



# National Electric Power Regulatory Authority Islamic Republic of Pakistan

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**Registrar**

No. NEPRA/R/DG(Lic)/LAD-01/1004-24

January 19, 2024

**Chief Executive Officer**  
K Electric Limited (KEL)  
KE House, 39 B  
Main Sunset Boulevard, DHA  
Phase-II, Karachi

**Subject: DETERMINATION OF THE AUTHORITY IN THE MATTER OF DISTRIBUTION LICENCE OF K-ELECTRIC LIMITED (DISTRIBUTION LICENCE NO. DL/09/2024)**

*Reference: Your letter No. KE/RA&GR/NEPRA/2022/846 dated 01.12.2022*

The Determination of the Authority in the subject matter and the Distribution Licence (DL/09/2024) are attached herewith. Please note that the Determination of the Authority contains (22 pages) whereas the Distribution Licence consists of Face Sheet (single page), Articles of Distribution Licence (18 pages), Schedule I (4 pages) and Schedule II of Distribution Licence (3 pages).

2. Please quote above mentioned Distribution Licence No. for future correspondence.

Enclosure: As Above

(Engr. Mazhar Iqbal Ranjha)

**Copy to:**

1. Secretary, Power Division, Ministry of Energy, 'A' Block, Pak Secretariat, Islamabad
2. Secretary, Ministry of Planning & Development, Government of Pakistan, 'P' Block, Pak Secretariat, Islamabad
3. Secretary, Ministry of Finance, Government of Pakistan, 'Q' Block, Pak Secretariat, Islamabad
4. Secretary, Energy Department, Government of Punjab, EFU House, 8th Floor, 6-D Jail Road, Lahore
5. Secretary, Energy Department, Government of Sindh, State Life Building -3, Dr. Zia-ud-din Ahmed Road, Karachi
6. Secretary, Energy & Power Department, Government of Khyber Pakhtunkhwa, Block-A, 1<sup>st</sup> Floor, Abdul Wali Khan Multiplex, Civil Secretariat, Peshawar.
7. Secretary, Energy Department, Government of Balochistan, Block-1, Balochistan Civil Secretariat, Zarghoon Road, Quetta
8. Managing Director, National Transmission & Despatch Co. 414-WAPDA House, Shahrah-e-Quaid-e-Azam, Lahore
9. CEO, Central Power Purchasing Agency (Guarantee) Ltd, 73 East, A.K.Fazl-e-Haq Road, Blue Area, Islamabad
10. Managing Director, Private Power & Infrastructure Board (PPIB), Ground & 2nd Floors, Emigration Tower, Plot No. 10, Mauve Area, Sector G-8/1, Islamabad

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|--|--|
| 11. Chief Executive Officer<br>Peshawar Electric Supply Company<br>NTDC House, Shami Road, Peshawar              | 12. Chief Executive Officer<br>Gujranwala Electric Power Company (GEPCO)<br>565/A, Model Town, G.T Road, Gujranwala      |
| 13. Chief Executive Officer<br>Multan Electric Power Company (MEPCO)<br>NTDC Colony, Khanewal Road, Multan       | 14. Chief Executive Officer<br>Islamabad Electric Supply Company (IESCO)<br>Street 40, Sector G-7/4, Islamabad           |
| 15. Chief Executive Officer<br>Quetta Electric Supply Company (QESCO)<br>Zarghoon Road,<br>Quetta                | 16. Chief Executive Officer<br>Hyderabad Electric Supply Company<br>WAPDA Complex, Hussainabad,<br>Hyderabad             |
| 17. Chief Executive Officer<br>Tribal Areas Electricity Supply Company<br>213-NTDC House<br>Shami Road, Peshawar | 18. Chief Executive Officer<br>Faisalabad Electric Supply Company (FESCO)<br>Abdullahpur, Canal Bank Road,<br>Faisalabad |
| 19. Chief Executive Officer<br>Sukkur Electric Supply Company (SEPCO)<br>Old Thermal Power Station, Sukkur       | 20. Chief Executive Officer<br>Lahore Electric Supply Company<br>22-A, Queens Road, Lahore                               |

**National Electric Power Regulatory Authority**  
**(NEPRA)**

**Determination of the Authority**  
**in the Matter of the Application of K-Electric Limited for the**  
**grant of Distribution Licence**

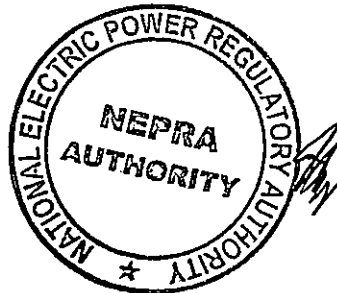
**January, 19<sup>th</sup> 2024**  
**Case No. LAD-01**

The Authority in terms of Section-20 and 21 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the "NEPRA Act") granted a Distribution Licence No. (09/DL/2003, dated July 21, 2003) to K-Electric Limited (KEL). The Authority at the time of the grant of said licence fixed the term of the same to twenty (20) years, which expired on July 20, 2023.

(2). In this regard, KEL in terms of Regulation-13 of the NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021 (the "Licensing Regulations"), submitted an application on December 01, 2022, for renewal/extension in the term of its Distribution Licence which envisaged wire/network and supply functions. The application was examined and found deficient on account of information/documents required under the Licensing Regulations. KEL was directed to provide the missing information/documents which it submitted on December 13, 2022.

(3). Further to the above, the Authority was already in the process of deciding the applications of XW-DISCO(s) that the said companies had submitted for the consideration of extension/renewal and the Authority decided to put the processing of the application of KEL on hold till the time applications/cases of XW-DISCO(s) are decided. The Authority decided the cases of XWDISCO(s) and determinations for the grant of fresh Distribution Licences were issued on April 06, 2023, and May 09, 2023.

(4). Accordingly, the Authority decided to proceed with the submitted application of KEL and published a notice in the press on May 06, 2023, in one (01) English i.e. Business Recorder and one (01) Urdu i.e. Dunya newspaper informing the general public, interested/affected persons/parties and other stakeholders about the application and for seeking their comments in the matter. Apart from the said, letters were also sent

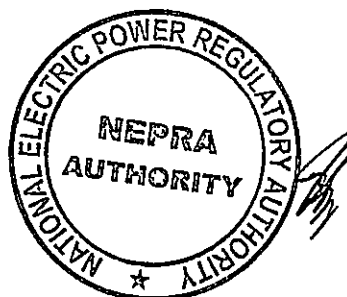


to different Govt. Ministries, organizations and their attached departments on May 10, 2023, for seeking their comments for the assistance of the Authority in the matter.

