ANNUAL REPORT 2022-23



NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

ANNUAL REPORT 2022-23



MISSION STATEMENT

To develop and pursue a regulatory framework for safe, reliable, affordable, modern, efficient and market-driven environment for provision of electric power to consumers in Pakistan and to maintain the balance between interests of consumers and service providers in line with the broad economic and social policy objectives of the Government and best international practices of the industry.

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CHAIRMAN'S MESSAGE

A requirement under Section 42(a) of NEPRA Act, every year NEPRA prepares Annual Report highlighting the regulatory activities during the year. This report in hand presents an account of major activities of NEPRA during the FY 2022-23.

The power sector stands as the cornerstone of a nation's economy. In the FY 2022-23, Pakistan's Power Sector achieved a cumulative value exceeding Rs. 3.5 trillion, constituting about 35% of the total budget which underscores the profound impact the power sector has on the nation's economic landscape. Given this pivotal role, the formulation of sound public policies and their implementation through a robust regulatory framework is of paramount importance which in turn necessitate a strong regulator.

NEPRA, being the sole regulator of electric power sector in the country, is entrusted with a daunting task of striking balance between the interests of the investors and the consumers. During the FY 2022-23, the Pakistan's power sector, already replete with multiple issues including the huge capacity payment obligation, inefficiencies in the generation, transmission and distribution segments, whopping circular debt etc., faced unprecedented high cost for electric power services. Increase in the prices of imported fuel coupled with drastic devaluation of Pak Rupee jacked up the cost of generation. On the other hand, the economic compulsions seriously impacted the Government's capacity to absorb increasing costs by way of subsidies. The Government is compelled to pass on cost to the end-consumers who unfortunately are faced with diminishing purchasing power amid historically highest inflationary spree in the country.

In this economic environment, the regulator is confronted with uphill task of balancing between the service providers and the consumers. Allowing the recovery of prudently incurred costs to the companies while protecting consumers from undue financial burden require utmost vigilance, professional competence and robust decision making - a task NEPRA continuously endeavours to come up to.

Since its establishment in 1997, the NEPRA has been entrusted with the exclusive mandate to regulate the power sector in Pakistan. NEPRA has actively been pursuing the power sector entities to curb inefficiencies to bring down the cost of service. Through State of Industry Reports annually prepared by NEPRA as well as its Determinations and regulatory proceedings, the Authority has been highlighting the issues hampering efficiency of power generation, transmission and distribution segments while suggesting the remedies. Exercising its enforcement powers, fines have been imposed on many entities for violation of service standards.

NEPRA Act has laid down a broader framework for development of competitive market based power sector. NEPRA was required to frame regulations aligned with the NEPRA Act to provide regulatory framework for transition from monopolistic environment to a competitive market. Towards this objective, during FY 2022-23, NEPRA notified a series of Regulations including NEPRA Procurement Regulations which have set direction for future procurements on competitive basis. Similarly the NEPRA Supply Regulations notified during the previous fiscal year have paved way for establishing competitive retail market for supply of electricity to end consumers.

Under the regulatory supervision of NEPRA, the power sector has been inching closer to develop a competitive power market. During previous year, land mark achievements were made by approving detailed design of Competitive Trading Bilateral Contract Market (CTBCM), Market Operator Licence, while during FY 2022-23, NEPRA granted System Operator Licence along with approval of Grid Code to put the institutional arrangements and the regulatory tools in place to operationalize the market.

The need for integrated planning holds central importance for objective development of power sector in the short, medium and long run. Though procrastinated, through continuous pursuance and push by NEPRA, the Indicative Generation Capacity Expansion Plan (IGCEP) was finally introduced in 2021. The second iteration of IGCEP covering the period 2022-2031 has been approved during FY 2022-23. The approved IGCEP along with Transmission System Expansion Plan (TSEP) gives a road map for future induction of generation capacity in tandem with transmission and distribution system expansion. With the progress towards finalizing the regulatory framework, development of planning documents and the institutional arrangements, the stage is set for transition of power sector from traditional monopoly to a modern market based structure working on the principles of competitions and efficiency.

NEPRA is deeply concerned about consumer satisfaction and therefore has enhanced vigilance on the consumer service standards of Distribution Companies (DISCOs). Swift consumer complaint handling is one of the priorities of the Authority for which regional offices have been established to facilitate consumers to lodge their complaints. During the year, 18,839 complaints were received, of which 17,545 were disposed off.

NEPRA uses a diverse range of regulatory mechanisms, encompassing the rules, regulations, codes, standard operating procedures, and guidelines to oversee and manage this critical sector. For regulating the power sector systematically, NEPRA grants licenses, determines tariff rates & adjusts them as needed, and sets and monitors industry standards under its regulatory frame work, while diligently addressing consumer complaints.

This report contains the details of key activities of the Authority and decisions made during FY 2022-23 in the areas of licensing, tariff, monitoring and enforcement, consumer affairs etc. It would not be out of place to remind that involvement of stakeholders through public hearing, consultative sessions and written representations continued to remain a cornerstone for transparency and holistic due diligence while making regulatory decisions by the Authority.

I want to extend heartfelt gratitude to the Authority Members as well as the team of NEPRA professionals and staff for their dedicated services. I would also like to thank the stakeholders for their steadfast support in our quest for developing a robust and forward looking power sector responsive to the present as well as future energy needs of the country. Together, NEPRA and the stakeholders will continue to drive positive change and progress in Pakistan's power sector and the economy as a whole.

While presenting this report, I would like to express the unwavering commitment of the NEPRA Authority to continue to play its role for bringing efficiency in the power sector and providing a regulatory environment to steer it in the direction of self-sustainment - notwithstanding the enormous challenges faced in this path.

WASEEM MUKHTAR Chairman

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THE AUTHORITY

The Authority consists a Chairman appointed by the Federal Government and four Members, one from each Province, appointed by the Federal Government after considering the recommendations of the respective Provincial Governments.

- (1) Chairman;
- (2) Member (Tariff & Finance);
- (3) Member (Technical);
- (4) Member (Law); and,
- (5) Member (Development)

Mr. Waseem Mukhtar assumed the charge of office of the Chairman NEPRA on August 10, 2023 as NEPRA's 10th Chairman for a term of four years in pursuance of Section 3 (5) of NEPRA Act.

Mr. Rafique Ahmed Shaikh, after completion of his 1st terms as Member (Sindh), has assumed the charge of the office of Member (Technical) on December 06, 2022, for another term of three years.

Engr. Maqsood Anwar Khan assumed charge of the office of Member (Khyber Pakhtunkhwa) on April 21, 2021. Mr. Khan represents the province of Khyber Pakhtunkhwa.

Mr. Mathar Niaz Rana (ncs) assumed the charge of the office of Member (Tariff & Finance) on November 11, 2022. Mr. Rana represents the province of Balochistan.

Ms. Amina Ahmed became the first ever female appointed as a Member NEPRA representing the province of Punjab. She assumed the charge of the office of Member (Law) on February 06, 2023.









Head of HR & Admin Department welcoming Chairman NEPRA, Mr. Waseem Mukhtar on August 10, 2023



NEPRA Authority welcoming Member (Tariff & Finance), Mr. Mathar Niaz Rana (nsc) on November 24, 2022



Senior Management bidding farewell to former Chairman, Mr. Tauseef H. Farooqi on August 04, 2023



The then Chairman, NEPRA welcoming Member (Law), Ms. Amina Ahmed on February 06, 2023

COMPOSITION OF THE ORGANIZATION

Section 10 of NEPRA Act provides that:

- (i) To carry out the purposes of this Act, the Authority may, from time to time, employ officers, members of its staff, experts, consultants, advisers and other employees on such terms and conditions as it may deem fit.
- (ii) All officers, members of staff, experts, consultants, advisers and other employees employed by the Authority shall not be deemed to be civil servants within the meaning of the Civil Servants Act, 1973 (LXXI of 1973).

To dispose-of the regulatory functions, NEPRA comprises following Departments:

- (i) Registrar Office
- (ii) Licensing Department
- (iii) Tariff Department
- (iv) Technical Department
- (v) Monitoring and Enforcement Department
- (vi) Consumer Affairs Department
- (vii) Legal Department
- (viii) Coordination & Implementation Department
- (ix) Finance Department
- (x) Human Resource & Administration Department
- (xi) Information Technology Department

The Organogram notified vide SRO dated September 24, 2020, is as under:







POWERS AND FUNCTIONS

The NEPRA has been established under Section 3 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the "Act"), as amended from time to time, to exclusively regulate the provision of electric power services in Pakistan. The Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act, 2018 [Act No. XII of 2018] has strengthened and improved the role and responsibilities of NEPRA. The powers and functions of the Authority as delineated in Section 7 of the Act are:

- (1) The Authority shall be exclusively responsible for regulating the provision of electric power services.
- (2) In particular and without prejudice to the generality of the foregoing power, only the Authority, subject to the provisions in sub-section (4), shall:-
 - (a) Grant Licence under this Act;
 - [(aa) specify procedures and standards for registration of persons providing electric power services;
 - (ab) aid and advise the Federal Government, in the formulation of national electricity plan
 - (ac) ensure efficient tariff structures and market design for sufficient liquidity in the power markets.]
- (b) specify procedures and standards for investment programmes by generation companies and persons licenced or registered under this Act;
- (c) specify and enforce performance standards for generation companies and persons licenced or registered under this Act;
- (d) specify accounting standards and establish a uniform system of account by generation companies and persons licenced or registered under this Act;
- (e) specify fees including fees for grant of Licence and renewal thereof;
- (f) [* * * * * * *]^[1]
- (g) review its order, decisions or determinations;
- (h) settle disputes between Licensees in accordance with the specified procedure;
- (i) issue guidelines and standards operating procedures;
- [(a) promote the development of a market, including trading, in accordance with the national electricity policy and the national electricity plan;] and;
- (j) perform any other function which is incidental or consequential to any of the aforesaid functions;
- (3) Notwithstanding the provisions of sub-section (2) and without prejudice to the generality

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¹¹ Omitted vide The Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act, 2018 (XII of 2018).

of the power conferred by sub-section (1) the Authority shall:-

- (a) determine tariff, 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;
- (b) review organizational affairs of generation companies and persons licenced or registered under this Act to avoid any adverse effect on the operation of electric power services and for continuous and efficient supply of such services;
- (c) encourage uniform industry standards and code of conduct for generation companies and persons licenced or registered under this Act;
- (d) tender advice to public sector projects;
- (e) submit reports to the Federal Government in respect of activities of generation companies and persons licenced or registered under this Act;
- (f) perform any other function which is incidental or consequential to any of the aforesaid functions.
- (4) Notwithstanding anything contained in this Act, the Government of a Province may construct power houses and grid stations and lay transmission lines for use within the Province and determine the tariff for distribution of electricity within the Province and such shall not be called into question by the Authority.
- (5) Before approving the tariff for the supply of electric power by generation companies using hydro-electric plants, the Authority shall consider the recommendations of the Government of the Province in which such generation facility is located.
- (6) In performing its functions under this Act, the Authority shall protect the interests of consumers and companies providing electric power services in accordance with the principles of transparency and impartiality.

In addition to performing the core functions envisaged under the NEPRA Act, the following initiatives were vigorously pursued and implemented during the reporting period:

- (a) Competitive Trading Bilateral Contract Market (CTBCM)
- (b) Power with Prosperity Corporate Social Responsibility (CSR)
- (c) Power with Safety Health, Safety and Environment (HSE)
- (d) Power with Security Computer Emergency Response Team (CERT)
- (e) Power with Equality Equal Opportunities irrespective of Gender
- (f) Power with Unity Academia Industry Linkage

KEY HIGHLIGHTS

KEY HIGHLIGHTS OF NEPRA ACTIVITIES DURING FY 2022-23

- (i) Approval of IGCEP 2022-31 whereas Assumption Set for preparation of the next iterations of IGCEP-2023-32 is at advance stage of approval;
- (ii) Grant of System Operator Licence to NTDC and approval of Grid Code 2023;
- (iii) Two (02) applications of PPIB and AEDB to act as Independent Auction Administrator (IAA) for the conventional and renewable energy projects are at advance stage of approval;
- Lifting of Moratorium on Section 23A, 23B, 23G and 23H of NEPRA Act by operation of law on 27th April, 2023;
- (v) Issuance of ten (10) Generation Licences and two (02) Micro Grid Licences for cumulative capacity of 1,430.492 MW;
- (vi) Issuance of fifteen hundred and ninety three (1,593) Net-Metering Licences/Concurrence for combined generation capacity of 220.821 MW;
- (vii) Issuance of seventy four (74) Tariff decisions including tariff determination, decisions on review motions filed by NEPRA licensees, decisions on reconsideration requests filed by Government of Pakistan;
- (viii) 277 Monthly Adjustments, in respect of fuel price, made;
- (ix) 387 Quarterly, Biannual, and Annual Adjustment in respect of capacity charges, made;
- (x) Approval of 28 requests in respect of Power Acquisition, filed by DISCOs and Central Power Purchasing Agency (Guarantee) Limited (CPPA-G);
- (xi) 477 Authority Regulatory Meetings were conducted;
- (xii) 182 Public Hearings/Consultative Sessions were held;
- (xiii) Imposition of fines on sixteen (16) Independent Power Producers (IPPs) and K-Electric (KE) in respect of total power system collapse on January 09, 2021;
- (xiv) Imposition of fines on DISCOs for violations of Performance Standards, Distribution Code and other applicable documents as well as occurrence of fatal accidents;
- (xv) 93% consumers complaints resolved;
- (xvi) Development of fundamental information and frequently asked question regarding electrical safety and reporting of unsafe electrical conditions, acts or accidents for Pakistan Citizen Portal;
- (xvii) Established Cyber Emergency Response Team (Powercert);
- (xviii) Rupees 561.829 Million remitted in the Federal Consolidated Fund of the Government of Pakistan;
- (xix) Compliance with Federal and Provincial Tax Laws by NEPRA;
- (xx) External Audit of NEPRA's Financial Statement;

- (xxi) Following Regulations or Amendments in existing Regulations were notified in the Official Gazette of Pakistan:
 - (a) NEPRA (Electric Power Procurement) Regulations, 2022;
 - (b) NEPRA Licensing (System Operator) Regulations, 2022;
 - (c) NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022;
 - (d) NEPRA (Security of Information Technology and Operational Technology) Regulations, 2022;
 - (e) NEPRA Licensing (Micro Grid) Regulations, 2022; and
 - (f) Amendment in NEPRA (Fees Pertaining to the Tariff Standards and Procedure) Regulations, 2022.
- (xxii) Decided Market Operator Fees of CPPA-G for the FY 2022-23.

NEPRA REGULATORY FRAMEWORK

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Role of NEPRA in the Power Sector:

NEPRA plays an important role in Pakistan's power sector. Established in 1997, NEPRA serves as an independent regulatory body entrusted with the responsibility of overseeing and managing the power industry. The primary objective of NEPRA is to ensure affordable, reliable, and sustainable electric power for the consumers. The role of NEPRA extend beyond the regulatory oversight which is central in harmonizing and balancing the interest of two key stakeholders - the consumers and the service providers - while aligning the broader economic and social policy objectives outlined by the Government of Pakistan.

Regulatory Framework:

The powers and the functions of the Authority, as stipulated in Section 7 of the Act, mandate it to develop and pursue a regulatory framework that ensures provision of safe, reliable, sustainable and affordable electricity to consumers of Pakistan through employing modern, efficient and market-driven regulatory tools. To perform its duties entrusted under NEPRA Act, the Authority developed a robust and market-oriented regulatory framework including Rules^[2], Regulations, Codes, Guidelines, Manuals, and Standard Operating Procedures (SOPs) to effectively regulate the power sector of Pakistan. A list of the regulatory tools developed till the end of the reporting period is as follows:

	1. NEPRA Act
1.1	Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (hereinafter to be referred as "the NEPRA Act") with all amendments up to December, 2021
	2. NEPRA Rules
2.1	NEPRA Tariff (Standards and Procedure) Rules, 1998
2.2	NEPRA Licensing (Distribution) Rules, 1999
2.3	NEPRA Licensing (Generation) Rules, 2000
2.4	NEPRA (Fines) Rules, 2002
2.5	NEPRA (Fee) Rules, 2002
2.6	NEPRA Performance Standards (Distribution) Rules, 2005
2.7	NEPRA Performance Standards (Transmission) Rules, 2005
2.8	NEPRA Performance Standards (Generation) Rules, 2009
2.9	NEPRA (Uniform System of Accounts) Rules, 2009
2.10	NEPRA (Market Operator Registration, Standards and Procedure) Rules, 2015
2.11	NEPRA (Complaint Handling and Dispute Resolution Procedure) Rules, 2015
	3. NEPRA Regulations
3.1	NEPRA (Fees Pertaining to Tariff Standards and Procedure) Regulations, 2002
3.2	NEPRA (Resolution of Disputes between Independent Power Producers and other Licensees) Regulations, 2003
3.3	NEPRA (Review Procedure) Regulations, 2009
3.4	NEPRA (Procedure for filing appeal before the Authority) Regulations, 2012
3.5	NEPRA (Alternative and Renewable Energy) Distributed Generation and Net-Metering Regulations, 2015
3.6	NEPRA (Supply of Electric Power) Regulations, 2015
3.7	NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021
3.8	NEPRA (Fees) Regulations, 2021
3.9	NEPRA (Fine) Regulations, 2021
3.10	NEPRA (Registration) Regulations, 2022
3.11	NEPRA Licensing (Distribution) Regulations, 2022
3.12	NEPRA Licensing (Electric Power Supplier) Regulations, 2022

¹ the Federal Government may frame rules either on its own motion or on the recommendation of the Authority.

3.13	NEPRA Consumer Eligibility Criteria (Electric Power Suppliers) Regulations, 2022								
3.14	NEPRA Consumer Eligibility Criteria (Distribution Licensees) Regulations, 2022								
3.15	NEPRA (Uniform System of Accounts) Regulations, 2022								
3.16	NEPRA Licensing (Market Operator) Regulations, 2022								
3.17	NEPRA Performance Standards (Electric Power Suppliers) Regulations, 2022								
3.18	NEPRA (Electric Power Trader) Regulations, 2022								
3.19	NEPRA Licensing (Micro Grid) Regulations, 2022								
3.20	NEPRA (Security of Information Technology and Operational Technology) Regulations, 2022								
3.21	NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022								
3.22	NEPRA Licensing (System Operator) Regulations, 2022								
3.23	NEPRA (Electric Power Procurement) Regulations, 2022								
	4. NEPRA Standard Operating Procedures								
4.1	NEPRA Standard Operating Procedures for Inspection, Examination and Provision of Copies of Documents, 2015								
	5. NEPRA Guidelines								
5.1	NEPRA (Sale of Electric Power by Renewable Energy Companies) Guidelines, 2015								
5.2	NEPRA Guidelines for Determination of Consumer-end Tariff (Methodology and Process), 2015								
5.3	NEPRA Guidelines to Lay Down the Methodology and Process for Determination of Revenue Requirement and Use of System Charges (UoSC) for Transmission Licensee, 2017								
5.4	NEPRA (Selection of Engineering, Procurement and Construction Contractor by Independent Power Producers) Guidelines, 2017								
5.5	NEPRA (Benchmarks for Tariff Determination) Guidelines, 2018								
5.6	NEPRA (Selection of Operation and Maintenance Contractors by Generation Companies) Guidelines, 2021								
5.7	NEPRA (Social Investment) Guidelines, 2021								
5.8	NEPRA Guidelines for Procurement of Coal on Spot Basis, 2022								
	6. NEPRA Codes								
6.1	Distribution Code, 2005								
6.2	Commercial Code, 2015 of CPPA-G								
6.3	Power Safety Code for Licensees, 2021								
6.4	Market Commercial Code, 2022								
6.5	Grid Code, 2023								
	7. NEPRA Manuals								
7.1	Consumer Service Manual – January, 2021								
7.2	Regulatory Framework for Electric Vehicle Charging Stations								

The NEPRA Act and Rules, Regulations, Guidelines and SOPs made thereunder are available on NEPRA website for ease of all concerned.

Grant of Licenses/Concurrences and Registrations:

Before the enactment of the Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act, 2018 (hereinafter to be referred as NEPRA Amendment Act, 2018), the generation, transmission and distribution of electric power were the only licenced activities. However, in addition to the earlier categories, new licence categories have been introduced in the Amendment Act and now the electric power supply, trade, market operations and system operations have also been introduced as separate licenced activities. Under the NEPRA Act, the Authority is vested with the exclusive power to grant licences/concurrence for provision of electric power services in the country.

In addition to the issuance of licences/concurrences under the NEPRA Act, the Authority has also been empowered to issue Registration to persons providing electric power services, other than generation or an electric power service requiring a licence under this Act.

Further, the NEPRA (Amendment) Act, 2018 has also provided for cessation of generation licences after a period of five years from the date of its enactment. Accordingly, the Authority has introduced

a Concurrence regime in accordance with the provisions of the NEPRA (Amendment) Act, 2018 with effect from 27th April, 2023.

Determination of Tariff:

Pursuant to Section 7 (3) of NEPRA Act, the Authority has been given the exclusive power to determine tariff, rates, charges and other terms and conditions for the supply of electric power services by generation, transmission, distribution and suppliers companies and to intimate its recommendations to the Federal Government for notification in the Official Gazette.

Section 31, Sub-section (3) of NEPRA Act, provides general guidelines for determination, modification or revision of rates, charges and terms and conditions for provision of electric power services.

Section 31, Sub-section (7) of NEPRA (Amendment) Act 2021, stipulate that:

"Notification of the Authority's approved Tariff or Uniform Tariff, as the case may be; rates, charges, and other terms and conditions for the supply of electric power services shall be made, in the Official Gazette, by the Federal Government within 30 days of intimation of the same by the Authority. In the event the Federal Government fails to notify the tariff so determined by the Authority, or refer the matter to the Authority for reconsideration, within the time period specified, then the Authority may direct for immediate application of its recommended and approved tariff or uniform tariff as the case may be, by way of notification of the same, subject to adjustment which may arise on account of reconsideration, if any, subsequently filed by the Federal Government".

The Authority follows a transparent procedure for determination of tariff under the NEPRA Tariff (Standards and Procedure) Rules, 1998 that involves participation of the stakeholders and general public as well. Further, the Authority exercises due diligence for assessment of appropriate level of expenses and prudent rate of return allowed to the licensees or sponsors.

Prescribe and Enforce Performance Standards:

The Authority formulated and issued Performance Standards (Generation) Rules, 2009, Performance Standards (Transmission) Rules, 2005 and Performance Standards (Distribution) Rules, 2005 to ensure that the licensees offer better service quality and reliable services to all consumers. The Authority ensures the compliance of the said standards through site visits, evaluation of performance reports and legal proceedings. The Authority is also in the process of reviewing and improving the said standards in view of the global developments in the power sector and prudent utility practices.

Monitoring and Enforcement of the Regulatory Framework:

Monitoring and Enforcement (M&E) is a critical function of the Authority to ensure that the performance of licensees is in accordance with the conditions of the applicable documents including the Act, Rules, Regulations, Codes, Manuals, SOPs and the Authority directives etc. The following pages offer an overview of the actions taken by the Authority regarding M&E of its licensees.

Transparency:

Transparency stands as the essence of NEPRA's regulatory practices. This commitment to transparency is manifest in multifaceted approach involving effective public engagement in the decision-making process. This engagement is ensured through the conduct of public hearings, solicitation of written comments from stakeholders and the general public for regulatory decisions. Further, for transparency, the regulatory documents including Rules, Regulations, Licences, Tariff Determinations, as well as the orders and decisions of the Authority are placed on the official website of NEPRA.

THE AUTHORITY'S REGULATORY DECISION MAKING PROCESS

THE AUTHORITY'S REGULATORY DECISION MAKING PROCESS

NEPRA is entrusted with the comprehensive regulatory oversight of the power sector through its core function such as grant of licence/concurrence issuance, tariff determination, rigorous monitoring to ensure compliance by the licensees with the regulatory standards for quality services and the diligent handling and resolution of consumer complaints. The Authority exercises its power under the NEPRA Act, Rules and Regulations made thereunder and is also empowered to review its own decisions in the interest of judicious decision making.

