relevant matters.

³⁷ NEPRA Act, Sections 7(2)(g)&(h), 11 and 39.



9. Rules and Regulations

Under the NEPRA Act, NEPRA is legally authorized to issue Rules and Regulations, which are binding and enforceable.

- a. Rules require the approval of the Federal Government through the Cabinet Secretariat.
- b. Regulations do not require any approval or notification beyond that provided by NEPRA.

2. Private Power and Infrastructure Board

The 1994 Power Policy envisaged the creation of a one-window facility to, inter alia, co-ordinate with all agencies and Ministries concerned with power sector operations, monitoring the performance of the private sector projects, and safeguarding the interests of the consumers. It was for these purposes that the Private Power Infrastructure Board (PPIB) was established with specific emphasis on attracting private investment to the generation sector. The PPIB mandate has been reiterated in the 1998 Power Policy and the 2002 Power Policy.

The PPIB Act was enacted in 2012. The primary emphasis of the PPIB Act is on generation, although Section 2(h) defines “private power” as “all activities concerning generation, transmission and distribution of electricity and the related infrastructure, which may be carried out by or on behalf of private sector under power related policies and applicable laws”. This term has only been used once in the PPIB Act, in section 5(1)(j), which empowers PPIB to “obtain from sponsors or private power companies, as the case may be, security instruments and encash or return them, as deemed appropriate”.

The PPIB Act dissolved the Board³⁸ established under the 1994 Power Policy, establishing a revised Board consisting of Chairman being the Minister for MWP, four federal secretaries, and 14 other nominated designees as its members.

Upon dissolution, all assets, rights, and powers were transferred from the former PPIB Board to the revised PPIB, and all contracts entered into with or for the former Board were deemed to have been incurred, entered into or engaged to be done by, with or for the PPIB.

The PPIB was established to promote private investment, and the development and implementation of private and quasi-private (i.e., PPP) power projects. PPIB functions to promote and facilitate private sector investment in the power sector include:

³⁸ Section 29 of the PPIB Act.



- a. Recommendations and facilitation for development of power policies, including coordination and collaboration with relevant agencies for implementation thereof, including obtaining consents, approvals, etc.
- b. Consultation with concerned Provincial Governments with regard to construction of hydroelectric power stations.
- c. Collaboration with power sector companies to ensure implementation of private power projects.
- d. Preparation and negotiation of private investment agreements, contracts, and performance guarantees.
- e. Performance of any other function incidental or consequential to its powers for carrying out objects of the PPIB Act. PPIB also gives sovereign guarantees on behalf of the GOP with regards to power projects in private sector.

3. Alternative Energy Development Board

The Alternative Energy Development Board was established in 2004³⁹ by the Alternative Energy Development Board Act, 2010 (AEDB Act). AEDB is a coordinating government body for the implementation of policies and projects to facilitate alternative and renewable energy technologies. The AEDB Act dissolved the pre-existing AEDB and transferred all assets, rights and powers to the newly established AEDB, including all debts, obligations incurred and contracts entered into for and by the former AEDB.

AEDB functions include:

- a. Developing national strategy, policies and plans for utilization of alternative and renewable energy resources.
- b. Serving as a forum in which alternative or renewable energy projects are evaluated, monitored and certified.
- c. Facilitation of energy generation through alternative or renewable energy resources by setting such projects on its own or through joint venture and by undertaking technical, financial and economic evaluation of such projects etc.

IV. REGULATION OF CORPORATE AFFAIRS (INCLUDING OF DISCOS)

The NEPRA Act provides adequate coverage for regulation of generation, transmission and distribution of electric power. In addition to the specific regulation under the NEPRA Act with respect to the distribution of electric power, there are two fundamental laws in Pakistan that regulate corporate affairs and are applicable to today's DISCOs and will apply to privatized entities as well. With respect to the corporate operations of privatized companies, these laws in Pakistan provide sufficient regulatory guidance.

³⁹ Notification No. f. 1/7/2003.



I. Securities and Exchange Commission of Pakistan Act, 1997

The Securities and Exchange Commission of Pakistan was established under the Securities and Exchange Commission of Pakistan Act, 1997 (SECP Act), and is the regulator of companies incorporated under the Companies Ordinance in Pakistan. SECP regulatory oversight includes the DISCOs as they were incorporated under the Companies Ordinance.

The SECP has a wide role with regards to regulation of companies in Pakistan that includes administration of the Companies Ordinance and related rules and regulations, as well as monitoring company compliance with applicable laws, rules and regulations. The SECP regulates all registered companies and has the power to make rules and regulations while exercising its functions.

Whether government-owned or private, it should be expected that the SECP rules would apply to all DISCO operations. What is less clear until the mode of privatization is finalized is whether the SECP's 2013 "Public Sector Corporate Governance Rules" will apply.

Applicability of Public Sector Corporate Governance Rules

The applicability of the Public Sector Corporate Governance Rules on the DISCOs after privatization, and whether they would fall within the definition of "public sector companies", will depend on what mode of privatization is used for the privatization of DISCOs.

These Rules have, to date, applied to the existing DISCOs as government-owned companies. "Public Sector Company" is defined to include a company, whether public or private, which is directly or indirectly controlled, beneficially owned or not less than 50 per cent of the voting securities or voting power of which are held by the Government, or in respect of which the Government has otherwise power to elect, nominate or appoint majority of its directors. The applicability of the Public Sector Corporate Governance Rules on the DISCOs after privatization, and whether they would fall within the definition of "public sector companies", will depend on what mode of privatization is used for the privatization of DISCOs.

2. Companies Ordinance, 1984

The Companies Ordinance applies to private, public and government-owned companies for which shares/guarantees have been issued. The DISCOs were incorporated under the Companies Ordinance and legally should follow this guidance. In fact, institutional arrangements and certain government interventions have somewhat intervened in the past bypassing Ordinance requirements, i.e., handling of the Board of Directors, which have in recent times been reconciled. The provisions of the Companies Ordinance in detail cover aspects of corporate affairs including share capital and debentures, management and administration, accounts and audit and arrangements and reconstruction.



V. REGULATION OF CORPORATE AFFAIRS IN OTHER SECTORS

Presently, the regulatory framework is more focused on the transition phases of the power sector. Specific regulations with respect to private investment are not in place. The power market is still in the early stage of a competitive market setting in Pakistan. Therefore, it may require more aggressive approaches to regulation, before competition is fully developed, and while the power sector is undergoing significant changes. Lessons as to modality adopted for regulation of private sector investment may be learned from how other sectors in the Pakistan economy function alongside their relevant regulatory authorities. For example, the State Bank of Pakistan (SBP) regulates the banking sector in Pakistan, and the SECP has made specific rules and regulations for various sectors (e.g., NBFCs, Insurance). Some of the powers of regulation exercised in other sectors are:

- a. Determining requirements for minimum paid-up capital and reserves.
- b. Authority to appoint a director on the Board of Directors. Laying down “fit and proper” criteria with respect to appointments of directors. Generally, such criterion is based on the touchstones of honesty, financial integrity, etc.
- c. Having strict independent audit requirements.
- d. Requiring approval of the regulator before confirmation of appointment of a director / Chief Executive Officer (CEO). A qualification criterion is provided for other posts like Chief Financial Officer and Company Secretary.
- e. Approval before acquisition of business by a major shareholder.
- f. Ensuring that a compliance division is maintained.
- g. Requirement of majority independent directors on the Board of Directors.



CHAPTER – 4 REGULATORY COMPLIANCE BY DISTRIBUTION COMPANIES

I. REGULATORY REQUIREMENTS

DISCOs are licensees under the NEPRA Act; and are legally obligated to comply with regulatory guidance provided in:

- a. NEPRA Act.
- b. Rules notified by NEPRA.
- c. Regulations notified by NEPRA.
- d. Distribution License.
- e. Codes and Manuals prescribed or notified by NEPRA.

Illustrative Regulatory Compliance for DISCOs

- NEPRA Act.
- Rules notified by NEPRA.
- Regulations notified by NEPRA .
- Distribution License.
- Codes and Manuals prescribed or notified by NEPRA.

As licensees, the following regulatory obligations and responsibilities apply to all DISCO operations:

- a. Provision of distribution services and sale of electric power within their service territory in a non-discriminatory manner to all consumers who meet the eligibility criteria prescribed by NEPRA (Section 21(2)(b) of the NEPRA Act).
- b. Establishing instructions, guidelines and procedures for: (a) obtaining service; (b) metering, billing and collection; (c) disconnection, i.e., in case of non-payment of charges; (d) addressing electricity theft and use of energy for purposes other than for which it was supplied; and (e) procedures for re-connection and recovery of arrears and other charges (Section 21(2)(d) of the NEPRA Act).
- c. Making their transmission facilities available for operation by NTDC (the national grid company), consistent with applicable instructions established by such company (Section 21(2)(e) of the NEPRA Act).



- d. Following the performance standards prescribed by NEPRA, including safety, health and environmental protection (Section 21(2)(f) and 7(2)(c) of the NEPRA Act). This is also provided in Article 11 of the Distribution License. In this regard, NEPRA is to prescribe performance standards (section 34), which have been prescribed in the form of the NEPRA Performance Standards (Distribution) Rules.
- e. Maintaining accounts in accordance with the manner and procedure prescribed by NEPRA (Section 21(2)(g) and 7(2)(d) of the NEPRA Act). NEPRA is to prescribe a uniform system of accounts to be followed by the distribution companies (Section 36), which has been done through National Electric Power Regulatory Authority (Uniform System of Accounts) Rules, 2009 (NEPRA Accounts Rules).
- f. Developing and maintaining (with the approval of NEPRA), an investment program for satisfying its service obligations, and acquiring and selling its assets (Section 21(2)(h) of the NEPRA Act).

Regulatory authority of NEPRA with respect to DISCOs includes:

- a. NEPRA is to prescribe procedures and standards for DISCO investment programs.
- b. NEPRA is to prescribe procedures and standards for DISCOs power acquisition programs (Section 7(2)(b) and 32 of the NEPRA Act).
- c. NEPRA is to issue guidelines and standards on DISCO operating procedures (Section 7(2) of the NEPRA Act) with a mandate to encourage uniform industry standards as well as a code of conduct for DISCOs for which the regulatory criteria is prescribed (Section 7(3) and 35 respectively of the NEPRA Act).
- d. Review of organizational affairs of DISCOs to ensure technical safeguards for continuous and efficient supply of such services (Section 7(3) and 33 of the NEPRA Act) and the avoidance of any adverse effect on the operation of electric power distribution services.

Illustrative Distribution Licensees Regulatory Compliance Requirements

- Performance Standards
- Preparation and Maintenance of Accounts
- Investment and Power Acquisition Programs
- Corporate Affairs Regulation
- Technical Distribution Code
- Maintenance of Insurance
- Reporting and provision of Required Information
- Digitized Plotting of Service Territory Maps
- Compliance with Environmental Standards



I. Performance Standards

Section 21(2)(f) of the NEPRA Act requires that DISCOs comply with NEPRA performance standards that include: reporting, safety, health and environmental protection instructions issued by NEPRA and any Government agency.

The NEPRA Act provides that NEPRA shall prescribe and enforce performance standards for DISCOs.⁴⁰ NEPRA notified the NEPRA Performance Standards (Distribution) Rules. Article 11 of the Distribution License also obligates the DISCO to comply with the Rules. Under section 34 of the NEPRA Act, such standards are to include standards for:

- a. Service characteristics including voltage and stability.
- b. Scheduled and unscheduled outages.
- c. Reserve margins where applicable.
- d. Time required to connect to new customers.
- e. Principles and priorities of load shedding.

As investors consider investment in distribution, the performance standards will apply. Illustrative, relevant provisions of the NEPRA Performance Standards (Distribution) Rules are reviewed below.

- a. Guaranteed Standards of Performance. DISCOs are required to implement guaranteed standards of performance for each and every consumer.⁴¹ In the event of planned power supply interruptions,⁴² notice is to be served to all affected consumers at least 48 hours in advance of such interruption. In defence establishments, any planned power supply interruptions are only to be after mutual agreement. It is not clear whether any such notices have been issued but for load management currently being implemented on account of shortfall in demand and supply, schedules are sometimes provided and advertised in newspapers. In today's DISCO operations, such schedules are not entirely followed.
- b. Service Interruptions. The rules specify time limits in which supply is to be restored in case of unscheduled or unplanned interruption. Maximum frequency and maximum aggregate duration of

⁴⁰ Section 7(2)(c).

⁴¹ The guaranteed standards of performance are provided in Rule 3(3) of the NEPRA Performance Standards (Distribution) Rules.

⁴² Planned Power Supply Interruptions defined as: "planned or scheduled outage of electrical supply to one or more consumers".



unplanned interruptions are also provided including limits for maximum interruptions and maximum aggregate hours of interruption on account of planned power supply interruptions, and the maximum number of unplanned short duration power supply interruptions. Exact figures are not available from either DISCOs or NTDC with respect to power outages, frequencies and durations.⁴³ The Consultant has not assessed the compliance status of DISCOs with these standards but additional technical review will be undertaken by potential investors as part of their due diligence. It is however understood through NEPRA that many of the DISCOs are not in compliance with the performance standards.

- c. Supply Standards. The NEPRA Performance Standards (Distribution) Rules regulate overall standards of performance, providing underlying indicators to assess supply reliability, quality of supply, and safety of electric power supply that a DISCO provides to its consumers. These include:
- i. The System Average Interruption Frequency Index (SAIFI).⁴⁴
 - ii. The System Average Interruption Duration Index (SAIDI).⁴⁵
 - iii. Time limits for providing new connections (which time limits must be met in 95% of the cases).⁴⁶
 - iv. Maintaining power supply with a maximum range of +/- 5% of the nominal voltage.
 - v. Supplying power within the frequency of 50 (+/-1%) Hz and in accordance with the Institute of Electrical and Electronics Engineers (IEEE) Standard 519-1992 pertaining to harmonic content.
 - vi. Priorities and principles of load shedding, i.e., having a plan ready to shed up to 30% of its connected load at any time upon instruction from NTDC. For the aspect of load shedding, the DISCO is to provide copies of such plans to NTDC, and upon such instructions from NTDC the DISCO is to follow an order⁴⁷ in which the load is to be shed. At the same time, the rotation is to be proportional and non-discriminatory.

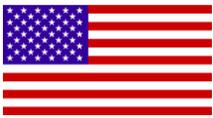
⁴³ Relevant figures are filed with PEPCO; Consultant has not been provided with this information.

⁴⁴ SAIFI = Total annual number of power supply interruptions / total number of consumers of DISCO in a year. Any power supply interruptions caused due to outage of a transmission or generation facility are not accounted for.

⁴⁵ SAIDI = Aggregate minutes of all supply interruptions duration in minutes / number of consumers of DISCO in a year. Any power supply interruptions caused due to outage of a transmission or generation facility are not accounted for.

⁴⁶ It is also provided that if there is a delay, a DISCO is to give reasons in writing to the consumer, along with a copy to NEPRA. The requisite parameters have been modified by way of SRO No. 393(I)/2011 dated May 13, 2011.

⁴⁷ The order is: supply to consumers in rural areas and residential consumers in urban areas where separate feeders exist; supply to consumers, other than industrial, in urban areas; supply to agricultural consumers where there is dedicated power supply; supply to industrial consumers; supply to schools and hospitals; supply to defence and strategic installations.



- vii. To construct, operate, control and maintain their facilities in a manner consistent with the Distribution Code, Power Safety Code, and other documents, and to maintain standards keeping in view safety of human life.
- d. Database. The DISCOs are required to maintain a computerized database system covering all power supply interruptions. The system is to include information with respect to: (a) date and time of outage; (b) point of interruption; (c) the time at which service was restored; (d) total duration of interruption; and (e) number of connected consumers, feeder and transformer code number and number of affected consumers. DISCOs are also to have adequate complaint system in field for consumers, including timely registration of complaints, toll-free numbers, and other similar matters.
- e. Reconciliation of Metering and Billing. Regulatory guidance is clear on resolution of metering and billing disputes. DISCOs are to ensure that any investigation and decision with respect to metering, billing, and other disputes are finalized within 21 days of the filing of any complaint, and that the disputed meter is inspected by authorized personnel within 5 days of the complaint.
- f. Reporting. DISCOs are regulated to submit annual performance reports to NEPRA that, at a minimum, include information on: (a) system performance; (b) consumer service performance; (c) plans for improvement; and (d) reasons for any poor performance, including details of most affected consumers. It is understood that such reports are being filed but that they are submitted in manual forms, not digitized and that they are typically delayed in their filing.