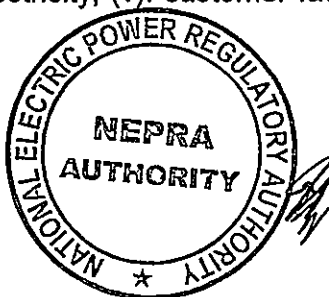
(5). In the meantime, KEL submitted a separate application for the consideration of the grant of licence for Supplier of Last Resort in terms of Section-23E of the NEPRA Act. In view of the said, the Authority considered that the submitted application for extension/renewal of the Distribution Licence covering both the wire and supply function was not maintainable. Therefore, the Authority decided to clarify this issue by publishing an addendum in (01) English dated July 19, 2023, and one (01) Urdu dated July 20, 2023 newspaper, clarifying that the submitted application will be processed/treated as a new application for the grant of Distribution Licence only.

(6). In response to the above, the Authority received comments from thirteen (13) stakeholders including (a). Landhi Association of Trade & Industry (LATI); (b). All City Tajir Ittehad Association (ACTIA); (c). Faisalabad Electric Supply Company Ltd. (FESCO); (d). Ministry of Energy Petroleum Division (MoEPtD); (e). Shaheen Industries (SI); (f). Karachi Electric Supply Company Labour Union (KESCLU); (g). Lasbela Industrial Estates Development Authority (LIEDA); (h) Association of Builders and Developers of Pakistan (ABAD); (i) Administration Union Committee No.12, Singo Lane/Syedabad District South Karachi (AUCSL); (j). Korangi Association of Trade & Industry (KATI); (k). Roshan Pakistan Karachi (RPK); (l). Pakistan Civic Society (PCS) and (m). District Municipal Corporation Malir (DMCM) etc. The salient points of the comments offered by the said stakeholders are summarized in the following paragraphs:-

- (a). LATI submitted that the company/KEL has invested an amount of PKR 474/- billion after its privatization. Further, the company has pledged an investment of an equal amount for the future which shows its commitment for providing better services to the consumer. In this regard, LATI supported the grant of a non-exclusive Distribution Licence to KEL which is in line with the proposed market structure;



- (b). ACTIA expressed that the city of Karachi and its adjoining area has a population of more than twenty million people. Therefore, the grant of an exclusive Distribution Licence will not be appropriate, instead, multiple licensees be considered. ACTIA suggested that the Distribution Licence should be granted to a minimum of twenty (20) different companies;
- (c). FESCO stated that the Authority may consider the request of KEL for renewal/extension/grant of Distribution Licence in terms of the provisions of the eligibility criteria including the framework of CTBCM;
- (d). MoEPtD remarked that it has no objection to renewal/extension/grant of Distribution Licence to KEL;
- (e). SI submitted that privatization is key for bringing efficiency in the power sector and we have a success story in the form of KEL which has made a huge investment after the privatization. SI appreciated the plan of KEL to lower electricity prices through investments in sustainable renewable energy sources and promote innovation and efficiency in the sector. SI expressed that if the rest of the country follows a similar suit, the circular debt will be reduced which will ultimately bring about relief for the national exchequer in terms of cash inflows and investments SI expressed that the grant of Distribution Licence to KEL is not only in the best interest of the industry of Karachi but also in the interest of other consumers;
- (f). KESCLU highlighted that KEL has failed to honour its commitments which it made at the time of privatization including (i). lowering the tariff; (ii). increase in generation capacity by installing new generation facilities; (iii). to reduce/eradicate load shedding/power breakdowns; (iv) stop pilferage of electricity; (v). customer facilitation; (vi) reduction

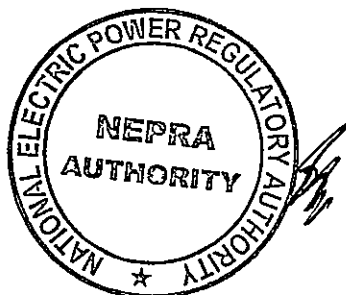


of complaints and improvement of distribution infrastructure etc. KESCLU stated that at the time of privatization, KEL had assured that it would not be getting any subsidy from the Government but, factually the same is being provided and now stands at PKR eighty (80) billion against the previous amount of PKR five (05) billion. In view of the said, KEL may not be granted a Distribution Licence;

- (g). LIEDA stated that it is providing distribution services in the Industrial Zone of Hub district Lasbela in the province of Balochistan. The Authority had granted a Distribution Licence to it which KEL has disputed and the same is now pending adjudication before the Appellate Tribunal of the NEPRA. Therefore, it is requested that the territory allowed to it in its Distribution Licence may not be made part of the service territory of KEL while considering the request of KEL;
- (h). ABAD was of the view that it is an important stakeholder in the matter and has learnt that KEL has applied for extension/renewal/grant of exclusive Distribution Licence. It is submitted that the same should not be granted to KEL due to its poor performance and instead, some other well-reputed and efficient Distribution Company may be allowed to operate in the city;
- (i). AUCSL stated that initially, the stakeholders had apprehensions about the performance of KEL but the company has taken various initiatives including the installation of Aerial Bundled Conductors-ABC(s) and investment in the related infrastructure. Due to the said, there is a reduction in theft of electricity and increase in recovery etc. Also, KEL has made the billing and complaint handling mechanism modernized by introducing IT for the facilitation of the consumers. Further, KEL has been facilitating the consumers





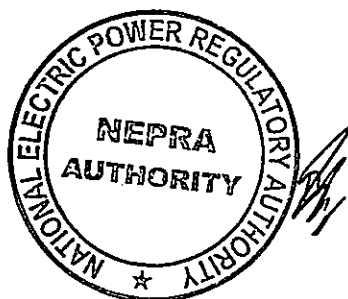


in payment of bills by allowing instalments etc. Accordingly, the Customer Service Support and complaint handling mechanism has shown improvement. In view of the said, AUCSL supports renewal/extension/grant of Distribution Licence to KEL;