All petition brought before NEPRA undergo meticulous scrutiny, in light of the applicable regulatory framework. This involves, among other facets, the engagement of all stakeholders, including consumers, through the conduct of public hearings and the solicitation of input via nation-wide advertisements. These practices serve to provide the Authority with an extensive repository of data and insights, which are subjected to rigorous evaluation in the pursuit of well-informed and judicious decision making.

The NEPRA (Amendment) Act, 2021 provides as under:

Section 5: Meetings of the Authority, etc.—

- (a) Subject to the provisions of this Act, the Authority shall, in performance of its functions and exercise of its powers, conduct its proceedings in accordance with regulations made under this Act.
- (b) The Chairman and two other members shall constitute a quorum for a meeting of the Authority requiring a decision by the Authority:

Provided that the members of the Authority shall nominate a member amongst themselves to work as an acting Chairman in case of absence of the Chairman, as the case may be, for meeting of the Authority.

- (c) The member shall have reasonable notice of the time and place of the meeting and the matters on which a decision by the Authority shall be taken in such meeting.
- (d) The decision of the Authority shall be taken by the majority of its members present, and in case of a tie, the person presiding the meeting shall have a casting vote.

Section 6: Decisions of the Authority.—

All orders, determinations and decisions of the Authority shall be taken in writing and shall identify the determination of the Chairman and each member.

REGULATORY ACTIVITIES DURING FY 2022-23

LICENSING ACTIVITIES

NEPRA Act 1997, Section 14B (1) states that subject to Sub-section 5, no person shall, except under the authority of a licence issued by the Authority under this Act and subject to the conditions specified in this Act and as may be imposed by the Authority, construct, own or operate a generation facility.

The Sub-section (5) of Section 14B of the Act provided that:

"the Federal Government may, after consultation with the Authority and by notification in Official Gazette, provide a mechanism for the gradual cessation of the generation Licenses for various classes of generation licence holders, which shall not extend beyond a period of five years from the coming into effect of the Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act, 2018 (i.e. from April 27, 2018) and thereafter, any generation company may establish, operate and maintain a generation facility without obtaining a Licence under this Act if it complies with the technical standards relating to connectivity with the grid as may be specified."

Further, First proviso of Section 14B (5) of NEPRA Act provides that:

"a generation company intending to set up a generating facility shall prepare and submit a detailed scheme covering all financial, geological, hydrological, technical, safety and environmental aspects to the Authority for its concurrence."

The five years period given under Section 14B (5) of NEPRA Act has completed on April 26, 2023. Since the mechanism for gradual cessation of the generation Licenses for various classes of generation licence holders is yet to be notified, therefore, NEPRA continued to grant generation licenses till April 26, 2023 and thereafter started issuing concurrence to generation companies.

(i) Generation Licenses

During FY 2022-23, a total of twenty-four (24) generation licence applications were in process with around 2,398.96 MW capacity, among these, six (06) applications were new, totaling 21.507 MW. Twelve (12) Licenses, including 02 Micro Grid Licenses, were granted, accounting for 1,430.492 MW capacity. The pending applications are undergoing processing.



5. No.	Technology	Number of Licenses	Capacity (MW)	
1	Hydel	4	855.90	
2	Solar	5	7.62	
3	Thermal	1	565.65	
4	Micro Grid	2	1.3215	
	Total	12	1,430.492	

Source-wise detail of Licenses Granted

Source: NEPRA

5. No.	Name of Licensee	Installed Cap. (MW)	Fuel	Licence	Date of Issuance		
1	Burj DG (Pvt.) Limited	0.25	Solar	SGC/168/2022	29 July, 2022		
2	Burj DG (Pvt.) Limited	0.40	Solar	SGC/169/2022	29 July, 2022		
3	Burj DG (Pvt.) Limited	0.25	Solar	SGC/170/2022	29 July, 2022		
4	GSolar Power (Pvt.) Limited	4.79	Solar	SGC/171/2022	29 July, 2022		
5	GSolar Power (Pvt.) Limited	1.93	Solar	SGC/172/2022	29 July, 2022		
6	Gorkin-Matiltan – PEDO	88.30	Hydel	GL(Hydel)/18/2022	15 September, 2022		
7	Balakot – PEDO	300.00	Hydel	GL(Hydel)/19/2022	22 November, 2022		
8	NPGCL (GENCO-III)	565.65	Thermal	GL/28/2022	25 January, 2023		
9	KOAK Power Limited	229.40	Hydel	IGSPL/109/2023	12 June, 2023		
10	KA Power Limited	238.20	Hydel	IGSPL/110/2023	12 June, 2023		
11	Quaid-e-Azam Solar Power	0.60	Micro-grid	MGL/01/2023	17 January, 2023		
12	Quaid-e-Azam Solar Power	0.7215	Micro-grid	MGL/02/2023	17 January, 2023		
Total Installed Capacity 1,430.492							

Licenses Awarded to Generation Companies

Source: NEPRA

(ii) **Distribution Licenses**

In the FY 2022-23, eight (08) distribution licenses were issued to DISCOs, namely IESCO, PESCO, GEPCO, LESCO, MEPCO, QESCO, FESCO, and HESCO. In addition to the issuance of distribution licenses to aforementioned DISCOs, ten (10) applications for the grant of distribution licenses are currently under process. These include KE, five (05) projects of PIEDMC, Rashakai Special Economic Zone, Bahria Town (Rawalpindi/Islamabad), Bahria Town (Lahore), and PECHS Valancia, Lahore.

(iii) <u>Transmission Licenses (PGC)</u>

In accordance with Section 18(A) of the NEPRA Act; one (01) application from Punjab Grid Company Limited, seeking a licence to serve as the Provincial Grid Company (PGC) for the Province of Punjab, has been submitted and is currently under processing.

(iv) <u>Supplier Licenses</u>

As per Section 23E of the amended NEPRA Act, the Authority is currently reviewing twenty-three (23) applications for the issuance of Supplier Licenses. These applications were submitted by IESCO, PESCO, GEPCO, LESCO, MEPCO, QESCO, FESCO, HESCO, SEPCO, TESCO, KE, and various projects under PIEDMC, including Sundar, Vehari, Bhalwal, Rahim Yar Khan, and Sheikhupura. Additionally, applications from Rashakai Special Economic Zone, Maple Leaf Power Limited, Lucky Energy (Pvt.) Limited, Shams Power Limited, Innovative Energy Solutions (Pvt.) Limited, Aquagen (Pvt.) Limited, and Nishat Mills Limited are also under consideration.

(v) <u>Net-Metering Licenses</u>

In the FY 2022-23, a total of 1,596 Net-Metering Licenses were issued, representing a cumulative installed capacity of 221.05 MW. The detailed breakdown of the Net-Metering Licenses issued during this period is given in the following table:

DISCO	PESCO	IESCO	GEPCO	LESCO	FESCO	MEPCO	HESCO	SEPCO	QESCO	KE	DHA (EME)
Net- Metering Lic. Issued (No.)	44	136	116	331	183	292	25	6	3	458	2
Installed Cap. (MW)	6.16	13.76	20.02	51.52	25.03	48.89	5.91	6.0	0.50	48.12	0.25

Source: NEPRA
(vi) Modifications in the Existing Licenses

The Authority reviewed and approved seven (07) cases related to Licensee Proposed Modifications within the existing generation licenses. The details of the modified licenses are given in the following table:

5. No.	Name of Licensee	Licence No.	Modification/ Decision Issued
1	Access Solar (Pvt.) Limited	SPGL/03/2013	28 July, 2022
2	Access Electric (Pvt.) Limited	SPGL/05/2014	03 August, 2022
3	Northern Power Generation Company Limited	GL/03/2002	25 January, 2023
4	Pakistan Steel Mills Corporation (Pvt.) Limited	SGC/41/2008	26 January, 2023
5	UEP Wind Power (Pvt.) Limited	WPGL/22/2013	01 March, 2023
6	National Transmission and Despatch Company Limited	TL/01/2002	21 March, 2023
7	Trans-Atlantic Energy (Pvt.) Limited	WPGL/43/2017	23 June, 2023

Source: NEPRA

(vii) Cancellation of Licenses

In the specified period, the Authority, upon request from licensees, revoked four (04) generation licenses. The details of the revoked licenses are given in the following table:

5. No.	Name of Licensee	ame of Licensee Licence No.	
1	Ramzan Sugar Mills Limited	SGC/92/2013	01 November, 2022
2	Al-Arabia Sugar Mills Limited	SGC/126/2018	01 November, 2022
3	Digri-Gen Limited	IGSPL/102/2018	26 December, 2022
4	Shams Power (Pvt.) Limited	SGC/135/2020	13 April, 2023

Source: NEPRA

(viii) Registration of AEDB and PPIB as Independent Auction Administrator

The amendments made to the NEPRA Act in 2018 were aimed at fostering the development of a competitive electric power market in the country. This involved the introduction of new categories of licenses and the registration of other market participants and service providers. In alignment with these amendments, the Authority gave its approval for both the high-level and detailed design of the CTBCM.

As per the detailed design of the CTBCM, a registered entity will play the role of an Independent Auction Administrator (IAA). Its primary function will be to assist DISCOs and Suppliers of Last Resorts (SoLR) in meeting their capacity obligations through the procurement of new capacity. This registered entity will also oversee competitive auctions for the approved capacity procurement plan.

Subsequently, PPDB and AEDB have each submitted separate applications under Section 25A of the NEPRA Act to serve as IAAs. These applications from AEDB and PPIB, seeking to act as IAAs, are currently in an advanced stage of processing.

(ix) Grant of System Operator Licence to NTDC

The Section 23G of the NEPRA Act outlines the separation of the System Operator function from the NGC. This entails the responsibility of overseeing system operation, dispatch, and integrated planning for the nation's power system.

To comply with this provision, NTDC submitted an application for the issuance of a System Operator Licence on August 24, 2022, alongside the draft Grid Code 2023 for the Authority's approval.

After thorough consideration, the Authority granted the System Operator licence to NTDC and approved the Grid Code 2023. Furthermore, the Authority notified the NEPRA Licensing (System Operator) Regulations, 2022, in accordance with the relevant provisions of the NEPRA Act. These regulations serve to delineate the functions, responsibilities, and terms & conditions of the System Operator in conducting efficient and economically viable system operations.

(x) <u>Registration of CPPA-G as Special Purpose Agent</u>

The comprehensive design of the CTBCM outlines a restructuring and division of functions currently held by CPPA-G. This includes the establishment of two distinct roles: (i) Market Operator, tasked with the development and administration of the market; and (ii) Special Purpose Agent, responsible for managing the existing legacy contracts currently overseen by CPPA-G.

In accordance with this framework, CPPA-G has filed an application for registration as Special Purpose Agent, along with the assigned Agency Code, to undertake these functions. The application is currently under review by the Authority.

(xi) <u>Proposed Amendments and Formulation of Connectivity Standards Regulations in light</u> of Section -14B of the NEPRA Act

Pursuant to Section 14(B) of the NEPRA Act, generation companies are required to obtain 'concurrence' after five (05) years from the amendment of the Act. Following this period, any generation company seeking to establish a generating facility must develop and submit a comprehensive scheme covering financial, geological, hydrological, technical, safety, and environmental aspects to the Authority for its approval.

As above, amendments to the relevant regulations have been initiated to align them with the provisions of the NEPRA Act. Additionally, a draft of the NEPRA Generation (Connectivity Standards) Regulations, 2023 has been drafted and will be finalized as stipulated in Section 47(3) of the NEPRA Act.

TARIFF ACTIVITIES

Under Section 7(3) of the NEPRA Act, NEPRA is exclusively empowered to determine tariff, rates, charges and other terms and conditions for the supply of electric power services by generation, transmission, distribution, and suppliers and to recommend these to the Federal Government for notification. Further, pursuant to Section 12 of the Act, the powers to determine tariff, cannot be delegated by the Authority.

Pursuant to Rule 6 of the NEPRA Licensing (Generation) Rules, 2000 the licensee shall charge only such tariff for the provision of electric power



or the ancillary services as may be approved or specified by the Authority.

NEPRA determines the generation, transmission, distribution and supply tariff for different categories of licensees. The comprehensive process of determination of tariff is given under NEPRA (Tariff Standards and Procedure) Rules, 1998. During FY 2022-23, NEPRA determined tariff for various generation technologies, distribution and supply of electric power companies. The details of the determined tariff are as under:

(i) <u>Hydropower Projects</u>

During the year, following Tariff Determinations, Modification, Review Decisions, and Adjustments/ Indexations were issued.

S. No.	Name of the Plant	Capacity (MW)	Determination Date	Decision Sought			
1	Pehur HPP	18	06-10-2022	Modification in Tariff			
2	Shishi HPP	1.875	22-02-2023	Motion for Leave for Review			
3	Ravi HPP	4.6	29-07-2022	Motion for Leave for Review			
4	Uzghor HPP	82.25	29-07-2022	Motion for Leave for Review			
5	WAPDA	0.400	29-12-2022	Motion for Leave for Review			
	WAPDA	8,420	29-09-2022	Modification in Tariff			

List of Tariff Determinations, Modification and Review Decisions

Source: NEPRA

List of Tariff Adjustments/Indexation of Tariff

5. No.	Name of Project
1	Karot Hydropower Project: Decision Dates: 09-02-2023, 29-05-2023
2	Laraib Hydropower Project: Decision Dates: 07-07-2022, 27-07-2022, 01-08-2022, 04-10-2022, 28-10-2022, 01-02-2023, 29-05-2023
3	Patrind Hydropower Project: Decision Dates: 17-08-2022, 30-08-2022, 16-10-2022, 01-02-2023, 21-02-2023, 20-04-2023, 09-06-2023
4	Malakand-III Hydropower Project: Decision Dates: 04-10-2022, 27-12-2022, 12-04-2023, 16-06-2023
5	Jagran-I Hydropower Project: Decision Date: 05-05-2023
6	Gulpur Hydropower Project: Decision Dates: 01-02-2023, 12-04-2023, 10-10-2022

Source: NEPRA

(ii) <u>Solar Power Projects</u>

During the FY 2022-23, NEPRA made tariff determinations for three Solar PV Projects: Zorlu Solar Pakistan Limited (100 MW), Access Electric (Pvt.) Limited (10 MW), and Access Solar (Pvt.) Limited (11.52 MW), in accordance with NEPRA's Tariff (Standards and Procedure) Rules, 1998. The levelized tariffs approved were US Cents 3.9017/kWh, US Cents 4.5586/kWh, and US Cents 4.5950/kWh, respectively.

During the same reporting period, Siachen Energy Limited (100 MW) submitted a tariff petition for approval of generation tariff. However, due to incomplete information, the Authority returned the petition.

During the FY 2022-23, the Atlas Solar Limited (ASL) (100 MW) [formerly Zhenfa Pakistan New Energy Company (Pvt.) Limited] submitted an application for tariff adjustment, true-up, at the COD. The verification process of the submitted documents is currently underway. The ASL achieved commercial operation in FY 2021-22.

During FY 2022-23, CPPA-G filed a motion for leave for review against the determinations of the Authority in respect of Zorlu Solar Pakistan Limited, Access Electric (Pvt.) Limited, and Access Solar (Pvt.) Limited. Hearings for these review motions were conducted, and subsequently, the Authority reevaluated the determinations for these solar IPPs and issued a decision. The approved levelized tariffs for Zorlu Solar Pakistan Limited, Access Electric (Pvt.) Limited, and Access Solar (Pvt.) Limited were US Cents 3.9017/kWh, US Cents 4.5586/kWh, and US Cents 4.5950/kWh respectively.

(iii) Wind Power Projects

During FY 2022-23, the Authority issued a decision on Master Green Energy Limited true-up application, approving a levelized tariff of US Cents 4.4450/kWh.

Following the successful achievement of Commercial Operation during FY 2021-22, the eleven (11) Wind Power Projects, namely, Lucky Renewables (Pvt.) Limited [formerly Tricom Wind Power (Pvt.) Limited], Gul Ahmed Electric Limited, Din Energy Limited, Act 2 Din Wind (Pvt.) Limited (formerly Act2 Wind (Pvt.) Limited), Artistic Wind Power



(Pvt.) Limited, Metro Wind Power Limited, NASDA Green Energy (Pvt.) Limited, Liberty Wind Power 1 (Pvt.) Limited, Liberty Wind Power 2 (Pvt.) Limited, Lakeside Energy (Pvt.) Limited, and Indus Wind Energy Limited, collectively with a capacity of 610 MW, commenced electricity delivery to the National Grid. The verification process for claimed project costs, along with other financial parameters and submitted information of the remaining wind IPPs, is currently underway

(iv) Bagasse-based Power Projects

During FY 2022-23, the Authority issued decision in respect of the Tariff Modification Petition filed by Shahtaj Sugar Mills Limited regarding Generation Tariff of its bagasse based project. A levelized tariff of Rs. 9.0611/kWh was approved for a tariff control period of thirty years.

Furthermore, in accordance with the Judgment of the NEPRA Appellate Tribunal dated November 18, 2022, and following the Ministry of Energy's (Power Division) letter dated December 18, 2020, which urged NEPRA to rationalize the bagasse price for cogeneration projects, the Authority held a hearing involving stakeholders. The case is currently in progress.

(v) Indexation/Adjustment of RE Tariff

In line with the indexation mechanism outlined in the Authority's decisions/determination for Wind, Solar and Bagasse based power generation companies, the relevant components underwent adjustments

on quarterly, bi-annual and/or annual basis. The adjustments were made to account for variation in US CPI, Local CPI (General), Exchange Rate, and KIBOR/LIBOR. Throughout the reporting period, the Authority issued decision pertaining to these IPPs.

5. No.	Name of IPPs	5. No.	Name of IPPs
1	Quaid-e-Azam Solar Power (Pvt.) Limited	22	Artistic Energy (Pvt.) Limited
2	Apollo Solar Development Pakistan Limited	23	Zephyr Power (Pvt.) Limited
3	Best Green Energy Pakistan Limited	24	FFC Energy Limited
4	Crest Energy Pakistan Limited	25	Zorlu Enerji Pakistan Limited
5	Harappa Solar (Pvt.) Limited	26	Foundation Wind Energy-I (Pvt.) Limited
6	AJ Power (Pvt.) Limited	27	Foundation Wind Energy-II (Pvt.) Limited
7	Oursun Pakistan Limited	28	Metro Power Company Limited
8	Gharo Solar (Pvt.) Limited	29	Sachal Energy Development (Pvt.) Limited
9	Act Wind (Pvt.) Limited	30	Master Green Energy Limited
10	Yunus Energy Limited	31	JDW Sugar Mills Limited (Unit-II)
11	Sapphire Wind Power Company Limited	32	JDW Sugar Mills Limited (Unit-III)
12	HydroChina Dawood Power (Pvt.) Limited	33	Chiniot Power Limited
13	UEP Wind Power (Pvt.) Limited	34	RYK Mills Limited
14	Master Wind Energy Limited	35	Hamza Sugar Mills Limited
15	Gul Ahmed Wind Power Limited	36	Al-Moiz Industries Limited
16	Tenaga Generasi Limited	37	Thal Industries Corporation Limited
17	Hawa Energy (Pvt.) Limited	38	Chanar Energy Limited
18	Jhimpir Power (Pvt.) Limited	39	Tricon Boston Consulting Corporation (Pvt.) Limited-A
19	Three Gorges First Wind Farm Pakistan (Pvt.) Ltd	40	Tricon Boston Consulting Corporation (Pvt.) Limited-B
20	Three Gorges Second Wind Farm Pakistan (Pvt.) Ltd	41	Tricon Boston Consulting Corporation (Pvt.) Limited-C
21	Three Corges Third Wind Farm Pakistan (Put) Itd		

21 Three Gorges Third Wind Farm Pakistan (Pvt.) Ltd

Source: NEPRA

(vi) <u>RFO-based Power Plants</u>

During FY 2022-23, the Authority issued following decision or determinations:

- (a) On December 1, 2022, the Authority granted immediate application of the proposed tariff for Gul Ahmed Energy Limited with a gross capacity of 136.17 MW.
- (b) In compliance with the directives of the Islamabad High Court regarding the Plea Bargain amount adjustments in the tariffs of SNPC-I and SNPC-II, a decision was made on January 16, 2023. This decision pertains to NEPRA's earlier determinations issued on June 1, 2016, and August 4, 2017.
- (c) On January 23, 2023, the Authority gave its determination, for a period of two years, in the matter of Tariff Petition filed by Tapal Energy (Pvt.) Limited for approval of generation tariff for its RFO based power plant having a gross power generation capacity of 126 MW.
- (d) On February 22, 2023, the Authority gave its determination, for a control period of two years, in the matter of Tariff Petition filed by Gul Ahmed Energy Limited for approval of generation tariff for its RFO Based Power Plant having a gross capacity of 136.17 MW.

(viii) Coal-based Power Plants

During FY 2022-23, the Authority addressed the following petitions and applications related to coalbased power plants:

- (a) The Authority approved guidelines for the procurement of coal on a spot basis for coal power projects.
- (b) Decision was made in the matter of Motion for Leave for Review filed by FFBL against the Authority's Decision dated June 20, 2022, regarding the Tariff Modification Petition for the sale of 52 MW Power to KE, was considered. The decision was issued on December 26, 2022.



(ix) Indexation/Adjustment of Thermal Tariffs

The Indexation/adjustments approved by the Authority during FY 2022-23 is given in the following table:

Adjustments	Quantity
Monthly Adjustment	286
Quarterly Adjustment	162
Annual Adjustment	40
Total	488

Source: NEPRA

(x) Distribution and Supply Tariff (KE)

The MYT determination for KE, dated July 05, 2018, was notified vide SRO No. 576(I)/2019 dated May 22, 2019. This notified MYT outlines a mechanism for adjustments to the approved tariff on a monthly, quarterly, and annual basis.

(x) Distribution and Supply Tariff (DISCOs)

NEPRA set the tariff for DISCOs from FY 2020-21 to FY 2022-23. The determined national average tariff stands at Rs. 24.82/kWh, a notable increase of Rs. 7.91/kWh compared to the previous average tariff of Rs. 16.91/kWh. This revised tariff was notified by the Federal Government with effect from July 25, 2022. The rise of Rs. 7.91/kWh is primarily attributed to elevated fuel prices, the addition of new plant capacities (such as Coal, Nuclear, and RLNG Power Plants), exchange rate fluctuations, and inflationary factors.

DISCOs, FESCO with regard to MYT adjustment/indexation decision, and GEPCO, MEPCO, HESCO, SEPCO, PESCO, and QESCO in response to MYT determinations, have submitted motions for leave for reviews. These motions were subsequently decided by the Authority. Both the NEPRA Act and the notified decisions outline a framework for implementing specific adjustments in the approved tariff on a monthly and quarterly basis.

(xi) Market Operator Fee (CPPA-G)

The Authority determined the Market Operator fee of CPPA-G for FY 2022-23 on November 23, 2022, and forwarded it to the Federal Government for notification in the Official Gazette of Pakistan. Aggrieved with the Authority's determination, CPPA-G, submitted a Motion for Leave for Review. This motion was subsequently decided by the Authority on May 22, 2023. The decision was then conveyed to the Federal Government for notification in the Official Gazette.

TECHNICAL ACTIVITIES

Following activities were undertaken during the FY 2022-23:

- (a) Determination of Benchmark Tariff on RFP for Competitive Bidding of 600 MW Solar Project at Muzaffargarh.
- (b) Technical Evaluation of bids for the task titled "Comprehensive Assessment/Verification of Market Transactions Performed by CPPA-G for FY 2018-19, FY 2019-20, FY 2020-21 and FY 2021-22". Financial Bid has also been opened.
- (c) Specified NEPRA Licensing (Micro-grid) Regulations, 2022 to provide access of electricity to remote and far-flung areas of the country where conventional grid expansion is not feasible technically and commercially.
- (d) Approval of Heat Rate number for BQPS-II in case of gas compressor operations in different configuration for adjustment in monthly Fuel Charges Adjustments (FCAs) calculations.
- (e) Approval of five (05) years Investment Plan and Losses Assessment of PESCO, TESCO, IESCO, GEPCO, LESCO, FESCO, HESCO and SEPCO for Tariff Control Period from FY 2021-22 to FY 2022-23.