2. Accounts

NEPRA established a Uniform System of Accounts for the DISCOs, for which NEPRA has notified the NEPRA Accounts Rules.

Under the NEPRA Accounts Rules,⁴⁸ every licensee is required to:

- a. Keep a book of accounts at its principal place of business and maintain its accounts as specified in the NEPRA Account Rules.
- b. File a set of quarterly, semi-annual and annual regulatory accounts with NEPRA:
 - i. The annual accounts are to be filed with NEPRA within one month of the last date of submission of the audited accounts under the Companies Ordinance.

⁴⁸ Rule 3.



- ii. The accounts for the previous 10 years are to be maintained.

Similarly, the NEPRA Licensing Distribution Rules provide in detail the accounting practices to be followed by the DISCOs, and provide the obligation of the DISCOs to maintain records for a period of five years.

Article 13 of the Distribution License requires the DISCOs to maintain separate accounts for: (a) Sale of Power Business; and (b) Network Business. These accounts are to be in addition to those required under the NEPRA Licensing Distribution Rules, which do not impose any requirement for a particular type of account to be maintained; but rather, that a DISCO ensures arrangements that allow separate accounts to be maintained for each of the DISCO's businesses.

The Rules do not prescribe how the accounts are to be maintained, but such aspect is prescribed in the Schedule of the NEPRA Accounts Rules. The NEPRA Accounts Rules provide a list of the different areas of a DISCO's business that need to have separate accounts. The NEPRA Accounts Rules also set out templates of accounts for each of those areas.

3. Investment and Power Acquisition Programs

The NEPRA Act requires DISCOs to develop and maintain, with NEPRA approval, an investment program to ensure its capacity to meet its service obligations, and acquire and sell its assets.⁴⁹ To date, NEPRA has not prescribed procedures and standards for investment and power acquisition programs. The rules were intended to minimize regulatory oversight of power purchase and sales contracts entered into by NTDC and DISCOs, while taking into account the national energy plans issued by the Federal Government.⁵⁰

The NEPRA Licensing Distribution Rules require that DISCOs submit power acquisition programs to NEPRA for approval⁵¹ and that electric power should be purchased at cost-effective prices, reasonably obtainable with respect to security, reliability and diversity of sources. After such procedures and standards for investment and power acquisition programs are notified by NEPRA, DISCOs are permitted by NEPRA to enter into long-term contracts for power purchases and undertake their investment programs.

The DISCOs have not submitted power acquisition programs to NEPRA, except and save to the extent discussed in Chapter 6. Because the requisite standards and procedures under section 32 of the NEPRA Act have not been issued, in addition to the current market structure, DISCOs continue to procure power through the centralized NTDC/CPPA structure. As a result of the current structure, NTDC/CPPA acquires and sells

⁴⁹ Section 21(2)(h) and 7(2)(b) of the NEPRA Act.

⁵⁰ Section 32 of the NEPRA Act.

⁵¹ Rule 12(4).



power on a case-to-case basis under the 2005 IPPR Regulations. With respect to tariff petitions filed by DISCOs for NEPRA review and determination, NEPRA is provided with a business plan, which details projected investments for the coming year.

To the extent of investment programs, the NEPRA Licensing Distribution Rules set out two categories of investment by DISCOs in the absence of an approved investment program:

1. Firstly, a DISCO may acquire assets required for operation / maintenance of the distribution system “or” for a value not exceeding the value specified in the license.
2. Secondly, a DISCO may sell or dispose of assets of a value not exceeding the value specified for that purpose by NEPRA in the Distribution License.

These categories are also reflected in the Distribution Licenses of the DISCOs.

4. Restrictions in Corporate Affairs

Rule 13 of NEPRA Licensing Distribution Rules places a restriction on DISCOs to:

- a. Stand surety, give guarantees or in any other manner offer or provide security for indebtedness or obligations, contractual or otherwise, of any other person.
- b. Acquire shares or other securities or participating interest in any other person after the date of the issue of the Distribution License, except:
 - i. Its affiliate on the date of issue of the distribution license.
 - ii. To satisfy its obligations under the laws or applicable documents.
 - iii. In a person which conducts an authorised business.
 - iv. In order to avoid dilution of the shareholding or such other interest of the licensee in a person in which it holds shares or other securities in conformity with the applicable documents.
- c. Recognize transfer of its shares or voting securities where the result would be one person holding 10% or more voting strength⁵² (it is also mandated that the Articles of Association of the DISCO would also

⁵² This condition can be dispensed with by NEPRA as per Rule 13(3), which provides that while considering such a request, NEPRA will take into account, inter alia, promotion of competition in the industry, and the change in management and control which was likely to result from such transfer.



contain a clause to this effect). This restriction would not apply in the event shares or voting securities of the licensee are listed on any recognised national or international stock exchange. NEPRA is also authorized to require retention by any shareholder of a minimum number of shares or other voting securities, not exceeding the number held by such shareholder on the date of issue of the Distribution License, for such period of time as may be specified by NEPRA.

Note: These are important issues for privatization. The Consultant has not assessed the status of DISCOs with respect to (a) and (b) above, as information in this respect was not made available. With respect to (c), it appears that the DISCOs have not issued shares (beyond those shares held by the GOP or WAPDA).

5. Compliance with the Distribution Code

NEPRA has approved a Distribution Code, which defines the technical and operational aspects of the relationships between the distribution company and all those entities connected to its distribution system. The Distribution Code⁵³ regulates requirements for all material technical, design, planning, development, operational, maintenance and other aspects relating to the distribution system. Illustrative content of the Distribution Code includes:

- a. The distribution operating code (procedures on operational matters, including but not limited to planned outages, safety matters, procedures under contingencies, etc.).
- b. The distribution planning code (standard of supply of the DISCO's network, design principles, technical information for connections, etc.).
- c. The distribution design code (design process of the distribution system and any user connections to the system).
- d. The connection code (standard of supply to connecting parties, use of system principles, etc.).
- e. System construction code.
- f. System performance reliability.
- g. Consumer service requirements.
- h. Metering requirements.
- i. Safety requirements.
- j. Public lighting.

⁵³ Prepared by DISCOs under Rule 15 of NEPRA Licensing Distribution Rules and approved by NEPRA.



- k. System maintenance and testing.

NEPRA has made numerous efforts, including establishing a Distribution Code Review Panel, to address issues pertaining to the distribution sector, and to evaluate the development of the Distribution Code in light of upcoming power projects, concept of net metering, etc. NEPRA is contemplating introduction of the concept of net metering in the service territory of DISCOs. This initiative was reflected in the form of draft rules in 2014 for comments of the stakeholders; however, the process is presently under review of NEPRA.

6. Compliance with the Commercial Code

NEPRA has approved a Commercial Code, which is applicable on the existing market structure, i.e., the Single Buyer and the current practices. The Commercial Code regulates billing, collection, settlement and payments amongst the market participants.

The Commercial Code also provides for establishing a Commercial Code Review Panel, to address issues and improvement of the aspects covered by the commercial code.

7. Insurance Requirement

Per the NEPRA Licensing Distribution Rules, DISCOs are required to obtain and maintain appropriate policies of insurance, as may be specified in their Distribution License. An exception has been carved out with respect to applicability of this provision until such time that NEPRA makes and enforces a policy decision for insurance to be obtained by the entire electric power industry. It will be important to ensure that during privatization clear and broad insurance requirements are included in transaction documents (i.e., worker coverage, operational coverage, etc.).

8. Reporting Information Requirement

NEPRA has and may specify in the Distribution License the extent and scope of the licensee obligation to furnish to NEPRA information regarding any activity of the licensee, and penalties are also provided in case of non-compliance. Consideration of the information to be required as privatization ensues will be important as well as treatment of information for public access.

9. Digitized Plotting of Distribution System Maps

The Distribution License requires DISCOs to submit to NEPRA digitized plotting on:

- a. Maps of its “11 kV distribution system” and “sub-transmission system network” within two years of issuance of the Distribution License.



- b. Maps of “low-tension distribution system”, within three years of issuance of the license.

However, no DISCO has submitted these maps or otherwise fulfilled NEPRA’s requirements for the digitization process.⁵⁴ This requirement must be essential as part of privatization.

Article 3.3(ii) of the Distribution License requires the DISCOs to submit quarterly progress reports to NEPRA until the digitization process is completed. The NEPRA State of Industry report also states that digitization process is not yet complete but that the process is under way.

The Distribution License further requires submission of an updated map showing 11kV distribution system on specified scale and that on 1st of July every year, an updated map of the 11 kV distribution system along with clear demarcation of the extensions that have taken place in the preceding year be submitted.

10. Compliance with Environmental Standards

Environmental standards are not fully developed. Requirements in place are reviewed below.

- a. Distribution License. Article 12 of the Distribution License requires that DISCOs conform to any environmental standards prescribed by the relevant competent authority; no more regulatory guidance is given.
- b. NEPRA. NEPRA has not prescribed environmental standards; however, the “relevant competent authority” would indicate the Environmental Protection Agency, which has been set up by each province (as applicable to respective DISCOs).
- c. Pakistan Environmental Protection Act was enacted in 1997 and pursuant to the 18th Amendment, the subject of “environment” devolved from federal to provincial oversight. As a result, provinces have adopted respective legislations (i.e., the Punjab Environmental Protection (Amendment) Act, 2012 etc.).
- d. These legislations, and rules and regulations enacted under them, provide criteria for certain environmental aspects, which the DISCOs are bound to comply with.

⁵⁴ SOI Report 2013; Para 4.11.



II. EFFECTS OF REGULATORY NON-COMPLIANCE

NEPRA AUTHORIZATION

The NEPRA Act authorizes NEPRA to take actions against DISCOs for regulatory non-compliance that includes:

- a. Imposition of Fines.
- b. Suspension of Distribution License.
- c. Revocation of Distribution License.

Illustrative penalties for DISCO regulatory non-compliance

- Imposition of Fines
- Suspension of Distribution License
- Revocation of Distribution License

The penalties for DISCO regulatory non-compliance suspension or revocation of a DISCO license must be implemented following prescribed notification including issuance of a Show Cause notice to the non-complying DISCO that provides time-based opportunity to cure.⁵⁵ To date, NEPRA has never suspended or revoked any Distribution License.

The National Electric Power Regulatory Authority (Fines) Rules, 2002 (Fines Rules) specify certain fines for failing to comply with provisions of the NEPRA Act or the Distribution License. The Fines Rules regulate the power of NEPRA to impose fines, with the general principle that fines should be imposed in proportion to the gravity of the violation or failure.

Generally, NEPRA may impose fines up to Rs.100 Million for each violation for each day that violation was committed. However, where non-compliance continues, NEPRA is authorized to impose a fine up to Rs.500,000 for each day on which the violation is committed, provided that the licensee has been given prescribed notice to show cause including an opportunity to cure and to be heard before NEPRA.

In imposing any fine, NEPRA is required to seek an explanation⁵⁶ from the identified DISCO regarding the violation. If NEPRA rejects the explanation, it may issue a Show-Cause Notice, to which the DISCO must respond. If NEPRA decides to impose the fine, an aggrieved DISCO has the option of having the NEPRA decision reviewed.⁵⁷

⁵⁵ Sections 28 and 29 of the NEPRA Act.

⁵⁶ Rule 4(1) of the Fines Rules.

⁵⁷ Rule 5 of the Fines Rules.



NEPRA IMPOSITION OF FINES FOR DISCO NON-COMPLIANCE

NEPRA has imposed fines for regulatory non-compliance on DISCOs, notably with respect to the performance standards. To illustrate the typical process and procedure followed for NEPRA fines, action taken against PESCO in 2014 is detailed below, based on documents provided to the Consultant:

- a. NEPRA identification of non-compliance. Following review of PESCO non-compliance with NEPRA Performance Standards (Distribution) Rules,⁵⁸ NEPRA determined that fines would be imposed. NEPRA issued notice to PESCO specifying for PESCO that it had failed to comply with certain performance standards, including the SAIFI and SAIDI requirements, failed to provide reasons for its delay in providing connections, and failed to submit information in the annual performance report to NEPRA.
- b. DISCO response. In reply, PESCO gave reasons for such failures that included impacts from the national power crisis, infrastructure design issues, overloaded and old / deteriorating distribution network, and power theft issues due to a diminishing law and order situation in its territory.
- c. NEPRA review of DISCO response. NEPRA found the explanatory response provided by PESCO to be unsatisfactory. NEPRA therefore issued an Order in which it noted that PESCO had not complied with the Distribution Code and the relevant rules and regulations. It rejected PESCO's reasoning and directed the NEPRA Registrar to issue a Show Cause Notice per Rule 4 of the Fines Rules.
- d. Issuance of Show Case Notice. NEPRA issued a Show Cause Notice to which PESCO replied, restating its explanations for non-compliance and provided information on the overloaded and deteriorating distribution network.
- e. Hearing. NEPRA conducted a hearing after which it issued a detailed order. While taking into account PESCO's submissions, NEPRA highlighted that every year, despite heightening state subsidy, PESCO's performance had not shown any satisfactory improvement; PESCO's response was rejected by NEPRA.
- f. Final Imposition of Fines for Non-Compliance. NEPRA imposed the following fines on PESCO: (1) Rs.5 Million for violation of safety standards; (2) Rs.3 Million for failing to meet time frame for new connections; and (3) Rs.2 Million for failing to meet the SAIFI and SAIDI standards.

⁵⁸ Proceedings initiated in 2014.



III.NEPA “STATE OF INDUSTRY” REPORTS

NEPA issues a “State of Industry Report” as part of its operational work; the State of Industry Reports issued for 2006 to 2013 indicate that sector reform has encountered various impediments and is not yet implemented.

NEPA recommended that the 1992 Power Sector Reform Plan finally be implemented, specifically through immediate decentralization and privatization of selected power sector companies that include DISCOs. NEPA noted that the lack of autonomy amongst DISCO management has resulted in an on-going, centralized management role of PEPCO particularly in critical DISCO operational matters, and that PEPCOs role in distribution is a critical impediment to sector reform.

This State of Industry Report, utilizes information included in the DISCOs annual performance reports, concluded the following:

- a. The DISCOs, with respect of their reported losses over a period of three years, reflect slight improvement, except for LESCO and QESCO, which have reported that their losses have increased as compared to previous years.
- b. Five DISCOs report improved recovery ratios; LESCO, QESCO, PESCO and HESCO do not.
- c. The DISCOs have not improved their compliance with SAIFI and their interruptions remain above the threshold index prescribed by NEPA. It is the same case with respect to the power supply reliability over a three-year period. None of the DISCOs were able to improve the key parameters, and inability to achieve NEPA set index reflects, in the opinion of NEPA, total failure of DISCOs, as the index excludes the load-shedding hours from calculation of this system reliability index.
- d. The DISCOs have failed to meet the performance standard for duration of interruptions, which also did not reflect any improvement.
- e. The electrical safety aspects for DISCO employees provide a bleak picture and strict safety measures should be adopted by all DISCOs to match comparable performance by international utilities.
- f. There has been improvement in DISCOs’ maintenance of their databases in the last three years. However, it has also been reported that some DISCOs have misreported their data.
- g. DISCOs have failed to provide electricity connections to new applicants within the prescribed NEPA time frame.
- h. The frequency of complaints against DISCOs by their consumers has increased.



CHAPTER – 5 LICENSING AND TARIFF

I. LICENSING FRAMEWORK

The NEPRA Act created and mandated NEPRA to be the independent regulator of all entities engaged in electric power services. Under the NEPRA Act, each activity, i.e. generation, transmission and distribution, is defined and required to be a licensed activity. The NEPRA Act defines distribution as “the ownership, operation, management or control of distribution facilities for movement or delivery

Definition of “distribution” (NEPRA Act, 1997)

“...the ownership, operation, management or control of distribution facilities for movement or delivery or sale to consumers of electric power, but shall not include the ownership, operation, management and control of distribution facilities located on private property and used solely to move or deliver electric power to the person owning, operating, managing and controlling those facilities or to its tenants”.

or sale to consumers of electric power, but shall not include the ownership, operation, management and control of distribution facilities located on private property and used solely to move or deliver electric power to the person owning, operating, managing and controlling those facilities or to its tenants”. The issuance of licenses is the first and foremost way in which NEPRA is able to regulate the “distribution” and to monitor implementation of those licensed activities to ensure sound distribution operations.