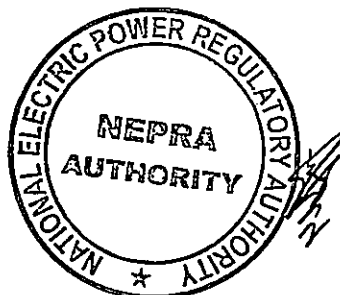
- (j). KATI expressed that the performance of KEL is better than other DISCO(s) in terms of reduction in T&D losses, recovery and improvement in network reliability therefore, the utility may be granted the Distribution Licence. KATI expressed that the grant of Licence to KEL will encourage investments in infrastructure, up-gradation, expansion and improvement of service quality etc. Besides supporting the grant of Distribution Licence to KEL, KATI requested the Authority to clarify (i). whether there will be multiple networks or otherwise? if yes, the same will create issues including over looping, inefficiency and reliability etc. Therefore, in order to avoid such situations, new network operators should only be allowed to operate in societies and industrial zones where they buy electricity from KEL or any other competitive supplier in bulk and distribute further; (ii). will KEL be allowed to surrender high-loss areas to become more efficient and serve the consumers at reduced rates? Also, KATI was of the view that the Wheeling Charges, if implemented, would depend on various factors including specific agreements, infrastructure cost, maintenance expenses and regulatory guidelines. Further, allowing the consumers to access any electricity supplier using the network of KEL would provide them with greater options and promote competition;

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*[Handwritten signature]*



- (k). RPK remarked that, after the privatization of the utility, there has been an increase in load shedding, pilferage/theft of electricity and complaints on bogus billing etc., therefore, further renewal/grant of Distribution Licence to KEL will not be in the interest of consumers;
- (l). PCS submitted that the citizens of Karachi experiencing issues of overbilling and load-shedding etc. The situation has adversely affected the industrial and business sector in Karachi and consequently, the export and trade activities have to bear irreparable losses in the shape of loss of foreign exchange earnings. The Authority should look into the commitments that KEL had made including lowering of tariff, increase in generation capacity, utilization of subsidy, reduction of load-shedding & complaints, establishment of labs for meters/reading, improvement in Transmission and distribution network and amount spent on Corporate Social Responsibility etc.;
- (m). DMCM remarked that the area of Malir is one of the poorest of the city of Karachi and most of the residents used to have illegal connections. KEL has invested in installing ABC cable to replace the open/bare conductor thus reducing the theft/pilferage of electricity. Further, in order to facilitate the defaulters, KEL has arranged many recovery campaigns offering flexible payment plans. Further, KEL through its various initiatives has enhanced the connection between KEL & its customers. The campaigns demonstrate the importance of safety and power theft hazards especially in wet weather/monsoon etc.

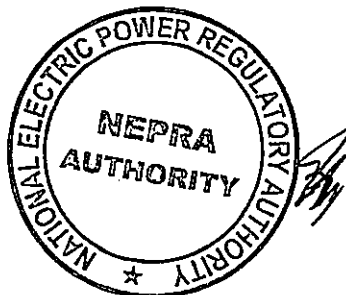




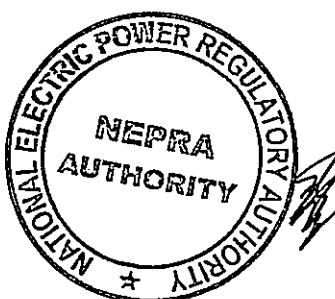
Further to the above, a large number of individual comments were also received from inhabitants/residents of Karachi through couriers and emails which had a mix stance with regard to the grant of a Distribution Licence to KEL. Most of the said appreciated the efforts of KEL in the reduction of theft/pilferage of electricity, technology intervention, loss reduction and investment made in the infrastructure. Whereas, few stakeholders/individuals highlighted issues pertaining to load-shedding and complaints related to billing etc. It is worth mentioning that a number of complaints were also received through the Wafaqi Mohtasib (Ombudsman)'s Secretariat in the matter for similar nature of issues.

(7). The Authority considered the above comments of stakeholders and considered it appropriate to hold a public hearing in the matter at its main/head office in Islamabad. Further, based on the observations/comments of the stakeholders and other relevant facts related to the case, the Authority also formulated issues of hearing for the proposed public hearing. In consideration of the said, the notice about the public hearing was published in the press on November 17, 2023, informing the general public, interested/affected persons/parties and other stakeholders about the hearing and inviting their views/comments in the matter. Apart from notices in the press, separate letters were also sent to Govt. Ministries, their attached departments, and representative organizations about the hearing and for participating in the same. In this regard, the Authority framed the following issues to be discussed during the hearing:-

- a) The Eligibility Criteria Distribution Rules, 2023 (the "Distribution Rules") for the grant of Distribution Licence has been notified after the submission of the application. Whether KEL fulfils the eligibility criteria under the relevant Rules?
- b) What has been the performance/efficiency of the KEL in terms of KPI(s) prescribed in the relevant Performance Standards to justify the grant of Distribution Licence?
- c) Has KEL achieved the goals of privatization as per the original spirit upon which it was privatized? what is the difference particularly with respect to customer satisfaction in pre & post privatization of KEL?

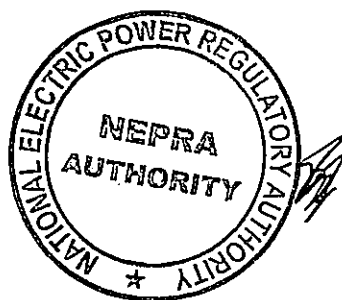


- d) How much IT infrastructure has been deployed during the previous term of the Licence for service delivery to the consumers? what are the future plans of KEL to modernize its distribution infrastructure and to improve its service delivery?
- e) What efforts has KEL made to minimize its environmental impact, reduce emissions and promote sustainable practices? Are there any initiatives to encourage energy conservation and efficient consumption among consumers?
- f) What strategies have KEL adopted to enhance the reliability of its power supply and reduce instances of interruptions and load shedding? How does it plan to mitigate the impact of extreme weather conditions on its distribution network?
- g) How KEL is ensuring the resilience of its distribution grid against natural disasters and cyber threats? are there cyber security measures in place to protect the distribution network and consumer data?
- h) What training and development programs are in place to enhance the skills and capacity building of the workforce of KEL? How does KEL ensure that its employees are well-equipped to handle the technical challenges?
- i) What procedures does KEL follow for regular maintenance, inspection, and upgrading of its distribution infrastructure to reduce corrective and emergency maintenance?
- j) How does KEL communicate with consumers about planned maintenance, outages, schemes and developments etc? are there any efforts to raise public awareness about energy conservation, safety and emergency response?