DISCOs/NTDC	Investment (Rs. Million)	Target Loss (%)
PESCO	21,972	20.16
TESCO	3,862	9.21
IESCO	30,359	7.80
GEPCO	9,864	9.10
LESCO	20,073	8.00
FESCO	8,464	9.50
MEPCO	14,734	12.34
HESCO	20,686	18.57
SEPCO	8,652	17.05
QESCO	26,379	14.27

Investments and Target Loss allowed to DISCOs in their MYT (FY 2022-23)

Source: NEPRA

(f) Assessment of plant factor was under-taken during the tariff determination process; during the FY 2022-23, NEPRA Approved 22.97% plant factor for the Zorlu Energi.

Following events were organized during FY 2022-23:

- (a) Webinar on new technology "**Power from Hydrogen**" was held on September 24, 2022 which revolved around the discussion of rapid growth of global hydrogen economy and its significance on geo-economic and geo-political shift. International Hydrogen System analysts from NREL and Wartsila covered the aspects and targets of zero emissions along with storage and safety concerns.
- (b) Webinar on new technology "Geo Thermal Energy Technological Overview and Potential" was held on October 07, 2022 which was attended by large number of power sector stakeholders, members of academia and other relevant organization, discussion was made on advances and potential in Pakistan. International presence was made by research scientist Ms. Amanda Kolker from USA. The then Chairman, NEPRA connected the theme with reliable and affordable power generation.
- (c) Webinar/Seminar on "Electrical Vehicles (EVs) Future in Pakistan" was held on November 10, 2022 in collaboration with 'EV Academy'. The seminar aimed at creating awareness and potential sites for EV charging stations in Pakistan. Audience from Petroleum

Division, Public and Private Companies also participated. Mr. Shahid Khaqan Abbasi (Former PM) expressed his views and the support from government in promoting the cause.

(d) Signing ceremony of MOU with Pakistan Telecommunication Authority held on September 12, 2022 for information sharing, cooperation, coordination and capacity building between the two Regulators. Transition towards smart grids and Advance Metering Infrastructure were discussed along with formulation of coordination mechanism.

Other Technical Activities:

- (a) Shared point of view regarding Energy Transition Mechanism Workshop of Asian Development Bank to assist Pakistan in the matter of transition to clean and Green energybased power generation by reducing the risk of high-carbon emissions from coal-fired plants in the environment.
- (b) Provided comments on report titled "Regulatory Interventions on Grid Discipline and Grid Reliability in the South Asian Region", published by South Asia Forum for Infrastructure Regulation (SAFIR) formulated under Central Electric Regulatory Commission (CERC).
- (c) Examined and processed a number of PPAs/EPAs of power plants.
- (d) Assisted the Authority on technical matters which included but not limited to heat rate numbers, energy and capacity verification of power plants, NPMV claims, technical losses, etc.
- (e) Assisted the Authority on factors and efficiency of power plants, used in tariff calculations.
- (f) Carried out verification of technical factors for monthly FCAs and quarterly adjustments in CPPA-G and KE System.

MONITORING AND ENFORCEMENT - GENERATION

(i) <u>Performance Evaluation Reports of Thermal Power Plants</u>

During the FY 2022-23, the quarterly reports submitted by thermal power plants, for the FY 2022-23, under NEPRA Performance Standards (Generation) Rules, 2009 were reviewed and a comprehensive Performance Evaluation Report was prepared and approved by the Authority, which is available at NEPRA website.

(ii) Data Exchange Portal (Generation)

During the FY 2022-23, a data exchange portal was developed for online acquisition of daily data pertaining to Key Performance Indicators from all operational generation licensees in respect of their generation facilities. Initially, the beta version of the portal was launched after approval of the Authority and data was being obtained from 09 power plants only. However, after the successful functioning of the beta version, all remaining operational generation Licensees were directed to register



on the portal. Now, as on June 30, 2023, a total number of 116 power plants are registered on the portal and providing data on given formats.

(iii) <u>Under-utilization of Efficient Power Plants/Observance of Economic Merit Order</u> (EMO)

NEPRA maintains a diligent oversight of the System Operator's performance. This involves a strict examination of hourly generation data provided by NPCC. Any discrepancies from the stipulations outlined in the Grid Code and EMO are identified and addressed through monthly FCA. Due to effective monitoring, there is substantial improvement in system operation and the out of merit generation has reduced considerably. In this regard, NEPRA has also advised CPPA-G to develop its own mechanism for effective monitoring of monthly generation data as submitted by NPCC.

Another significant outcome of NPCC's identification of out-of-merit generation is the spotlight it casts on NTDC's system constraints. NEPRA is closely monitoring the constraints in NTDC's Transmission System and the resulting impact that it has on the system operation in terms of under-utilization of efficient plants and operation of expensive/ inefficient plants. Consequently, NTDC has taken to submitting monthly progress reports on rectification of system constraints that impacts the economic dispatch of generating units.



NEPRA brought attention to EMO violation stemming from delayed construction of the 500 kV Thar-Matiari transmission line. Due to vigilant monitoring and evaluation, the transmission line was successfully completed on May 09, 2023. As a result, consumers now have access to cost-effective energy from Thar Coal project.

Likewise, NEPRA oversees the performance of KE. This involves a thorough examination of hourly generation data submitted by KE. Any variance detected in compliance with the Grid Code and EMO is highlighted during the FCA process carried out on monthly basis. This vigilant monitoring has led to notable enhancements in system operation, resulting in a significant reduction in the out of merit generation.

(iv) Power System Stabilizers at Different Power Plants

Data regarding Power System Stabilizers (PSS) of various power plants was acquired from NTDC/ NPCC. Subsequently, this information was shared with Lucky Electric Power, Neelum Jhelum, Karot Hydro, ThalNova Power, and Thar Energy Power Plants. The responses received indicated that PSS has been activated at ThalNova Power, and Thar Energy. Meanwhile, the remaining power plants are in various stages of implementation, such as commissioning and stability studies. NTDC was also notified to provide support to the power plants in expediting the activation of their PSS systems.

(v) Directions of the Authority to Licensees in the matter of Inquiry Conducted by NEPRA in the wake of Power System Collapse dated 23-01-2023

On January 23, 2023, a widespread power system failure occurred, throwing the entire country into darkness. The system was completely restored on January 24, 2023, after an approximate outage of 20 hours. The Authority took serious note of this incident and constituted an Inquiry Committee (IC) to thoroughly investigate the matter. Following a comprehensive examination and analysis, an inquiry report was compiled. The Authority duly deliberated on the findings and subsequently instructed NTDC, KE, and WAPDA to implement the recommended remedial measures, as submitted by the IC.

(vi) **Operating Procedures and Black Start Facility at different Power Plants**

A total power system collapse occurred on January 09, 2021 which plunged the whole country into darkness and the system was completely restored on January 10, 2021 after a lapse of 20 hours. NEPRA took serious notice of the aforementioned incident and constituted an IC to probe into the matter. The Authority directed to initiate legal proceedings against different power plants on account of:

- (a) Delay in synchronization with the national grid as per Notice to Sync (NTS) issued to them by the System Operator; and
- (b) Non-submission of Operating Procedures Manual as per requirement of Rule 16 of NEPRA Licensing (Generation) Rules, 2000 which states that:

"Not later than one hundred eighty days following the date of issue of the Generation Licence or the commissioning of the generation facility, whichever occurs later, the Licensee shall prepare and file with the Authority, and shall at all times have in force and implement, an operating procedures manual covering all material operational, maintenance and similar other aspects relating to the generation facilities, with such details and particulars as may be specified in, or may be necessary or prudent to include to secure compliance with, the pooling and settlement arrangement, the grid code and the applicable Distribution Codes."

Accordingly, legal proceedings were initiated against different IPPs. During the course of legal proceedings, hearings were held and same were attended by NTDC/NPCC and CPPA-G. During hearings, the Authority inter alia directed NTDC/NPCC to finalize the Operating Procedures of all power plants in coordination with relevant stakeholders.

A joint meeting of NEPRA, CPPA-G and NTDC/NPCC was also held in March, 2023 wherein the issue of operating procedures and black start facilities was deliberated in detail and stakeholders were directed to expedite the finalization of operating procedures.

(vii) Lucky Electric Power Company Limited (LEPCL) Load Variation

LEPCL communicated their concerns regarding the frequency of daily load variation instructions issued by the System Operator and sought NEPRA's intervention in resolving this matter. A joint meeting was convened, involving representatives from NEPRA, LEPCL, and NTDC/NPCC, where the issue was thoroughly discussed.

LEPCL emphasized that their plant is designed to operate under high-temperature and high-pressure conditions, and frequent load cycling is detrimental to the plant's equipment and overall lifespan. They further conveyed that load change directives were issued within 10 minutes of meeting the previous revised target, which they considered inconsistent with the spirit of their generation licence.

NTDC/NPCC presented their standpoint, explaining that the 24-hour load pattern exhibits a degree of unpredictability. To align with this pattern, load variations are implemented within the agreedupon technical limits and parameters, as established in the Power Purchase Agreement (PPA). They also clarified that the location of LEPCL and neighboring plants might encounter load variations due to (i) adherence to the EMO, and (ii) constraints within the HVDC/HVAC corridor. The Authority, after consideration of the view point of both parties, issued following direction for compliance:

- (a) NTDC/NPCC shall adhere to all necessary applicable documents while giving dispatch instructions to avoid the short duration load variations;
- (b) LEPCL shall support the national grid for stable, reliable and safe operation.

(viii) Inquiry/Investigation initiated against Generation Licensees

Following inquiry/investigation has been initiated against generation Licensees during the reporting period:

- (a) Inquiry into the matter of tripping and fire incident of ST-16 of Guddu 747 CCPP.
- (b) Investigation into the matter of acquisition of gas booster compressor station by CPGCL from Engro Fertilizers free of cost in consideration of utilization of gas quota and its subsequent transfer to NPGCL against Rs. 1.242 Billion.

5. No.	L	.egal Proceedings d	uring the FY 2022-23				
1	Imposed fine of Rs. 100 Million on CPGCL on account of raising invoices pertaining to excess capacity payments in respect of different units/machines of TPS Guddu, non-filing of tariff petition despite repeated directions by the Authority and non-submission of rehabilitation plan in respect of Unit 13 of TPS Guddu despite repeated directions by the Authority.						
2	Imposed fine of Rs. 50 Million on CPPA-G on account of making excess capacity payments to CPGCL in respect of different units/machines of TPS Guddu.						
3	Imposed fine of Rs. 10 Million by 485 days without prior appro-		ount of extension in term of the P	PA signed with KAPCO			
4	Imposed fine of Rs. 50 Million on CPGCL on account of its failure to restore the damaged Unit 14 within a reasonable timeframe.						
	Imposed a cumulative fine of Rs. 250 Million on 16 No. of IPPs & KE in lieu of the total power system collapse occurred on 09-01-2021 as per the following details:						
	Company	Fine (Rs.)	Company	Fine (Rs.)			
	Pak Gen Power	25 Million	K-Electric	20 Million			
	Engro Powergen Thar	20 Million	Quaid-e-Azam Thermal	20 Million			
_	Huaneng Shandong Ruyi	20 Million	China Power Hub	15 Million			
5	Sapphire Electric	15 Million	Halmore Power Generation	15 Million			
	Orient Power	15 Million	Saif Power	10 Million			
	Port Qasim Electric Power	10 Million	NPPMCL – Balloki	10 Million			
	NPPMCL – Haveli Bahadur Shah	10 Million	Engro Powergen Qadirpur	10 Million			
	Saba Power Company	10 Million	Kot Addu Power Company	10 Million			
	Uch-II Power	10 Million	Total	250 Million			

5. No.	Legal Proceedings during the FY 2022-23
6	Explanation was issued to HESCO on account of non-compliance with the Authority's decisions regarding filing of Power Acquisition Contracts (PACs) for procurement of power from different bagasse based captive power projects for approval of the Authority. In response, HESCO finally complied with the Authority's decisions and filed the desired PACs which were subsequently approved by the Authority. Accordingly, the Authority accepted the response received from HESCO against the above-mentioned explanation and order the matter closed.
7	The response received from WAPDA against Show Cause Notice (SCN) issued on account of availing higher out- ages by some WAPDA hydel power stations than allowed limit as specified in the PPA is under consideration.
8	The response received from CPPA-G against SCN issued on account of non-imposition of LDs on WAPDA on account of availing higher outages by some WAPDA hydel power stations than allowed limit as specified in the PPA is under consideration.
9	Explanation issued to CPPA-G and PEDO on account of delay in commissioning of Daral Khwar Hydropower Project.
10	Explanation issued to PEDO and PESCO on account of delay in commissioning and non-execution of EPA of Machai Hydropower Project.
11	A SCN was issued to KAPCO due to an extension in the term of the PPA signed with CPPA-G, which extended by 485 days beyond the validity of its generation licence at the time. This extension occurred prior to KAPCO filing an application for an extension in its generation licence.
	Against this SCN, KAPCO filed an appeal before the Appellate Tribunal, Islamabad. The Appellate Tribunal subsequently overturned the aforementioned SCN, remanding the case back to NEPRA for further proceedings, beginning from the stage of Explanation.
12	SCN issued to CPPA-G on account of non-submission of initialed PPAs/EPAs/TPPAs for approval of NEPRA prior to execution of such documents.
13	SCN issued to WAPDA on account of non-performance of Golen Gol Hydropower Project since its commis- sioning.
13 Source: NE	sioning.

MONITORING AND ENFORCEMENT (TRANSMISSION)

(i) <u>Performance Evaluation Report</u>

During the FY 2022-23, the Authority approved the Performance Evaluation Report of NTDC and KE, pertaining to FY 2021-22, under Performance Standards (Transmission) Rules, 2005. The same is available on NEPRA website.

(ii) Data Exchange Portal (Transmission)

The Data Exchange Portal (Transmission Model) has been established to facilitate the acquisition of performance data pertaining to various aspects including Infrastructure, System reliability (Duration/ Frequency, Regional trend, Seasonal trend, Locational trend), System Security (Energy not served), Quality of supply (Voltage violations, Frequency violations, Highest frequency record), and Loading position (Transformers, Circuits) from transmission licensees. To ensure seamless data flow, all transmission licensees have been instructed to consistently submit their data through the NEPRA Data Exchange Portal.

(iii) <u>Tower Collapses</u>

Transmission networks serve as the backbone for efficient electricity distribution across vast distances, contributing significantly to the functionality of economies and communities. However, a worrisome trend of tower collapses has emerged in recent years, resulting in power disruptions, safety risks, and economic setbacks. During FY 2022-23, a total of forty-six (46) 500 kV and 220 kV towers collapsed. Out of these, thirty-three (33) towers collapse in the South region, nine (09) in the North region and four (4) in KE's jurisdiction. The breakdown of tower collapses for FY 2022-23 is as follows:

Region	Grid Stations and Transmission Lines	No. of Towers Collapsed
K-Electric	132 kV T/L Baldia - Hub Chowki and Tapal-Hub Chowki (D/C)	4
	500 kV Dadu - Jamshoro	2
	500 kV Port Qasim – Matiari	6
	500 kV Dadu - Shikarpur	2
	500 kV NKI - Jamshoro T/Line	2
	500 kV Port Qasim - Matiari T/Line	6
South Region	500 kV Jamshoro - Dadu T/Line	3
	500 kV Jamshoro - Matiari T/Line Ckt-II	1
	500 kV Dadu - Matiari T/Line and 500 kV Guddu-Shikarpur Ckt-I, T/Line	3
	500 kV Guddu - Shikarpur-I T/Line	3
	220 kV T/Line Guddu - Shikarpur - Circuit-I/Guddu-Sibbi (D/C)	4
	220 kV Guddu - Sibbi T/Line	1
North	500 kV Sheikhupura - Nokhar T/Line	4
Region	500 kV Dera Ghazi Khan - Guddu Old T/Line	5
	Total	46

Details of Tower Collapse of 500 kV and 220 kV Transmission Lines during FY (2022-23)

Source: NTDC

(iv) <u>Power Evacuation Constraints in NTDC Transmission Network - Review of Progress of</u> <u>Interconnection Arrangements for Different Power Projects</u>

The progress of interconnection arrangements for various power projects is under constant scrutiny. NEPRA has been actively engaged with key stakeholders including NTDC, PEDO, WAPDA, and others to oversee this process. A series of meetings have been convened at the NEPRA Headquarters, during

which the Authority has provided specific directives to NTDC and other pertinent stakeholders to ensure strict adherence and compliance with established guidelines.

(v) NTDC System Constraints

The M&E Department oversees NTDC's continuous endeavours to mitigate system constraints on a monthly basis. The Authority has issued explicit directives to expedite the resolution of these constraints. In pursuit of this objective, numerous meetings have been held with NTDC, and correspondences conveying the Authority's directives have been dispatched. As a result, certain system constraints that persisted since 2014-2016 have been effectively resolved. However, some constraints appeared in 2017 and 2018 continue to be persisting.

(vi) Member (Technical)'s Meeting with Thar Coal key organizations and NTDC

Member (Technical) conducted a high level meeting on the issue of delay in completion of dedicated transmission line from TCB-I to Matiari, resulting in loss of economical generation from Thar energy corridor. The meeting was attended by Managing Director (Thar Coal and Energy Board), Additional Secretary (Department of Energy, Sindh), CEOs of Sindh Engro Coal Mining Company, Engro Power Thar Limited, Shanghai Electric Power Company Limited, Thar Energy Limited, and ThalNova Power Thar Limited, along with representatives of NTDC, DMD - System Operation, and officials of Sindh Transmission and Dispatch Company Limited. Due to the effective intervention of NEPRA, the line was completed in record time saving billions of rupees to the national exchequer.



(vii) Legal Proceedings

5. No.	Legal Proceedings
1	Partial Blackout at 500 kV Jamshoro Grid Station: A fine of rupees 10 Million was imposed on NTDC in respect of an incident of partial blackout occurred in September, 2021 due to lightening at 500 kV Grid Station causing tripping.
2	Tower Collapse in Wake of Cyclonic Winds: A fine of rupees 10 Million was imposed on NTDC in respect of an incident of partial blackout occurred in May, 2021 due to collapse of eight 500 kV towers in the southern part of the country.
3	Jhimpir-II Grid Station: SCN issued to NTDC on December 26, 2022. Reply of SCN by NTDC received on March 13, 2023. Hearing scheduled was held on June 05, 2023. The matter is at advance stage of its conclusion and will be closed in due course of time.

Source: NEPRA

(viii) Investigation against NTDC on account of Fatal Accident

An accident involving fatality of contractor's staff due to electrocution occurred during an approved shutdown by NTDC on 500 kV Thar - Matiari Circuit. Following NEPRA's directive, NTDC conducted an inquiry in the matter and submitted its report, assigning full responsibility to the contractor. Upon

reviewing the report, the Authority ordered an investigation into the matter. Accordingly, an investigation under Section 27 (A) of the NEPRA Act was conducted, and the resulting report was presented to the Authority. Consequently, legal proceedings were initiated.

During the hearing on December 22, 2022, the Authority directed NTDC to promptly address the earlier directives issued in November, 2022 and also directed NTDC to provide details regarding fatal accidents within the last decade, including information on compensation. NTDC was given a seven-day time to furnish this information. The case is currently under review and will be decided in due course after observing all formalities.

(ix) Inquiry report in the matter of Total Power System Collapse occurred on January 23, 2023

On January 23, 2023, Pakistan experienced a country-wide blackout, prompting immediate action from the Authority. A meeting/hearing was swiftly convened, bringing together all stakeholders to provide insights into the causes of the blackout. Regrettably, the stakeholders were unable to provide satisfactory explanations for the incident.

Recognizing the gravity of the situation, the Authority established a high-level IC tasked with conducting a comprehensive investigation and presenting an inquiry report within 15 working days. The committee submitted a comprehensive and detailed Inquiry Report to the Authority. Based on the findings and recommendations of the IC, the Authority has issued the following directions for immediate implementation:

- (a) VAR compensations study shall be carried out and required measures in light of study shall be taken to avoid power swing.
- (b) The stability of HVDC system needs to be ensured through proper study to avoid frequent signals of 'Commutation Failure'.
- (c) Fully functional SCADA facility for complete system related to NTDC, GENCOs, IPPs and DISCOs is essentially required for System Operator in order to ensure the online monitoring of system parameters in all respect for sake of system security, stability and analysis of events through GPS synched time event recorder.
- (d) NTDC shall ensure the healthiness and operation of recently installed Out of Step devices, as the same did not operate during the event.
- (e) Quantum of load to be rejected through under frequency schemes need to be increased, especially in South region, where it is considerably less.
- (f) Simultaneous tripping of K2-K3 Units on Over Frequency shall be made stage-wise.
- (g) Standard Operating Procedure (SOP) to be developed between all stakeholders to maintain required water indent for relevant Hydel Power Station under acute emergency situations.
- (h) KE shall set right the cause of undesired tripping of Unit-10 at BQPS-III and shall also set right their Black Start facilities as multiple attempts were made during restoration and as such not satisfactory.
- (i) Black start facilities are required at some additional locations, study based near Lahore and Hyderabad to help early restoration during black out.
- (j) Repeated tripping of Machines at Tarbela and Mangla during black start need to be checked and set right, as successful restorations have been carried out through these situations in the past.
- (k) To ensure the installation of modern technologies device such as Wide Area Management including Phasor Management Units to detect oscillations instability which can be mitigated by Remedial Action Scheme.

(x) Inquiry report in the matter of Total Power Blackout in the country occurred on October 13, 2022

On October 13, 2022, at 09:33 hours, a severe breakdown occurred in the power supply system. This incident was attributed to a conductor breakdown in the red phase of the 500 kV NKI-K2/K3 and 500 kV K2/K3-Jamshoro Transmission Lines. As a consequence, a substantial region of the country was plunged into darkness.

Taking serious note of the event, the Authority constituted an IC to thoroughly investigate the incident. The committee conducted its inquiry and compiled a comprehensive and detailed Inquiry Report. This report was submitted to the Authority. Subsequently, the Authority undertook a thorough review and deliberation of the findings and recommendations presented in the IC Report. Based on the findings and recommendations of the IC, the Authority has issued the following directions for immediate implementation:

- (a) The existing interim arrangement may immediately be reinforced with standard hardware. Aging factor of conductor and quality of material before and proper workmanship during the execution of interim arrangement must be ensured.
- (b) Periodic maintenance/monitoring activities, especially the interim arrangement designed for K2/K3 Circuits, must be ensured as per SOP.
- (c) Pending work of dedicated transmission lines for evacuation of power from K2 and K3 power plants must completed on top priority.
- (d) VAR compensations study shall be carried out and required measures in light of study shall be taken to avoid power swing.
- (e) Availability of required professionals and staff as per approved yard stick, along with required T&P including thermo vision camera, especially in southern region must be arranged on urgent basis in order to ensure timely maintenance of existing network for system stability, reliability and security.
- (f) NTDC Telecom Department's deficiencies must be addressed to ensure proper communication of inter grid signals and avoid transmission of false signals.
- (g) Execution work of dedicated transmission lines shall be completed before the energization of transformation equipment or COD of power plants in order to avoid the LDs resultantly reducing the basket price for end-consumer.
- (h) Implementation of coordinated over-frequency/over-speed trip schemes on newly synchronized generating units (i.e. Lucky Electric Power, Shanghai Electric, ThalNova Power and Thar Energy), after system study, shall be expedited in order to ensure the system reliability.
- (i) Automatic tripping to be implemented through SCS on Lucky Electric Power, Shanghai Electric, ThalNova Power and Thar Energy in case of outage on mono-pole/bi-pole HVDC system at Matiari Converter Station.
- (j) Protocols/SOPs to be developed in order to streamline the operational co-ordination between KE and NPCC.
- (k) Quantum of load to be shed through under-frequency and ROCOF schemes in South region needs to be increased for survival of the region whenever the region experiences under-frequency situation.

(I) It is noticed that there is a practice of switching off transmission lines to control the over voltage on system, which is neither prudent nor recommended. Therefore, a study shall be carried out to install additional Shunt Reactors at appropriate locations i.e. on Grid Station Busbar.