I. Authority to Grant Distribution Licenses

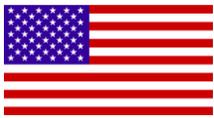
NEPRA is authorized to grant licenses for generation, transmission and distribution of electric power.⁵⁹ The NEPRA Licensing Distribution Rules provide that NEPRA may grant a license to engage in the distribution business within the area specified in the Distribution License.

Distribution License Application

- Application Form.
- Application Fee.
- Copy of Incorporation Documents.
- Copy of Annual Financial Statements.
- CVs/Information on Senior Management.
- Technical details/design of facility.
- Map of service area.
- Proposed power sources/availability of resources.
- Resource commitments.
- Proposed rates and commitment from sources of electric power.

In 1999, NEPRA notified the National Electric Power Regulatory Authority (Application and Modification Procedure) Regulations that provide the form of the distribution license application,

⁵⁹ Section 7(2)(a) of the NEPRA Act. For distribution licenses, the relevant provision is section 20.



and the documents / information required to accompany such application. These include application fee, copies of incorporation documents, annual financial statements, profiles and curriculum vitae of senior management. For a distribution license, an application is to provide the type, technology, model, technical details and design of the facility, a territorial map of the proposed service area, and particulars in respect of availability of resources, rates, and commitment from sources of electric power.

In considering the distribution license application, the NEPRA-prescribed eligibility criteria⁶⁰ are applied. These include business experience, financial status, technology, model design, and ability to meet the various technical codes with respect to the power sector in order to operate in sync with the sector.

2. Distribution License Rights and Obligations

Once an applicant is granted a Distribution License as prescribed under the NPERA rules, the following rights and obligations apply:⁶¹

- a. Exclusivity. The license holder has exclusive rights for a defined period of time, to engage in the distribution business within the service territory specified in the License (Service Territory). However, practically there are certain cases of high rise buildings, housing colonies and industrial estates within the Service Territory of DISCOs, who are obtaining one-point supply from the DISCO and thereafter selling / supplying the electric power to their respective consumers. This may appear to impinge upon the exclusivity of the DISCOs, but when any proceedings are initiated for grant of a separate distribution license to such entities, DISCOs object to the same on the ground of exclusivity. This arrangement requires consideration so as to safeguard the interests of DISCOs as well as to codify any such arrangement.
- b. Service Territory. Service Territory is defined not to include: (i) area used by Armed Forces for which an authorization by NEPRA for distribution of power purchased at one or more points for consumption within its own area has been provided;⁶² (ii) housing colonies, plazas/complexes, and other bulk purchasers, at the option of the organizations or bodies representing the occupiers or owners, which were already operating their own distribution systems within the said areas on the date of issue of the Distribution License; and (iii) an area restricted to three meters on either side of a small

⁶⁰ Regulation 5.

⁶¹ Section 21 of the NEPRA Act.

⁶² The criteria for such permission by NEPRA have also been specified in Article 3 of the Distribution License.



power producers distribution system as set out in the generation license issued to them where the small power producers opts to apply for a distribution license.⁶³

- i. All disputes with respect to the distribution Service Territory are to be decided by NEPRA. The distribution Service Territory is defined to extend up to eight kilometres on either side and tail end points of the existing 11 kV distribution system shown in Schedule I of each distribution license,⁶⁴ which may be extended upon expansion of the licensee's 11 kV distribution system within the service territory.⁶⁵
- ii. Schedule I of the distribution licenses provided to the Consultant for review were blank (as are the Schedules found on the NEPRA website). Information provided with respect to Schedule I indicated that it contains a figure outlining the territory covered under each distribution license. For privatization, it will be essential that clear and written definition of each service territory is properly and clearly marked.
- c. Non-discriminatory service. License holders are obligated to provide distribution services and make sales of electric power within its service territory on a non-discriminatory basis, provided that the licensee will not be required to sell electricity to a bulk power consumer who has contracted with another supplier, and the licensee has the right to cut power supply to a consumer that is in default of payments or engage in electricity theft.
- d. Provision of Information. The distribution licensees have certain information obligations, i.e.:
 - i. Publicly make available tariff specifying NEPRA's approved rates, and other terms and conditions for distribution and power sales to consumers.
 - ii. Establish, within three months of the issue of its license for distribution of electric power and make available to public, instructions specifying the procedure for obtaining services and the manner and procedure for billing, metering, collection of charges, etc.
 - iii. Obtain NEPRA approval for its investment plan and maintain, develop and publicly make available the said plan thereafter.

⁶³ The licensee has been directed not to change or alter the arrangement, as it existed on the date of issuance of the Distribution License. Further, it may be noted that in the case of IESCO, the license has been modified through an Authority Proposed Modification, through which some part of its Service Territory has been carved out in favor of a Bahria Town (Pvt.) Limited, to whom a separate distribution license has been granted for that area.

⁶⁴ Schedule – I of the Distribution License.

⁶⁵ Concession Territory defined as: the territory outside the Service Territory of the licensee defined by the administrative/geographical boundaries as delineated in Schedule-I to the license.



- e. Technical obligations:
 - i. Make available transmission facilities to the national grid company.
 - ii. Follow performance standards including standards for safety, health and environmental protection as issued by NEPRA.
- f. Maintain accounts in accordance with the manner and procedure laid down by NEPRA.

3. Duration and Renewal of License

The duration of Distribution Licenses of each of the DISCOs is 20 years. NEPRA may, at its discretion, renew a distribution license for a term it considers appropriate. In doing so, NEPRA would take into consideration the performance of the licensee (including compliance with standards) during the previous license term, along with considerations of consumer interests and the state of the electric power industry. The applicant is to follow prescribed renewal procedures.

A private investor may consider the remaining term of the Distribution License that is being privatized. The GOP should consider policy determination as to extension of such license terms.

Article 5 of the Distribution License guides renewal rights but does not set out renewal procedure.

4. Modification of Distribution License

One critical aspect with respect to the distribution-licensing framework is the power of NEPRA to modify the distribution license.⁶⁶ NEPRA may initiate an “Authority Proposed Modification” (APM) to the license if in its opinion, such modification:

- a. Does not adversely affect the performance by the licensee of its obligations.
- b. Does not cause NEPRA to act or acquiesce in any act or omission of the licensee in a manner contrary to the NEPRA Act, or the rules and regulations made pursuant to it.
- c. Is or is likely to be beneficial to the consumers.
- d. Is reasonably necessary for the licensee to effectively and efficiently perform its obligations under the license.
- e. Is reasonably necessary to ensure the continuous, safe and reliable supply of electric power to the consumers keeping in view the financial and technical viability of the licensee.

⁶⁶ Similar to the power of NEPRA to propose a modification, a licensee can also propose a modification under Regulation 10(2) of the NEPRA (Application and Modification Procedure) Regulations, 1999.



If a licensee does not agree to the APM, a public hearing is to be held by NEPRA, in which the licensee and stakeholders may present their case following which NEPRA may either amend or reject the APM.

NEPRA's authority to modify licenses requires consideration, keeping in view the case of Bahria Town (Pvt.) Limited (BTPL). BTPL's businesses include developing and operating housing colonies in Pakistan. In this regard, it has developed certain areas that are within the IESCO service territory. Nonetheless, NEPRA granted BTPL a Distribution License on November 24, 2010 and IESCO's license was modified through an APM to exclude the area from IESCO's territory. NEPRA's rationale was that it was in the public interest to make the APM in that consumers would be served better by BTPL. Further, that BTPL had been involved in providing the services in the area for which many consumers had expressed their satisfaction. NEPRA was of the view that in the concerned area, no distribution services were being provided by IESCO, and the dedicated distribution system laid by IESCO for BTPL, was thereafter owned, operated and maintained by BTPL. NEPRA stated that since this system was in place before the grant of the IESCO license to IESCO, it fell within the exclusion clause of IESCO's license.

IESCO was aggrieved of NEPRA's determination and filed a writ petition in the Honourable Islamabad High Court, which is pending adjudication. In the writ petition, IESCO's contentions include that the modification of its license, and grant of license to BTPL, are contrary to public interest, and should be null and void. This case raises concern for potential private investors where NEPRA's discretion may prevail in its sole determination to modify a distribution license.

A licensee can propose an amendment as per Regulation 10 of the NEPRA (Application and Modification Procedure) Regulations, 1999, which follows a substantially similar procedure as reviewed above; NEPRA has approval authority.

5. Suspension / Revocation of Distribution License

NEPRA is authorized to suspend or revoke a distribution license after issuing a Show Cause Notice, and granting the licensee an opportunity to respond and cure any noted omission,⁶⁷ where there is a consistent failure on the part of the licensee to comply with its license conditions.

Rule 8 of the NEPRA Licensing Distribution Rules provides, that subject to and in accordance with the terms of and procedure set out in the Distribution License, NEPRA may appoint an administrator in respect of the distribution business, or suspend or revoke the Distribution License upon occurrence of certain events, which are specified therein.

⁶⁷ Section 28 of NEPRA Act.



6. Issuance of Distribution License to Private Entities

Presently, none of the DISCOs are privately owned or operated. However, NEPRA has issued distribution licenses⁶⁸ to private entities such as BTPL, K-Electric Limited (formerly, KESC) and several captive power distributors. With respect to such licenses, the following regulatory experience and guidance is provided – basically whether private or government-owned distribution, regulatory guidance is the same. The BTPL license provides the following:

- a. As per Article 3, BTPL has the same rights and obligations as that of a distribution licensee under Section 21 of the NEPRA Act. As per Article 3.2, where the distribution line is in close proximity to the system of IESCO (the DISCO licensed in the service area), BTPL is to develop an underground distribution system, and cannot alter its system (for example, shifting to over-head wiring) without prior approval of NEPRA.
- b. As per Article 6, BTPL can only charge such tariff as approved by NEPRA. BTPL filed a tariff petition in 2011; however, no determination has yet been made by NEPRA.⁶⁹ Article 6.2 provides that pending approval of the tariff, BTPL shall not charge a tariff higher than that of IESCO. BTPL has filed a tariff petition in 2011.
- c. BTPL must also obtain authorization prior to acquiring or using any tangible or intangible assets of a nature or value inconsistent with or which is not expressly or by necessary implication stated in its investment program. If BTPL seeks to dispose of or sell any tangible or intangible distribution assets, NEPRA approval is required.

Generally, the BTPL license has all the attributes of those issued to the government-owned DISCOs, and NEPRA's regulation applies the same regulatory terms. The K-Electric Limited distribution license was also examined by the Consultant, and found to be substantially the same as the government-owned DISCOs.

II. DISTRIBUTION TARIFF FRAMEWORK

The NEPRA Act⁷⁰ authorizes NEPRA to determine the tariff, rates, charges and other terms and conditions for supply of electric power services by generation, transmission and distribution companies, and to recommend same to the Federal Government for Notification. Per Section 31(2) of the NEPRA Act, while determining the standards for tariff, NEPRA is to:

- a. Protect consumers against monopolistic and oligopolistic prices.

⁶⁸ License No. 20/DL/2010.

⁶⁹ This information is available on NEPRA's website (www.nepa.org.pk).

⁷⁰ Section 7(3)(a) of NEPRA Act.



- b. Keep in view the research, development and capital investment program costs of licensees.
- c. Encourage efficiency and quality of service in licensees operations.
- d. Encourage economic efficiency in the electric power industry.
- e. Keep in view the economic and social policy objectives of the Federal Government.
- f. Determine tariffs so as to eliminate exploitation and minimize economic distortions.

NEPRA Tariff (Standards and Procedures) Rules, 1998 (NEPRA Standards for Tariff) were issued by NEPRA in accordance with Sections 31(1) and (2) of NEPRA Act. The NEPRA Standards for Tariff⁷¹ provide that tariffs should be determined, modified or revised on the basis of and in accordance with the following standards:

- a. Tariffs should allow licensees to recover prudently incurred costs in order to meet the demonstrated needs of the consumers; prudence may not be required where tariffs are set on other than a “cost of service basis” such as formula-based tariffs that are designed to be in place for more than one year.
- b. Tariffs should generally be calculated to include a depreciation charge and rate of return on capital investment of each licensee, commensurate to that earned by other investments of compatible risk.
- c. Tariffs should allow licensees a rate of return that provides economic incentive for continued investment in equipment and facilities for improved services, and should include a mechanism to allow licensees a benefit from, and penalties for failure to achieve, the efficiencies in the cost of providing quality of service.
- d. Tariffs should reflect marginal cost principles to the extent feasible, keeping in view the overall financial stability of the sector. NEPRA should have a preference for competition rather than regulation, and should adopt policies and establish tariffs that promote competition.
- e. The tariff regime should be transparent, clearly identify inter-class and inter-region subsidies and should provide such subsidies with a view to minimizing if not eliminating them, keeping in view the need for an adequate transition period.
- f. Tariffs may be set below the level of cost of service for those consumers consuming electric power below the consumption levels as may be determined by NEPRA, as long as such tariffs (“lifeline tariffs”) are financially sustainable.

⁷¹ Rule 17(3) of the NEPRA Standards for Tariff.



- g. Tariffs should, to the extent feasible, reflect the full cost of service to consumer groups with similar service requirements and take into account GOP subsidies and any adjustments required to finance rural electrification, in accordance with GOP policies.
- h. Application of the tariffs should allow for reasonable transition periods so that the adjustment of tariffs meet the standards and other requirements pursuant to the NEPRA Act, including performance standards, industry standards and uniform code of conduct.
- i. Tariffs should be predictable for customers as well as understandable, clearly indicating each component thereof to minimize misinterpretation.

As read, these regulatory guidelines encourage competition in a regulated market with particular emphasis on minimizing subsidies and eventually eliminating them, while recognizing the utility and of lifeline tariffs. These are standard market-based regulatory principles that private investors will expect.

I. Procedure for Tariff Petition

The NEPRA Standards for Tariff provide detailed procedures to be followed by NEPRA, licensees, consumers and interested parties with respect to tariff determinations. Such parties may file a petition with the NEPRA Registrar along with prescribed fees and other required information.

Over the years, judicial precedents have held that public notice and hearing is an essential aspect of tariff determinations, allowing interested parties an opportunity to be heard. Upon acceptance of the petition, a notice of the petition is sent to key stakeholders and interested parties and details of the proceeding are published in relevant Pakistan newspapers.⁷² Parties may file a reply, comments or objections, i.e. intervention request to any such petitions within 15 days, and NEPRA may, at its discretion, address such replies, comments or objections. Following a tariff hearing, NEPRA is to issue a written its determination. Rule 16(2) provides that the petition is to be decided within a period of four months from its filing, however, NEPRA is authorized to extend this period up to an additional four months, where there are reasons beyond its control.⁷³ A party that is aggrieved by such decision may file motions for re-calculation⁷⁴ or for leave to review before NEPRA.⁷⁵

Once the determination has been finalized as above, NEPRA is to intimate the same to the Federal Government for Notification in the Official Gazette. The Federal Government may require that NEPRA

⁷² Rule 5 of the NEPRA Standards for Tariff.

⁷³ This may include failure by a person to comply with the provisions of the NEPRA Standards for Tariff, or the orders and directions of NEPRA.

⁷⁴ In case of inadvertent error of calculation.

⁷⁵ For any other matter in the determination.



reconsider its determination on such tariff, charges, rates or other terms and conditions in which case NEPRA is required to review same and intimate its review findings to the Federal Government.

2. Tariff Components

Tariffs are set (by NEPRA) at each segment of power sector operations, i.e., generation, transmission and distribution.

At the generation stage (e.g. GENCOs/IPPs), NEPRA determines tariffs based primarily on two components: a Variable Component (Energy Purchase Price or EPP), and a Fixed Component (Capacity Purchase Price or CPP).

- a. The EPP component of the tariff is based on the actual despatch of the plant, and includes fuels costs of operating the plant as well as Operation and Maintenance (O&M) costs.
- b. The CPP component is irrespective and independent of the actual despatch of the plant; in essence, this component of the tariff is paid for the plant being available for service. NEPRA sets long-term multi-year tariffs for generation companies at rates and levels that account for the above two components. The effect is that the generation company can sell electric power to NTDC only at the rate approved in the tariff determination.

At the transmission stage (NTDC), the above two components are carried forward and the Use of System Charges component of the NTDC is added.

At the distribution stage, the tariff includes following components.

- a. Power Purchase Price. The first component is the Power Purchase Price, which is the cost incurred at the

generation and transmission stages of the total power that the DISCO is estimated to purchase for the calendar year. Presently, the generation cost is transferred to the DISCOs according to the Transfer Price Mechanism as prescribed by NEPRA, which was determined by NEPRA in NTDC's tariff determination for 2012-13⁷⁶, notified vide S.R.O. 886(I) / 2013⁷⁷.