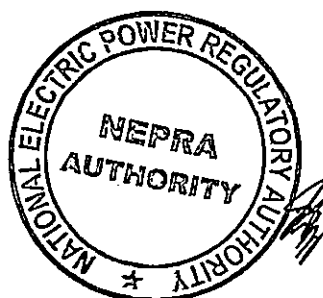
- k) What is the total length (km) and capacity (MVA) of the HT/LT network of KEL, no. of consumers served and their mix, annual energy sales for the last five (05) years, percentage of T&D losses and recovery percentage?
- l) What is the safety management system in KEL particularly with respect to the operation of the distribution system? Whether any HSE department has been established or otherwise?; Can KEL justify that it is providing a safe, reliable and uninterrupted power supply to its consumers?
- m) There are complaints against KEL pertaining to breakdowns, safety, over and unjustified billing, load shedding and higher electricity tariffs, etc. what efforts/measures/steps have been taken to mitigate such issues?
- n) What steps is KEL taking to integrate renewable energy sources into its energy mix to reduce its basket price? what are plans for increasing the share of RE to ensure an affordable and sustainable energy mix?
- o) What is the arrangement between KEL and the NTDC regarding the purchase of electric power and what is its future demand from NTDC?
- p) What is the policy of the KEL regarding the electrification of housing colonies/schemes, industrial estates plazas etc.? Should the said entities be allowed electrification at their own cost or KEL will be willing to electrify on its own?

(8). The public hearing was held on November 28, 2023, wherein the stakeholders had the option to join the proceedings of the hearing either through "Zoom" or physically at the main office of the Authority in Islamabad. In this regard, the representatives of National Transmission and Dispatch Company (NTDC), DISCO(s), Central Power Purchasing Agency (Guaranteed) Limited (CPPA-G), the representatives of KATI, the representatives of Punjab Industrial Estates Development and Management Company



(PIED&MC), Karachi Chamber of Commerce and Industry, Mr. Arif Balwani, Mr. Mushtaq Ghuman, Mr. Usman Ali, the representative of Jamat-e-Islami, Mr. Imran Shahid, Mr. Zeeshan Yousafzai from Dunya News, Mr. Riaz from Geo News and a number of consumers joined the proceedings of the hearing.

(9). In the hearing, the team of KEL gave a detailed presentation on the background of the case and also elaborated the points of the company/KEL on the observations that the stakeholders had made. Further, the representatives of KEL submitted their position/stance on the different issues that the Authority has framed in the matter. The Chief Financial Officer (CFO), Mr. Aamir Ghziani of KEL submitted that KEL is the only vertically integrated electric supply company in Pakistan providing utility services to the entire metropolitan city of Karachi and its suburbs up to Dhabeji and Gharo in the province of Sindh and over Hub, Uthal, Winder and Bela in the province of Balochistan. He expressed that KEL was incorporated in 1913 and subsequently privatized in the year 2005. As a vertically integrated utility, KEL is engaged in the generation, transmission, distribution, and supply of electricity by virtue of the licences granted by the Authority. It was submitted that the customer base of KEL is more than 3.56 million and peak demand is over 3,650 MW. The consumer sales mix of KEL is 47.8% domestic, 34.9% industrial, 11% commercial, and 6.4% others. The CFO submitted that KEL has added a total of 1,957 MW of efficient capacity including BQPS-III having an efficiency of around 59% resultantly, the overall efficiency of the generation fleet has improved from 30% to 42%. The T&D losses have been reduced to 15.3% from 34.2% which is in line with the targets that the Authority had set and resultantly more than 70% of feeders are now free from load-shedding with 100% exemption to industrial feeders and resultantly there is no operational subsidy from the privatization of the utility. The CFO submitted that in order to facilitate the consumers, the utility has established Integrated Business Centers-IBC(s), Customer Experience Centers-CEC(s), Integrated Business Centers-IBC(s) on Wheels, Customer Facilitation Centers-CFC(s) and various digital platforms including KEL Live App, KEL WhatsApp etc. In addition to the said, KEL has added nineteen (19) new grid stations and transmission system capacity has been doubled. Over 1,000 feeders and 21,900 distribution transformers have been added to the system which resulted in the enhancement of distribution capacity by over

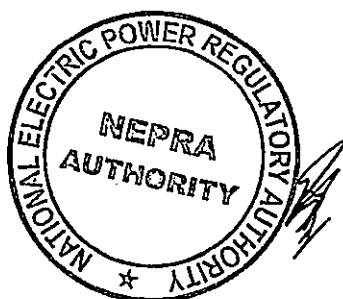


4,900 MVAs (2.3 times increase). Around 12,500 Pole Mounted Transformers-PMT(s) have been converted into ABC(s), thus aiding the downward trajectory of losses.

(10). On the issue of whether KEL complies with the Distribution Rules or not, KEL confirmed that it complies with the said Rules, including compliance related to registration with the Securities and Exchange Commission of Pakistan (SECP), minimum solvency requirements, minimum technical and human resource requirements, supplying power to all the consumers, adequate financial resources and timely publication of rates, charges and other terms and conditions approved by the Authority, on its website etc.

(11). With regards to the performance in terms of KPI, the KEL was of the view that it has made technological advancements including Meter Data Management System (MDMS), Geographic Information System (GIS) and Outage Management System (OMS), better visibility comprehensive maintenance plan based on data from MDMS/OMS, physical surveys, random quality inspections and condition monitoring with focus on safety environment, reliability of asset and overload relieving, annual preventive maintenance on over 600 feeders, network protection regime enhancement, load relieving of Common Distribution System (CDS) network assets through laying of 350+ feeders and induction of 900+ new transformers. From FY 2018, KEL moved from log sheets and Excel-based data to a proper OMS, which improved outage capturing and reporting. Further, the improvement in efficiency and reliability performance is evident from the improvement trajectory in SAIFI/SAIDI metrics, showcasing a 21% reduction from FY 2018.