(xi) Fatal Accidents/Poor Safety in NTDC Network

A fatal accident occurred on October 24, 2022, at the 500 kV Dadu Grid Station. NTDC was directed to provide a Detailed Inquiry Report in the matter. However, NTDC submitted the preliminary inquiry report after an inordinate delay of eight (08) months. The preliminary Inquiry Report contains recommendations and remedial measures to prevent such incidents in the future. However, the final detailed inquiry report is still pending. In view of the recommendations given in the Preliminary Inquiry Report, NTDC was directed to furnish a compliance progress report regarding the outlined recommendations. This report is still pending.

The unfortunate incident involving Khair Bux, LM-2, NTDC, occurred on March 15, 2023, during the rehabilitation work of towers No. 210-212 of 500 kV Guddu-Shikarpur CKT-1 was brought to the attention of the Authority. NEPRA directed NTDC to establish an IC for a thorough investigation and to furnish a detailed report to NEPRA. NTDC, after a delay of two (02) months, submitted a preliminary Inquiry Report instead of the final report. NTDC was subsequently reminded to expedite the submission of the detailed Inquiry Report without any further delay. Additionally, NTDC was directed to provide a progress report regarding the recommendations outlined in the Preliminary Inquiry Report. The detailed final report is still pending.

(xii) Non-Fatal Accident

A non-fatal incident involving Mr. Ghulam Murtaza occurred at 500 kV Yousafwala Grid Station in Sahiwal on October 12, 2022. The Authority directed NTDC to establish an IC to conduct a thorough investigation and furnish a detailed report in the matter. NTDC, after a delay of five (05) months, submitted the Inquiry Report in June, 2023. The IC, in its report, proposed recommendations and remedial measures to prevent such incidents in the future. Recognizing the importance of swift action, NEPRA, on June 22, 2023, directed NTDC to provide a detailed progress report, outlining the progress made, expected timelines, and the actions taken by NTDC in response to the recommendations put forth by the IC. The final report is still pending.

(xiii) <u>Non-compliance of the Authority's direction by NTDC with respect to reimbursement</u> of power dispersal cost to Nandipur

NPGCL, Nandipur, approached NEPRA seeking reimbursement for the power dispersal/evacuation cost extended to NTDC. The matter was considered by the Authority during a meeting held on June 14, 2023. Following deliberations, the Authority directed to schedule hearing in the matter to address the payment dispute between the involved parties.

Subsequently, hearing was convened at NEPRA Headquarters which was attended by the representatives of both NPGCL and NTDC. The Authority directed both parties to convene a meeting aimed at resolving the payment dispute. A compliance report concerning this resolution was to be submitted to NEPRA within a period of seven (07) days.

(xiv) Theft of braces on 500 kV/220 kV Transmission Line

Observing a sudden surge in incidents of tower collapses, the Authority called NTDC to address the issue. NTDC attributed the rise in incidents to the prevalent problem of brace theft in disputed areas which has emerged as a primary cause for the increased frequency of tower collapses. The Authority directed NTDC to formulate comprehensive policy, SOPs, and implement regular patrolling of the disputed areas. Currently, the SOPs are in the preparation stage.

MONITORING AND ENFORCEMENT (DISTRIBUTION)

(i) <u>Performance Evaluation Report of DISCOs and KE</u>

In 2005, NEPRA framed the Performance Standards (Distribution) Rules, 2005 under which each DISCO is required to submit an Annual Performance Report (APR) to NEPRA by August 31st of the succeeding year. This report encompasses information pertaining to compliance with the Rules for the year, including a comparative analysis with the previous year's compliance report. The APR is required to feature, at a minimum, System Performance Reports, Consumer Service Performance Reports, and DISCOs written assessments of their performance, as well as their plans and targets for improvement.

For the FY 2021-22, NEPRA conducted a comprehensive review of the APRs submitted by all DISCOs and KE. The evaluation was based on various key parameters, including Transmission and Distribution Losses, Recovery Rates, System Average Interruption Frequency Index (SAIFI), System Average Interruption Duration Index (SAIDI), Timeframe for New Connections, Load-Shedding Practices, Nominal Voltage Levels, Consumer Complaints, Safety Measures, and Fault Rates. Subsequently, a detailed Performance Evaluation Report (PER) was meticulously prepared, approved by the Authority, and subsequently made available on the NEPRA website.

For the FY 2022-23, data is currently being collected, and the PER will be made available on the NEPRA website in due course.

(ii) Data Exchange Portal (Distribution)

Monthly data from all DISCOs is now gathered through an Online Data Exchange Portal. This robust system enables the collection and analysis of pertinent information, empowering NEPRA to make informed decisions to mitigate risks and enhance efficiency in the future. This transition from a paperbased system to electronic filing not only optimizes physical space but also heightens security measures.

The DISCOs provide monthly updates on critical aspects such as the Loading Position of the Distribution Network, Time of Use (TOU) Meters, status of Damaged Transformers, Pending Connections, Defective Meters, and the estimated Restoration Time in case of Power Breakdowns. This information is consistently monitored and subjected to detailed analysis to effectively respond to evolving situations and uphold the highest standards of service delivery.

(iii) Monitoring of Load-Shedding in the Country

NEPRA took proactive measures to address the issue of excessive load-shedding within the service territories of DISCOs. While the DISCOs implemented load-shedding based on Aggregate Technical and Commercial (AT&C) losses on the feeders, this approach is not aligned with NEPRA's established Performance Standards and has never been acknowledged by NEPRA.

Across all its Regional Offices, NEPRA maintains a consistent vigil on load-shedding activities. This involves regular field assessments by randomly selecting feeders on a weekly basis to ascertain the actual extent of load-shedding.

Upon scrutiny of the gathered data, it was observed disconcertingly that DISCOs fell short in adhering to their own policy. Extended load-shedding beyond the scheduled



slots was identified. Consequently, Explanations were issued to HESCO, SEPCO, QESCO, PESCO, and KE for violating NEPRA's Performance Standards. Furthermore, hearings on the matter have also been held. The case will be decided by the Authority after observing all due formalities.

(iv) Earthing/Grounding of DISCOs

During NEPRA's investigations into fatal accidents within various DISCOs the distribution facilities, including poles and structures, were found lacking of proper earthing/grounding. This deficiency emerged as a significant contributing factor to the occurrence of tragic incidents. The Authority took a serious notice and directed DISCOs to present a comprehensive plan, complete with specific timelines, for the earthing/grounding of 100% of their distribution system.

A meeting was also convened to address this matter. After deliberation and in consideration of the submissions made by DISCOs, NEPRA, directed DISCOs to furnish a detailed plan, complete with specific timelines, for the implementation of earthing/grounding measures for all High Tension (HT) and Low Tension (LT) poles and structures.

The progress demonstrated by DISCOs in executing this important task and addressing these severe hazards has been marked inadequate. Consequently, the Authority has decided to initiate legal proceedings against all DISCOs for their non-compliance with the directives issued by NEPRA. Explanations have been issued to each DISCO. The case will be decided by the Authority after observing due formalities.

(v) <u>AMI/AMR Metering System (K-Electric)</u>

Considering the installation of AMI/AMR meters by KE in its distribution system, NEPRA directed KE to explore design and development opportunities to achieve remote disconnection/reconnection of meters. However, KE submitted a number of challenges to achieve the task. A meeting/hearing in the matter was held in NEPRA, whereby KE was again directed to find solution for remote disconnection/ re-connection of meters through exploring design and development opportunities. Further, online meetings with KE's team were also held in the matter and some solutions were shared with KE by the NEPRA team. However, the compliance from KE was not received. Therefore, NEPRA initiated legal proceedings and issued an Explanation to KE, for inter-alia, non-compliance with the repeated directions of the Authority. KE submitted its reply, and a subsequent hearing on the matter was convened. The case will be decided by the Authority after observing due formalities.

(vi) AMI/AMR Metering System (IESCO)

During the MYT determination process of IESCO, it was revealed that IESCO has initiated a largescale AMI/AMR project, encompassing the installation of AMR meters at both the PMT and individual consumer levels, particularly in Rawalpindi and Cantt Circles. In furtherance of this, a collaborative meeting was convened at NEPRA, involving officials from IESCO and KE. During this session, IESCO presented a comprehensive plan detailing the implementation of its AMI/AMR project. The Authority appreciated IESCO's dedication to this initiative and directed IESCO to provide regular monthly progress reports pertaining to the project's execution.

(vii) Interconnection Issues of Access Solar with IESCO

NEPRA initiated legal proceedings against IESCO due to the delay in grid interconnection of Access Solar (Pvt.) Limited and Access Electric (Pvt.) Limited, resulting in subsequent financial losses for electricity consumers and the national exchequer. In line with this, an Explanation was issued to IESCO. The company submitted its response to the matter. Furthermore, a hearing was conducted in this regard.

After a thorough review of IESCO's response to the Explanation and the arguments presented during the hearing, it became evident that IESCO's submissions were unsatisfactory. Consequently, it was decided that a SCN be issued to IESCO. The case will be decided by the Authority after observing due formalities.

(viii) Issue of MDI Calculation between NTDC v/s IESCO

The IESCO approached NEPRA to intervene in a dispute with NTDC concerning the calculation of MDI, amounting to Rs. 1,513 Million, for the period from August, 2020 to June, 2021. This issue arose during the process of load shifting to another transformer in case of a fault. Additionally, IESCO urged NEPRA to devise a mechanism or formula for MDI calculation in situations involving outages, shutdowns, and the subsequent shift of load to a parallel transformer.

To address this matter, the Authority constituted a Special Tribunal under Section 11 of the NEPRA Act, 1997. The Special Tribunal conducted thorough proceedings, engaging in extensive discussions and correspondence between the involved parties, namely NTDC and IESCO. Moreover, several meetings and hearings were convened between the parties. Subsequently, the matter was successfully resolved, and a comprehensive decision was issued to both parties on February 23, 2023.

(ix) <u>Pending Connections in DISCOs</u>

NEPRA has implemented an online portal for the systematic collection of data on pending connections from all DISCOs on a monthly basis. The gathered data has revealed a significant backlog of new connections awaiting activation. Upon reviewing this information, the Authority directed to initiate legal proceedings against PESCO, IESCO, GEPCO, LESCO, FESCO, MEPCO, and KE. Subsequently, Explanations were issued to these entities, and hearings were conducted to address the matter. During the hearings, the Authority underscored the need for DISCOs to promptly resolve all pending connections within a one-month time-frame and submit a compliance report be submitted to NEPRA accordingly. NEPRA is proactively monitoring the monthly progress of all DISCOs in this regard. A list of pending connections along with sanctioned load (kW) as on June, 2023 is as follows:

	Tetal	Tetal	Pending C	ing Connections after expiry of time limit given in PSDR, 20				DR, 2005
DISCO	Total Nos.	Total Load (kW)	Up to 1 month	Up to 2 months	Up to 3 months	Up to 6 months	Up to 1 year	above 1 year
PESCO	19	13.61	4	0	6	0	5	4
TESCO	14,464	122.00	11,620	2,706	34	19	25	60
IESCO	7,155	23.66	6,440	313	357	32	10	3
GEPCO	24,945	76.02	24,330	609	0	4	2	0
LESCO	52,615	210.34	32,611	19,624	217	163	0	0
FESCO	17,192	69.56	15,533	1,577	82	0	0	0
MEPCO	156,315	435.68	25,583	30,042	26,411	74,201	51	27
HESCO	937	40.213	749	53	27	10	17	81
SEPCO	337	12.072	527	23	24	10	4	9
QESCO	1,307	7.766	1,170	19	26	24	62	6
KE	3,548	106.38	388	159	1,451	940	145	465
Total	278,834	1,117.31	118,955	55,125	28,635	75,403	321	655

Status of Pending Connection as of June, 2023

Source: DISCOs and KE

(x) Fatal Accidents/ Poor Safety Environment in DISCOs and KE

The following table gives status of fatalities in DISCOs during FY 2022-23:

DISCOs	Employee	Public	Total
PESCO	12	28	40
TESCO	0	1	1
IESCO	8	16	24
GEPCO	3	6	9
LESCO	8	3	11
FESCO	3	3	6

DISCOs	Employee	Public	Total
MEPCO	4	1	5
HESCO	4	10	14
SEPCO	6	3	9
QESCO	4	6	10
KE	0	33	33
Total	52	110	162

Source: DISCOs and KE

In light of the Safety Issues/Hazards in the DISCO's service areas that caused a number of fatal incidents, the Authority issued directions to undertake thorough investigations and commenced legal action against DISCOs in accordance with the NEPRA Act. Further details of the investigations are as follows:

5. No.	Legal Proceedings under Section 27-A of NEPRA Act
1	IESCO: The Authority initiated proceedings regarding fatalities and after observing all formalities decided to impose a fine of Rs. 65 Million, with the directions to provide compensation to bereaved families of public persons equal to the amount given in case of its employees and also provide jobs to next kins of the victims.
2	GEPCO: The Authority initiated proceedings regarding fatalities and after observing all formalities decided to impose a fine of Rs. 21 Million, with the directions to provide compensation to bereaved families of public persons equal to the amount given in case of its employees and also provide jobs to next kins of the victims.
3	LESCO: The Authority imposed a fine of Rs. 10 Million on LESCO on account of fallen transformer at Achar Bazar, Lahore and directed LESCO to provide compensation to bereaved family equal to the amount given in case of its employees and also provide job to next kin. The Authority imposed fine of Rs. 10 Million each on LESCO and UET-KSK Campus on account of a Fatal Activity that accurred at UET-KSK Campus, Labora along with the directions to UET-KSK Campus, Labora for
	Accident that occurred at UET-KSK Campus, Lahore along with the directions to UET-KSK Campus, Lahore for provision of compensation to the bereaved family along with a job to their next of kin. FESCO:
4	The Authority initiated proceedings regarding fatalities and after observing all formalities decided to impose a fine of Rs. 26 Million, with the directions to provide compensation to bereaved families of public persons equal to the amount given in case of its employees and also provide jobs to next kins of the victims.
5	MEPCO: The Authority initiated proceedings regarding fatalities and after observing all formalities decided to impose a fine of Rs. 28 Million, with the directions to provide compensation to bereaved families of public persons equal to the amount given in case of its employees and also provide jobs to next kins of the victims.
6	HESCO: The Authority initiated proceedings regarding fatalities and after observing all formalities decided to impose a fine of Rs. 31 Million, with the directions to provide compensation to bereaved families of public persons equal to the amount given in case of its employees and also provide jobs to next kins of the victims.
	The Authority imposed a fine of Rs. 10 Million on account of blast of 200 KVA transformer at Islamabad chowk and directed HESCO to provide compensation to bereaved families of public persons equal to the compensation given in case of its employees and to provide jobs to the next kin of the deceased persons.
7	SEPCO: The Authority initiated proceedings regarding fatalities and after observing all formalities decided to impose a fine of Rs. 28 Million, with the directions to provide compensation to bereaved families of public persons equal to the amount given in case of its employees and also provide jobs to next of kins of the victims.

Source: NEPRA

CONSUMER AFFAIRS AND COMPLAINT MANAGEMENT ACTIVITIES

The Consumer Affairs Department of NEPRA is responsible for receiving and resolving complaints from electricity consumers lodged against DISCOs. To enhance consumer satisfaction, NEPRA has established ten Regional Offices across various cities dedicated to the receipt and processing of these complaints. Furthermore, a significant number of complaints are also received through Pakistan's Citizens Portal for resolution. The tables below provide a breakdown of DISCO-wise complaints received, processed, and resolved at both the NEPRA Head Office and its various Regional Offices for the FY 2022-23:

DISCO	Total Complaints Received/ Processed	Total Complaints Disposed off	Total No. of Complaints under Process
PESCO	268	186	82
TESCO	3	2	1
IESCO	313	284	29
GEPCO	106	92	14
LESCO	176	144	32
FESCO	125	108	17
MEPCO	184	151	33
HESCO	223	200	23
SEPCO	133	114	19
QESCO	4	3	1
KE	419	407	12
Pakistan Citizen Portal	255	255	0
	2,209	1,946	263

Status of Consumer Complaints (Head Office) (July, 2022 – June, 2023)

Source: NEPRA

Status of Consumer Complaints (Regional Offices) (July, 2022 – June, 2023)

DISCO	Total Complaints Received/ Processed	Total Complaints Disposed off	Total No. of Complaints under Process		
PESCO	370	186	184		
GEPCO	317	285	32		
LESCO	3,360	3,051	309		
FESCO	598	498	100		
MEPCO	643	603	40		
HESCO	902	843	59		
SEPCO	599	547	52		
QESCO	145	92	53		
QESCO	18	15	3		
KE	9,678	9,479	199		
Total	16,630	15,599	1,031		
Grand Total	18,839	17,545	1,294		

Source: NEPRA

(i) Other Major Activities of Consumer Affairs Department

To ensure the adherence to NEPRA (Alternative & Renewable Energy) Distributed Generation and Net-Metering Regulations, 2015, the CSM and the installation of bi-directional meters at time of new connections, as well as extensions of load or relocations of distribution generation facilities, DISCOs have been instructed through the following ways:

(a) In October and November of 2022, an online open forum named "Khuli Kachehri" was convened to address concerns and complaints of the consumers of KE and DISCOs. This platform proved instrumental in resolving consumers' issues.

(b) Based on the valuable feedback received during the Khuli Kachehri, all DISCOs have been directed to provide consumers with a minimum of seven (07) clear days for payment of their electricity bills. In instances of delayed bill delivery, DISCOs are obligated to extend the payment deadline, ensuring that consumers are not burdened with Late Payment Surcharges (LPS).



- (c) The Consumer Service Manual (CSM) has been revised, eliminating the three-year-old connection restriction for load extension from 5 MW to 7.5 MW for industrial connections, facilitating smoother operations for businesses in the sector.
- (d) Electric inspectors have been instructed to carry out thorough assessments of the internal distribution systems for individual consumers receiving single-point supply for further distribution. This proactive measure aims to eradicate any potential risks or hazards.
- (e) DISCOs were directed to include clear instructions in Urdu on electricity bills regarding the process for filing complaints with both the NEPRA and Provincial Office of Inspection (POIs).
- (f) All DISCOs are mandated to strictly comply with the timelines specified for consumer cases involving Distributed Generation facilities. These timelines are outlined in Clause 3 of the NEPRA (Alternative & Renewable Energy) Distributed Generation and Net-Metering Regulations, 2015. This ensures a streamlined and efficient process for consumers seeking to commission distributed generation systems.
- (g) Explanation letters have been served to DISCOs that have billed or are currently billing electricity consumers for detection bill based on energy meter slowness for a duration exceeding two (2) billing cycles. This practice stands in violation of the stipulations set forth in the CSM.
- (h) DISCOs have been instructed to immediately rectify detection bills, in upcoming bills, issued to the consumers due to energy meter slowness or defectiveness, exceeding two billing cycles. Further, it is mandated that these companies take decisive disciplinary action against the officials accountable for these erroneous billing practices.
- (i) A consultative session was convened with DISCOs on May 15, 2023, to deliberate on proposed amendments to the CSM.
- (j) HESCO, SEPCO, PESCO, and TESCO were directed to furnish explanations for the low recovery ratios against the detection bills. These DISCOs are required to justify their position that these detection bills are not issued primarily for the purpose of managing T&D losses.
- (k) The Authority convened Public Hearings on May 10, 2023, and June 06, 2023, to address matters concerning the application of Fixed Charges and Tariffs for Cold Storages.
- (I) All DISCOs have been directed to accord top priority to the supply of electricity for industrial and commercial entities, as per directives from the Prime Minister of Pakistan conveyed through the Task Management System.
- (m) NEPRA Regional Offices have been instructed to carry out unscheduled audits on DISCOs' complaint resolution mechanisms throughout the summer season, guaranteeing high-quality

service provision to consumers. Moreover, DISCOs are mandated to uphold easily accessible records of complaint resolution and allocate dedicated teams/officers to ensure the swift and effective resolution of consumer grievances.

- (n) In order to enhance consumer service, all DISCOs have been obligated to reinstate electricity supply within four (04) working days following the completion of necessary procedural formalities in cases of temporary disconnection.
- (o) All DISCOs have been directed to promptly furnish reports on complaints referred by the Consumer Affairs Department within a strict timeframe of seven (07) days for expedited resolution.
- (p) DISCOs have been directed to replace transformers that have been in operation for more than twenty (20) years and are no longer deemed viable for continued use. Furthermore, it is mandatory that all essential tests, including grounding/earthling, to be conducted to ensure the safe and secure utilization of these transformers.
- (q) Efforts are underway to develop a mobile application that will facilitate consumers in lodging complaints against all DISCOs.
- (r) NEPRA is currently in the process of creating an electricity bill estimator/calculator, which will be made accessible on the NEPRA website. This tool is designed to offer consumers a convenient means of estimating their electricity bills.
- (s) A connection cost estimator will soon be accessible on the NEPRA website, simplifying the process for prospective consumers to assess the expenses associated with new connections. This tool aims to provide a user-friendly platform for individuals seeking to establish new connections.
- (t) NEPRA has commenced the modernization and automation process for its Regional Offices, with initial focus on the offices in Lahore and Karachi. This strategic step aims to enhance operational efficiency and effectiveness in key regions.
- (u) During the reporting period, the Consumer Affairs Department conducted a comprehensive total of 3,236 hearings, which encompassed a combination of online sessions, Head Office meetings, and meeting at Regional Offices. These proceedings led to the issuance of decision and instructions, further reinforcing consumer-centric initiatives.



NEPRA Regional Offices attend Meetings/Hearings through ZOOM

(ii) Visit of HESCO and SEPCO by Member (Technical) and DG (CAD)

During the reporting period, Member (Technical) visited HESCO's Head Office, Hyderabad. During the visit, the Member (Technical) held meeting with the Chairman of the Board of Directors and CEO, HESCO to discuss a range of critical issues, including the handling of consumer complaints, addressing delays in new connections, resolving complaints, and managing the issuance of detection bills, among other related matters. During this interaction, Member (Technical) provided explicit directives to expedite the resolution of all pending issues, emphasizing the paramount importance of offering maximum relief to consumers. Additionally, Member (Technical)



visited various areas to directly engage with and listen to consumer complaints. The Regional Office of HESCO received specific instructions to ensure the prompt resolution of all consumer grievances. Member (Technical) extended this proactive approach to SEPCO's Head Office, engaging in discussions with SEPCO's senior management. The meeting addressed various crucial issues such as the timely management of consumer complaints, rectifying delays in new connections, and ensuring the proper issuance of detection bills. Member (Technical) directed for resolution of consumer related issues and personally heard consumer complaints. Member (Technical) also inaugurated the new NEPRA's Regional Office premises.

(iii) Visit of NEPRA Regional Office, Peshawar by Member (Licensing) and DG (CAD)

Member (Licensing) with the relevant staff visited the NEPRA regional office in Peshawar. During the meeting, several issues were discussed, including the timely disposal of consumer complaints, delays on the part of DISCO, in providing new connections, and the issuance of detection bills. Member (Licensing) directed to resolve these consumer-related issues and even personally listened to consumer complaints. In addition, Member (Licensing) inaugurated the new premises of NEPRA's Regional Office.



LEGAL ACTIVITIES

A summary of cases pending before the Honorable Courts of Pakistan as on June 30, 2023 is as under. These are the cases, wherein either the decision of the Authority has been challenged or NEPRA is party to the case:

Court	Pending on 30 th June, 2022	Filed in FY 2022-23	Total (No.)	Decided/Disposed in FY 2022-23	Pending on 30 th June, 2023
Supreme Court of Pakistan	166	351	517	2	515
Islamabad High Court	124	6	130	0	130
Lahore High Court	634	100	734	22	712
Peshawar High Court	491	20	511	0	511
High Court of Sindh	708	53	761	65	696
Balochistan High Court	5	2	7	1	6
Civil Courts	31	12	43	0	43
Appellate Tribunal (NEPRA)	131	90	221	18	203
Total	2,290	634	2,924	108	2,816

Source: NEPRA

During the FY 2022-23, the following Regulations were specified:

- (a) NEPRA Licensing (Micro-Grid) Regulations, 2022
- (b) NEPRA Licensing (System Operator) Regulations, 2022
- (c) NEPRA (Electric Power Procurement) Regulations, 2022
- (d) NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022
- (e) NEPRA (Security of Information Technology and Operational Technology) Regulations, 2022

COMPETITIVE TRADING BILATERAL CONTRACT MARKET (CTBCM)

The development of a competitive wholesale electricity market has been a longstanding objective outlined in the Government of Pakistan's 1992 Strategic Plan. The aim was to transition from a monopoly-based structure to one driven by competition, achieved through unbundling, corporatization, and privatization of power generation, distribution, and retail/supply.