Composition of Distribution Tariff

1. Power Purchase Price. (2 components):
 - a. Generation Cost (approximately 80-88% depending on fuel mix).
 - b. Transmission charge (approximately 2-3%).
2. Distribution margin (approximately 10-12%).
3. Prior Year Adjustment (PYA).

(In order to justify the Distribution margin, DISCOs submit to NEPRA the standard array of operating information that includes Operations & Maintenance, Losses, etc.)

⁷⁶ July 19, 2013

⁷⁷ September 24, 2013



- b. Distribution Margin. The second component is the net distribution margin (the Distribution Margin) of the DISCO. The net distribution margin is the difference between gross distribution margin and “other income”, Gross distribution margin would consist of operation and maintenance costs, depreciation and return on asset base of a DISCO, and includes all the costs incurred prudently by the DISCO in providing its services, including salaries of employees. “Other income” includes meter and rental income, sale of scrap, income from non-utility operations, etc.
- c. Prior Year Adjustment. Additionally, on account of various adjustments, a third aspect is also included, which is the prior year adjustment (PYA). This component accounts for the shortfall in the recovery of determined and notified tariff on account of delayed determination and/or notification thereof on account of which the DISCO is unable to recover the cost in that tariff (additional information provided below).

The second proviso to section 31(4) of the NEPRA Act also envisages monthly decisions by NEPRA for making adjustments to approved tariffs attributed to any variations in fuel charges and in response to policy guidelines as the Federal Government may issue and, notify the tariff so adjusted in the Official Gazette.

3. Considerations to be taken by NEPRA before Tariff Determinations

NEPRA determines an average tariff for a DISCO after considering all relevant and prudently projected cost components and dividing them by its projected power sales. Different tariff rates are subsequently approved for different categories of consumers, i.e., residential, commercial, industrial, agricultural, and other categories.

Within each consumer category, the tariff is further set at different rates for different groups within those categories. For example, in the residential consumer category, the tariff is set at different rates for different consumers based on load requirements and consumption rates. For lifeline consumers

(those using up to 50 units/kWh a month), the tariff is the lowest (below cost rate) and is typically subsidized through GOP subsidy and/or cross-subsidy from other consumers.

The GOP subsidy policies primarily target socially desirable objectives, i.e., subsidies to lifeline and low-end consumers. In addition to this, subsidy is used to provide for a uniform end-consumer tariff throughout the country.

Illustrative DISCO Customer Categories

- Residential (including lifeline).
- Commercial.
- Industrial.
- Agriculture.
- Single point bulk.
- Temporary Supplies (e.g., seasonal industries, public gathering places).
- Public Lighting.
- Residences attached to Industrial Complexes.



- a. The mechanism developed and used by GOP to determine the Tariff Differential Subsidy (TDS) was that upon receiving the tariff determination of all DISCOs from NEPRA, the lowest rate for each tariff category in the said determinations, i.e. Schedule 1 of the determinations by NEPRA, was taken. Such lowest rate was then notified as Schedule 2 for each DISCO confirming a uniform tariff, with a direction that each DISCO shall charge the tariff rate cited in Schedule 2. The difference between Schedule 2 and Schedule 1 was to be paid by the GOP as the TDS.
- b. In the current context, the GOP intends to continue to implement uniform tariffs for all DISCOs. The 2014 Guidelines (discussed below) confirm that the GOP will continue to provide subsidies but that additional guidelines shall be prepared to facilitate alternative and more efficient mechanisms for rationalization of tariffs.

The GOP, in order to improve and streamline the subsidy mechanism, modifies it from time to time and as such a shift in the mechanism for incorporating subsidies in the tariff rates has occurred. Present mechanism is as under:

- a. Upon receiving the tariff determination of all DISCOs from NEPRA, the GOP communicates the customer category-wise amount of subsidy, based on the amount of subsidy that will be included in the annual national budget, to NEPRA for inclusion in the Tariff Schedule along with the customer category-wise rates of tariff rationalization surcharge to maintain uniform tariff.
- b. The Tariff Schedule, specifying rates along with subsidy and surcharges, is then provided by NEPRA to the GOP for notification.

This approach is in line with the 2014 Guidelines, which envisages transparent subsidy administration and the gradual elimination of subsidies subject to social policy decisions, i.e., lifeline tariffs and/or subsidies.

4. Tariff Policy and Tariff Guidelines

In recent years, policies and guidelines impacting the tariff and the tariff determination process include the following all of which are in place and need to be read in conjunction:

- a. 2013 Power Policy issued by the CCI.
- b. 2014 Guidelines issued by the GOP.
- c. 2015 Guidelines for the Determination of the Consumer End Tariff (Methodology and Process) issued by NEPRA.

Policies and Guidelines on Tariff

- 2013 Power Policy – CCI.
- 2014 Guidelines – GOP.
- 2015 NEPRA Guidelines for Determination of Consumer End Tariff (Methodology and Process).



2013 Power Policy. In 2013, the CCI issued the National Power Policy, 2013 (2013 Power Policy) which sets out nine goals sought in order to achieve the long-term vision of the Pakistan power sector with emphasis on a competitive and efficient market in which private investment is a critical part.

A key policy principle is ‘sector sustainability’ which, in the current market context requires the use of lifeline tariffs and cross-subsidies. The 2013 Power Policy states that in the long term, subsidies will be solely directed to the most poor, and will otherwise be phased out over a period of three years. The Policy also envisions that to the extent possible, tariff rationalization would minimize or eliminate subsidy within the industrial, commercial and bulk consumers. Finally, toward improved governance, the Policy states that the tariff determination processes should be reduced from what was/is currently 8 – 10 months, to a reduced and reasonable period.

2014 Guidelines. The GOP issued Tariff Guidelines in 2014 that seek to improve the predictability and financial viability of sector operations through a strengthened tariff setting process, which would apply and be essential to attract private investment. Highlights of the 2014 Guidelines are:

- a. In the short-term, that the regulatory process for tariff determinations should be streamlined.
- b. The medium-term objective is that a tariff regime is in place that covers the cost of service determined on the basis of a least cost integrated generation, transmission and distribution expansion plan, with lifeline subsidies limited to targeted low-income consumers.
- c. The long-term objective is to implement a robust and reliable power sector where generation prices are determined competitively, and the regulator for the transmission system determines cost-based or incentive-based rates. Consumers interests will be protected by allowing all reasonably incurred costs, but disallowing inefficient costs and prevents them from being passed on to consumers.

Additionally, the 2014 GOP Guidelines envisages regulatory predictability and that the future tariff determinations should ensure the following:

- a. Through separate, independent proceedings, NEPRA should approve the five-year rolling Integrated Generation, Transmission and Distribution Plan (IGTDP)⁷⁸ for each DISCO.
- b. The Transmission / Use of System charge will be determined by NEPRA on a multi-year basis, effective from 2015 – 2016, after the IGTDP is approved.

⁷⁸ NTDC and DISCOs have submitted an IGTDP to NEPRA, on which NEPRA has provided its comments, and the matter is pending thereafter.



- c. The Distribution Margin for DISCOs will be determined on a multi-year basis, effective from 2015 – 2016, after the IGTD is approved.
- d. Pool generation charges and other indexation relevant to the annual tariff or multiyear tariff regime shall be determined by NEPRA on an annual basis, coupled with determination of a forward-looking fuel price through suo-moto proceedings for 2014 – 2015.
- e. GOP will notify a power sector roadmap with a target to achieve full cost recovery for power sector operations.

Subsidy Objectives in the 2014 GOP Guidelines

- *Short-term objective:* To provide a tariff regime, which covers cost of service, including a GOP subsidy within the annually budgeted amount.
- *Mid-term objective:* To limit lifeline subsidies to consumers most in need of financial support.
- *Long-term objective:* Low-income consumers will be provided a tariff subsidy through transparent tariff; cross-subsidized by high demand residential consumers or through the national safety net.

With respect to distribution tariffs, the 2014 Guidelines sought that a balance be struck

between DISCO commercial viability and DISCO consumer interests. In this regard, it envisaged that benchmarks set by NEPRA for operation and maintenance, and other costs, should be revisited. At the same time, that DISCOs should be obligated to meet cost parameters set by NEPRA and are to make every effort to comply with NEPRA directives pertaining to losses.

The 2014 Guidelines further envisage that:

- a. Uniform national tariffs shall continue, countrywide; therefore, the TDS and equalization surcharge, which are intended to achieve such uniform tariff, shall continue.
- b. NEPRA will develop a mechanism to determine the amount of the TDS, which shall appear separately on the bills of applicable consumer categories.
- c. In determining tariffs, NEPRA will take into account any GOP subsidy provided through the national budget. The intent appears to be that instead of the current process where NEPRA’s rate schedule is notified subject to adjustment of subsidy and tariff rationalization surcharge by the GOP, NEPRA would itself take into account the subsidy policies of the GOP in its determination before intimating the same to the Federal Government for notification; such subsidy would be based the annual national budget.

2015 NEPRA Guidelines for Determination of Consumer End Tariff (Methodology and Process). NEPRA has also issued the National Electric Power Regulatory Authority Guidelines for Determination of Consumer End Tariff (Methodology and Process), 2015 (2015 Guidelines), intended to further streamline the tariff



determination process. The 2015 Guidelines provide certain forms in which the information is to be set out while making tariff petitions, which would assist the DISCOs in providing data required by NEPRA.

The 2015 Guidelines recognize the emergence / development of a bilateral contract market, as they require DISCOs to submit details of cost of power purchased from NTDC (through CPPA) as well as through bilateral contracts (if any), and that the cost of power purchase from CPPA is also to be supported with the IGTDP.

Similarly, it is provided that NEPRA would assess the cost of generation procured through CPPA based on the rates approved by NEPRA for the generation companies. In addition, NEPRA would also take into consideration the cost of generation for any power procured directly by a DISCO from a generator. The Transfer Price Mechanism is to stay in field. In determining the distribution margin, the revenue requirement approach is to be used.

The 2015 Guidelines also provide a detailed timeline for the submission, determination and notification of tariffs. Delayed determination and notification processes are identified as a major hurdle in proper implementation of the tariff regime. However, the timelines are subject to approval of the IGTDP, and it is only after this approval that the time schedule of determination can be met.

The Tariff Schedule is prepared in order to assure full recovery of DISCO revenue requirements based on regulatory targets. The DISCO tariff is to be based on a cost-of-service study, and NEPRA may grant an annual or multi-year tariff depending on which option best enables the DISCO to fully recover the NEPRA approved revenue requirement. In addition, the Tariff Schedule is to indicate the cross-subsidy and / or inter-region subsidy for all classes of consumers.

For both annual and multi-year tariffs, NEPRA is to identify a base year, on the basis of which the tariff will be determined. It is also required that DISCOs will submit the IGTDP. Adjustments in the tariff would then be made on the basis of the IGTDP for subsequent years in the case of a multi-year tariff. It is further provided that while technical losses, as determined by NEPRA, shall be included in the revenue requirement, non-technical (commercial) losses will be determined on a case-to-case basis.

The 2015 Guidelines envisage quarterly and bi-annual adjustments in the Power Purchase Price. In addition, the monthly tariff adjustment made due to variations in the fuel cost component of the Power Purchase price is continued. DISCOs are further required to provide details and explanation of line losses, and the procedure for assessing these losses is also provided.



The 2015 Guidelines envisage that a multi-year tariff would have the potential to yield more predictable rate levels over time, as it would be less volatile and subject to fewer adjustments.

As assessed, the 2015 Guidelines have been formulated by NEPRA while keeping in view the 2014 Guidelines of the GOP. The intent is to move towards the tariff mechanism envisaged by the GOP, and to improve the efficiency of the power system while ensuring full recovery of cost of

service. In this regard, changes are sought in the regulatory framework. For example, instead of the GOP separately revising the Tariff Schedule, NEPRA is to prepare the Tariff Schedule after taking into account the subsidy of the GOP and indicating the same in the Tariff Schedule. Additionally, a shorter time frame is provided to complete the tariff determination process.

Illustrative objectives of a multi-year tariff in the 2015 Guidelines

- Increase the stability and predictability of the future revenue streams of the licensees.
- Rationalize increase in the demand for electric power.
- Rationalize the expansion of facilities and assets of licensees.
- Minimize the risk of regulatory assessments by NEPRA.
- That DISCOs will be better positioned in terms of planning and strategic decision-making.

5. Surcharges Imposed by the Federal Government

In the NEPRA Act, in addition to the tariff structure and its components discussed above, Section 31(5) of the NEPRA Act provides the Federal Government with the power to notify surcharges from time to time that are to be considered as a cost incurred by the DISCO, to be included in the tariff determined by NEPRA.

Certain surcharges are levied from time to time on the consumers, and indicated on their electricity bills. Recently, these include:

- a. Neelum Jhelum⁷⁹ Surcharge.
- b. Financing Cost Surcharge.
- c. Tariff Rationalization Surcharge.

To the extent of surcharges, it may be noted that their imposition was challenged before the Courts and a Division Bench of the Balochistan High Court validated such charges. However in a recent judgment, a Division Bench of the Lahore High Court has declared that both the surcharges as well as section 31(5) of the NEPRA Act (which gave the authority to the Federal Government to impose surcharges) are unconstitutional. The GOP filed an appeal against the judgment of the Division Bench of the Lahore High Court before the Supreme Court. Leave has been granted; the judgment of the Division Bench has been suspended.

⁷⁹ Neelum Jhelum is a hydro-electric power generation project being constructed on the river Jhelum.



III. BASIC ISSUES IN THE TARIFF DETERMINATION PROCESS

In relation to the tariff determination process, which has been followed up until the most recent distribution tariff determination (May 2015), the following issues have been identified as impacting the effectiveness of the tariff.

I. Time Consumed in Determination of Tariff

The current tariff determination process is very time consuming. Rule 16(2) of the NEPRA Standards for Tariff prescribes a maximum time limit within which NEPRA must prescribe the approved tariff rate, subject to any exceptions stated therein. The time consumed in determination of tariff was recognized by the 2013 Power Policy, which noted that the process takes between 8 – 10 months and it was suggested that it should be reduced to 90 days. Such a timeline may only be achieved with cooperation of the GOP, NEPRA and DISCOs.

Timely Tariff Notification

- Current tariff determination can take 8-10 months.
- The 2013 Power Policy envisages that this period should be brought down to 90 days.
- Such a timeline can only be achieved with the cooperated effort of the DISCOs, NEPRA and the GOP.

For most financial years, the tariff is determined at a time when the financial year is more than six months through. On occasions, the tariff notification has even been made after the end of the relevant financial year. In such case, the DISCO continues to operate per its previously notified tariff. The result of this exercise is that the costs are not fully recovered, as in most cases, inflation and increase in prices leads to increases in the revenue requirement for the relevant year. Although such amounts are later recoverable in the form of prior year adjustments, the reality is that for that particular year, the DISCO's financial system is not reflective of its actual costs.

Delays are attributed to various reasons including, but not limited to, delays in filing of petitions, delays in hearings, delays in providing necessary documents and evidence, delays in making the determination, time consumed in case review petitions are filed by aggrieved DISCOs, time consumed in calculating and applying subsidies by the GOP, and time consumed in final notification of the tariff.

In order to improve the tariff determination time lines, each stakeholder must comply with the timelines provided in the 2015 Guidelines, and ensure that the tariff is determined and notified within the time period provided under the NEPRA Standards for Tariff.

2. Line Losses

One of the most common issues between DISCOs and NEPRA at the time of tariff determination is the matter of Transmission and Distribution (T&D) line losses. Typically the allowable line losses determined by



NEPRA are lower than the claim made by the DISCOs in their tariff petition. In the context of DISCOs, there are two types of line losses (1) Technical and (2) Commercial / Administrative. The technical line loss comprises the electricity / units lost during distribution from DISCOs system to end-consumer of electricity. These losses occur due to technical reasons and may be gradually improved over time by making the transmission and distribution systems more efficient. (Further examination of technical line loss is beyond the scope of this study.)

The reason for this variance appears to be that there is no scientific or technological data on which either the DISCO or NEPRA may rely. From the determinations of NEPRA, it is noted that NEPRA had directed the DISCOs to carry out a study, which would assist in setting the level for T&D losses allowed, and while one or two DISCOs have completed a partial study, none have provided a complete study.