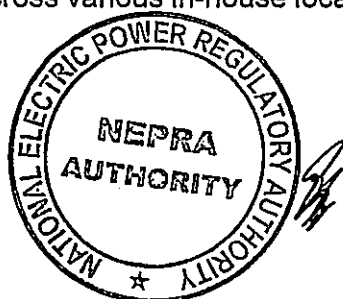
(12). About the issue of whether KEL has achieved the goals of privatization, KEL submitted that at the time of privatization of KEL, it was a loss-making entity with weak operational performance, burdening the Government of Pakistan (GOP) in the form of requirement for the operational subsidy from the GOP. Accordingly, the GOP decided to privatize KEL through the transfer of a majority stake to a consortium. Before privatization last generation capacity addition was in 1997. The generation was outdated having efficiency as low as 25%. KEL invested over PKR 544 billion (USD 4.40 billion) across its value chain after privatization which led to significant improvements in various areas. In this regard, 1957 MW of efficient capacity was added



including BQPS-III having an efficiency of around 59%, thus total generation fleet efficiency improved from 30% to 42%. Transmission and Distribution losses (T&D losses) were reduced from 34.2% at the time of privatization in 2005 to 15.3% as of now meeting the target of the Authority. Before the privatization, only 6.6% of feeders were exempted from load-shedding whereas, in the FY 2023, over 70% of feeders are exempted from load-shedding with 100% exemption to industrial feeders. Further, net losses of PKR 73.00 billion from 1995 to 2005 that GOP overburdened in the form of operational subsidies while profits were seen in 2012 after seventeen (17) years of losses and no operational subsidy was provided after privatization. Moreover, before privatization, there was a very low level of customer engagement and after privatization, KEL has established twenty-six (26) CEC(s), fifteen (15) IBC(s) on Wheels, thirty-six (36) CFC(s) and various digital platforms as mentioned above.

(13). On the issue of deployment of IT infrastructure, KEL submitted that it has installed more than sixty thousand (60,000) Smart Meters on the network and consumers, MDMS with analytics capabilities deployed, 21% improvement in reliability, 31% reduction in customer complaints in the last five (05) years through enhanced visibility enabled by Automated Meter Infrastructure (AMI), Automated Billing System (ABS) on more than twenty-seven thousand (27000) consumers for B2 and above categories, enabled data-driven investment decisions and network studies based on geospatial data. Moreover, it is the 1<sup>st</sup> DISCO to deploy a Geographical Information System (GIS). It further plans to make a transition to an Advanced Distribution Management System to reduce customer complaints and use Advanced Analytics and Artificial Intelligence for outage reduction. KEL IT infrastructure sets the foundation for future innovations in the power sector, such as renewable energy integration, electric vehicle charging infrastructure, pre-paid metering infrastructure and other advancements that benefit consumers.

(14). On the issue of minimizing the environmental impacts, KEL highlighted that it has reduced 81% of its effluents, reduced stores utilizing vertical height for operational efficiency, reduced 21% in its tanker and extracted water consumption, reduced 27% in electricity consumption at KEL locations, plantation of 2,85,000 mangroves, 202 MW of PV injected into the system through net metering, 100 MW of renewables in the current mix and 410 kW solar PV across various in-house locations. In 2023, its efforts resulted

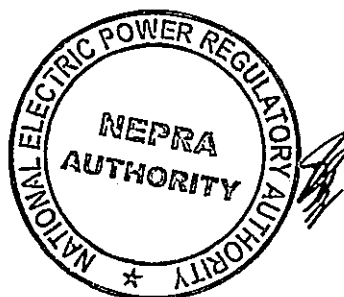


in a notable decrease of 83g CO<sub>2</sub>/kWh, bringing its emissions intensity down from 595g CO<sub>2</sub>/kWh to 512g CO<sub>2</sub>/kWh and 23% emission reduction.

(15). With regards to the issue of enhancement of the reliability of power supply and reduction of load shedding, KEL apprised that it has taken initiatives for enhanced reliability & reduction in interruption/load-shed like effective asset management through technological tools, relieving of overloaded assets (1,900+ new transformers and laying of 260+ new feeders by 2030), continuous performance monitoring and improved governance of field assets across the network, enabling protection regime to contain spread of faults, robust corrective maintenance and preventive maintenance, replacement of Load Breaker Switches (2,100) and Oil Circuit Breakers-OCB(s) to Vacuum Circuit Breakers-VCB(s) (2,275), loss reduction initiatives (Installation of ABC, low-cost meters, ring fencing of PMT(s), conversion of bare HT conductor to covered HT conductor and replacement of deteriorated HT cable), segregation of industrial feeders from residential consumers, skill up gradation of technical resources through structured trainings. With the said initiatives, KEL is geared up to improve SAIFI/SAIDI by around 35% and enhance load-shed exempt areas to 95% by FY 2030.

(16). On the issue of ensuring the resilience of the distribution grid against natural disasters and cyber threats, KEL expressed that it has taken initiatives for Grid System Operations (emergency response centre, raincoats, gum boots for grid staff, high-intensity emergency flashlights availability at all grids and roof waterproofing at critical grids), Maintenance Overhead (Increased patrolling and thermography, replacement of critically damaged insulators/span conductor/jumpers, Cleaning of line insulator, Public Accident Prevention Plan and Annual Preventive Plan.

(17). Regarding the issue of training and development programs for capacity building of employees, KEL apprised that it is conducting talent hunt/recruitment drives (locally and at the international level) to identify best candidates in line with best industry practices, dedicated learning facility i.e. AZM Learning Institute to enhance organizational capabilities, in house training of more than 34,000 employees, external training (e.g., Public Programs) of more than 350 employees and establishment of Distribution Network Academy (DNA) which develops technical resources through teachings and trainings in line with the international standards.



(18). With regards to the issue of maintenance, inspection and up gradation of the distribution network, KEL submitted that it has taken initiatives for effective asset management through technological tools such as MDMS, KE-OMS and SAP-PM, relieving overloaded assets, continuous performance monitoring and improved governance of field assets across the network, enabling protection regime to contain the spread of faults, robust corrective maintenance and preventive maintenance, replacement of Load Breaker Switches, loss reduction initiatives and skill up gradation of technical resources through structured trainings.