Despite various challenges along the way, the realization of a fully functional wholesale electricity market has remained in the implementation stage. However, owing to the substantial efforts invested in recent years, this vision is now on the cusp of becoming a reality.



During the period under consideration, the Authority monitored the implementation of the CTBCM test-run plan, approved with the grant of Market Operator Licence in May, 2022. In addition, the pending action items approved in the CTBCM Implementation Roadmap of the Detailed Design determination of 2020 were also actively monitored and necessary directions were issued to relevant agencies including PPIB/AEDB, CPPA-G, NTDC/NPCC, DISCOs to address the challenges and achieve the desired results.



The standout achievement of the year was the completion and finalization of three pivotal regulations

for the CTBCM: the NEPRA (Electric Power Procurement) Regulations, 2022; NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022; and NEPRA Licensing (System Operator) Regulations, 2022.

(i) CTBCM Test Run Report

The Authority granted CPPA-G the Market Operator Licence and approved the Market Commercial Code (MCC) through its determination dated May 31, 2022. In this determination, CPPA-G was directed to conduct testing and implement the MCC for a period of six (06) months without imposing any financial obligations on market participants, concluding by November 30, 2022. Additionally, CPPA-G was mandated to furnish a comprehensive final test-run report within seven (07) days following the completion of the test-run period, after consulting with relevant stakeholders including NTDC/NPCC, DISCOs, etc. The submission of this report is a prerequisite for the declaration of the Commercial Market Operation Date, marking the official commencement of the CTBCM.

Despite assurances from its chief executive to expedite the submission, CPPA-G has failed to meet its obligation and submit the final test-run report within the stipulated timeline. The Authority has taken serious note of this lackadaisical approach by CPPA-G, which has resulted in a delay in the commencement of the CTBCM. Consequently, the Authority is in the process of initiating legal proceedings against CPPA-G.

(ii) Approval of Eligibility Criteria Rules

The NEPRA Act, as amended through the NEPRA Amendment Act 2018, designates the responsibility for formulating eligibility criteria rules to the Federal Government while NEPRA is entrusted with the formulation of Regulations govern the conduct, procedures, duties, responsibilities, and terms and conditions for licensees or registered individuals. The scope of Rules, on the other hand, is to specify technical, human resource, and solvency requirements for electric power services necessitating a Licence or registration under the Act.

The Authority has already provided its feedback on the draft rules; however, by the end of FY 2022-23, the approval and notification of the said rules were awaited. The Authority has consistently emphasized to the Federal Government, through various communications, the urgency of promptly notifying the Eligibility Criteria Rules for regulatory certainty and legal sanctity regarding the issuance of licenses and registrations.

(iii) <u>Grid Code (GC)</u>

As per Section 23H of the Act, System Operator is obliged to develop a Grid Code to govern its operations, set standards of practice, and define business conduct which is necessary for effective functioning of System Operator. While an initial Grid Code was approved in 2005, it necessitated substantial revision to align with the CTBCM and adapt to the evolving dynamics of the power sector.

In January 2023, after extensive public and stakeholder consultation, the Authority granted approval for the Grid Code, 2023 concurrently with the issuance of the System Operator licence. This updated Grid Code encompasses various provisions, including but not limited to, ensuring non-discriminatory open access by Transmission Network Operators, delineating the roles and responsibilities of the Metering Service Provider, delineating the framework for long-term system planning by the System Operator, and fostering coordination between the independent System Operator and the Transmission Network Operators.

(iv) Agency Code (AC)

The Authority has directed CPPA-G to include the draft Agency Code in its application for registration as a Special Purpose Agent. Under the previous single-buyer system, CPPA-G acted as the agent for DISCOs, with its functions governed by the Commercial Code. With the recent approval of the Market Commercial Code by the Authority, there is a need for a comprehensive revision of the existing Commercial Code to accommodate CPPA-G's revised role as an agent for DISCOs, particularly in managing legacy contracts. This revised document has been renamed as the AC.

The Agency Code, which CPPA-G submitted along with its application for Registration as a Special Purpose Agent, is currently under review and will be finalized in due course of time and after consultation with relevant stakeholders.

(v) Distribution Code (DC)

After the commencement of the CTBCM, it has become essential to thoroughly revise the existing Distribution Code. This revision will encompass essential provisions related to the competitive electric power market, such as ensuring non-discriminatory open access and facilitating coordination with the MSP, among other aspects. Notably, in accordance with the NEPRA Amendment Act of 2018, the

functions related to supply have been segregated from those of distribution. The revised Distribution Code will exclusively address matters pertaining to electric power distribution, with those concerning supply being addressed in the CSM.

To facilitate this process, DISCOs have engaged a consultant to conduct a comprehensive review and overhaul of the existing Distribution Code. Deliberations and consultations among stakeholders are presently underway after which the updated draft of the Distribution Code will be finalized for NEPRA's approval.

(vi) <u>Connection Agreements (CAs)</u>

CAs between DISCOs, NTDC, and generators have been a longstanding requirement and have been in practice in various forms. However, with the introduction of CTBCM, it has become essential to delineate the updated roles and responsibilities of the parties involved in signing the CA. To this end, the Authority, in approving the CTBCM Implementation Roadmap, directed the relevant entities to develop CA for submission and review.

Subsequently, MEPCO, acting on behalf of all DISCOs, submitted draft CA to the Authority. Upon review, significant deficiencies were identified. These observations were communicated to the DISCOs' working group, with the direction to revise and resubmit the draft CA for the Authority's approval.

Concurrently, PPIB has hired the services of an international consultant, Mr. Tom West, for the preparation of the SPDs for the CTBCM. These SPDs encompass the CAs as well. To ensure consistency and coherence, all CAs need to be harmonized. Given that the CAs submitted by the DISCOs required substantial amendments, the Authority directed both the DISCOs and PPIB to collaborate in the joint preparation of the CAs for subsequent approval.

(vii) Use of System Agreement

Pursuant to Regulation 5 of the NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022, distribution companies were mandated to draft and subsequently submit for approval of the Use of System Agreements. These agreements delineate the rights and responsibilities of open access provisions. The draft Use of System Agreement, prepared by the DISCOs, has been duly submitted and is currently under review and consideration.

(viii) Lifting of Moratorium

As per Section 1(3) of the NEPRA Act, amended through the NEPRA Amendment Act of 2018, sections 23A, 23B, 23G, and 23H were scheduled to become operative after a period of five (05) years from the enactment of the Amended NEPRA Act, i.e., by April 2023, or any earlier date if notified by the Federal Government. These particular sections are instrumental in defining the roles of the Market Operator and System Operator, both integral components for the effective functioning of CTBCM.

In view of the provision of NEPRA Amended Act, the moratorium was lifted on April 27, 2023. Consequently, Sections 23A, 23B, 23G, and 23H automatically took effect, thereby paving the way for the commencement of CTBCM after the completion of the test-run and the subsequent declaration of the Commercial Market Operation Date.

(ix) Development & Notification of Regulations by NEPRA

During the FY 2023, the Authority has taken a significant step by notifying three important regulations in accordance with the NEPRA Act. These regulations serve to establish the essential regulatory framework required for the smooth operation of the CTBCM. The notified regulations are as follows:

- (a) NEPRA (Electric Power Procurement) Regulations, 2022,
- (b) NEPRA Licensing (System Operator) Regulations, 2022, and

(c) NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022

These Regulations establish the necessary regulatory framework for key aspects such as the procurement of electric power by suppliers of last resort, the facilitation of open access by network Licensees, and the delineation of rights and responsibilities for the system operator. Furthermore, the preparation of regulations regarding performance standards for distribution, system operator, market operator, and electric power trader Licensees is currently underway.

(x) <u>Market-Based Security Package Documents (SPDs)</u>

The development of SPDs is a critical milestone in NEPRA's approved CTBCM Implementation Roadmap. These documents are designed to align with the wholesale market design and CTBCM, replacing existing agreements like EPAs, PPAs, and IAs.

PPIB has engaged an international consultant for formulating these documents. NEPRA has urged PPIB to expedite the development and submission of these documents for regulatory approval. However, despite a considerable period of over two years, PPIB has not yet concluded and presented the finalized SPDs. The availability of SPDs is essential for transitioning from a single-buyer regime to a bilateral contracts market. Therefore, it is essential for PPIB to expedite the development of SPDs, for smooth and early transition to the bilateral contract market.

(xi) Capacity Building of Power Sector Entities

To ensure comprehensive understanding and proficiency in the wholesale electricity market/ CTBCM, the Authority has launched a capacity-building initiative in the power sector. This program entrusts CPPA-G as the lead agency responsible for organizing these training sessions. Over the past fiscal year, a diverse range of training courses were conducted in-person. These included sessions on Generation Planning, Transmission Planning, Load Forecasting, orientation programs for entities' Boards of Directors and Senior Management, the Electricity Market Professionals program, and more. Additionally, a series of six consultative workshops were held to provide insights into the CTBCM Test Run.

In addition to physical workshops, an online training mode was also implemented. Approximately 19 sessions covering Contract Management & Regulatory Affairs were delivered. This extensive training initiative has resulted in the certification of over 100 professionals and the accumulation of over 5000 hours dedicated to professional development.

CORPORATE SOCIAL RESPONSIBILITY ACTIVITIES

NEPRA established its CSR with a vision of "Power with Prosperity" to envisage model of inclusive development and impact investments in power sector. During the FY 2022-23, NEPRA CSR launched its CSR Data Portal and 316 NEPRA Licensees as well as 46 Social Welfare Organizations (SWOs) were registered at NEPRA's CSR Portal.

NEPRA under its "Power with Prosperity" Drive undertook various initiatives during the year. NEPRA's CSR Department held 2nd NEPRA CSR Award Ceremony on 16-12-2022, wherein the following NEPRA Licensees secured positions on the basis of their services for community development on CSR Fronts:

(a)	Pakistan Atomic Energy Commission	Gold Award (Winner)
(b)	K-Electric Limited	Silver Award (1st Runner Up)
(c)	Pakhtunkhwa Energy Development Organization	Bronze Award (2 nd Runner Up)

Akhuwat established a PwP Fund wherein, 04-NEPRA Licensees i.e. KE, Engro Energy, KAPCO and Port Qasim Electric Power Company Limited participated for provision of Interest Free Solar Loans to the local communities on easy installments for solarization of communities. As per latest progress review report by the Akhuwat, Solar Loans have been provided to 311 applicants (283-Male Applicants and 28-Female Applicants) through its 61 operating branches in the country.

During FY 2022-23, the then Chairman, NEPRA visited the following Licensees and SWOs to witness their CSR activities:

- (a) Children Emergency Rooms established by Childlife Foundation at PIMS Hospital, Islamabad and Civil Hospital, Karachi.
- (b) JDC's projects including JDC Free IT City and JDC's First Largest Mortuary established in Karachi.
- (c) Disabled Welfare Association which is doing remarkable work for the persons with disabilities to empower, nurture and grow them enabling to meet the real-time challenges of life.
- (d) SAHARA for Life Trust, Sahara Medical College, Narowal and Sughra Shafi Hospital run by the trust of Mr. Abrar-ul-Haq.
- (e) SOS Children Village Karachi and lauded their performance to support the orphans.
- (f) Site of Lucky Cement Limited to inaugurate the PwP wall built by them.
- (g) Indus Hospital, Karachi established newly block as well as other facilities provided to patients.
- (h) Star School for Girls run by Pakistan Alliance for Girls Education (PAGE) in Badia Qadir Baksh, Islamabad.

In line with NEPRA CSR's vision, a series of CSR Webinars were conducted during the whole year, enlisted below:

- (a) August 3, 2022: Webinar for Engagement of SWOs held wherein PAGE Foundation, Transparent Hands and Hands Pakistan showcased their CSR agendas in front of NEPRA licensees.
- (b) August 23, 2022: Webinar on Rehabilitation of Balochistan's Flood Affected Areas held

wherein Saahil Welfare Association and Akhuwat delivered presentation on rehabilitation activities done in Balochistan's most affected flood hit areas.

- (c) September 14, 2022: Webinar on Engagement of SWOs held wherein Bin Qutab Foundation, Disabled Welfare Association and Roshni showcased their work in the field of Social Welfare to all NEPRA Licensees.
- (d) October 4, 2022: Webinar held on impact of collaboration of NEPRA Licensees and SWOs for flood relief activities in Balochistan and Sindh.
- (e) January 4, 2023: Webinar held on Engagement of SWOs wherein Chief Secretary Gilgit-Baltistan, Roshni Helpline 1138, National Logistics Cell and Disabled Welfare Association highlighted their CSR activities.
- (f) March 20, 2023: Webinar held on Engagement of SWOs wherein SAHARA for Life Trust, PAGE Foundation and Teacher's Resource Centre portrayed their work in the fields of Health and Education.
- (g) May 17, 2023: Seminar/Webinar held in collaboration with Rotary International. RI Director presented the idea of "Building up Sustainable Smart Villages" in flood-hit areas.
- (h) June 21, 2023: Open House Seminar/Webinar about Pakistan's First smart female security solution "IYZIL APP" for female employees of Public/Private Sector Organizations.
- June 22, 2023: Appreciation ceremony to honor the KE 7/11 Innovation Challenge Finalists. Top-10 finalists participated and showcased their innovations before the power sector of Pakistan.

HEALTH, SAFETY AND ENVIRONMENT ACTIVITIES

During the FY 2022-23, NEPRA proactively embraced the vision of "Power with Safety", launching several initiatives aimed at prioritizing Health, Safety, and Environment (HSE). These measures were geared towards safeguarding human lives, preserving the environment, and securing the assets within the power sector. The objective was to ensure strict adherence to the NEPRA Power Safety Code and relevant legal obligations among Licensees. NEPRA's commitment was directed towards achieving a zero-incident goal in the Power Sector through the implementation of highly efficient and proactive practices.

During this period, NEPRA accomplished significant milestones in the field of HSE. These achievements included conducting HSE Performance Evaluations, organizing awareness sessions and webinars, facilitating discussions with Licensees on Power Safety Code requirements, approving safety manuals for DISCOs, disseminating incident alerts, launching safety campaigns, developing a Job Safety Analysis checklist in Urdu for distribution companies, and conducting a fire drill at the NEPRA Tower.



5. No.	Interactive and Awareness Sessions/Webinars
1	Electrical Safety in the Work place based on NFPA 70E Standard NEPRA organized a webinar on "Electrical Safety in the Workplace based on NFPA 70E Standard" in collaboration with Inovo USA on Friday, 05-08-2022. The webinar was attended by technical professionals from the entire power sector of Pakistan, as well as NEPRA officials. The main objective of the webinar was to know about National Fire Protection Association Standard "NFPA 70E" and its requirements for electrical safety-related critical work practices and maintenance of the electrical systems. A significant health and safety concern in the workplace is the risk of shock, electrocution, arc flash, and arc blast. Compliance with the latest safety codes and standards could have prevented many electrical incidents. To keep the workplace safe from unacceptable risks associated with the use of electricity, NFPA 70E, Standard for Electrical Safety in the Workplace, must be implemented and followed by both employers and employees.
2	Webinar on Isolation and Permit To Work A webinar on "Isolation and Permit to Work" was hosted on 16-09-2022 in collaboration with K-Electric for the Power Sector professionals & Staff. The webinar was attended by hundreds of HSE Professionals and field staff from the entire power sector of Pakistan, as well as NEPRA officials. The main objective of the webinar was to understand correct application of "Isolation and Permit to Work" system to control hazards, to know about requirements and appropriate application of Isolation and Permit to Work for maintenance of any electrical apparatus, where the unexpected energizing, start up or release of any type of energy (electrical, thermal, chemical, potential, kinetic) could occur, cause damage to equipment, injury to personnel and/or the environment can be adversely impacted.
3	Developed JSA/JHA for DISCO's NEPRA developed a Job Safety Analysis (JSA) checklist in Urdu for DISCO's in accordance with NEPRA Power Safety Code Section 7.19. The JSA checklist contains only the minimum mandatory contents to assess safety risks at site in order to save line staff lives. When working on HT and LT systems, the JSA checklist must be applied to all maintenance activities/ complaints handled by field Linemen or Authorized Assistant Linemen to identify all known hazards and its precautions.
4	Incident Alert NEPRA released an Incident Alert titled "NEPRA Incident Alert-Coal Dust Explosion", that is also available on NEPRA's website under the HSE page. The incident alert includes a brief summary of the incident at a coal-fired power plant, the findings, and the high focus areas & lessons learned. NEPRA encourage all Licensees to share and discuss this alert in Safety Meetings, Safety Talks, and other safety communication forums so such incidents can be avoided in the future.

5	Public Safety Awareness Campaign during Monsoon Season NEPRA in line with its "Power with Safety" initiative directed DISCO's to conduct a Safety Awareness drive for Public during Monsoon season. The aim was to educate the public regarding potential hazards and how to be safe.
6	Webinar on Transmission & Distribution Network Protection NEPRA in collaboration with KE hosted a webinar on "Transmission & Distribution Network Protection" on 11-11-2022. The webinar was attended by hundreds of HSE Professionals and field staff from the entire power sector of Pakistan, as well as NEPRA officials. The main objective of the webinar was to learn about the requirements of network protection components, such as fixed grounding, relays, fuses, and circuit breakers. Network protection eliminates safety risks to human as quickly as possible, minimizes the duration of a fault, protects consumers' appliances, disconnect faulted lines & transformers, and protects the system from severe damage.
7	Webinar on Incident Investigation On 22-02-2023, a webinar on "Incident Investigation" was hosted in collaboration with Consultant HSE, MA'ADEN (Saudi Arabian Mining Company) for the Power Sector professionals. In this session, participants learned how to investigate work-related incidents properly to prevent recurrences.
8	Webinar on HSE Performance Evaluation Results of Top Performers On 15-03-2023, a webinar on "HSE Performance Evaluation Results of Top Performers" was hosted in collaboration with UCH Power (Private) Limited and Nishat Power Limited. In this session, the intent and gaps of the evaluation process were discussed with power sector professional for further improvement. HSE performance evaluation results for 2021/2022 were also shared with all Licensees.
9	 Webinar on International Standard for Occupational Health & Safety Management Systems ISO-45001 A webinar on "International Standard for Occupational Health & Safety Management Systems ISO-45001" was hosted in collaboration with Strategic Management Services, Pakistan for the Power Sector professionals on 27-01-2023. Participants learned about the requirements of ISO-45001, and its framework. The aim and intended outcomes of the OH&S management system are to prevent work-related injury and ill health to workers and to provide safe and healthy workplaces.
10	NEPRA HSE Recognition and Awards Distribution Ceremony 2022 To celebrate the outstanding achievements of NEPRA's Licensees in the area of Occupational HSE, NEPRA organized 2 nd Annual HSE Award Ceremony at NEPRA Tower which was chaired by the then Chairman NEPRA, Mr. Tauseef H. Farooqi and graced by His Excellency Mr. Nong Rong, Ambassador of People's Republic of China as Chief Guest. The ceremony was attended by Heads and Professionals of various top power sector entities, contractors from Generation, Distribution and Transmission companies including Chairman PNRA, Chairman PAEC, NEPRA Professionals and journalists. H.E Mr. Nong Rong and the then Chairman NEPRA, Mr. Tauseef H. Farooqi presented awards to the top performing organizations. Uch Power and Uch-II Power (Pvt.) Limited was recognized as the top performer and presented Gold Award, followed by Foundation Power Company (Deharki) Limited with the Silver whereas Bronze award was shared by Chashma Nuclear Power Generating Stations, Karachi Nuclear Power Generating Stations, and Nishat Power Limited. Similarly, NEPRA also recognized eighteen individuals from power companies for their outstanding safety performance in the field.
11	Webinar on Fire Load CalculationA webinar on "Fire Load Calculation" was hosted on 28-04-2023 in collaboration with Quaid-e-Azam ThermalPower (Pvt.) Limited for the Power Sector professionals to celebrate the UN/ILO World Day for Safety andHealth at Work. A message from Director General, International Labor Organization, Mr. Gilbert H. Houngbowas also played. In this session, participants learned about fire load calculation in order to ensure that buildingsand other structures are designed and equipped to withstand potential heat and flames of a fire.
12	Webinar on Legal and Safety Requirements for Bulk Power Consumers A webinar on "Legal & Safety Requirements for Bulk Power Consumers" was hosted on 26-05-2023 for the Power Sector professionals. In this session, BPC's learned about Safety Standards envisaged in Performance Standards (Distribution) Rules 2005, Distribution Code, Consumer Service Manual, and Power Safety Code to minimize potential incidents.
13	Pakistan Citizen PortalThe HSE Frequently Asked Questions for the Pakistan Citizen Portal has been developed on 17-04-2023to provide fundamental information to users regarding Electrical Safety and reporting of unsafe electricalconditions, acts, or accidents.

14	NEPRA Clarification NEPRA provided a solution to transmission companies for "Safe Approach Distance" on 08-03-2023 while working near high voltage circuits 132 kV and 220 kV to protect workers against lethal electrical shocks and burns.
15	Personal Protective Equipment (PPE) Assessment at NEPRA PPE Assessment Form was developed and assessment was conducted in January, 2023. Based on the assessment, the necessary PPE was procured for technical staff.
16	HSE Performance Evaluation Report 2021-2022 HSE Department published Licensees HSE Performance Report for FY 2021-22. The purpose of Occupational HSE performance evaluation initiative is to compare Licensees' performance to previous year's performance for their continual improvement, identify top HSE performers for benchmarking, identify unsafe organizations and provide them necessary guidance in order to become a safe organization.
17	DISCO's Safety Manuals The HSE function reviewed DISCO's submitted Safety Manuals in accordance with NEPRA Power Safety Code 2021 and returned to Licensees with review comments. In response to NEPRA's comments, they have revised and resubmitted their Safety Manuals. All of Safety Manuals are approved by the Honorable Authority on 14- 02-2023.
18	Awareness session on Work Permit NEPRA organized an awareness session on "Work Permit" under its vision 'Power with Safety' on 13-06-2023. The loopholes in the existing work permit system of the DISCOs are leading to frequent accidents in the sector, therefore NEPRA developed.
19	NEPRA Emergency Management Plan The Honorable Authority has approved the NEPRA Emergency Management Plan on 21-06-2023 to comply with Section 14.13.2.1 of the Building Code of Pakistan-Fire Safety Provisions-2016. The Emergency Management Plan is developed to provide fundamental knowledge regarding potential emergencies, respective responsibilities, and the mechanism to effectively manage and minimize the consequences. The potential emergency scenarios include Medical Emergencies, Fire Emergencies, Utility Failures, Elevator Failures, Earthquakes, Floods, and Terrorist Attacks.
20	Emergency Mock Drill NEPRA conducted an emergency drill on 23-06-2023 with CDA to ensure that a proper emergency readiness and response is in place to limit and control the consequences of an on-site emergency.
21	Public Safety Campaign NEPRA's 'Power with Safety' initiative aims to protect consumers' lives. In order to raise public awareness, NEPRA has launched a continual safety campaigns on Social and Print Media.
22	Webinar on Legal & Safety Requirements for Bulk Power Consumers A webinar on "Legal & Safety Requirements for BPCs" was hosted on 26-05-2023 for the Power Sector professionals. In this session, BPC's learned about Safety Standards envisaged in Performance Standards (Distribution) Rules 2005, Distribution Code, Consumer Service Manual, and Power Safety Code to minimize potential incidents.