With respect to line losses, the 2013 Power Policy also recognizes the inefficiencies in the transmission and distribution systems, which are correlated to poor infrastructure, mismanagement, and electricity theft; one of its goals is to minimize financial losses across the system. The Policy sets a target to reduce the power sector level transmission and distribution losses from the existing 23 – 25% to 16% by the year 2017. In this regard, the 2013 Power Policy recommends the use of performance contracts between DISCOs and GOP through MWP, where incentives are provided for decreasing losses. The Policy also guides that the DISCO Board of Directors should focus on reducing losses attributed to electricity theft, technical reasons and improving billing and collection.

The 2014 Guidelines also emphasize loss reduction and that it should be incentivized by linking returns in a multi-year tariff framework to an achievable trajectory. The 2014 Guidelines also recommend that once proper metering systems are in place for the distribution system, technical losses can be segregated from commercial losses, which require a different approach, and estimates of technical losses would be a simulation of the distribution system components and loads.

In the context of line losses for future tariff determinations, the 2015 Guidelines provide that only assessed levels of T&D Losses, as determined by NEPRA, shall be included in the revenue requirement of a DISCO, whereas non-technical losses (Commercial losses that include theft) would be decided on a case to case basis.

- a. The 2015 Guidelines further provide the losses plan procedure, under which the DISCOs are to submit details of the test year's monthly and progressive T&D Losses. DISCOs are to submit the details of the preceding year's monthly and accumulated estimated T&D losses, and to provide detailed reasons and explanations for the losses. These reasons and explanations are then to be analysed by the Technical Division of NEPRA during a regulatory proceeding.



- b. It is further provided that in calculating the losses (T&D including commercial), NEPRA will consider the approved DISCO investment plan and annual performance report. It is also stated that the basis for allowing losses would be on data and information obtained via monitoring and technical evaluation by NEPRA and / or an independent consultant study. To date, no such study has been conducted, it appears that NEPRA would itself undertake the technical evaluation and determine the losses.



CHAPTER – 6 MARKET STRUCTURE

I. ENVISAGED STRUCTURE

The Reform Plan considered two models for the power market in Pakistan:

1. Vertically integrated generation and transmission (where one entity would be the sole buyer and seller of electric power).
2. A competitive market model (where a wholesale electricity market would determine short run actions and compensation of competing entities).

The GOP has determined that the second model supporting a competitive market that is implemented with independent, privately owned and operated generation and distribution companies is the envisaged power market model. In support of this model, GOP has taken a number of reform steps including the unbundling of WAPDA’s Power Wing, establishment of NEPRA, and incorporation of government-owned power companies resulting in today’s market, which may be described as a “transition power market structure”.

II. THE TRANSITION REFORM PHASES

The GOP adopted three transition reform phases to progress the power sector market to a competitive market model:

1. The original industry structure (vertically integrated trading entities with limited competition and a single buyer as energy broker and central despatcher).
2. The medium-term structure (partial unbundling, with expanded competition and price-based market energy broker).
3. The long-term structure (complete unbundling with competition and centralized competitive spot market).

Updated Timelines for the Transition Reform Phases

- Single Buyer arrangement is the current market structure.
- The Single Buyer Plus arrangement would commence July 2016 up to 2020.
- Competitive Market operations would commence July 2020.



The power sector reform transition phases were reflected in the NTDC Transmission License, which prescribed that the Single Buyer arrangement would continue till the pre-requisites for the next transition reform phase, i.e., Single Buyer Plus, were met and was to be given effect by July 1, 2004. The Single Buyer Plus arrangement was to be followed by the Competitive Trading Bilateral Contract Market (CTBCM), by the competitive market operations date (CMOD). The competitive market operation date was set as July 1, 2009, which as part of the reform plan, could be postponed for a maximum of three years (i.e., up to July 1, 2012).

These timelines were not met, leaving the power market structure as primarily a Single Buyer arrangement with NTDC (acting through CPPA) serving as the Single Buyer of electric power on behalf of the DISCOs. In 2015, the market reform timelines were revised by the GOP through the ECC decision (2015 ECC Approval) and are reflected in the NEPRA (Market Operator Registration, Standards and Procedure) Rules, 2015 (Market Rules). The Market Rules provide that the Single Buyer Plus arrangement will remain in place from 2016 to 2020, and that the final transition reform phase (competitive market) will be initiated by July, 2020.

Annexure IV illustrates the regulatory framework of the power market as designed by NEPRA, and demonstrates operations linked throughout the entire power market supply chain (prior to the revision of timelines above and operationalization of CPPA-G in 2015).

I. Single Buyer

In the Single Buyer arrangement, distributors were not allowed to directly negotiate with generators. Similarly, generators were not allowed to directly deal with any distributors/customers. Instead, NTDC was to act as both the purchaser and the seller of power as the “Single Buyer” and to act as the collection agent for generators.

2. Transition to Single Buyer Plus

The pre-requisites for the transition from a Single Buyer to a Single Buyer Plus arrangement were provided in Transitional Arrangement Order No. 1 (TAO 1) of NEPRA, which envisaged that the transition was to be achieved on or before July 1, 2004. The aspects to be accomplished included: (a) Independent administrative and financial functioning of the DISCOs, GENCOs, NTDC and Hydroelectric Stations of WAPDA; (b) Tariff determination in place for each of the GENCOs and Hydroelectric Stations of WAPDA; (c) Determination of transmission, inter-connection and ancillary charges for NTDC; (d) Tariff Determination in place for DISCOs; and (e) Establishment, by NTDC, of the CPPA, TNO, SO and CRPEA.

The NTDC Transmission License envisaged a similar arrangement for the transition from Single Buyer to Single Buyer Plus. Article 8 of the License stipulated that NTDC would comply with NEPRA directions and instructions to progress toward the Single Buyer Plus model and to establish its four departments:



1. Central Power Purchasing Agency (CPPA)
2. System Operator (SO)
3. Transmission Network Operator (TNO)
4. Contract Registrar and Power Exchange Administrator (CRPEA)

3. Single Buyer Plus

The Single Buyer Plus arrangement envisages the Single Buyer performing its role of procuring power for the DISCOs, with the added option for the generation companies to directly contract with DISCOs. The framework for the Single Buyer Plus arrangement prescribed in the TAO 1 was as follows:

- a. Establishment by CPPA of the sale rate during a billing period (to be progressively reduced from a monthly to ½ hourly period) as the weighted average sales rate of all the power generation stations used during the billing period with capacity and energy charges separately calculated. The transfer capacity and energy charges should include the transmission charges to the generation weighted average sales rate.
- b. The power exchange administrator is to maintain the register of all contracts between generation licensees and the DISCOs or the Bulk Power Consumers (BPCs).
- c. The power exchange administrator was to arrange settlement for the Single Buyer Plus arrangement.
- d. New generation companies are to have option of contracting with the CPPA for additional power procurement required to cater for load growth of the DISCOs or directly with any new DISCOs or the BPCs.
- e. The contracting parties, in accordance with the terms of the power purchase agreement and upon the approval of NEPRA, may supply part or whole of their generated power to DISCOs or the BPCs through bilateral contracts.

4. Competitive Trading Bilateral Contract Market

The NTDC Transmission License prescribes that a competitive trading bilateral contract market (CTBCM) would be established by the competitive market operation date (CMOD) that has yet to be met. The prerequisites to be met included:

- a. Development of infrastructure and a market structure to support competitive power trading. .



- b. During operation of the Single Buyer Plus model, NTDC was to comply with NEPRA directions and instructions for transition toward the competitive power market model. In this regard, NTDC was to frame a competitive trading bilateral contract market implementation plan (CTBCM Implementation Plan) in consultation with authorized electricity operators⁸⁰ and the BPCs with the approval of NEPRA. The CTBCM Implementation Plan was to set out the steps to be taken or procured by NTDC and/or authorized electricity operations and the BPCs which were, in the opinion of NEPRA, appropriate in order to give full and timely effect to:
- i. Any order issued by NEPRA for moving toward a competitive power trading arrangement.
 - ii. Amendments to applicable documents including NEPRA rules and regulations, the Grid Code, the Distribution Code, and any documents issued under such documents.
 - iii. Grant of indemnities against liabilities pursuant to the Single Buyer Plus trading arrangements.
 - iv. Administration and implementation of the CTBCM and the Single Buyer Plus trading arrangement.
 - v. Reference of any dispute to NEPRA for settlement with respect of matter covered by the CTBCM Implementation Plan.

These measures were to result in the final stage of the envisaged power market structure, intended to be an open and bilateral contract market in which:

- a. Generation companies would directly contract with DISCOs and the BPCs.
- b. DISCOs would procure power in accordance with their NEPRA-approved power acquisition program through contracts.
- c. The role of the Single Buyer (NTDC) would become nominal and per Article 7 (3) of the NTDC Transmission License, NTDC would no longer procure or purchase power for the purposes of sale to third parties.
- d. NTDC would only be permitted to procure power to the extent required to provide balancing services to ensure safe and reliable transmission and such procurement would be subject to all contracts being approved by NEPRA prior to the CMOD or contracts backed by sovereign guarantee, which would continue to remain in force and enforceable until their expiration.

⁸⁰ Other than NTDC, any person authorized by NEPRA to use the transmission system of NTDC, through a license or otherwise.



III. THE EXISTING POWER MARKET AND ITS DEVELOPMENT

Presently, toward establishing a competitive power market, the separation of the Market Operations⁸¹ and System Operations⁸² functions of the NTDC is being achieved through the operationalizing of the Central Power Purchasing Agency (Guarantee) Limited (CPPA-G), an incorporated government-owned company established in 2009 which has taken over these market functions. This transfer of business functions was approved by the ECC in 2015 (2015 ECC Approval), and is in furtherance of the 2013 National Power Policy objectives that were approved by the CCI.

As a consequence of the reform plan specifically with respect to the CPPA, NEPRA has notified the Market Rules that now recognize CPPA-G as the authorized power market operator. The Market Rules further provide that any entity: (a) approved by NEPRA as a generation company; (b) NTDC; (c) the DISCOs; or (d) any other entity enlisted by the market operator under the Commercial Code shall be considered as “Market Participants” (Market Participants). Operationalization of the CPPA-G is a critical aspect of the various actions included in Phase I of the GOP reform plan, various aspects are reviewed in the table below.

Description of Documents (Phase I)	Status
Modification of NTDC License by NEPRA	Approved by NEPRA
Business Transfer Agreement (BTA) for transfer of the business and assets with respect to CPPA and WPPO, both divisions of NTDC	Executed between NTDC and CPPA-G
DISCOs to sign the Power Procurement Agency Agreement with CPPA-G	Executed between CPPA-G and all the DISCOs
Market Rules	Approved by Federal Government and Notified by NEPRA
Commercial Code	Approved and Notified by NEPRA
Administrative Agreement between NTDC and CPPA-G for all PPAs signed or administered by NTDC/CPPA with power producers	Executed between NTDC and CPPA-G

The functions, operations and responsibilities of CPPA-G assigned under the Market Rules may be further prescribed by NEPRA but presently include the following:

- a. In accordance with the Grid Code and the Commercial Code:

⁸¹ The sale by the generators and purchase by the distribution companies of electricity on long-term contracts with associated billing and settlement.

⁸² The management of physical flow of electricity from generators to the transmission system for onwards transmission to distribution companies and/or bulk power consumers.



- i. Settlement and development of competitive power market from CPPA of NTDC and to carry on these functions and business.
 - ii. Procurement of electric power on behalf of the DISCOs, including import of power from other countries.
 - iii. Generation invoice verification on the basis of meter reading or dispatch scheduling report and terms of the respective PPAs.
 - iv. Billing DISCOs based on the meter readings per delivery points procedures.
 - v. Payment from the DISCOs and settlement to the Market Participants.
 - vi. Management of cash flow, treasury management and other relevant banking functions for purposes of collection and disbursement.
- b. Administration, maintenance and implementation of the Market Rules and supervision of compliance by Market Participants, including the billing, settlement and payment procedures per the Commercial Code.
 - c. Updating, implementing, administering and enforcing the Commercial Code in relation to the Market Rules.
 - d. Collecting information and statistics and publishing reports and information relating to the performance of the Market Operator administered market.
 - e. Administering the development of and amendments to the Commercial Code for submission to NEPRA for approval.
 - f. Developing and implementing competitive power markets based on policies guidelines of the Federal Government and/or requirements of NEPRA.
 - g. Liaising with other bodies having market functions similar to the Market Operator or administering competitive power markets.

Per the GOP policy for continued implementation of the Phase II reform measures to develop Market Operations by CPPA-G, consultative processes with all stakeholders shall be used to implement key benchmarks as illustrated in the table below.



Illustrative Phase II Reform measures	Illustrative Benchmark
Novation of Power Purchase Agreement with IPPs under various Power Policies after 2002.	Within the time frame envisaged in the Rules/Commercial Code (Currently 2 Years from the date of notification of the Market Rules in May 2015).
Signing of new PPAs with public sector GENCOs and WAPDA Hydel.	Within the time frame envisaged in the Rules/Commercial Code (Currently 2 Years from the date of notification of the Market Rules in May 2015).
Preparation and submission of Competitive Trading Bilateral Contract Market (CTBCM) plan by CPPA-G.	Within two years of modification of NTDC License for bifurcation of Market Operation and System Operation functions and notification of Market Rules.
Connection Agreements / Transmission Service Purchase Agreement (if required).	Within the time frame envisaged in the Rules/Commercial Code (Currently 2 Years from the date of notification of the Market Rules in May 2015).
Modifications in the Grid Code.	As per the CPPA-G Reform Process. Time Period is not specified yet.

I. Power Pool

In today’s power market, NTDC through CPPA procures power on behalf of the DISCOs, which results in the “Power Pool”. Per the Market Rules and Commercial Code, market operations for the Power Pool shall be administered by CPPA-G.

- a. Tariff determinations of NTDC specify the generation companies, duly approved by NEPRA, from which NTDC is to procure power for onward sale to DISCOs, and they are termed as “CPGENCOs”.
- b. In 2013, NEPRA further added that the Power Pool would also include any power purchase by NTDC from any generation company within Pakistan pursuant to the NEPRA Interim Power Procurement Regulations, 2005 (the 2005 IPPR Regulations).

Tariff determinations of NTDC specify the transfer price / transfer charge which NTDC is to charge the DISCOs per the methodology prescribed in the determination; this mechanism is called the “Transfer Price Mechanism” (TPM). The Transfer Price Mechanism is inclusive of the use of system charge for NTDC. In the context of DISCOs, the transfer charge calculated as per the Transfer Price Mechanism is essentially a pass-through item, as it is being collected for onward payment.

2. Power Acquisition Programs

The NEPRA Act, NTDC License and Distribution Licenses provide detailed methodology for power acquisition by a DISCO, in addition to procurement conducted on behalf of a DISCO via the Power Pool.



With respect to DISCOs direct procurement, Section 32 of the NEPRA Act provides that NEPRA shall, within 18 months from commencement of the NEPRA Act (1997), prescribe procedures and standards for NEPRA's prior approval of the transmission company's and DISCO's

Power Acquisition Programs

The essence of section 32 of the NEPRA Act is to integrate the power market structure with the national energy plan, which would help to achieve the GOP reform objectives.

investments and power acquisition programs. Such programs, approved by NEPRA are to take into account the national energy plans issued by the Federal Government. It is further envisaged that upon NEPRA approval of a power acquisition program, NEPRA shall, subject to such terms and conditions, including rates and charges of electric power, allow the DISCO to enter into long-term contracts for power purchases.

For DISCOs, Rule 12(1)(ii) of the NEPRA Licensing Distribution Rules also allows DISCOs to submit their power acquisition programs to NEPRA. In accordance with such a program approved by NEPRA, a DISCO would be able to directly procure power from any generation company. Till such time that the program has been approved, the DISCOs are required to procure / purchase all power from NTDC.

In fact, the prescribed procedures and standards for NEPRA's prior approval of the transmission company's and DISCO investments and power acquisition programs under section 32 of the NEPRA Act have not, to date, been notified.⁸³ As a consequence, it seems that to date, Article 7(1)(b) of the NTDC Transmission License is not applicable. Therefore, the methodology being adopted is that power acquisition contracts are made and sent to NEPRA for approval, which are decided on a case-to-case basis.

3. 2005 Interim Power Procurement Regulations (IPPR)

As an interim measure, instead of prescribing procedures for approval of power acquisition and investment programs as required under Section 32 of the NEPRA Act, the 2005 Interim Power Procurement Rules (IPPR) Regulations have been notified. Under these regulations NTDC and/or a DISCO may file a power acquisition request regarding the purchase of power from any intending electricity generator desirous of selling its power to NTDC or a DISCO under a power acquisition contract. NEPRA may approve such purchase request on a case-to-case basis.