(19). About communication with consumers, KEL submitted that it ensures timely information access through digital channels including KEL Live, WhatsApp, Website, utilizing push and pull services, dynamic info-graphics and captivating videos etc. Further, multiple channels are used to send notifications for outages and bill generation such as SMS, emails, and push notifications and a dedicated safety response team addresses and resolves safety-related calls immediately.

(20). On the issue of the total demand of KEL, the utility submitted that its peak demand in 2023 was 3,654 MW. Going forward, KEL peak power demand is expected to grow at a Compounded Annual Growth Rate (CAGR) of 2.89% (FY 2024 to FY 2030), to meet the future power demand in the KEL system, it is diligently pursuing an increase in Interconnection Capacity to off-take additional power from National Grid, addition of local coal based IPP(s) which includes pursuing options for conversion of imported coal projects to local coal and addition of 1,282 MW of renewable projects.

(21). With regards to the issue of length, capacity, consumers & their mix, energy sales and T&D losses, KEL provided that the length of HT Lines is 10,891 km, LT Lines is 19,370 km, installed capacity is 8,808 MVA and there are a total 3,565,801 number of active consumers. Regarding T&D losses and recovery ratio, KEL submitted that its T&D losses stand at 15.3% and recovery ratio at 92.8% as of 2023.



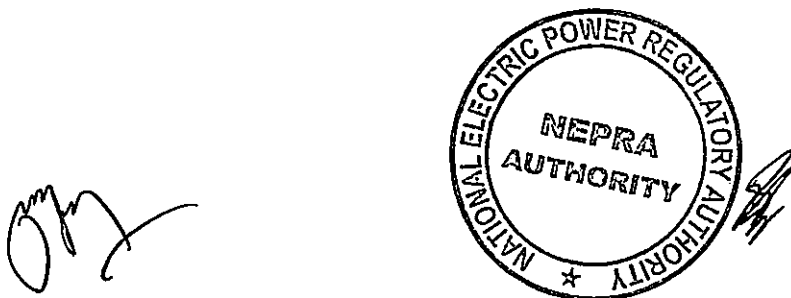


(22). About the issue of the safety management system, KEL apprised that it has a dedicated HSE department that follows the Process Safety Management System based on DuPont's PSM comprehensive framework to prevent & mitigate safety incidents.

(23). Regarding the issue of complaints, KEL was of the view that it has made technological advancements including the introduction of MDMS, GIS and OMS etc. to address these issues. Further, physical surveys, quality inspections, condition monitoring of substations, overload relieving, preventive maintenance of feeders and network protection enhancement are being performed on a regular basis. In this regard, 500+ VCBs & Ring Main Units-RMU(s), load relieving of CDS network assets through laying off 350+ feeders and induction of 900+ new transformers have been done.

(24). On the issue of integration of Renewable Energy (RE) sources into the energy mix, KEL stated that it plans to add around 1,282 MW of renewable energy capacity by FY 2030. The addition of renewable is based on an optimized generation plan also endorsed in the Indicative Generation Capacity Expansion Plan (IGCEP). Investments related to the power evacuation of these projects are included in the Investment Plan. To further increase the RE induction while reducing the basket price, KEL is engaged with a globally renowned consultant for techno-commercial study. According to KEL by bringing RE sources to its system, the basket price is expected to reduce from 9.31 cents/kWh to 8.00 cents/kWh.

(25). About the issue of the arrangement of KEL with NTDC, KEL clarified that currently, it is being supplied with 1,000 to 1,100 MW from the National Grid through the existing interconnection points. In addition, KEL is setting up two (02) new interconnection points which would enable increased off-take of supply from the National Grid. In this regard, a Power Purchase Agency Agreement (PPAA) and Interconnection Agreement (ICA) for the supply of power to KEL from National Grid have been initialed and subsequently approved by the ECC and ratified by the Cabinet for execution by relevant parties. As per the approved agreements, KEL will be supplied the firm 1,000 MW; and supply over and above the firm 1,000 MW and up to the interconnection capacity will be on a pro-rata basis.

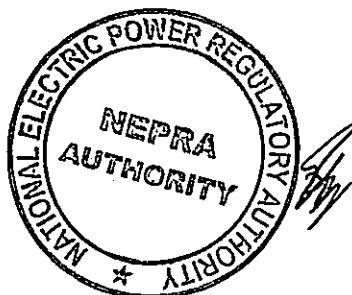



(26). On the issue of electrification of housing colonies/schemes, industrial estates and plazas, KEL submitted that it offers different options to sponsor/developer/builder, as per charges prescribed in the Consumer Service Manual: Full Paid - applicant pays the total cost of the scheme including material and installation charges; Full self-finance -applicant pays only supervision charges; and Partial self-finance, material arrange by applicant only. Further, KEL is fully prepared to continue electrification as per CSM guidelines on cost cost-deposit basis which may be amended from time to time.

(27). The Authority offered an opportunity to other stakeholders present physically or through Zoom for expressing their views/comments in the matter. The participants had mixed remarks regarding the performance of KEL with respect to its service delivery, provision of connections, complaint handling, reliability and continuity of electric power supply. In this regard, a considerable number of stakeholders did not agree with the submissions of KEL and stated that the utility has failed to perform against the expectations that were envisaged at the time of privatization.

(28). In this regard, the stakeholders highlighted that KEL has not been able to enhance its generation capacity and still heavily dependent on supply from the National Grid. Further, the said stakeholders expressed that the basket of KEL is heavily skewed towards imported fuel and there is an urgent need to add the cost-effective RE of wind and solar which is available in abundance. Further, the said stakeholders highlighted that KEL has failed to pass on various reliefs that the Authority allowed relating to the clawback mechanism and has approached the courts. An equal number of stakeholders appreciated the various initiatives of KEL expressing that there has been substantial improvement in the performance of the utility, resulting in better delivery of service for the end consumer including redressal of complaint and reduction in load shedding. Similarly, various representatives from Industrial Estate confirmed that there has been significant improvement in the performance of the utility and the Authority may consider the grant of Distribution Licence to KEL in terms of the amended NEPRA Act.