COORDINATION AND IMPLEMENTATION ACTIVITIES

The Coordination and Implementation Department oversees the organization of Authority Regulatory Meetings, Hearing, Public Hearings, including the recording of minutes and decisions and their subsequent issuance. The department is also responsible for ensuring internal compliance with Authority decisions through a systematic process of implementation and monitoring. A summary of Authority Regulatory Meeting and hearings is given in the following table:

Month	Hearings	Regulatory Meetings	Total
July, 2022	17	30	47
August, 2022	22	30	52
September, 2022	28	46	74
October, 2022	6	41	47
November, 2022	19	54	73
December, 2022	18	52	70
January, 2023	11	52	63
February, 2023	10	42	52
March, 2023	13	41	54
April, 2023	9	21	30
May, 2023	20	52	72
June, 2023	9	16	25
Total	182	477	659

Source: NEPRA

(i) National Accountability Bureau (NAB) Workshop

On December 09, 2022, The NAB, A&P Division, organized an awareness session for NEPRA employee in commemoration of International Anti-Corruption Day. The session delved into various facets of corruption and strategies to counteract in the workplace. The seminar was attended by all officers of NEPRA. The NAB team, led by DG (A&P) Division, provided valuable insights and shared their experiences funded by Q&A session.


FINANCE DEPARTMENT ACTIVITIES

Section 13 of the NEPRA Act, requires that operations of the Authority shall be funded from grants from Federal Government and fees & fines collected. Further, any surplus of receipts over expenditure after payment of tax shall be remitted to the Federal Consolidation Fund and in case of any deficit, shall be made up by the Federal Government. Furthermore, Section 14 of the Act requires that the Authority shall maintain books of accounts and the same shall be audited by the Auditor General of Pakistan.

In 2007, all Regulatory Authorities including NEPRA were brought under the tax net. Since then, in compliance to the procedure stipulated by FBR for filing of annual return of income tax, the audited financial statements are annexed with the annual return under the corporate taxation framework. The annual accounts of NEPRA are being regularly audited by external audit firms of Chartered Accountants. Furthermore, the Auditors' Report and Audited Financial Statements are regularly published as major content of the Annual Reports of NEPRA.

Finance department of NEPRA is responsible to perform major functions as income collector, disbursement of claims relating employees' compensation & benefits, payments to suppliers/ vendors/contractors, remittance to the government & designated government agencies peer organizations on levies, taxes etc. Finance Department also plays a collaborative & advisory role in various processes of budget preparation, hiring, procurement, selection/pre-qualification of suppliers/contractors/professional firms. Finance Department also spearheads in the matters of ensuring statutory compliances to Auditor General of Pakistan and Federal & Provincial Tax Authorities/Boards.

During the FY ended 30 June, 2023, Finance Department extended continued support towards achievements of organizational goals in performing its entrusted internal functions as well as fulfilled external statutory obligations and compliances, a few are being reported as follows:

(i) External Audit of NEPRA Accounts

The Finance Department achieved independent assurance on the annual accounts of NEPRA by the external audit firm i.e. Ilyas Saeed & Company, Chartered Accountants. The Financial Statements for the FY ended 30 June, 2023 were approved by the Authority. The Auditors' Report and the Audited Financial Statements are at **Annex-I** with the Annual Report.

(ii) Payment to the Government and Peer Organizations

NEPRA continued to actively fulfill its statutory obligations and paid following contributions during the financial year ended 30 June, 2023:

Nature of Contributions	Payments made during FY 2022-23 (Rs. Million)
Payment of Surplus to Federal Consolidation Fund (FCF): Under Section 13 of NEPRA Act, 1997, payment made to FCF during 2022-23. So far, NEPRA has made total payments of Rs. 2,429.988 Million to FCF.	561.829
Tax Payments to Federal Board of Revenue:	
Quarterly instalments of advance tax paid by NEPRA.	122.137
Tax withheld & deposited by Licensees on fee income.	143.079
Tax withheld & deposited on various transactions.	42.263
Sub-total	307.479
Payments to Competition Commission of Pakistan (CCP):	
Pursuant to SRO 1277(I)/2020 dated November 27, 2020 issued by Finance Division, Government of Pakistan, NEPRA made statutory charge of 3% of fee to CCP: Charge during the FY 2021-22. So far, NEPRA has made a total payment of Rs. 478.646 Million to CCP.	94.811
Total Payments:	964.119

(iii) Annual Licence Fee

NEPRA raised Annual Licence Fee notices in accordance with the base rates as defined in NEPRA (Fees) Rules, 2002 computed/indexed with most recent National Consumer Price Index (N-CPI) published every month by Pakistan Bureau of Statistics. Being major source of income, the Annual Licence Fee notices effective 01 July, 2022 were sent to the Licensees for FY 2022-23 summarized as under:

5. No.	Licence Segment, Annual Fees, Base Rates in Rupees	Annual Fees, Applicable Rates Effective 01 July, 2022 in Rupees
1	Generation: The fee will be calculated, at the rate of Rs. [20 thousand] per MW, on the basis of the Gross (ISO) MW capacity of the Licensed generation facility.	24,221
2	National Grid: The fees will be charged at the fixed rate of Rs. [10.00 Million].	12,110,414
3	Provincial Grid: The fees will be charged at the fixed rate of Rs. [2.50 Million].	3,027,604
4	Special Purpose Transmission Licence: The fee for Special Purpose Transmission Licence shall be calculated at the rate of Rs. [2,500] per MW, on the basis of	3,028
	maximum transmission capacity as given in the Licence with a maximum ceiling of Rs. 10.00 Million.	12,110,414
5	K-Electric (Transmission): The fees will be charged at the fixed rate of Rs. [7.00 Million].	8,477,290
6	Distribution:	7,872
	Rs. [6,500] per MVA or Rs. [1,200,000] whichever is more.	1,453,250
7	Electric Power Supplier:	12,110
	Rs. [10,000] per MW or Rs. [1,200,000] whichever is more.	1,453,250
8	Market Operator: The fee will be charged at the fixed rate of Rs. [10.00 Million].	12,110,414
9	System Operator: The fee will be charged at the fixed rate of Rs. [10.00 Million].	12,110,414

(iv) <u>Compliance of Tax Laws</u>

Finance Department represented NEPRA as withholding agent of Federal & Provincial Tax Authorities/ Boards and ensured accurate collection and timely deposit of taxes followed by electronic filing of period statements relating income tax/sales tax on goods and services.

In compliance of section 114(1) of the Income Tax Ordinance, 2001, the annual corporate tax return of NEPRA for the financial year ended 30 June, 2022 was electronically filed to Federal Board of Revenue's online portal well before the due date.

HUMAN RESOURCE ACTIVITIES

During the FY 2022-23, several key appointments were made by the Federal Government in NEPRA. Mr. Mathar Niaz Rana, Mr. Rafique Ahmed Shaikh, and Ms. Amina Ahmed assumed their roles as Member (Tariff & Finance), Member (Technical), and Member (Law), respectively. Upon completion of his terms, Mr. Tauseef H. Farooqi, the then Chairman, retired on August 04, 2023.

During the FY 2022-23, NEPRA regularized the employment of numerous probationary employees after conducting a comprehensive assessment of their performance. Additionally, seven



(07) professionals and fourteen (14) support staff members were promoted during the year.

In pursuit of enhancing the skills and knowledge of its workforce, NEPRA established the Training and Development domain within the HR Department. This domain encompasses a wide range of management and leadership training programs. NEPRA's professionals and support staff were enrolled in personal development and soft skills training courses, further enriching their capabilities.

The HR Department also took proactive steps to provide in-house capacity-building training sessions, covering diverse fields. This initiative aimed to foster skill development, familiarize employees with contemporary industry practices, nurture leadership potential, and ultimately enhance efficiency and effectiveness across all levels of operation. The overarching goal was to optimize service delivery in alignment with national interests.

An important milestone was achieved in promoting gender sensitivity, workplace diversity, and inclusivity with the training session titled "Gender Sensitization & Workplace Diversity and Inclusivity". This initiative, under NEPRA's "Power with Equality" campaign, garnered significant participation from NEPRA employees.

Furthermore, NEPRA's HR Department initiated efforts to enhance its HR software, particularly the ORACLE software for HR Management and personnel administration. Additionally, the department embarked on the digitization of leave records in collaboration with the IT Department, enabling seamless online document storage, retrieval, and approval processes. The digitization effort extended to personal employee files, ensuring they are regularly updated for efficient and effective HR management.

ADMINISTRATIVE ACTIVITIES

During the FY 2022-23, multiple events as well as webinars were organized by NEPRA, in which Administration Department played a key role. During the year, the following major activities were under taken:

- (i) Official vehicles were procured both for the professionals and NEPRA pool at reasonable rates during the economic downturn. The registration and comprehensive insurance of all such vehicles had also been completed well in time. The insurance for all the tangible assets was renewed in January 2023 through the National Insurance Company Limited in line with the directives of the Ministry of Commerce.
- (ii) Complying with the Emergency and Disaster Management of Capital Development Authority, a free fire and safety installation training was given to



NEPRA Fire & Safety staff by MIs. Fire & Safety under Training, Correction & Development Program. The said Training encapsulated the following three categories of emergency response:

- (a) Fire Safety Response (Workplace, home, care etc.)
- (b) Emergency Evacuation (Workplace)
- (c) First Aid (Workplace, home, car)
- (iii) NEPRA arranged the 3rd Football Inter-Departmental Tournament in the month of December, 2022. The event was graced by the then Chairman, Mr. Tauseef H. Farooqi and Member NEPRA, Mr. Maqsood Anwar Khan and attended by a large number of NEPRA employees and their families. Black Tigers (Tariff Department) remained Champions during the said tournament.
- (iv) Two employees Mr. Manzar Mehmood Kiyani and Mr. Sher Zaman were selected, on March 17, 2023, through balloting to perform the religious obligation of Hajj (2023) at NEPRA's expense.

MEDIA ACTIVITIES

NEPRA Media Department keeps the media and all the stakeholders including the general public informed about important developments, decisions and enforced actions of paramount importance. In this regard, NEPRA published advertisements and issued Press Releases/briefs for information of the general public. During this financial year, NEPRA Media Department published a total of 187 advertisements in accordance with the Press Information Department, SOPs and guidelines with subsequent uploading of the same on NEPRA website. Similarly, 126 Press Releases/Briefs/ Clarifications of paramount importance were also shared with the external media personnel of print and electronic media.

Moreover, NEPRA Media Department ensured coverage of various events/webinar in print and electronic media; which are mentioned below:

- (a) Workshop on Introduction of CTBCM
- (b) Awareness session on "Electrical Safety in the workshop based on NFPA 70E Standards" for power sector
- (c) Webinar on Cybersecurity challenges in critical Infrastructure (Power Sector) NTDC submits System Operator licence application to NEPRA
- (d) Consultative session on CTBCM
- (e) NEPRA and PTA signs Mol for collaboration
- (f) Workshop on Cyber Incident Response Management Webinar on "Power with Security"
- (g) Webinar on "Power from Hydrogen"
- (h) Webinar on "Geothermal Energy"
- (i) Webinar on "Computer Emergency Response Team"
- (j) Webinar On "Electrical Vehicles Future in Pakistan"
- (k) Seminar on "Eradication Of Corruption"
- (I) Webinar On "Cybersecurity Roadmap-Practitioner's Approach"
- (m) NEPRA Futsal Tournament
- (n) NEPRA 2nd Annual CSR Award ceremony
- (o) NEPRA 2nd Annual HSE Award ceremony
- (p) Webinar on "International Standard for Occupational Health & Safety Management Systems ISO-45001"
- (q) NEPRA approves IGCEP 2022-31
- (r) Webinar on "Power Sector Cyber Security Threats and way forward"
- (s) Awareness Session on "Incident Investigation" for Power Sector
- (t) NEPRA briefs the visiting students of NUST
- (u) NEPRA celebrates International Women's Day 2023

- (v) Awareness session on "Performance Evaluation Results of Top Performer" for Power Sector
- (w) NEPRA grants System Operator Licence to NTDC and approves Grid Code 2023
- (x) MOU signing between NEPRA and CFA Society Pakistan
- (y) Eid Milan get-together organized at NEPRA Tower
- (z) Awareness Session on "Fire Load Calculation" for Power Sector
- (aa) Workshop on "Implementation Roadmap-NEPRA IT/OT Cybersecurity Regulations" Seminar on "Power Theft and its Solutions"
- (ab) Facilitation of Power Development Initiatives in AJK
- (ac) Webinar on "Implementation Roadmap-NEPRA IT/OT Cybersecurity Regulations"
- (ad) Webinar on "Work Permit"
- (ae) Webinar on "Implementation Roadmap-NEPRA IT/OT Cybersecurity Regulations" (Distribution Network)

INFORMATION TECHNOLOGY AND CYBER SECURITY ACTIVITIES

(i) <u>Cyber Security</u>

NEPRA has taken another important initiative of Power with Security as the electricity infrastructure is one of the critical and essential services for a country. For this purpose, NEPRA (Security of Information Technology and Operational Technology) Regulations have been notified in the Official Gazette of Pakistan on September 06, 2022. NEPRA has directed all Licensees to submit their compliance reports of regulations. In response, Fifty (50) Licensees have submitted their compliance report.

A comprehensive awareness drive has been conducted among NEPRA Licensees to promote a culture of cyber security. This included a series of ten (10) webinars on cyber security awareness and the implementation roadmap for the NEPRA regulations. Additionally, (02) two handson workshops were conducted, providing Licensees with invaluable practical experience. Distinguished cybersecurity professionals from renowned organizations such as Siemens, Hitachi, NREL, Kaspersky, ACET Solutions, Tech Access, LUMS and many others shared their expertise during these sessions.

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In adherence to Clause 12 of the NEPRA regulations, the Authority has established the PowerCERT (Cyber Emergency Response Team) on February 02, 2023, comprised of ten members from various stakeholders, including power sector licensees, academia, and industry experts. PowerCERT is playing a pivotal role as Advisory Board. Subsequently, PowerCERT portal has been launched to share the cybersecurity alerts and advisories for NEPRA Licensees.

NEPRA has also demonstrated its commitment to collaboration and cooperation by signing a Memorandum of Understanding (MOU) with the Pakistan Telecommunication Authority on September 12, 2022. This MOU facilitates information sharing and mutual coordination between the two entities, strengthening the collective efforts towards safeguarding the critical infrastructure of Pakistan.

(ii) Data Exchange Portal (Dxp)

For effective and timely sharing of data between NEPRA and the Licence, the initiative of Data Exchange Portal (Dxp) is approved by Authority under which the M&E Generation, M&E Distribution, CSR and HSE portals developed during the last year are enhanced and new functionalities and reports as per requirements of the relevant departments are developed.

(iii) Website Updation

NEPRA migrated its website from a shared hosting environment to a cloud server. This shift aims to enhance the website's performance, scalability, and reliability to provide the uninterrupted access to information for stakeholders, consumers, and the public.

Month (FY 2022-23)	Number of Visits	Unique Visitors	Pages	Hits	Bandwidth GB
July	102,059	40,768	440,907	3,057,169	1.14
August	151,690	60,090	633,908	4,838,558	2.71
September	147,329	61,973	686,309	5,028,292	2.14
October	185,660	67,315	654,983	4,496,499	1.19
November	239,674	58,535	640,725	4,592,863	1.00
December	213,370	56,549	763,691	4,507,430	1.00
January	221,314	64,987	642,962	4,969,145	2.55
February	100,386	44,025	655,357	4,229,723	0.85
Month (FY 2022-23)	Number of Visits	Unique Visitors	Pages	Hits	Bandwidth GB
March	109,976	50,691	513,675	3,257,887	0.69
April	85,432	42,965	473,462	2,958,013	0.55
May	156,981	89,209	975,679	2,466,053	0.58
June	102,187	58,181	507,208	1,367,314	0.36
Total	1,816,058	695,288	7,588,866	45,768,946	14.75
Source: NEPRA					

Summary of User/Visitor of NEPRA Website during FY 2022-23

ANTICIPATED DEVELOPMENT/ ACTIVITIES FY 2023-24

ANTICIPATED DEVELOPMENT/ACTIVITIES FY 2023-24

(i) Anticipated Licensing Activities FY 2023-24

- (a) Formulation of NEPRA (Generation) Regulations, 2023 in lieu of NEPRA (Generation) Rules, 2000;
- (b) Formulation of NEPRA (Technical Standards & Connectivity with the Grid) Regulations, 2023;
- (c) Formulation of NEPRA (Bulk Power Consumer) Regulations, 2023;
- (d) Modifications in NEPRA (Alternative & Renewable Energy) Distributed Generation and Net Metering Regulations, 2015 to consider the provisions of Concurrence instead of Licence;
- (e) Modifications in NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021 to include provisions for Concurrence;
- (f) Modifications in NEPRA Licensing (Fee) Regulations, 2021 to include provisions for Concurrence;
- (g) Grant of Licenses to Ten (10) DISCO(s) as SoLR;
- (h) Grant of Licenses for Distribution and SoLR for KE;
- (i) Grant of Registration to CPPA-G for Special Purpose Agent for Legacy Contracts;
- (j) Licence for Provincial Grid Company for the provinces of Punjab and Balochistan;
- (k) Approval of IGCEP for the 2023-2032;
- (I) Approval of TSEP for the 2023-2032;
- (m) Grant of 20-30 Licence to Competitive Supplier for Supplying to BPC(s) earlier granted Second Tier Supplier Authorization;
- (n) Grant of 5-10 Licenses to Competitive Supplier for Supplying to BPC(s) under the CTBCM regime;
- (o) Grant of Concurrence for 15-20 generation companies;
- (p) Grant of Licenses to 4-5 companies for Trader;

(ii) Anticipated Tariff Activities FY 2023-24

Tariff Determination of Wind Power Projects

- (a) Trans-Atlantic Energy (Pvt.) Limited (49.5 MW)
- (b) Western Energy (Pvt.) Limited (47.6 MW)

COD Tariff Adjustment of Wind Power Projects

- (a) Lucky Renewables (Pvt.) Limited (formerly Tricom Wind Power (Pvt.) Limited) (50 MW)
- (b) Gul Ahmed Electric Limited (50 MW)

- (c) Din Energy Limited (50 MW)
- (d) Act2 Din Wind (Pvt.) Limited (formerly Act2 Wind (Pvt.) Limited) (50 MW)
- (e) Artistic Wind Power (Pvt.) Limited (50 MW)
- (f) Metro Wind Power Limited (60 MW)
- (g) NASDA Green Energy (Pvt.) Limited (50 MW)
- (h) Liberty Wind Power 1 (Pvt.) Limited (50 MW)
- (i) Liberty Wind Power 2 (Pvt.) Limited (50 MW)
- (j) Lakeside Energy (Pvt.) Limited (50 MW)
- (k) Indus Wind Energy Limited (50 MW)

COD Tariff Adjustment of Solar Power Projects

(a) Atlas Solar Limited (formerly Zhenfa Energy Company (Pvt.) Limited) (100 MW)

(iii) Anticipated Technical Activities FY 2023-24

- (a) Online Access to CPPA-G portal regarding verification of different technical parameters for monthly FCAs and QTAs.
- (b) Online Access to KE portal regarding verification of different technical parameters for monthly FCAs and QTAs.
- (c) Development of tool for assessment of EMO violations in the system operations and calculation of financial impact thereon.

(iv) Anticipated Monitoring & Enforcement Activities FY 2023-24

- (a) Effectively monitoring the operational performance of power generation projects (especially efficient generation capacity) installed in the system for their optimal utilization.
- (b) Effectively monitoring the progress of NTDC for removal of system constraints for optimal utilization of available generation capacity
- (c) Monitoring of interconnection schemes of new power plants for timely completion
- (d) Effectively monitoring the compliance status of concerned entities against applicable documents, SOPs etc.
- (e) To ensure Earthing/Grounding of HT/LT Poles/Structures in all DISCOs.
- (f) Conversion of existing Rules into Regulations
- (g) To ensure provision of new connection and net-metering connection within permissible time as specified in NEPRA PSDR.
- (h) Implementation of AMI/AMR metering at PMT level in all DISCOs.
- (v) Anticipated Activities of Consumer Complaint Mechanism FY 2023-24
 - (a) Development of mobile application for lodging of consumer complaints against all DISCOs.

- (b) Development of electricity bill estimator/calculator to be placed at NEPRA website to facilitate the consumers.
- (c) Development of estimator to assess cost of new connection to be placed at NEPRA website to facilitate the prospective consumers.
- (d) Modernization/automation of NEPRA Regional Offices, Lahore and Karachi offices will be upgraded in the first phase.

(vi) <u>New Performance Standards Regulations to be developed for FY 2023-24</u>

- (a) Trader
- (b) System Operator
- (c) Market Operator

(vii) <u>Regulations to be developed for FY 2023-24</u>

- (a) Power Procurement Regulations
- (b) Provincial Grid Company
- (c) National Grid Company
- (d) Investment Regulations
- (e) Concurrence Regulations

(viii) Conversion of the Existing Rules into Regulations for FY 2023-24

- (a) NEPRA Licensing (Generation) Rules, 2000
- (b) NEPRA Performance Standards (Transmission) Rules, 2005
- (c) NEPRA Performance Standards (Distribution) Rules, 2005

(ix) Anticipated Activities of CTBCM for FY 2023-24

- (a) Declaration of Commercial Market Operations Date for CTBCM
- (b) Determination of Use of System Charges for the CTBCM
- (c) Approval of Use of System Agreement
- (d) Formulation of National Electric Power Regulatory Authority
- (e) Investment Standards and Procedures (Transmission and Distribution) Regulations
- (f) Review and Approval of Security Package Documents for CTBCM
- (g) Approval of Power Acquisition Programme of DISCOs
- (h) Approval of the Power Acquisition Programme of KE
- (i) Grant of IAA Registration to PPIB
- (j) Grant of Special Purpose Agent Registration to CPPA-G and approval of Agency Code
- (k) Security Package Documents
- (I) Institutional Restructuring
- (m) Lifting of Moratorium

(x) Anticipated Activities of Information Technology/Cyber Security FY 2023-24

- (a) Up-gradation of the ICT infrastructure in NEPRA including provision of End Point Security Solutions, revamping of Enterprise Content Management System, review of existing NEPRA Information Security Policies and Data Governance.
- (b) Phase-I assessment of all Licenses will be completed and the cybersecurity audit firms will be finalized to perform the Industrial Cyber Security Audits/Red Teaming engagements across Infrastructure/information systems of NEPRA's Licensees.

(xi) Anticipated Activities of Human Resource Department FY 2023-24

- (a) Procurement of Oracle HRMS Solution for the automation of the processes;
- (b) Hiring of Human Resources for critical positions;
- (c) Capacity Building of Professionals & Officials.

(xii) Other Anticipated Activities FY 2023-24

Processing of RFPs

- (a) RFP filed by Government of Sindh for 50 MW solar project to be developed at Manjhand, District Jamshoro.
- (b) RFP filed by KE for 120 MW solar project to be developed at West Karachi.
- (c) RFP filed by KE for 150 MW solar project to be developed at Malir Cantt:
- (d) RFP filed by KE for 200 MW Hybrid project to be developed at Dhabeji Grid.
- (e) Review Motion RFP filed by KE for three solar projects at Vinder, Uthal and Bela Districts of Balochistan.

ANNEXURES

ANNEX-I

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

AUDITED FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2023



OFFICE # 26, 2ND FLOOR, ROSE PLAZA, I – 8 MARKAZ, ISLAMABAD PH : (+92) 051 – 4938026 & 051 – 4938027, FAX : (+92) 051 – 4938028 Office # 26, 2nd Floor, Kose Plaza, I-8 Markaz, Islamabad - Pakistan Phone: +92-51-4938026 / 27 E-mail: info.isd@ilyassaeed.com www.ilyassaeed.com

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Chartered Accountants

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF NATIONAL ELECTRIC POWER REGULATORY AUTHORITY REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Opinion

We have audited the annexed financial statements of NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (the Authority), which comprise the statement of financial position as at June 30, 2023 and the related income & expenditure account, statement of comprehensive income, statement of changes in fund and statement of cash flows for the year then ended and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Authority as at June 30, 2023 and its financial performance, its cash flows and changes in general fund for the year then ended in accordance with the approved international financial reporting standards as applicable in Pakistan.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Authority in accordance with the ethical requirements that are relevant to our audit of the financial statements in Pakistan and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of the Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the approved International Financial Reporting Standards as applicable in Pakistan and for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless management either intends to liquidate the Authority or to cease operations, or has no realistic alternative but to do so.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance,

Other Offices: Lahore – Karachi – Gujranwala A member firm of MGI, a network of independent accounting, audit, tax and consulting firms worldwide

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Chartered Accountants

but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of the users taken on the basis of these financial statements.