4. Power Acquisitions other than via the Power Pool

DISCOs have entered into power acquisition contracts with generators pursuant to certain other policies decisions by the GOP. These aspects are discussed in below.

⁸³ Recently NEPRA has circulated a draft for such rules in the context of investment programs and is in the process of finalizing the rules.



- a. **Small Power Producers (SPPs).** SPPs have applied for, and been granted, generation licenses by NEPRA and presently supply electric power to the market as well as to BPCs per Section 22 of the NEPRA Act. In 2006,⁸⁴ approval was given that all power purchase costs incurred by DISCOs could be accounted for in the overall energy transfer rate calculated by CPPA.

b. New Captive Power Policy (NCPP)

In 2009,⁸⁵ PEPCO circulated policy guidelines for the purchase of power from SPPs and CPPs. The guidelines included certain findings that included:

- i. Electric power supplied by the SPPs and CPPs (mostly through All Pakistan Textile Mills Association) cost twice the amount of power supplied by the Power Pool, and their proposals were nonetheless accepted with the rationalization to minimize the power crisis and to minimize load shedding, particularly in the industrial sector.
- ii. Some DISCOs were purchasing power from the CPPs and selling to general consumers who were not subject to normal load shedding.
- iii. The power purchases scheme was designed to benefit the industrial sector, but that electricity was in fact being used to benefit the already subsidized general consumers. As a result, the guidelines stated, inter alia, that electric power from CPPs / SPPs would only be allowable as supplied to individual industrial units.

The NCPP Policy also provided:

- i. Purchase of power from a NCPP through a bilateral contract would be the sole prerogative of DISCOs.
- ii. A NCPP would need to acquire a generation license from NEPRA, which would be mandatory before its commercial operations date.
- iii. Details of the tariff components and incentives for NCPPs as well as provisions for use of an upfront tariff.

⁸⁴ A captive power plant would sell its Residual Fuel Oil based surplus capacity to CPPA. This decision was communicated in a letter dated August 29, 2006 of WAPDA, which led to meeting dated January 3, 2007.

⁸⁵ June 20, 2009



c. Latest Developments

The current market framework in the context of SPPs and CPPs, illustrates certain conflict. For example:

- i. NEPRA has exclusive authority to determine tariffs, and section 12 of the NEPRA Act specifically provides that NEPRA may not delegate this authority to any person. Therefore, the permission granted to SPPs / CPPs to enter into arrangements on mutually agreed rates may inherently be contrary to this scheme.
- ii. NEPRA has also clarified that power acquisition requests are to be processed pursuant to the 2005 IPPR Regulations, which provide the mechanism whereby power acquisition requests and contracts are to be approved by NEPRA (which appears to have been bypassed on account of NEPRA's approval for direct arrangements).
- iii. NEPRA modified its earlier advertisement allowing SPPs to contract directly with DISCOs, and stated that all SPPs / CPPs which intended to sell electric power to DISCOs / CPPA / BPCs, would either need to directly approach NEPRA directly for its tariff determination under the NEPRA Standards for Tariff, or through the DISCOs / CPPA under the 2005 IPPR Regulations.

In some cases, the concerned DISCO filed the power acquisition requests, whereas in other cases NEPRA initiated proceedings on its own. This has led to contentious litigation between the parties and the matters are pending adjudication.



CHAPTER – 7 RIGHT OF WAYS / EASEMENTS

Significant aspects concern a DISCO's right or easement (formal or informal), which allows it to access or enter onto the land for the construction, installation, operation and maintenance of its distribution network ranging from 400 volts to 132 kV. Generally, this would include installation and maintenance of poles and towers, laying of electricity lines etc. for which usually access to or crossing over not only land and premises owned by others is required but sometimes digging of roads, sewers, drains, waterways, tunnels etc. is also essential.

Review of Distribution Works and Rights of Way issues may be assessed against two time periods:

1. The pre-regulatory regime that existed prior to the WAPDA Restructuring and enactment of NEPRA Act in the year 1997.
2. The post-regulatory regime i.e., after the WAPDA Restructuring and the establishment of NEPRA.

I. PRE-NEPRA REGIME

Prior to the promulgation of the NEPRA Act, WAPDA was the sole vertically integrated power utility (apart from KESC) and had the authority and duty to conduct distribution works as a licensee under the Electricity Act, 1910 (Electricity Act). Section 12(1) of the Electricity Act sets out the following non-exhaustive list of distribution works that the licensee may undertake:

- a. Open and break up the soil and pavement of any street, railway or tramway.
- b. Open and break up any sewer, drain or tunnel in or under any street, railway or tramway.
- c. Lay down and place electric supply-lines and other works.
- d. Repair, alter, or remove the same.
- e. Do all other acts necessary for the due supply of energy.

Section 12 (2) of the Electricity Act addresses land and compensation issues:

- a. The above tasks could also be carried out on land that was not dedicated for public use, for which permission was to be obtained from the local authority or from the owner / occupier of the land.
- b. With respect to any support or aerial lines, it was provided that the District Magistrate may order that the same may be fixed (or altered, where already fixed) on any land, notwithstanding any objection by



the owner or occupier. In passing such an order, the District Magistrate was to also fix compensation to be paid by the licensee to the owner. If the owner showed sufficient cause, the District Magistrate could also order a licensee to remove any such installation.

- c. Any orders made by the District Magistrate were subject to revision by the Provincial Government.

Section 14 permits the licensee to alter pipes or wires that were likely to impede its distribution works. Section 20 provides that the licensee may, at any reasonable time, enter any premises to which energy is, has been, or is to be supplied, for the purpose of:

- a. Examining, inspecting and testing the supply-line, meters, and other apparatus.
- b. Ascertaining the amount of energy supplied.
- c. Removing, where the energy was no longer required, any apparatus belonging to the licensee. In order to protect the consumer, where any consumer apparatus is involved, the officer of the licensee is not be authorized to enter unless he/she had a written authorization from an officer not below the rank of a Divisional Officer. In the case of a domestic consumer, the permission of the District Magistrate is required.

It is also noted that Section 51 of the Electricity Act provides that the Provincial Government may confer upon any public officer or licensee, for the placing of appliances and apparatus for the transmission of energy, any of the powers which the telegraph authority possesses under the Telegraph Act, 1885. The provisions of the Telegraph Act provide various powers with respect to erection of telegraph lines / posts, entry on property for repair / removal, etc. Accordingly, the then Provincial Government granted the powers, available to the telegraph authority under the Telegraph Act, to WAPDA by way of notification.

Additionally, Section 13(2)(a) and 13(2)(c) of the WAPDA Act stated that WAPDA had the power to undertake any works that it considered necessary or expedient for carrying out the purposes of the WAPDA Act and to place wires, poles etc. for the transmission of electricity necessary for the proper execution of a scheme. Furthermore, section 14 of the WAPDA Act granted WAPDA a right of entry to any land not owned by WAPDA itself for the purpose of making preparations for the distribution works, provided care was taken so that least amount of inconvenience and damage is caused for which the licensee was required to pay compensation to the owner of the land.

II. POST-NEPRA REGIME

After WAPDA Restructuring, DISCOs became licensees of NEPRA. Although the NEPRA standards and procedures make provision for the repair, relocation or extension of the distribution network by the licensees



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but the right of way / easement as was available to WAPDA in the pre-NEPRA regime is not available to the DISCOs being licensees of NEPRA. In the post-NEPRA regime, the Consumer Service Manual and the Consumers Eligibility Criteria Regulations, 2003 provide provisions for the performance of certain distribution works, which are discussed below:

1. Consumer Service Manual

Paragraph 3.1 of the Consumer Service Manual requires DISCOs to relocate the Service Connection i.e. the wires/cables of the distribution network, if necessary for carrying out public works or on the reasonable request of a consumer. In such a case, the costs of the relocation are to be borne by the party requesting the relocation and not by the DISCO.

Chapter 4 of the Consumer Service Manual deals with the installation of meters. Of particular importance is Chapter 14, which sets out the rights and obligations of Consumers and DISCOs. Paragraph 14.1 and 14.2 state that the employees of the DISCO have the right to enter the premises of any consumer who is being supplied or will be supplied with power by the DISCO, provided notice is given three clear days before the work is to be performed.

DISCO employees have the right to access all consumer premises for the purposes of installation, maintenance, operation or removal of the DISCO's electrical equipment. The consumer has an obligation to allow access to the DISCO to its utility system. Failure to do so may result in disconnection of the power supply by the DISCO.

2. Consumer Eligibility Criteria

Paragraph 14.5 states that right of way shall be as per the terms and conditions provided in the Consumer Eligibility Criteria. The Consumer Eligibility Criteria defines two different parts of a DISCO's distribution system.

1. The dedicated distribution system is part of the distribution system that supplies power to only one consumer and is developed only on that consumer's application and cost. Dedicated distribution systems are often sponsored, i.e., they are developed through the cost and support of the applicant who requests the dedicated distribution system to be constructed. The sponsor may be a private individual, a housing society or a Government body, etc. The issues relating to right of way / easement are to be cleared/tackled by the sponsor and not the DISCO.
2. The common distribution system includes interconnection facilities that supply power to all consumers of the DISCO. Regulation 4 of the Consumer Eligibility Criteria states that the DISCO is required to carry out extension/reinforcement of the common distribution system, at its own cost. If the extension



or reinforcement is outside the approved development plan of the DISCO in accordance with its investment plan duly approved by NEPRA under Section 32 of NEPRA Act, then it may carry out the works in accordance with its least cost expansion plan. However, it appears that no right of way / easement is expressly provided to the DISCOs in the Consumer Eligibility Criteria.

3. Differences in the Pre- and Post-NEPRA Regulatory Regimes

The differences between the two regimes are apparent:

- a. The pre-NEPRA regime under which the WAPDA Act guided sector operations, provided a much clearer description of the distribution works that WAPDA could carry out, and the incidental rights that it would possess. On the contrary, the NEPRA Act does not provide for rights of way for DISCOs in such a detailed manner. The absence of such right of way / easement may pose difficulty for a DISCO for installation of distribution network in the post-privatisation period.
- b. Although it is evident from the Consumer Service Manual that the DISCO and its employees have a right to enter the premises/property of consumers for the purposes of installation, maintenance, operation and removal of electrical equipment, the same does not extend to non-consumers. As there is no right of way to land owned by third parties i.e. other than consumers of the DISCO, it would follow that the employees of the DISCO would be required to obtain permission from the landowner each time. It also follows that any attempt to acquire a right of way may incur inconvenience and extra costs, which would then have to be adjusted in the tariff of DISCOs.
- c. There are no express provisions in the NEPRA Act that permit DISCOs to carry out distribution works which require digging, drilling and excavation, on roads, waterways, sewers, tunnels, etc. or access onto land and property owned by any third party. Furthermore, the right and power available to the licensee under the Electricity Act will not be available to the holder of distribution license under the NEPRA Act. As DISCOs are not licensees under the Electricity Act.



CHAPTER – 8 CUSTOMER RELATIONS

I. CUSTOMER SERVICES

According to the NEPRA Licensing Distributions Rules, the distribution licensee is obligated to connect and to supply electric power to a consumer satisfying the eligibility criteria prescribed in the NEPRA Consumer Eligibility Criteria Regulations, 2003, as amended from time to time.

Rule 9 of the NEPRA Licensing Distribution Rules also required DISCOs to develop and prepare a Consumer Service Manual, and a NEPRA-approved Consumer Service Manual is in existence for each DISCO (with substantially the same content). The salient features are discussed below:

- a. **Chapter 2: Applications.** Chapter 2 of the Consumer Service Manual deals with applications for new connections, extension and reduction in load, and change of name. A list of the documents to be provided by the consumer is provided. The application process correlates to the criteria provided in the Consumer Eligibility Criteria. A new connection has to be provided within the time frame provided in the NEPRA Performance Standards (Distribution) Rules.
- b. **Chapter 4: Meter Installation.** Chapter 4 deals with energy meter installation, and provides guidance on the procedure to install meters at a consumer's premises, as well as procedures for replacement of meters.
- c. **Chapter 5: Fees and Charges.** Chapter 5 deals with security deposits and other connection charges, and also refers to the Consumer Eligibility Criteria for the determination of such charges.
- d. **Chapter 6: Meter Reading and Billing.** As per the Consumer Service Manual, the local distribution company office generally conducts meter reading. Consumers are divided into batches due to large number of consumer base and practical issues in meter readings, compiling and entry of data in the system, bill printing and delivery thereof to the consumers. Typically, meters of a particular batch are read on the same date each month:
 - i. Thereafter, electricity bills specifying the details of the bill are issued to the consumers.
 - ii. These bills are prepared by the revenue offices of the DISCO and delivered to the local office, which hands the bills over to 'Bill Distributors'.



- iii. The Bill Distributor is required to deliver the bills to consumers within a day of receipt of the same.
- iv. A consumer has 15 days from the date of issue of the bill (and at least seven days from date of delivery to the consumer) for payment of the bill, failing which late payment charges, which are also specified in the bill, are charged in addition to the bill amount. Various modes of payment are prescribed in Section 6.5(b) of the Consumer Service Manual.
- e. **Chapter 7: Tariff.** Chapter 7 deals with tariff, and essentially provides that the DISCO shall only charge the tariff approved by NEPRA.
- f. **Chapter 8: Disconnection and Reconnection.** It is provided that a premise can be disconnected if the bill is not paid, or if the connection is used for a purpose other than the one for which it was obtained, or if the load is extended beyond the sanctioned load, after receipt of a notice from the DISCO. The detailed procedure for disconnection is provided and once disconnected; the connection is only to be restored once the entire payment due along with late payment surcharge, and other charges mentioned in the Consumer Service Manual, has been paid.
- g. Chapter 9 addresses electricity theft and Chapter 10 addresses consumer complaints, both topics are reviewed below.

II. DISPUTE RESOLUTION

An extensive legal and regulatory framework exists for settlement of grievances between the DISCOs and consumers as summarized below.

I. Consumer Complaints before the Distribution Company

Chapter 10 of the Consumer Service Manual guides consumer complaints and provides that with respect to new connections, meter reading and billing, electric supply failures and other matters relating to electric power services, DISCOs are to immediately address such complaints. DISCOs are to establish Customer Service Centres, with a one-window facility to receive complaints and to provide definite timelines in which the complaint will be addressed.

Paragraph 10.3(a) lists various types of complaints pertaining to meter reading and billing, along with timelines in which the complaints will be addressed. For example, errors in billing from wrong meter reading, defective meters, and delay in issuance of bill, arithmetical errors, etc. It is also stated that the consumer may approach NEPRA in case the DISCO according to the Consumer Service Manual does not handle its complaints.



Paragraph 10.4 deals with complaints regarding failure of electric supply, for example, failure / fluctuation of supply voltage, damaged distribution transformer, frequent tripping, low voltage, etc. As discussed in Chapter 4 of this Report, timelines for such matters are provided in the NEPRA Performance Standards (Distribution) Rules.

In addition, the Consumer Service Manual also provides that special arrangements shall be made to address the complaints of the elderly or the handicapped. It is also stated that the DISCOs will develop a website for consumer service.

2. Consumer Complaints before NEPRA

Under section 39 of the NEPRA Act, any person including an association of persons, concern, company, firm or undertaking, authority, or body corporate set up or controlled by the Federal Government or, as the case may be, the Provincial Government may file complaints against a licensee for contravention of any provisions of the NEPRA Act, or any order, rule, regulation, license or instruction made or issued. Such complaint is to be filed with NEPRA in writing. NEPRA shall then issue a show cause notice to the licensee, and provide an opportunity of hearing before taking any action. Depending on the nature of the complaint, NEPRA could take strict action against a DISCO (as discussed in Chapter 4 of this Report).

Section 38 of the NEPRA Act sets out a structure through which each Provincial Government shall establish 'Offices of Inspection' empowered: (a) to enforce compliance with instructions with respect to metering, billing, electricity consumption charges and decision of cases of theft of energy; and (b) to make determination in respect of disputes over metering, billing and collection of tariff, and such powers may be conferred on the Electric Inspectors appointed by the Provincial Government under section 36 of the Electricity Act, exercisable in addition to their duties under the said Electricity Act.