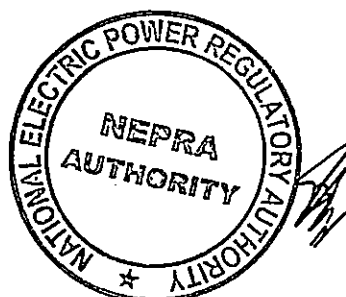
(29). KATI supported the grant of Distribution Licence and added that in high-loss areas, load shedding should be based on a PMT basis. Mr. Tanveer Bari commented that the grant of Licence should be subject to the terms & conditions and load shedding should be based on a PMT basis. In this regard, Mr. Arif Blvani highlighted that KEL has



claimed that it has reduced losses from 34.2% to 15.3% with a total investment of PKR 474 billion in its network, however, further reduction of only 2.3% is envisaged by KEL for future total proposed investment. He was of the view that the licence may be granted for the term of three (3) to five (5) years only and renewal of the same should be subject to performance. Mr Usman Ali, commented that load shedding should be based on a PMT basis. He also requested that KEL be directed to ensure the availability of staff to timely rectify consumer complaints and that the emergency response time may be reduced. Imran Shahid of Jamat-e-Islami was of the view that after privatization the load shedding and fatal incidents have increased. He also expressed his reservations in respect of corruption and illegal networks within KEL.

(30). The Authority considered and examined the submissions of KEL including the information provided by KEL with its application, comments of various stakeholders, proceedings of the hearing, the NEPRA Act, and the relevant Rules and Regulations in the matter. The findings/analysis of the Authority in the matter are explained in the following paragraphs.

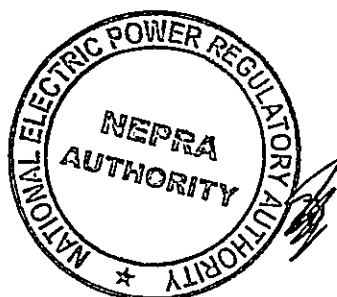
(31). KEL is a public limited company, incorporated under the repealed Indian Companies Act, of 1882 on September 13, 1913 (now the Companies Act, 2017), having Registration No. 0000002. The registered office of the company is at KE House, 39-B, Sunset Boulevard, Phase II, Defence Housing Authority, Karachi. According to the Memorandum of Association, the objectives of the company, inter alia, include constructing, laying, establishing, and fixing all necessary cables, wires, lines, accumulators, lamps and works, to generate, accumulate, transmit, distribute and supply electricity and to light cities, towns, streets, markets, theatres, buildings and places both public and private, to carry on the business of electrical engineering, contracting, carrying on all or any of the business of manufacturing of electrical apparatus, purchasing, importing, transforming, converting, distributing, supplying, exporting and dealing in electricity and all other forms of energy and products or services associated therewith and of promoting the conservation an efficient use of electricity and all other forms of energy and all other powers necessary or incidental to the business of electricity distribution and supply. According to the submitted information, KEL is the only vertically integrated electric supply company in Pakistan



providing utility services to the entire metropolitan city of Karachi and its suburbs up to Dhabeji and Gharo in Sindh and over Hub, Uthal, Winder and Bela in Baluchistan.

(32). The Authority is of the considered opinion that the performance of KEL is not up to the mark when compared to best industry practices worldwide as well as of the region. However, it is also a fact that KEL is one of the top-performing DISCO(s) when compared with its peers. Further, the Authority is of the view that despite being below par, there is no other option but KEL having a licence for distribution business. However, the Authority directs KEL to adhere to the NEPRA Act, rules & regulations made thereunder and all the applicable documents. Moreover, KEL shall improve its performance for the service delivery to its consumers including but not limited to the achievement of targets given for the reduction in line losses in the MYT, improvement in reduced time for new connection and expansion in IT intervention to make the process more transparent and consumer friendly.

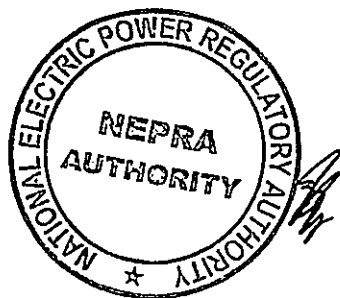
(33). In terms of Section-20 of the NEPRA Act, the Authority may grant a Distribution Licence authorizing a company to engage in the distribution of electric power. In this regard, the said Section prescribes the eligibility criteria for the grant of such a licence which includes (a). minimum solvency requirements; (b). minimum technical and human resource requirements. The Federal Government has notified the Distribution Rules. According to Rule-3 of the Distribution Rules, any person applying for the grant of Distribution Licence shall fulfil the eligibility criteria including, *inter-alia*, (a). registration with the SECP; (b). shall specify the service territory in respect of which it intends to engage in the distribution of electric power; (c). shall fulfil minimum solvency requirements as provided in the Distribution Rules, to adequately perform its duties and responsibilities under the NEPRA Act, relevant rules, regulations, commercial code, its Distribution Licence and any other legal instruments; (d). shall fulfil minimum technical and human resource requirements as provided in Schedule-II of Distribution Rules to meet all of its service-level commitments to perform the duties and responsibilities of the Distribution Licensee in an effective and efficient manner and provide continuous and reliable electric power in accordance with the Act, rules and regulations and other legal instruments; and (e). shall have the ability to ensure prompt and effective coordination with the System Operator (SO), Market Operator (MO) and other relevant



entities to comply with the provisions of the Grid Code, Commercial Code, Distribution Code and other relevant legal instruments as applicable;

(34). Further, the Distribution Licensee shall have the ability to ensure its quality of distribution service by (a). establishing and maintaining standardized and non-discriminatory procedures for the timely provision of connections, redressal of complaints, effective customer services and maintenance of distribution facilities; (b). ensuring compliance with Grid Code, Distribution Code and Performance Standards specified by the Authority for the distribution of electric power; (c) fulfilling the requirements of minimum technical resources prescribed under these rules; (d). sharing the information and data through a website or portal related to forecasts, transmission and distribution plans and information regarding network constraints; (e). maintaining the complete and accurate records and data in respect of distribution services. All such records and data shall, unless provided otherwise under the law, be maintained for a period of five (05) years after the creation of such record or data; and shall have a robust IT strategy outlining the planning and execution roadmap for ensuring transparency, effectiveness, efficiency and security in all operations of the distribution of electric power comprising (i). a secure and reliable data storage and network infrastructure for hosting backend as well as key applications; (ii). a reliable data backup and recovery system for operation continuity; (iii). an effective information security mechanism, to ensure confidentiality, integrity and the secure availability of data as part of an IT governance framework; and (iv). an effective and efficient mechanism of analysis and reporting of information through transparency portals, websites and other secure information-sharing techniques. Additionally, the applicant shall have the ability to prepare a distribution plan in coordination with SO, National Grid Company, Provincial Grid Company and other Distribution Licensees as per the provisions of the Grid Code and Distribution Code.