As part of an audit, in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates, if any, and related disclosures made by the management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Authority's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report related to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence up to the date of our auditors' report. However, future events or conditions may cause the Authority to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transaction and events in a manner that achieves fair presentation.

We communicate with the management regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

, Soreed & Co.

CHAR/ERED ACCOUNTANTS Engagement Partner: IMRAN ILYAS ISLAMABAD: 20/09/2023 UDIN: AR202310247Xm6KlrJyP

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NATIONAL ELECTRIC POWER REGULATORY AUTHORITY STATEMENT OF FINANCIAL POSITION AS AT JUNE 30, 2023

		2023	2022
NET ASSETS	Note	Rupees	Rupees
NON-CURRENT ASSETS			
Property, plant and equipment	4	529,547,852	485,197,089
Intangible assets	5	337,579	36,225
Advances to employees	6	929,521,196	819,460,998
Advances to employees	0	1,459,406,627	1,304,694,312
CURRENT ASSETS	_		
Current portion of advances to employees	6	67,225,727	48,944,557
Fee receivable	7	13,511,727	37,239,688
Advances, deposits, prepayments, other receivables	8	38,083,324	121,325,190
Tax due from government	9	633,350,411	486,887,421
Deferred tax asset	10	100,502,299	70,361,761
Cash and bank balances	11	616,131,948	244,171,459
		1,468,805,436	1,008,930,076
CURRENT LIABILITIES			
Accrued and other liabilities	12	(626,264,215)	(428,095,963)
Provision for taxation	13	(551,848,900)	(164,435,302)
Payable to Federal Consolidation Fund (FCF)	14	(589,127,654)	(561,829,176)
Current portion of long term loans	14	(1,125,893)	(750,594)
current portion of long territ loans	15	(1,768,366,662)	(1,155,111,035)
NON-CURRENT LIABILITIES	_		
Long term loan	15	(22,142,672)	(23,268,565)
Deferred liabilities	16	(6,416,639)	(3,958,698)
		(28,559,311)	(27,227,263)
	-	1,131,286,090	1,131,286,090
	=		
REPRESENTED BY:			
Capital contribution by Government of Pakistan	17	131,286,090	131,286,090
Building reserve	18	1,000,000,000	1,000,000,000
CONTINGENCIES AND COMMITMENTS	19		-
경험에는 이것은 것이 잘 넣었다. 그	1911) - 1	1,131,286,090	1,131,286,090
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MEMBER

CHAIRMAN

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED JUNE 30, 2023

		2023	2022
PARTICULARS	Note	. Rupees	Rupees
Fee income	20	3,098,246,262	2,028,359,613
Administrative expenses	21	(2,180,615,610)	(1,738,982,030)
Finance cost	22	(3,277,863)	(4,253,755)
Other income	23	267,820,219	106,104,788
Surplus for the year before tax	-	1,182,173,008	391,228,616
Taxation	24	(558,294,788)	(60,083,826)
Surplus for the year after tax	-	623,878,220	331,144,790

MEMBER

CHAIRMAN

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED JUNE 30, 2023

	2023	2022
PARTICULARS	Rupees	Rupees
Surplus for the year after tax	623,878,220	331,144,790
Other comprehensive income / (loss) for the year		
Experience adjustment - Defined benefit obligation	(47,831,526)	-
Experience adjustment - Unfunded Gratuity Scheme	(1,112,933)	-
Tax effect of remeasurement (gain) / loss	14,193,893 (34,750,566)	
Total comprehensive income for the year	589,127,654	331,144,790

MEMBER

CHAIRMAN

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY STATEMENT OF CASH FLOWS FOR THE YEAR ENDED JUNE 30, 2023

	2023	2022
ARTICLU ARS		
PARTICULARS	Rupees	Rupees
CASH FLOW FROM OPERATING ACTIVITIES		
Surplus for the year before tax	1,182,173,008	391,228,616
Adjustments for:		
- Provision for gratuity and earned leaves	333,524,256	172,686,824
- Depreciation and amortization	73,585,015	60,310,948
- Finance cost	3,277,863	4,253,755
- Mark up income	(266,443,999)	(102,438,647
- Gain on sale of fixed assets	(1,376,220)	(3,659,041
	142,566,915	131,153,839
Vorking capital changes:		
Increase) in advances to employees	(128,341,368)	(165,553,443
		50 000 050
Decrease / (Increase) in advances, deposits and other receivables	106,969,827	53,039,959
Decrease / (Increase) in tax refund due from government	(146,462,990)	(1,169,799
ncrease in accrued and other liabilities	(71,584,179)	(232,681,723
김 아들은 것에서 많은 것이 같아요? 그는 것이 같아요?	(239,418,710)	(346,365,006
Net cash generated from operations	1,085,321,213	176,017,449
ayments made:		
arned leaves and gratuity fund	(110,258,343)	(36,003,878
Aarkup on long term loan	(3,277,863)	(4,253,755
ncome taxes	(186,827,835)	(159,845,834
양공 승규 편집 성격 안을 얻는 것 같아. 것이 없는 것이 없는	(300,364,041)	(200,103,467
let cash generated from operating activities	784,957,172	(24,086,018
CASH FLOW FROM INVESTING ACTIVITIES		
Capital expenditure during the year	(128,549,688)	(21,547,206
Cash received against sale of fixed assets	11,688,776	7,656,490
Markup received during the year	266,443,999	102,438,650
Net cash generated from investing activities	149,583,087	88,547,934
CASH FLOW FROM FINANCING ACTIVITIES		
Repayment of loans	(750,594)	(750,594
Amount paid to Federal Consolidation Fund	(561,829,176)	(230,685,000
Vet cash (used in) financing activities	(562,579,770)	(231,435,594
Net cash & cash equivalents during the year	371,960,489	(166,973,678
Cash and cash equivalents at beginning of the year	244,171,459	411,145,137
Cash and cash equivalents at end of the year	616,131,948	244,171,459

MEMBER

CHAIRMAN

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY	STATEMENT OF CHANGES IN FUNDS	FOR THE YEAR ENDED JUNE 30, 2023
NATION	STATEN	FOR TH

	Capital contribution by Government of Pakistan	Building Reserve Fund	Accumulated Surplus	Total
PARTICULARS	Note	Rupees	Se se	
Balance as at July 01, 2021	131,286,090	1,000,000,000	•	1,131,286,090
· Total comprehensive income for the year			331,144,790	331,144;790
Allocated to Federal Consolidation Fund			(331,144,790)	(331,144,790)
Balance as at June 30, 2022	131,286,090	1,000,000,000	'	1,131,286,090
Total comprehensive income for the year			589,127,654	589,127,654
Allocated to Federal Consolidation Fund	14 -		(589,127,654)	(589,127,654)
Balance as at June 30, 2023	131,286,090	1,000,000,000		1,131,286,090
The annexed notes 1 to 31 form an integral part of these financial statements.	ents.			5

C MEMBER

CHAIRMAN

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NATIONAL ELECTRIC POWER REGULATORY AUTHORITY NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2023

1 NATURE AND STATUS OF OPERATIONS

National Electric Power Regulatory Authority (the Authority) was established as a body corporate under Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 for the regulation of power sector in the Country. The Authority operates through Head Office located in NEPRA Tower, Attaturk Avenue (East), Sector G-5/1, Islamabad and ten provincial and regional offices across Pakistan.

2 STATEMENT OF COMPLIANCE

Although, the Authority is not required to comply with the requirements of IFRS, nevertheless, to follow the best practices, the Authority has adopted most of the approved accounting standards as applicable in Pakistan as framework for preparation of financial statements. These financial statements have been prepared in accordance with the approved accounting standards as applicable in Pakistan. Approved accounting standards comprise of such International Financial Reporting Standards (IFRS) issued by the International Accounting Standard Board as adopted by the Institute of Chartered Accountants of Pakistan.

2.1 Basis of preparation

These financial statements have been prepared under historical cost convention except for certain financial instruments which are measured at fair value and employee retirement benefits including staff compensated absences which are measured at their present values as determined under the provisions of IAS-19, "Employee Benefits".

2.2 Functional and presentation currency

These financial statements are presented in Pakistani Rupees, which is the Authority's functional and presentation currency. Amounts presented in Pakistani Rupees have been rounded off to the nearest rupee, unless otherwise indicated.

3 SIGNIFICANT ACCOUNTING POLICIES

3.1 Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses. Cost comprises purchase price and other directly attributable costs. Capital work-in-progress is stated at cost less impairment, if any. Depreciation is charged on straight line method to write off the depreciable amount of each asset over its estimated useful life. Rates are specified in note 4 to the financial statements. Depreciation on additions is charged from the day on which the asset is put to use and on disposals up to the date of disposal. Normal repairs and maintenance are charged to income and expenditure account as and when incurred, whereas major improvements and modifications are capitalized. Gains and losses on disposal of property, plant and equipment are taken to the income and expenditure account.

The Authority reviews the useful lives and residual values of property plant and equipment on a regular basis. ∇V

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2023

3.2 Intangible assets

Intangible assets are stated at cost less accumulated amortization and impairment except for intangible assets under development which are stated at cost less impairment, if any. Amortization on intangible assets having finite useful life is calculated on straight-line basis at rates specified in note 5 to the financial statements.

3.3 Loans and advances

Loans and advances are classified as long term and / or short term based on the repayment terms and / or recoverability period. These are measured at cost less any provision for doubtful recoverables.

3.4 Investments - Held to maturity investments

The Authority classifies financial assets as held to maturity when it has positive intent and ability to hold the investments to maturity. Held-to-maturity financial assets are recognized initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest rate method less any impairment losses.

3.5 Staff benefits

(i) Defined contribution plan - on retirement

The Authority operates a contributory provident fund in which equal contributions are made by eligible employees and the Authority. The contributions are made at the rate of 5% or 10% (at the option of each employee) of basic salary plus utilities allowance. The Authority's contribution is charged to income and expenditure account currently.

(ii) Earned leaves

The Authority has a policy to provide for encashable leaves to its eligible employees in accordance with respective entitlement on cessation of service or on request of employee(s) during the service period. Related expected cost has been included in the financial statements.

(iii) Defined benefit plan - on retirement

The Authority operates funded and unfunded gratuity schemes in respect of all eligible employees. Provision is made annually for funded and unfunded gratuity schemes to cover the Authority's obligations by way of charge to the income and expenditure account.

3.6 Revenue recognition

License fee is recognized on receipt basis. Interest income on investments / deposits is recognized on a time proportion basis. Income from generation and transmission companies is recognized when received whereas, the income from distribution companies is recognized when units sold are confirmed by the distribution companies. \mathbb{N}^{0}

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2023

3.7 Foreign currency transactions

Transactions in foreign currency are accounted for at the exchange rates prevailing on the date of transactions. All monetary assets and liabilities denominated in foreign currencies at the year end are translated at exchange rates prevailing at the reporting date. Non monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Exchange differences are included in income and expenditure account.

3.8 Taxation

(i) Current

Provision for current taxation is based on taxable income at the current rate of tax, after taking into account the applicable tax credits, rebates and exemptions available, if any, and any adjustments to the tax payable in respect of previous years.

(ii) Deferred

Deferred tax is accounted for using the balance sheet liability method in respect of all taxable temporary differences arising from differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in computation of taxable profit.

Deferred tax liabilities are recognized for all taxable temporary differences and deferred tax assets are recognized to the extent it is probable that future taxable profits will be available against which the deductible temporary differences, unused tax losses and tax credits can be utilized.

Deferred tax is calculated at the rates that are expected to apply to the period when the differences reverse, based on the tax rates that have been enacted or substantially enacted by the date of issue of financial statements.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets and they relate to income taxes levied by the same tax authority.

3.9 Receivables

Receivables are initially recognized at fair value and subsequently stated at amortized cost. Known impaired receivables are written off while receivables considered doubtful of recovery are fully provided for.

3.10 Trade and other payables

Trade and other payables are initially recognized at fair value and subsequently stated at amortized cost.

3.11 Cash and cash equivalents

Cash and cash equivalents comprise of cash in hand and bank balances and are stated at cost which approximates to their fair value. M^0 NATIONAL ELECTRIC POWER REGULATORY AUTHORITY NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2023

3.12 Interest bearing borrowing

Interest bearing borrowings are recognized initially at cost being the fair value of consideration received less attributable transaction costs. Subsequent to initial recognition, interest bearing borrowing are stated at original cost less subsequent repayments. Interest expense for the current year is included in income and expenditure account.

3.13 Provisions

A provision is recognized in the statement of financial position when the Authority has a legal or constructive obligation as a result of a past event and it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate of the same can be made. Provisions are determined by discounting the expected future cash flows at a pre tax discount rate that reflects current market assessment of time value of money and risk specific to the liability. The unwinding of discount is recognized as finance cost.

3.14 Impairment

The carrying amounts of the Authority's assets are reviewed at each reporting date to determine whether there is any indication of impairment loss. An impairment loss is recognized for the amount by which the asset's fair value less cost to sell and value in use. An impairment loss or reversal of impairment loss is recognized in the statement of comprehensive income.

3.15 Off-setting of financial assets and liabilities

A financial asset and a financial liability is set off and the net amount is reported in the financial statements if the Authority has a legally enforceable right to set off the recognized amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

3.16 Financial Instruments

Financial assets and financial liabilities are recognized when the Authority becomes a party to the contractual provisions of the instruments. These are initially measured at cost, which is the fair value of the consideration given or received. These financial assets and liabilities are subsequently measured at fair value and amortized cost as the case may be. The Authority derecognizes financial assets and liabilities when it ceases to be a party to such contractual provisions of the instruments.

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NATIONAL ELECTRIC POWER REGULATORY AUTHORITY	NOTES TO THE FINANCIAL STATEMENTS	FOR THE YEAR ENDED JUNE 30, 2023

4 PROPERTY, PLANT & EQUIPMENT

		C O S T		6707			DEPRECIATION	LION		W.D.V.
PARTICULARS	AS AT			AS AT		AS AT		ACCUMULATED	AS AT	AS AT
	JULY 01, 2022	ADDITIONS	(DELETION)	JUNE 30, 2023	RATE	JULY 01, 2022	FOR THE YEAR	FOR THE YEAR DEPRECIATION OF DISPOSAL	JUNE 30, 2023	JUNE 30, 2023
easehold Land	16,555,500			16,555,500	1%	2,625,072	163,900		2,788,972	13,766,528
Office Building	603,652,217	•		603,652,217 3%-20%	3%-20%	225,346,621	15,254,922		240,601,543	363,050,674
Machinery & Equipment	206,303,196	245,700		206,548,896	10%	173,233,991	20,805,033	,	194,039,024	12,509,872
Office Equipment	26,185,950	688,000		26,873,950	20%	17,230,495	2,976,577	•	20,207,072	6,666,878
Computer & Accessories	68,918,024	1,815,675		70,733,699	33%	49,380,581	8,708,792	,	58,089,373	12,644,326
Furniture & Fixtures	24,620,814	2,546,086		27,166,900	20%	13,914,864	3,527,909		17,442,773	9,724,127
Vehicles	91,063,453	122,854,361	(19,831,161)	194,086,653	20%	70,377,864	22,046,474	(9,518,605)	82,905,733	111,180,920
Others	3,500,300			3,500,300	20%	3,492,875	2,896		3,495,771	4,529
DTAL 2023 (Rs.)	1,040,799,454	128,149,822	(19,831,161)	(19,831,161) 1,149,118,115		555,602,363	73,486,503	(9,518,605)	619,570,261	529,547,852
				2022					•	
		C 0 S 1	ST				DEPRECIATION	TION		W.D.V.

		CO	COST				DEPRECIATION	NOI.		W.D.V.	
PARTICULARS	AS AT		(DELETION)	AS AT	DATE	AS AT	EOD THE VEAD	DEPRECIATION	AS AT	AS AT	
	JULY 01, 2021	CNICIIIODA		JUNE 30, 2022		JULY 01, 2021		OF DISPOSAL	JUNE 30, 2022	JUNE 30, 2022	
Leasehold Land	16,555,500	•	•	16,555,500	1%	2,461,179	163,893	•	2,625,072	13,930,428	
Office Building	603,652,217	1		603,652,217 3%-20%	3%-20%	209,470,923	15,875,698	•	225,346,621	378,305,596	
Machinery & Equipment	206,142,275	160,921	•	206,303,196	10%	152,603,671	20,630,320		173,233,991	33,069,205	
Office Equipment	22,142,855	4,043,095	•	26,185,950	20%	14,320,250	2,910,245	•	17,230,495	8,955,455	
Computer & Accessories	55,328,813	13,589,211		68,918,024	33%	41,599,466	7,781,115		49,380,581	19,537,443	
Furniture & Fixtures	20,866,835	3,753,979		24,620,814	20%	10,777,338	3,137,526	,	13,914,864	10,705,950	
Vehicles	124,631,106		(33,567,653)	91,063,453	20%	90,191,936	9,756,132	(29,570,204)	70,377,864	20,685,589	
Others	3,500,300			3,500,300	20%	3,471,553	21,322		3,492,875	7,425	
TOTAL 2022 (Rs.)	1,052,819,901	21,547,206		(33,567,653) 1,040,799,454		524,896,316	60,276,251	(29,570,204)	555,602,363	485,197,089	
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4.1 In respect of building, different rates are being used for different components / elements of building such as furnishing, consultancy fee and etc.

NOTES	NAL ELECTRIC POWER REGULATORY AUTHORITY TO THE FINANCIAL STATEMENTS HE YEAR ENDED JUNE 30, 2023	Note	2023 Rupees	2022 Rupees
5	INTANGIBLE ASSETS - Computer software			
	Cost			
	Opening balance - cost		21,733,961	21,733,961
	Additions during the year		399,866	
	Closing balance - cost		22,133,827	21,733,961
	Amortization			
	Opening balance -		21,697,736	14,537,483
	Charged during the year		98,512	7,160,253
	Closing balance		21,796,248	21,697,736
	Carrying amount		337,579	36,225
	Amortization rate	_	33%	33%
6	ADVANCES TO EMPLOYEES			
	Opening balance		868,405,555	702,852,112
	Paid during the year	6.1	215,577,690	249,887,000
	Recovered during the year		(87,236,322)	(84,333,557)
			996,746,923	868,405,555
	Current portion		(67,225,727)	(48,944,557)
			929,521,196	819,460,998
6.1	These represent advances given to the employ land/house. These are interest free and are give advances given for land/house are recoverable du benefits in accordance with approved policies.	n for a peri	iod of more than or	ne year. Further,

7 FEE RECEIVABLE

Fee receivable - considered good		13,511,727	37,239,688
Fee receivable - not considered good	7.1	185,669,949	161,941,988
		199,181,676	199,181,676
Provision for recievable-not considered good		(185,669,949)	(161,941,988)
		13,511,727	37,239,688

7.1 Rs. 185.67 million (2022: Rs. 161.94 million) is outstanding for a significant period of time. Keeping in view the relevant fee rules and regulations, the provision for recievables in respect of not considered good is being provided against fee income recognised on accrual basis during the previous years.

8 ADVANCES, DEPOSITS, PREPAYMENTS AND OTHER RECEIVABLES

		040
	38,083,324	121,325,190
Other receivables	3,227,956	3,227,956
Advances against medical bills	1,838,260	2,741,198
Accrued interest	10,966,099	5,618,101
Advances to suppliers	8,411,896	92,544,863
Prepaid rent	4,515,947	7,269,423
Security deposits	2,148,388	2,148,388
Advances to staff	6,974,778	7,775,261

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

NOTES TO THE FINANCIAL STATEMENTS
2023
2022

FOR THE YEAR ENDED JUNE 30, 2023
Note
Rupees
Rupees

8.1
All of the above are unsecured but are considered good.
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9 TAX DUE FROM GOVERNMENT

Opening balance	9.1	486,887,421	485,717,622
Advance tax deducted / paid during the year		307,478,623	161,015,633
Tax adjusted against liability of previous years		(161,015,633)	(159,845,834)
영양 집 관생 귀엽을 가로 벗는 옷을 물 줄이 가 듣는		633,350,411	486,887,421

9.1 It includes Rs. 290 million paid for Tax Years 2003 to 2007. The tax authorities issued notices to the Authority for filing of return of total income for the Tax Years 2003 to 2007. The management of the Authority communicated its legal stance through correspondence with the tax authorities. However, to comply with the requirements of statutory notices, returns for the aforesaid Tax Years were filed claiming the net income of the Authority being exempt from tax. However, the tax authorities amended the assessments of all the aforesaid Tax Years by rejecting the stance taken by the Authority and raised a net tax demand of Rs. 290 million. The Commissioner Inland Revenue (Appeals) also upheld these amendments. The appeals filed with Appellate Tribunal Inland Revenue against the orders of Commissioner Inland Revenue (Appeals) were also rejected by the Appellate Tribunal Inland Revenue by placing reliance on the judgment of the High Court in the matter of Pakistan Telecommunication Authority. Whereas amendment for the Tax Year 2003 were annulled by the Appellate Tribunal Inland Revenue on legal grounds. The Authority filed references before the High Court. The Islamabad High Court in its decision dated January 14, 2019 declared that the Authority is not exempt from tax. Meanwhile, the Court has given the ruling that the provisions of Section 49(4) of the Income Tax Ordinance, 2001 could not be given retrospective effect. In light of the above decision, the Authority is subject to tax w.e.f. Tax Year 2007.

10 Deferred tax (asset) / liability

	Opening deferred tax (asset) / liability		(70,361,761)	27,136,948
	Charged to income & expenditure account		(15,946,645)	(97,498,709)
	Credit recognised in other comprehensive income		(14,193,893)	-
	Closing deferred tax liability / (asset)	=	(100,502,299)	(70,361,761)
10.1	Deferred tax (asset) / liability arising due to:			
	Accelarated depreciation		39,324,746	39,539,972
	Gratuity provision - unfunded		(994,354)	(1,148,022)
	Leave encashment		(70,794,513)	(61,790,534)
	Credit recognised in other comprehensive income		(14,193,893)	
	Provision for doubtful receivables		(53,844,285)	(46,963,177)
		=	(100,502,299)	(70,361,761)
11	CASH AND BANK BALANCES			
	Cash in hand		-	-
	Cash at bank:		· ·	
	Saving accounts - functional currency	11.1	616,131,948	244,171,459
	성 전 경계에서 집중한 것이라. 것이 같다.		616,131,948	244,171,459
				N

11.1 These carry markup ranging from 12.5% to 15% (2022: 5.5% to 12.5%) per annum.

	2023	2022	
Note	Rupees	Rupees	
	36,588,636	30,427,529	
12.1	288,090,445	49,386,218	
12.2	244,119,011	213,070,807	
	814,399	980,781	
	2,707,130	1,151,315	
	1,011,821	21,509,772	
	6,074,064	6,074,064	
	46,858,709	105,495,477	
	626,264,215	428,095,963	
	12.1	Note Rupees 36,588,636 12.1 12.1 288,090,445 12.2 244,119,011 814,399 2,707,130 1,011,821 6,074,064 46,858,709 1000000000000000000000000000000000000	Note Rupees Rupees 36,588,636 30,427,529 12.1 288,090,445 49,386,218 12.2 244,119,011 213,070,807 814,399 980,781 2,707,130 1,011,821 21,509,772 6,074,064 6,074,064 46,858,709 105,495,477

12.1 Payable to gratuity fund

The management has recognized the gratuity charge & liability for the current year based on the Actuarial Valuation Report for its Gratuity Fund on June 30, 2023. Provision has been made under the light of the reports of the actuary. Details as enumerated below;

12.1.1 Changes in net liability

Opening balance		49,386,218	(1,226,170)
Charge during the year	12.1.5	240,258,919	50,612,388
Other comprehensive income		47,831,526	-
Payments made during the year		(49,386,218)	-
Closing balance	12.1.2	288,090,445	49,386,218
2.1.2 Reconciliation of amounts recognized as liab	bility		
Present value of defined obligations	12.1.3	927,936,208	577,907,476
Fair value of plan assets	12.1.4	(639,845,762)	(528,521,258)
		288,090,446	49,386,218
Present value of defined obligations at start o	of the year	577,907,477	527,295,089
Current service cost	of the year		
Past Service Cost		67,529,473 170,260,135	50,734,088
Interest cost		55,586,199	(121,700)
Benefit paid		(44,090,974)	(121,700)
Experience adjustment		100,743,898	
Obligation at the end of the year	_	927,936,208	577,907,477
2.1.4 Movement in fair value of plan assets			
Fair value of plan assets at start of the year		528,521,258	528,521,258
Contribution during the year		49,386,218	_
Expected return on plan assets		53,116,888	
Benefit paid		(44,090,974)	-
Experience adjustment		52,912,372	-

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY NOTES TO THE FINANCIAL STATEMENTS		2023	2022
	Note	Rupees	Rupees
12.1.5 Charge during the year			
Transitional liability recognized during the year:			
Current service cost		67,529,473	50,734,088
Past Service Cost		170,260,135	
Interest cost		55,586,199	(121,700)
Expected return on plan assets		(53,116,888)	
	_	240,258,919	50,612,388
12.1.6 Remeasurement of Net Defined Benefit Liability		•	
Actuarial (Gains)/Losses due to experience adjustment	s	100,743,898	
Return on Plan Assets		(52,912,372)	
		47,831,526	

Discount rate16.25%10.00%Expected rate of salary growth16.25%10.00%Mortality rateSLIC-2001-2005SLIC-2001-2005Withdrawal factorLowLow

12.1.8 Sensitivity analysis

Average duration of defined benefit obligation

The calculation of defined benefit obligation is sensitive to the assumptions set out above. The following table summarises how the impact on the defined benefit obligation at the end of the reporting period would have increased / (decreased) as a result of a change in the respective assumptions by one percent.