The Provincial Government is also to establish procedures whereby DISCOs and consumers can bring violations in respect of metering, billing, collection of tariff and other connected matters before the Office of Inspection. The Provincial Government is further empowered to enforce penalties as may be determined by it for any such violation. Any person aggrieved by any decision of the Provincial Office of Inspection may prefer an appeal to NEPRA within 30 days, and such appeal is to be decided within a period of 60 days.

The Provincial Government has declared the office of the Electric Inspector as the Office of Inspection to exercise powers under Section 38 of the NEPRA Act, discussed above.



3. Dispute Resolution before the Electric Inspector

Electric Inspectors are appointed by the Provincial Government through Notification in the Official Gazette within such areas as may be assigned to them respectively. Under the Electricity Act, an Electric Inspector has powers to adjudicate a matter or an issue that may arise between the licensee and the consumer such as:

- a. Dispute as to any charge or other sum included in the bill of a licensee; [Section 24(2) of the Electricity Act].
- b. Dispute as to whether a meter is or is not correct. [Section 26(6) of the Electricity Act].

An appeal from the decision of an Electric Inspector lies to the Provincial Government or, if the Provincial Government, by general or special order, so directs, to the Advisory Board⁸⁶.

4. Remedies in Electricity Act against Non-Payment of Bills

Under section 54A of the Electricity Act, charges for supply of energy or any other sum outstanding against a consumer can be recovered as an arrear of land revenue. For such recovery, the DISCO would apply to the Collector of the concerned District for recovery of the said amount along with a certificate showing the amount outstanding against the consumer, and the Collector shall thereafter proceed to recover the said amount from the consumer or his sureties. For this purpose, earlier the Provincial Government deputed some Revenue Officers (Tehsildar Recovery) to WAPDA and later on to the DISCOs. However, practically, the DISCOs are not utilizing this system.

In addition, as already discussed, the Electricity Act as well as the Consumer Service Manual provides that supply to a premise can be disconnected if the consumer does not pay the electricity bill.

5. Power Theft and Remedies Available under the Law

The commercial / administrative line loss primarily is due to theft or illegal abstraction of electricity. Accountability for such losses is very low. Theft or illegal abstraction of electricity has a major impact on the finances of a DISCO. As discussed in Chapter 5, NEPRA only allows a certain percentage to each DISCO for line losses, and while determining the line losses, it protects the rights and interests of the consumers by disallowing what it deems to be ‘inefficiency’ on the part of DISCOs to recover charges and cut down on power theft. Further, the targets of line losses determined by NEPRA have not been achieved by most of the DISCOs, and power theft adds to the burden on the DISCOs, as they are unable to recover any payment for such theft.

⁸⁶ Constituted under section 35 of the Electricity Act.

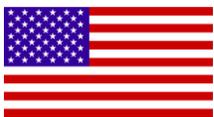


Section 39-A of the Electricity Act provides that whoever installs or uses any device or artificial means for dishonest abstraction, consumption or use of energy of a licensee shall be punishable with imprisonment for up to three years, or a fine of up to Rs.5,000/-, or both.

Furthermore, vide Ordinance X of 2013, a new chapter has been added to the Pakistan Penal Code, 1860, 'Chapter XVII B', which pertains to offences relating to electricity. The gist of the newly introduced provisions is that any person who engages in theft of power (through various means as described therein, including tapping to service lines, tampering with service lines, etc.) is liable to be punished with rigorous imprisonment of three years, or a fine of Rs.10 Million, or both. Similarly, there are also provisions relating to tampering with meters, which also specify similar punishments. In addition, as per section 462N, any such person is also liable to compensate the Government or the DISCO for any loss incurred by them, which fine is also recoverable as an arrear of land revenue. Similar amendment has also been made to the Criminal Procedure Code to reflect inclusion of the above provisions.

6. Dispute Resolution under other Fora

Other fora for dispute resolution include Office of the Federal Ombudsman / Wafaqi Mohtasib, and judicial relief that includes the Consumer Courts, Civil Courts and the Superior Courts in constitutional as well as appellate jurisdiction.



CHAPTER – 9 KEY FINDINGS AND RECOMMENDATIONS

Key regulatory due diligence findings and recommendations are provided in this Chapter. Findings have been identified by the Consultant based on the literature review, consultations and analysis of the legal and regulatory framework in which Pakistan’s government-owned DISCOs are operating with the expectation of privatizing these DISCOs. Recommendations have been prepared with the intention of preparing the DISCOs for privatization.

It should be underscored that continued capacity building and strengthening of NEPRA as the regulatory body overseeing distribution operations, and the electricity / power sector as a whole, in Pakistan is essential to implement these recommendations.

FINDING No. 1: **TARGETED APPROACH TO IMPLEMENTING PRE-PRIVATIZATION ACTIONS IS REQUIRED**

1. The proposed privatization of government-owned distribution companies in Pakistan traverses the entire country, that has considerable ramifications for not only the DISCOs but for government agencies (federal, provincial, district), NEPRA, consumers and communities.

Recommendation:

- a. It is important that legal processes are followed but also that information-exchange and coordination of pre-privatization activities is clearly achieved.
- b. In order to implement the regulatory due diligence findings and as part of pre-privatization preparation, the Consultant recommends that the GOP may immediately establish a “DISCO Privatization Committee” that will champion these efforts and consider the findings and recommendations of this Report and prepare a work plan to implement pre-privatization issues and to guide the privatization process in a transparent and regularized manner.
 - i. This committee may be chaired by representative of PC or MoF and be reportable to CCoP.
 - ii. The committee may consider the findings and recommendations of this Report as well as the complementary legal due diligence report to prepare a work plan to implement pre-privatization actions that will guide the privatization process in a transparent and regularized manner.



FINDING No. 2: **CONFIRMATION / IMPLEMENTATION OF APPROVALS REQUIRED**

1. The initiative to privatize nine DISCOs has been approved by CCI, with the exception of TESCO.
2. It is unclear if compliance with CCI approvals has occurred, i.e., that the Provincial Chief Secretaries were formally invited for the meeting of the Privatization Board, and the Provincial Chief Ministers were invited in meeting of the CCoP for any relevant power sector (DISCO) privatization matter in that Province.
3. The CCoP has approved the DISCOs to be placed in the privatization program for early implementation. It is also indicated that a proposed program for IESCO, HESCO and FESCO may be modelled around the concept of PPP Model. The Cabinet has also ratified the CCoP Approval in 2014.

Recommendation:

- a. Legal, financial and technical due diligence must be conducted for any specific DISCO undergoing privatization actions, as each DISCO will have its specific aspects for consideration.
- b. The strategy and mode for the DISCO privatization program should be specific to each DISCO, and the PC will need to conduct technical and commercial due diligence for each individual DISCO to be privatized. This envisaged arrangement shall require the requisite approvals.
- c. For such approvals, it should be ensured that the directions given in the CCI approvals, in particular regarding requirement that Chief Minister of the relevant province is to be a member of the CCoP for an item relating to privatization of a power sector entity in that Province, are complied with and similarly with respect to Chief Secretary for Privatization Board.

FINDING No. 3: **NEPRA ROLE AS REGULATOR NEEDS TO BE STRENGTHENED**

Sole authority to regulate government owned DISCOs vests with NEPRA under the NEPRA Act. Critical findings include:

1. NEPRA staff capacity has improved over the years and may be further developed especially to accommodate a competitive market.
2. The role of NEPRA and its jurisdiction and authority over the privatized distribution operations, as compared to similar role of the regulators in other sectors for instances banking companies/insurance companies etc., is very marginal, in that other regulators exercise more regulatory powers for their



sectors which in some cases even include approval for appointment / nomination of directors and CEOs.

3. For strengthening NEPRA's role, outstanding NEPRA actions include:
 - a. Procedures and standards for power acquisition programs and investment programs.
 - b. The integrated five year rolling generation, transmission and distribution plan (IGTDP)⁸⁷ has been prepared, and NEPRA has provided its comments on the same. Thereafter, the same is pending.
 - c. The time lines for the transition of power market specified in NTDC Transmission License, including arrangements for the Single Buyer Plus and Competitive Trading Bilateral Contract Market, have expired. These timelines have been revised by way of the 2015 ECC Approval, and are also reflected in the NEPRA (Market Operator Registration, Standards and Procedure) Rules, 2015. The framework for CTBCM is to be designed.
 - d. Integration of second tier supply business and wheeling arrangement with the Competitive Trading Bilateral Contract Market Implementation Plan per the NTDC Transmission License and the power market framework envisaged in the NEPRA Act has not occurred.

Recommendation: In order to strengthen NEPRA's discharge of its functions under the NEPRA Act and to improve the regulatory framework for privatized distribution operations, certain actions may be taken:

- a. For the development of the power market and its transition from Single Buyer arrangement to the next phases, it is essential that NEPRA clearly prescribe the procedures and standards for power acquisition program. This process is underway at NEPRA, and must be completed expeditiously.
 - i. Once the appropriate procedures and standards are prepared, the DISCOs should be able to directly contract (or through CPPA-G) with power producers/generation companies, which would provide the basis for a competitive market structure and would also be more attractive to private investors.
- b. The stakeholders should work cohesively in order to finalize the IGTDP, which can then be approved by NEPRA in order to enhance the tariff determination process by regulating the investment.
- c. To the extent of wheeling and second-tier supply business, requisite steps should be taken by NEPRA and NTDC in consultation with the DISCOs and bulk power consumers to facilitate contractual

⁸⁷ In the IGTDP, the expected/required generation facilities under the 2013 Power Policy have been accounted for, keeping in view the expected power demands of DISCOs for the same period.



arrangements to be aligned with the CTBCM Implementation Plan, and to re-arrange the timelines in this respect.

- d. In order to facilitate the development of corporate structure and good governance in privatized DISCOs with regulatory oversight, MWP should propose modification in the regulatory framework in consultation with Privatization Commission and NEPRA to augment NEPRA's role in setting minimum standards (i.e., for example fitness and propriety of directors, and minimum financial requirements). Reference to the regulatory approach in other sectors such as banking and telecommunications may be given. Furthermore, in support to this additional regulatory oversight by NEPRA, the institutional capacity of NEPRA should be strengthened.
- e. A true assessment of various performance standards and their compliance status is to be evaluated by NEPRA, which is done currently on the basis of the forms / information provided by DISCOs. The exercise may also take into account the investment required to achieve these compliances. PC can also utilize such an exercise, and any report prepared on this basis, for making provision in the privatization modality for compliance.
- f. The current reporting system is manual and should be digitized (computer-based reporting). This includes annual and other reports, digitized plotting of maps, reporting on Time of Use metering. NEPRA's role to actively monitor compliance should be actualized. In this respect, the compliance standards may also be revisited so that the same are practical and accurately reflect the current distribution sector.
- g. As part of the PC public awareness campaign on privatization of DISCOs, the role of NEPRA should be made clear that in fact, NEPRA will continue to serve as the sole regulatory body over privatized distribution operations.

FINDING No. 4: **CLARITY OF DISCO DISTRIBUTION LICENSE DURATION AND TERRITORY**

1. Duration of Licenses. Eight of the distribution license(s) granted to the government-owned DISCOs will expire in 2021-22; these were issued in 2001-02 for 20 years. The Distribution Licenses for SEPCO and TESCO shall expire in 2031 and 2033 respectively. A private investor may consider that, presuming privatization occurs any time prior to 2022, the remaining term of the Distribution License is insufficient.



2. Clearly defined Service Territory. The procedure adopted for carving out the service territory of IESCO resulted in litigation between IESCO and NEPRA. This dispute is pending adjudication.

Recommendation:

- a. In order to confer investor confidence, the MWP may consider steps thought appropriate as a matter of policy with respect to security for renewal/extension of the term of the distribution licenses under privatization.
- b. A policy decision may be taken, wherein renewal of licenses in case of privatization may be based on a study after evaluating performance standards, areas of non-compliance as well as the investment required so as to bridge the gaps and timelines thereof.
- c. The IESCO pending service territory issue with respect to carving out of its territory by NEPRA in favour of BTPL should be resolved. This requires review of the concept of Authority Proposed Modification under the NEPRA Act with respect to carving out the service territory of a licensee.

FINDING No 5:
THE TARIFF DETERMINATION PROCESS REQUIRES REVIEW AND IMPROVEMENT

1. The consumer end tariff for DISCOs has not progressed toward the multi-year tariff model which leads to uncertainty for DISCO managers, cost recovery, etc.
2. The regulatory tariff determination process (from filing of tariff petition to determination, and notification) is cumbersome and slow. In many cases, tariff determinations are made more than halfway through the relevant financial year, during which time the DISCOs continue to operate under the previously approved tariff, and this results in inconsistent recovery of revenue requirement of DISCOs.
3. Despite repeated directions from NEPRA, the DISCOs have not completed their required studies for approved Transmission and Distribution losses. Resultantly, NEPRA is basing distribution costs on its own information, which results in a substantial variance between those losses claimed by the DISCOs and those being allowed by NEPRA leading to circular debt.
4. The regulatory tariff setting mechanism designed by NEPRA can preclude cost recovery for distribution operations. One such instance is the mark-up claimed by IPPs from NTDC under their PPA. Under the tariff framework, the late payment surcharge collected by the DISCOs from its consumers was being treated as 'other income', leading to corresponding reduction of the distribution margin.



5. There is lack of certainty and clarity with respect to power being procured by the DISCOs from SPPs / CPPs / NCPPs, as well as the requirement to obtain NEPRA approval under the 2005 IPPR Regulations. This has resulted in litigation between parties.

Recommendation:

- a. NEPRA should adopt a multi-year tariff determination for DISCOs, which shall provide confidence to the private investor. At a minimum, all privatization documents should allow for a multi-year tariff.
- b. The procedure and time taken in tariff determinations should be reduced, in line with the GOP policies, as well as the 2015 Guidelines developed by NEPRA.
- c. The steps required to assess DISCO revenue requirements should be reviewed by NEPRA and consolidated so that regulatory targets set forth by NEPRA reflect true revenue requirements of the DISCO. In this regard:
 - i. Benchmarks set by NEPRA with respect to various components (for example, operation and maintenance costs, line losses, etc.) may be revisited.
 - ii. Stakeholders (especially NEPRA and DISCOs) should collaborate to prepare such studies and scientific data, which would enable them to make the process of determining line losses more efficient and clear.
- d. The aspect of adjustment of late payment surcharge with the amount of mark-up on account of delayed payment, invoiced by CPPA, has been considered by NEPRA in its latest tariff determination of DISCOs in 2015, in which it has been decided that late payment surcharge recovered from consumers shall be offset against the late payment invoices raised by CPPA. The amount of CPPA claim regarding mark-up for delayed payment for the previous years may also be considered by NEPRA in future tariff determinations.
- e. Steps should be taken to clarify the aspect of power being procured by DISCOs from SPPs / CPPs / NCPPs, by discussion among the stakeholders, i.e., MWP, NEPRA and concerned DISCOs to facilitate resolution of the matter in accordance with the legal framework.



FINDING No. 6: **CLARIFICATION OF RIGHTS OF WAY FOR DISTRIBUTION WORKS NEEDED**

1. Distribution works. The current regulatory regime guiding consumer aspects (Consumer Service Manual and Consumer Eligibility Criteria) lacks detailed descriptions of the rights of a DISCO in relation to distribution works. This gives rise to uncertainty and is a cause for concern for development work by the DISCOs – whether government or privately-owned.
2. Rights of Way.
 - a. There is no right of way to land or water owned or legally held by third parties for a DISCO, making it essential for the DISCO to obtain permission from the land owner or legal occupant for each such usage. Any attempt to acquire a right of way results in inconvenience and extra costs, which will then have to be adjusted in the tariff of DISCOs.
 - b. The NEPRA Act contains no express provisions that permit DISCO to carry out the distribution works, for example, digging, drilling and excavation, on roads, waterways, sewers, tunnels, etc.
 - c. There are no provisions in the NEPRA Act dealing with right of entry/way for the purpose of distribution works.

Recommendation:

- a. The legal framework provided for such rights for WAPDA, however, the same are missing in the NEPRA Act, and thus no such legal structure is available to the DISCOs. It is recommended that appropriate rules and regulations should be formed to regulate this aspect.

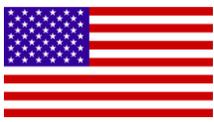
FINDING No. 7: **RECOVERY OF ARREARS AND ELIMINATING THEFT SHOULD BE IMPROVED**

1. Although relevant laws include remedies for DISCOs in the case of non-recovery or non-payment of consumer arrears, these remedies do not result in speedy recovery, which results in shortfalls in DISCOs payments to NTDC (CPPA), thereby adding to the problem of circular debt.
2. Electricity theft is a tremendous problem in the Pakistan distribution sector.