9 years

9 years

	Defined here	Ch L. K
	Defined bene	efit obligation
Effect in Rupees due to:	1 percent	1 percent increase
Discount rate	848,459,452	523,236,045
Salary increase rate	1,014,867,698	532,568,040
Changes in net liability - earned leaves		
Opening balance	213,070,807	121,469,953
Charge during the year	89,836,529	124,071,764
Payments made during the year	(58,788,325)	(32,470,910)
Closing balance	244,119,011	213,070,807
PROVISION FOR TAXATION		
Provision for Income Tax		
Opening balance	164,435,302	166,698,601
Charge during the year	411,295,523	157,582,535
Adjustment / payment during the year	(165,381,643)	(159,845,834)
Closing balance	410,349,182	164,435,302 000
	Discount rate Salary increase rate Changes in net liability - earned leaves Opening balance Charge during the year Payments made during the year Closing balance PROVISION FOR TAXATION Provision for Income Tax Opening balance Charge during the year Adjustment / payment during the year	Discount rate848,459,452Salary increase rate1,014,867,698Changes in net liability - earned leaves213,070,807Opening balance213,070,807Charge during the year89,836,529Payments made during the year(58,788,325)Closing balance244,119,011PROVISION FOR TAXATIONProvision for Income TaxOpening balance164,435,302Charge during the year411,295,523Adjustment / payment during the year(165,381,643)

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2023	Note	2023 Rupees	2022 Rupees
13.2 Provision for Super Tax			
Opening balance / perior year adjustment	13.2.1	(21,446,192)	-
Charge during the year	13.2.2	141,499,718	-
Adjustment / payment during the year		21,446,192	-
Closing balance		141,499,718	-

13.2.1 This tax was imposed by Government of Pakistan in 2022 on high earning entites under section (4C) @10% 2023 (2022: 4%) where entity income exceeds Rs. 500,000,000/-. The opening balance of rupees 21,446,192/- relates to prior year for which no provision was made last year.

13.2.2 This amount of rupees 141,063,117/- is the provision for super tax for the year 2023 (2022: rupees 21,446,192/-) under section 4c

14 PAYABLE TO FEDERAL CONSOLIDATED FUND

선생님은 말을 알려서 것 같아. 말 것 같아. 말 것 같아.		(589,127,654)	(561,829,176)
Less: Paid during the year	14.1	561,829,176	230,685,000
Add: Total comprehensive income for the year		(589,127,654)	(331,144,790)
Opening balance		(561,829,176)	(461,369,386)

14.1 According to NEPRA ACT, 1997 (Act No. XL of 1997), any surplus, after payment of taxes, shall be remitted to Federal Consolidated Fund. So far, the Authority has paid Rs. 2,419,495,641/- (2022: Rs. 1,857,666,465/-) to the FCF since inception.

15 LONG TERM LOAN

Non-current portion of long term loan	22,142,672	23,268,565
Current portion of long term loan	(1,125,893)	(750,594)
Loan from GoP through IDA	23,268,565	24,019,159

- 15.1 The Authority entered into a Subsidiary Loan Agreement ("Agreement") with Government of Pakistan (GoP) in respect of loan from International Development Association (IDA). Under the Agreement, the Authority got a loan of US\$ 1 million (equivalent to PKRs. 58 million) from GoP for capacity building project focused on both the employees and the institutional development.
- 15.2 As per the Agreement, loan from GoP is repayable from September 15, 2014 to March 15, 2039 semiannually in PKRs. The loan carries interest at 14% per annum. However, the Authority has requested GoP for premature repayment / settlement of loan obligation and is waiting for the outcome / approval from GoP.

16 DEFERRED LIABILITIES

Provision for gratuity - unfunded	16.1	6,416,639	3,958,698
		6,416,639	3,958,698 500

/

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY NOTES TO THE FINANCIAL STATEMENTS		2023	2022
FOR THE YEAR ENDED JUNE 30, 2023	Note	Rupees	Rupees
16.1 Changes in net liability - gratuity unfunded			
Opening balance		3,958,698	8,262,824
Net charge during the year		3,428,808	(771,158)
Other comprehensive income		1,112,933	-
Payments during the year		(2,083,800)	(3,532,968)
Closing balance		6,416,639	3,958,698

CAPITAL CONTRIBUTION BY GOVERNMENT OF PAKISTAN 17

This represents grant received from Federal Government on non-repayment basis for establishment of the Authority.

18 BUILDING RESERVE

This represents unfunded reserve created in prior years pursuant to the approval of the Authority for the purpose of the NEPRA building.

19 CONTINGENCIES AND COMMITMENTS

19.1 Contingencies

- (i) Notice under Rule 44(4) had been issued for the tax year 2017,2018,2019,2020,2021 & compliance against the said notices has been made accordingly. However, no order has been passed for any of the aforesaid years and no provision in this regard has been booked in these financial statements as per the advice of the tax advisor of the Authority.
- (ii) The Authority filed an application for a refund of Rs. 21,751,520/- for tax year 2017. The application was subsequently turned into a rectification of mistake under section 221(2). However, the department's final decision is still awaited and no provision is to be made in this regard.
- (iii) The Authority imposes penalties for various offenses on licensees from time to time. However, the penalties so charged have not been accounted for in these financial statements due to pending litigation and/or dispute with the licensees. The amount(s) of such penalties shall be recognized as income as when received.

19.2 Commitments

There is no material commitments as at June 30, 2023 (2022 : Nil).

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2023		2023 Rupees	2022 Rupees
20 FEE INCOME			
License fee Application and modification fee		2,776,070,536 343,246,317	1,726,068,108 290,697,998
Tariff petition and others		74,751,458	74,326,279
Gross fee income	-	3,194,068,311	2,091,092,385
Less: Fee and levies	20.1	(95,822,049)	(62,732,772)
Net fee income	-	3,098,246,262	2,028,359,613

20.1 This represents an amount payable to Competitive Commission of Pakistan under the CCP Act whereby five Authorities are required to pay an amount equal to 3% of their income collected to CCP on quarterly basis every year. The above provision has been calcualted on the basis of income booked during the year, whereas, actual payment is made on income as and when collected. So far, the Authority has paid Rs. 383,835,000 (2022: Rs. 362,326,000) since inception.

21 ADMINISTRATIVE EXPENSES

	Salaries, benefits and allowances		1,860,779,531	1,320,404,033
	Repairs and maintenance		25,541,210	30,851,316
	Travelling expenses		29,920,490	18,784,397
	Communication		11,297,343	11,909,611
	Utilities		33,161,630	27,639,087
	Rent expense		19,668,144	10,160,123
	Printing and stationery		17,764,816	12,370,445
	Training and development		1,579,559	25,307,329
	Hearings and events		916,577	928,448
	Advertisement		20,233,685	24,180,275
	Insurance expense		6,971,683	6,788,531
	Legal and professional		23,516,021	8,320,350
	Audit fee	21.1	342,000	330,600
	Vehicle running cost		19,089,815	11,515,100
	Depreciation and amortization		73,585,016	60,310,948
	Provision for bad debts		23,727,961	161,941,988
	Staff uniform		780,297	827,971
	Entertainment expense		11,739,832	6,411,478
		=	2,180,615,610	1,738,982,030
21.1	Audit fee			
	Professional fee		342,000	285,000
	Sales tax on services			45,600
		=	342,000	330,600
22	FINANCE COST			
	Bank charges		107,838	80,431
	Markup on long term loan		3,170,025	4,173,324
			3,277,863	4,253,755
NATIONAL ELECTRIC POWER REGULATORY AUTHORITY NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2023

23 OTHER INCOME

Markup on bank accounts		266,443,999	102,438,647
Gain on sale of fixed assets	23.1	1,376,220	3,659,041
Miscellaneous Income			7,100
		267,820,219	106,104,788

2023

Rupees

2022

Rupees

23.1 Gain on sale of fixed assets

11,688,776	7,656,490
19,831,161	33,567,653
(9,518,605)	(29,570,204)
10,312,556	3,997,449
1,376,220	3,659,041
	19,831,161 (9,518,605) 10,312,556

23.2 These represent vehicles sold to employees of the Authority under its approved policy.

24 TAXATION

Current tax			
- for the year		410,349,182	164,435,302
-prior years		946,341	(6,852,767)
		411,295,523	157,582,535
Super tax			
- for the year	24.1	141,499,718	
-prior years		21,446,192	-
		162,945,910	-
Deferred tax			
-for the year		(15,946,645)	(97,498,709)
-due to change in tax rate		-	-
		(15,946,645)	(97,498,709)
		558,294,788	60,083,826

24.1 This tax was imposed by Government of Pakistan in 2022 on high earning entites under section (4C) @10% 2023 (2022: 4%) where entity income exceeds Rs. 500,000,000/-

24.2 Relationship between accounting profit and tax expense

Accounting profit before tax	1,182,173,008	391,228,616
Tax rate	29%	29%
Tax on accounting profit	342,830,172	113,456,299
Tax effect of amount not admissible for tax purposes	118,004,552	65,932,576
Tax effect of depreciation & other admissible for tax	(50,485,542)	(25,751,382)
Tax effect of other items fall under final tax regime	-	10,797,809
Prior years	946,341	(6,852,767)
Super tax	141,499,718	
Super tax Opening Adjustments	21,446,192	
Temporary difference	(15,946,645)	(97,498,709)
Rate change	-	-
	558,294,788	60,083,826

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY		
NOTES TO THE FINANCIAL STATEMENTS	2023	2022
FOR THE YEAR ENDED JUNE 30, 2023	Rupees	Rupees

25 FINANCIAL INSTRUMENTS

The Authority has exposure to the following risks from its use of financial instruments:

- * Credit risk;
- * Liquidity risk; and
- * Market risk.

The Members of the Authority have overall responsibility for the establishment and oversight of the Authority's risk management framework.

The Authority's risk management policies are established to identify and analyze the risks faced by it, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Authority's activities. the Authority, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

Members oversee how management monitors compliance with the Authority's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Authority.

25.1 Credit risk

Credit risk is the risk of financial loss to the Authority if a counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Authority's receivables from financial institutions.

The Authority's exposure to credit risk is influenced mainly by the individual characteristics of each counter party including the default risk of the industry and country in which the counter party works. The Authority regularly monitors the status of receivables. Cash at bank is placed with financial institutions with high credit ratings. the Authority assesses the credit quality of the counter parties as satisfactory.

The Authority establishes an allowance for impairment that represents its estimate of incurred losses in respect of receivables. The maximum exposure to credit risk at the reporting date is as follows:

Advances to employees	996,746,923	868,405,555
Deposits and other receivables	5,376,344	5,376,344
Fee receivable	13,511,727	37,239,688
Bank balances	616,131,948	244,171,459
	1.631.766.942	1.155.193.046

25.2 Liquidity risk

Liquidity risk is the risk that the Authority will not be able to meet its financial obligations as they fall due. The Authority's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Authority's reputation.

Tor the tern choco sone so, 2025	nupees	nupees
FOR THE YEAR ENDED JUNE 30, 2023	Rupees	Rupees
NOTES TO THE FINANCIAL STATEMENTS	2023	2022
NATIONAL ELECTRIC POWER REGULATORY AUTHORITY		

The Authority ensures that it has sufficient cash on demand to meet expected cash outflows during its operating cycle. This excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. The Authority monitors rolling forecasts of cash and cash equivalents on the basis of budgets.

The table below analyses the Authority's financial liabilities into relevant maturity groupings based on the remaining period at the year end date to the contractual maturity dates. The amounts disclosed in the table are the contractual undiscounted cash flows.

		2023 (Rupees)		
Carrying	Contractual	With in 1 year	1 to 5 year	Over 5 years
625,449,816	625,449,816	625,449,816	-	-
24,082,964	24,082,964	3,427,960	17,139,800	3,515,204
649,532,780	649,532,780	628,877,776	17,139,800	3,515,204
		2022 (Rupees)		
427,115,182	427,115,182	427,115,182	-	-
24,999,940	24,999,940	2,082,908	10,414,540	12,502,492
452,115,122	452,115,122	429,198,090	10,414,540	12,502,492
	625,449,816 24,082,964 649,532,780 427,115,182 24,999,940	625,449,816 625,449,816 24,082,964 24,082,964 649,532,780 649,532,780 427,115,182 427,115,182 24,999,940 24,999,940	Carrying Contractual With in 1 year 625,449,816 625,449,816 625,449,816 24,082,964 24,082,964 3,427,960 649,532,780 649,532,780 628,877,776 2022 (Rupees) 2022 (Rupees) 427,115,182 427,115,182 427,115,182 24,999,940 24,999,940 2,082,908	Carrying Contractual With in 1 year 1 to 5 year 625,449,816 625,449,816 625,449,816 - 24,082,964 24,082,964 3,427,960 17,139,800 649,532,780 649,532,780 628,877,776 17,139,800 2022 (Rupees) 2022 (Rupees) - - 427,115,182 427,115,182 - - 24,999,940 24,999,940 2,082,908 10,414,540

25.3 Market risk

Market risk is the risk of changes in market prices such as foreign exchange rates and interest rates. The objective of market risk management is to manage and control market risk exposures within acceptable parameters while optimizing the return.

a) Interest rate risk

Interest rate risk is the risk that value of financial instrument will fluctuate due to changes in market interest rates. At the reporting date, the interest rate profile is as follows:

Fixed rate instruments

Cash at bank	616,131,948	244,171,459
Long term loan	(23,268,565)	(24,019,159)
	592,863,383	220,152,300

The Authority does not account for any fixed rate financial assets and liabilities at fair value through Income and expenditure. Therefore, a change in interest rate at the reporting date would not affect Income and expenditure.

b) Currency risk

The Authority is not significantly exposed to currency risk.

25.4 Fund management

The Authority's fund management is primarily devised under Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 which requires the Authority to remit any surplus of receipts over expenditure in a year to Federal Consolidation Fund. The members of the XCP

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY			
NOTES TO THE FINANCIAL STATEMENTS	2023	2022	
FOR THE YEAR ENDED JUNE 30, 2023	Rupees	Rupees	

Authority monitor the movements in the Federal Consolidation Fund.

25.5 Fair value of financial instruments

The carrying value of financial assets and liabilities reflected in the financial statements approximate their fair values.

25.6 Determination of fair values

A number of the Authority's accounting policies and disclosures require the determination of fair value for both financial and non-financial assets and liabilities. Fair values have been determined for measurement and / or disclosure purposes based on following methods:

Non - derivative financial assets

The fair value of non-derivative financial assets is estimated as the present value of future cash flows, discounted at the market rate of interest at the reporting date. This fair value is determined for disclosure purposes.

Non-derivative financial liabilities

Fair value, which is determined for disclosure purposes, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the reporting date.

26 TRANSACTIONS WITH RELATED PARTIES

The Authority is a statutory body and is a public sector entity. It is a regulatory body of power sector entities and is getting license fee from other government owned power sector entities. Apart from that, it has obtained loan from Government of Pakistan. Except for being a regulatory body, there are no transactions with these related parties.

Apart from the aforesaid, the staff retirement funds also fall in the category of related parties and the transactions with such staff retirement funds are as follows:-

Other related party transactions		
Contribution made to Gratuity fund	-	- 1
Contribution made to Provident fund	46,261,217	32,263,806
Balances outstanding at the year end		
Payable to / (due from) Gratuity fund	288,090,445	49,386,218

27 REMUNERATION OF CHAIRMAN AND MEMBERS

The aggregate amounts charged in the financial statements in respect of remuneration including benefits applicable to the chairman and the members are given below:

Basic pay Allowances	39,654,797 23,689,050	22,177,703 13,179,051	
	63,343,847	35,356,754	
Number of Persons	5	4)\$Co

NATIONAL ELECTRIC POWER REGULATO NOTES TO THE FINANCIAL STATEMENTS		2023	2022
FOR THE YEAR ENDED JUNE 30, 2023		Rupees	Rupees
28 NUMBER OF EMPLOYEES			
Number of employees		454	454
Average number of emplo	oyees during the year	446	466

29 RE-ARRANGMENTS AND RE-CLASSIFICATION

The comparative figures have been re-arranged and / or re-classified, wherever necessary, for the purpose of better comparison. However, no such re-arrangements and / or re-classifications has been done in these financial statements.

30 DATE OF AUTHORIZATION

The financial statements were approved by the Authority in its meeting held on 20.09.2023

31 GENERAL

Figures have been rounded off to the nearest rupee.

MEMBER

CHAIRMAN

ANNEX-II

Name & Designation	Department	Telephone No.	Email
Chairman	Chairman	051-9220902	chairman@nepra.org.pk
Member	Licensing	051-9210209	maqsoodanwarkhan@hotmail.com
Member	Tariff and Finance	051-9206887	matharrana@hotmail.com
Member	Technical	051-9206797	rafique.ahmed@nepra.org.pk
Member	Law	051-9207300	amina.ahmed@nepra.org.pk
Naveed Illahi Shaikh, Director General	CAD	051-9217673	naweedshaikh@nepra.org.pk
Imtiaz Hussain Baloch, Director General	Licensing	051-9206527	ihussain@nepra.org.pk
Sajid Akram, Director General	NEPRA Appellate Tribunal Cell	051-9203163	sajid.akram@nepra,org.pk
Anwar Malik, Director General	M&E	051-9205224	anwar.malik@nepra.org.pk
Mazhar Iqbal Ranjha, Addl. Director General	Registrar	051-9206500	miranjha@nepra.org.pk
Iftikhar Ali Khan, Addl. Director General	HR & Admin	051-9205052	iftikhar@nepra.org.pk
Jamil Akhtar, Addl. Director General	Finance	051-9210947	Jamil.akhtar@nepra.org.pk
Muhammad Yousaf, Addl. Director General	Tariff	051-9205294	m.yousaf@nepra.org.pk
Kazi Imran, Senior Advisor	M&E	051-9207754	kazi.imran@nepra.org.pk
Muhammad Ramzan, Director	C&I	051-9244722	ramzan@nepra.org.pk
Shahzad Anwar, Director	Technical	051-9212478	shahzad.anwar@nepra.org.pk
Gul Hassan Bhutto, Consultant/Advisor	СТВСМ	051-9208045	bhutto.gulhassan@nepra.org.pk
Mudassar Naqvi, Legal Advisor	Legal	051-9203680	bmnaqvi@nepra.org.pk

Senior Management and Key Contacts

ANNEX-III

Addresses Of Nepra Regional Offices

Regional Office, Karachi	Regional Office, Lahore
7th Floor, Office No. 706, Balad Trade Centre, Alamgir Road, Bahadurabad, Bihar Muslim Housing Society, Karachi.	1st Floor, Link Arcade, 54 B, GECH Society, Phase 3, Link Road, Model Town, Lahore.
	Ph: 042-99333931
Ph: 021-34893001 cadkarachi@nepra.org.pk	cadlahore@nepra.org.pk
Regional Office, Peshawar	Regional Office, Quetta
6th Saddar Road, 2nd Floor Room No. 3 & 4, Tasneem Plaza, Peshawar Cantt, Peshawar.	Room No. 1, 2nd Floor, Rehman CentrE, 7-A, Opposite NADRA Office, Model Town, Hali Road, Quetta
Ph: 091-5271238-39	Ph: 081-2822035-36
cadpeshawar@nepra.org.pk	cadquetta@nepra.org.pk
Regional Office, Sukkur	Regional Office, Hyderabad
House No. C-7, Hamdard Housing Society, Airport Road, Sukkur	Dawood Centre, 2nd Floor, Room No. 10, Autobhan Road, Latifabad, Hyderabad.
Ph : 071-5804563	Ph: 022-3823322
cadsukkur@nepra.org.pk	cadhyderabad@nepra.org.pk
Regional Office, Gwadar	Regional Office, Faisalabad
GPA Complex, 1st Floor, Adjacent to NADRA Office, Abdul Majeed Gwadari Road, Gwadar.	1st floor, Plaza No. C-6B, Opposite National Bank, Col- lege Road, Kohinoor City, Faisalabad Ph : 041-8727800 cadfaisalabad@nepra.org.pk
Regional Office, Multan	Regional Office, Gujranwala
Office No 39, 1st Floor, Orient Mall, Khanewal Road, Near Chowk Kumharanwala, Multan.	Office # 87, Block M, Trust Plaza, Grand Trunk Road, Model Town, Gujranwala.
Ph: 061-6784537	Ph : 055-3822766
cadmultan@nepra.org.pk	cadgujranwala@nepra.org.pk

ANNEX-IV

Glossary of Acronyms used

	ASR	Aggregated Service Router
	BPC	Bulk Power Consumer
	CAD	Consumer Affairs Department
	CCI	Council of Common Interests
	CCTV	Closed Circuit Television
	CDA	Capital Development Authority
	CEO	Chief Executive Officer
	CIR	Committed Information Rate
	COD	Commercial Operation Date
	CPEC	China Pakistan Economic Corridor
	CPPA-G	Central Power Purchasing Agency Guarantee Limited
	DCRP	Distribution Code Review Panel
	DG	Distributed Generation
	DHCP	Dynamic Host Configuration Protocol
	DISCO	Distribution Company
	ECC	Economic Coordination Committee
	ERP	Enterprise Resource Planning
	FESCO	Faisalabad Electric Supply Company Limited
	GENCO	Public Sector Generation Company
	GEPCO	Gujranwala Electric Power Company Limited
	HESCO	Hyderabad Electric Supply Company Limited
	HVDC	High Voltage Direct Current
	IESCO	Islamabad Electric Supply Company Limited
	LESCO	Lahore Electric Supply Company Limited
	MEPCO	Multan Electric Power Company Limited
	MW	Megawatt
	MYT	Multi-Year Tariff
108	NPCC	National Power Control Centre
100		

NTDC	National Transmission and Despatch Company
PESCO	Peshawar Electric Supply Company Limited
PPP	Power Purchase Price
PSDR	Performance Standards (Distribution) Rules
PSGR	Performance Standards (Generation) Rules
PSTR	Performance Standards (Transmission) Rules
QESCO	Quetta Electric Supply Company Limited
RLNG	Re-Gasified Liquefied Natural Gas
SAIFI	System Average Interruption Frequency Index
SAIDI	System Average Interruption Duration Index
SEPCO	Sukkur Electric Power Company Limited
SCADA	Supervisory Control and Data Acquisition
SOP	Standard Operating Procedure
T&D	Transmission and Distribution
TESCO	Tribal Areas Electric Supply Company
USAID	United State Agency for International Development
UOSC	Use of System Charges
USOA	Uniform System of Accounts





NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

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