Recommendation:

- a. NEPRA as a matter of regulatory reform should prepare a strengthened set of guidelines on non-payment and electricity theft, handling of same, remedies and enforcement mechanisms.
 - b. The DISCOs should prepare and adopt clear, enforceable procedures to be applied against non-paying consumers. The summary procedure for recovery of such arrears may be prescribed by way of a legislative framework.
 - c. To counter theft of electricity, the DISCOs, in partnership with NEPRA and MWP, should develop policies and awareness campaigns that will (1) clarify penalties for theft; (2) improve reporting of power theft to be more attractive.
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ANNEXURE – I

INTERPRETATION OF TERMS

Unless the context otherwise requires, terms used in this Report are interpreted as follows:

1. **1993 CCI Approval** – The approval given by CCI on September 12, 1993 pursuant to the summary dated September 9, 1993 titled “Privatization of WAPDA and amendments to WAPDA Act”.
2. **1994 Power Policy** – The Policy Framework and Package of Incentives for Power Generation Projects in Pakistan.
3. **1997 CCI Approval** – The post-facto approval of CCI on May 29, 1997.
4. **1998 Power Policy** – The Policy for New Private Independent Power Projects.
5. **2002 Power Policy** – The Policy for Power Generation Year 2002.
6. **2005 IPPR Regulations** – The Interim Power Procurement (Procedures and Standards) Regulations 2005 made by NEPRA.
7. **2011 CCI Approval** – The approval dated April 28, 2011 for privatization of, inter alia, nine DISCOs.
8. **2014 Guidelines** – The National Power Tariff and Subsidy Policy Guidelines, 2014.
9. **2015 ECC Approval** – The approval of the ECC dated April 30, 2015 and its subsequent modification with respect to phased approach towards the reform of power sector.
10. **2nd 2011 CCI Approval** – The approval in meeting dated August 27, 2011.
11. **Commercial Code** – The commercial code prepared by CPPA-G and approved and notified by NEPRA in 2015.
12. **Companies Ordinance** – The Companies Ordinance, 1984.
13. **Constitution** – The Constitution of Islamic Republic of Pakistan, 1973.
14. **CPGENCO** – The approved generation companies selling power (for the Power Pool) to NTDC for onward sale to the DISCOs.
15. **CTBCM Implementation Plan** – The competitive trading bilateral contract market implementation plan to be framed by NTDC.
16. **Distribution License** – License granted for distribution services by NEPRA pursuant to the NEPRA Act.
17. **Electricity Act** – Electricity Act, 1910.
18. **Market Participants** – The market participants as defined in the Market Rules.
19. **Market Rules** – The National Electric Power Regulatory Authority (Market Operator Registration, Standards and Procedure) Rules, 2015.
20. **NEPRA Act** – Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.



21. **NEPRA Licensing Distribution Rules** – National Electric Power Regulatory Authority Licensing (Distribution) Rules, 1999.
 22. **Power Pool** – The generating units from which NTDC may procure power on behalf of the DISCOs.
 23. **Privatization Rules, 2001** – The Privatization (Modes and Procedure) Rules, 2001.
 24. **Public Sector Corporate Governance Rules** – Public Sector Companies (Corporate Governance) Rules, 2013.
 25. **Report** – This Regulatory Due Diligence Report.
 26. **Rules of Business** – The Rules of Business, 1973.
 27. **Service Territory** – Territory defined in licenses of DISCOs.
 28. **SGV Work Program and Methodology** – Final report of consultants pertaining to Corporatization / Commercialization of WAPDA and its Existing Assets Blocks, a project initiated by WAPDA, rendered in October 1998.
 29. **Transfer Price Mechanism** – The mechanism which was determined by NEPRA in NTDC’s tariff determination for 2012-13⁸⁸, notified vide S.R.O.886(I) / 2013.⁸⁹
 30. **NTDC Transmission License** – Transmission license granted to NTDC by NEPRA on December 31, 2002.
 31. **WAPDA’s Power Wing** – The components of WAPDA involved in generation, transmission and distribution of electric power.
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⁸⁸ July 19, 2013

⁸⁹ September 24, 2013



ANNEXURE – II

List of Key Laws, Policies & Guidelines

STATUTES

1.	The Electricity Act, 1910
2.	The WAPDA Act, 1958
3.	Banking Companies Ordinance, 1962
4.	The Constitution of Pakistan, 1973
5.	The Companies Ordinance, 1984
6.	The NEPRA Act, 1997
7.	Securities and Exchange Commission of Pakistan Act, 1997
8.	Pakistan Environment Protection Act, 1997
9.	Insurance Ordinance, 2000
10.	Alternative Energy Development Board Act, 2010
11.	Private Power & Infrastructure Board Act, 2010

RULES & REGULATIONS

12.	Companies (Issue of Capital) Rules, 1996
13.	Tariff Standard & Procedure Rules, 1998
14.	NEPRA Licensing (Application & Modification Procedure) Regulations, 1999
15.	NEPRA Licensing (Distribution) Rules, 1999
16.	NEPRA Licensing (Generation) Rules, 2000
17.	Special Procedure for Collection & Payment of Sales Tax (Electric Power) Rules, 2000
18.	Public Companies (Employees Stock Option Scheme) Rules, 2001
19.	NEPRA Fines Rules, 2002
20.	NEPRA (Fee pertaining to Tariff Standard & Procedure), Regulation, 2002
21.	Insurance Rules, 2002
20.	Consumer Eligibility Criteria, 2003
22.	NBFC (Establishment and Regulation) Rules, 2003
23.	NEPRA (Resolution of Disputes between IPPs) Regulations, 2003



24.	NEPRA Performance Standards (Transmission Rules) 2005
25.	NEPRA Performance Standards (Distribution) Rules, 2005
26.	NEPRA Interim Power Procurement (Procedure & Standards) Regulations, 2005
27.	The Sales Tax Special Procedure Rules, 2007
28.	NEPRA Competitive Bidding Tariff (Approval Procedure) Regulations, 2008
29.	NEPRA (Review Procedure) Regulations, 2009
30.	NEPRA Fee Rules, 2009
31.	NEPRA Performance Standards (Generation) Rules, 2009
32.	NEPRA (Financial) Regulations, 2010
33.	NEPRA Up-Front Tariff (Approval & Procedure) Regulations, 2011
34.	NEPRA (Procedure of filing Appeal) Regulations, 2012
35.	Public Sector Companies (Corporate Governance) Rules, 2013
36.	NEPRA (Market Operator Registration, Standards and Procedure) Rules, 2015

POLICIES & GUIDELINES

36.	Power Policy, 1994
37.	Power Policy, 1995
38.	Power Policy, 1998
39.	Power Policy, 2002
40.	Renewably Energy Policy, 2006
41.	New Captive Power Policy, 2009 (N-CPP)
42.	Small Independent Power Projects (2011)
43.	National Power Policy, 2013
44.	Consumer Services Manual
45.	NEPRA Guidelines for determination of Consumer end tariff (Methodology and Process) 2015



ANNEXURE – III

FUNCTIONS OF THE PRIVATIZATION COMMISSION

- a. To recommend privatization policy guidelines to the Cabinet and to prepare comprehensive privatization program for the approval of the Cabinet, and to plan, manage, implement and control the program so approved.
- b. To facilitate or initiate legislation as approved by the Cabinet in connection with the privatization program.
- c. To provide overall directions for implementation of privatization related activities including, restructuring, deregulation, and post-privatization matters in sectors designated by the Cabinet.
- d. To take operational decisions on matters pertaining to privatization, restructuring, deregulation, regulatory issues including approval of licensing and tariff rules and other related issues pertaining to the privatization program approved by the Cabinet.
- e. To issue directions and instructions to the management of a business undertaking falling within the purview of the privatization program approved by the Cabinet on all major important administrative, financial, reporting and policy matters.
- f. To propose a regulatory framework, including the establishment and strengthening of regulatory authorities, to the Cabinet for independent and fair regulation of each industry sector falling within the purview of the privatization program.
- g. To approve and take decisions and perform all acts to implement pre-privatization restructuring, labour rehabilitation and severance schemes, and all other related matters as approved by the Cabinet and to recommend to the Federal Government such labour and manpower rehabilitation programs as may be necessary during privatization and to develop a roster of such employees who may need rehabilitation.
- h. To evaluate bids received according to criteria determined by the Privatization Commission, and formulate recommendations for consideration by the Cabinet.
- i. To advise measures to the Federal Government for improvement of public sector units till their privatization to assist in the implementation of the Federal Government policies on deregulation and



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privatization, and advise the Federal Government on deregulating the economy to the maximum possible extent.

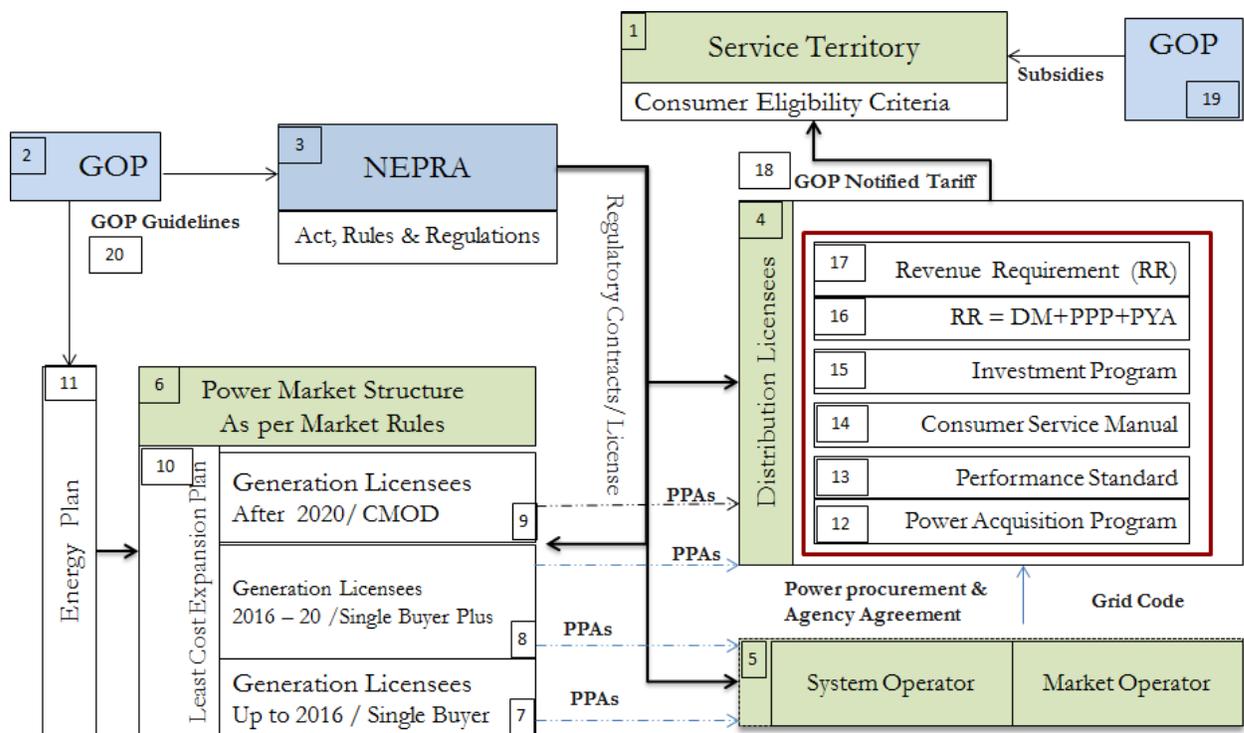


ANNEXURE – IV

REGULATORY FRAMEWORK OF THE PAKISTAN POWER MARKET

Figure 5 (along with explanation of each of the boxes in the flowchart) illustrates the regulatory framework of the power market as designed by NEPRA, and demonstrates operations linked throughout the entire power market supply chain (prior to the revision of timelines above and operationalization of CPPA-G in 2015).

Figure 5
Regulatory Framework of the Pakistan Power Market



Brief explanation

1. Distribution licensee is responsible to meet with the demonstrated needs of its existing consumers and obliged to give connection to all prospective eligible consumers.
2. Government of Pakistan has social, economic, constitutional and political obligations in the same service territory.
3. Pursuant to the promulgation of the NEPRA Act, the power sector of Pakistan is being regulated by NEPRA in accordance with NEPRA Act and rules/regulations made there under. Under NEPRA Act, there are three types of licenses:
4. Distribution license for specific service territory responsible to / for:
 - 12. *Power Acquisition Program - Power procurement in accordance with its power acquisition program duly approved by NEPRA under section 32 of NEPRA Act;*



13. *Performance Standards - Operate and maintain distribution network in accordance with performance standards prescribed by NEPRA;*
14. *Consumer manual - Provide customer service in a manner laid down in the NEPRA Consumer Service Manual;*
15. *Investment program - Develop investment plan in integration with power acquisition program approved by NEPRA to meet the demand of existing and future customers and to improve the distribution system to ensure compliance with performance standards and the consumer service manual.*
16. *Revenue Requirement - Work out the cost of service (Tariff) for the provision of distribution service in the manner explained from 12 through 15 above and obtain NEPRA approval for recovery of same through rates recommended by NEPRA from various categories of customers within DISCO service territory after such tariff is notified by Federal Government.*
17. *Revenue Requirement/ Cost of Service - The cost of service of the distribution licensee for distribution services and power procurement together termed as revenue requirement of distribution license determined by regulatory under section 31 of NEPRA Act.*
5. Under Section 17 of NEPRA Act there is only one license relating to National Grid Company which is performing following functions explained in the NTDC Transmission License:
 - a. *TNO: Transmission network operator for 220 kV and above.*
 - b. *SO: System Operator responsible for power dispatch and operating of interconnection points in accordance with parameters defined in the Power Purchase Agreements, Grid Code and Distribution Code and is also responsible for stability of the nation grid system.*
 - c. *CPPA⁹⁰: Central Power Purchasing Agency procures power on behalf of DISCOs and conducts meter reading, verification, billing, settlement and payment of all generation in the Power Pool under the different power market structures as defined in the NTDC transmission license.*
 - d. *CRPEA⁹¹: Contract Registrar and Power Exchange Administrator is envisaged for registering all the power under the single buyer plus as well as under Competitive Trading Bilateral Contract Market (CTBCM) structure (but no in operation).*
6. Power Market structures, including the arrangement/stages, which lead to ultimate goal of a competitive power market, are defined in the Market Rules. The NEPRA Act provides that the transmission/distribution licensee can only procure power in accordance with its power acquisition program as approved by NEPRA. While approving the power acquisition program, NEPRA consider the national energy plan issued by the Federal Government and least cost generation plan.
 7. *Single Buyer arrangement: under this model all power is procured by a single buyer i.e. NTDC through its CPPA (now CPPA-G) on behalf of DISCOs, in accordance with its approved power acquisition program, by entering into power purchase agreements (PPAs) at the tariff approved by NEPRA and notified by the Federal Government. This arrangement/ stage was to last till June 2004 and now per the Market Rules until July 2016.*
 8. *Single Buyer Plus arrangement: Under this model from July 1, 2004 till June 2012, the distribution company may opt to procure power, in accordance with its approved power acquisition program as stated at 6 above, from the Power Pool or alternatively from any generation licensee by entering into PPA(s) at the tariff approved by NEPRA and notified by the Federal Government. Per Market Rules this date has been revised to be from July 2016 until July 2020.*
 9. *COMD: Competitive Operation Market Date stated in the NTDC license as of July 1, 2012 (July 1, 2009 possible extension up to June 30, 2012) as the operation date for Competitive Trading Bilateral Contract Market (CTBCM). Per the Market Rules this date has been revised to be by July 2020.*
18. GOP issues notification for consumer end tariff after incorporating the subsidy and tariff rationalization surcharge through the reconsideration request under Section 31 of NEPRA Act.

⁹⁰ As a consequence of operationalization of CPPA-G now vested with CPPA-G authorized under the Market Rules to conduct market operations.

⁹¹ As a consequence of operationalization of CPPA-G now vested with CPPA-G authorized under the Market Rules to conduct market operations.



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19. In order to meet its social obligation and to support economic considerations coupled with policy to maintain uniform power tariff across the country, the GOP provides subsidies and imposes surcharges.
 20. The GOP issues policy guidelines to NEPRA on tariff-related issues which are binding provided that such guidelines are not in conflict with provisions of NEPRA Act.
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USAID Power Distribution Program

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