(35). As explained above, KEL submitted its application for the grant of a Distribution Licence on December 01, 2022, and at that time, the Distribution Rules were not notified. However, in order to avoid any regulatory gap the Authority decided to process the application in the absence of Distribution Rules in the pronouncements of the Superior Court of Pakistan, wherein it has been determined that the absence of the Rules or inaction of the government functionaries to frame the Rules cannot be held to

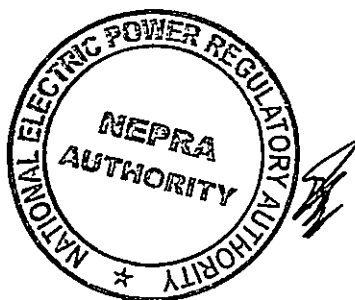


be prejudicial to the rights of the other party. Keeping in view of these settled principles, the applicant cannot be refused for Distribution Licence solely on this ground. In fact, the Rules are made to facilitate and not hinder the enabling legislation. In view thereof, the Authority may seek guidance from the judgment of the honourable Supreme Court of Pakistan reported as PLD 1974 SC 228 wherein the honourable Court held as follows:

"It is universally recognized that as regulator,' statutes have to deal with a variety of situations and subject, it is not possible for the Legislature itself to make detailed regulations concerning them, and, therefore the Legislature delegates its power to specified or designated authorities to make such detailed regulations, consistent with the statute, for carrying out the purposes of the parent legislation. The power so conferred, is generally in the nature of an enabling provision, intended to further object of the statute, and not to obstruct and stultify the same. As a consequence, the failure or omission of the designated authority to frame the necessary rules and regulations, in exercise of the power conferred on it by the Legislature, cannot be construed as having the effect of rendering the statute nugatory and unworkable. Such an eventuality could arise only if the Legislature indicates intention to this effect in clear and unmistakable terms."

(36). In another judgment, the honourable Court in the case reported as 2017 SCMR 206 held that:

"Absence of Rules may affect the enforceability or operation of the statute, however, for considering the constitutionality or otherwise of a statute on the touchstone of the Constitution or Fundamental Rights, framing or non-framing of the Rules under that statute could hardly be relevant."



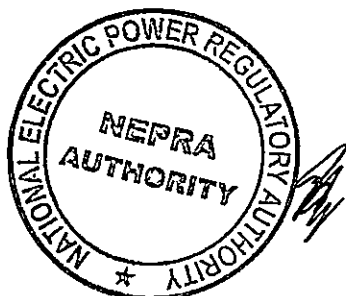
(37). Further, the honourable Lahore High Court while relying on above cited Judgment also held in its reported judgment (PLD 2018 LHR 858) that:

"14. It is also settled law that the operation of a statute or any statutory provision is not dependent upon framing of the Rules. However, in some cases, the absence of Rules may affect the enforceability or operatability of the statute. The framing of Rules would be generally relevant for determining as to whether the power under the statute has been exercised properly or not, but the existence of Rules could neither save nor destroy the constitutional validity of the Statute. Reliance in this regard is placed on Shahid Pervaiz v Ejaz Ahmad and others (2017 SCMR 206)..."

(38). In view of the above, the Authority considered that KEL cannot be refused to grant a Distribution Licence in the absence of the required Rules and therefore, it decided to move ahead with the request of KEL for the grant of a Distribution Licence. As explained earlier, now the Federal Government has notified the Distribution Rules. In this regard, KEL has confirmed that it complies with the Distribution Rules and the Authority directs KEL to submit a detailed report in this regard within six (06) months from issuance of this Licence.

(39). Regarding the provisions of Section-20(2) of the NEPRA Act, KEL has already provided the required details pertaining to (i). the type of service for which the licence is being sought; (ii). the territory in which the electric power shall be distributed and (iii). the source and scope of electric power etc.

(40). About the term of the Distribution Licence, the Authority has considered Rule-5 of the Distribution Rules which stipulates that the minimum term of such licence will be twenty (20) years. In view of the said, the Authority fixes the term of this licence for twenty (20) years from the date of its issuance. Regarding the tariff, it is clarified that under Section-7(3)(a) of the NEPRA Act, determining of tariff, rate and charges, etc. is the sole prerogative of the Authority. In view thereof, the Authority directs KEL to charge the consumers only such tariff which has been determined/approved or specified by the Authority.



(41). In view of the foregoing, the Authority hereby approves the grant of Distribution Licence to KEL in terms of Section-20 and 21 of the NEPRA Act on the terms and conditions as set out in the said Licence annexed to this determination. The grant of this Licence will be subject to the provisions contained in the NEPRA Act, relevant rules, regulations framed thereunder and other applicable documents.

**Authority**

Engr. Maqsood Anwar Khan  
(Member)

  
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Engr. Rafique Ahmed Shaikh  
(Member)

  
\_\_\_\_\_

Engr. Mathar Niaz Rana  
(Member)

  
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Amina Ahmed  
(Member)

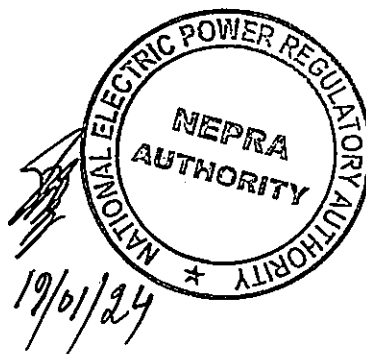
  
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Engr. Waseem Mukhtar  
(Chairman)

  
\_\_\_\_\_









**National Electric Power Regulatory Authority  
(NEPRA)  
Islamabad – Pakistan**

**DISTRIBUTION LICENCE**

**No. DL/09/2024**

In exercise of the powers conferred under Section-20 and 21 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, as amended from time to time, the Authority hereby grants the Distribution Licence to:

**K-ELECTRIC LIMITED**

Having Registration No. 0000002, dated September 13, 1913

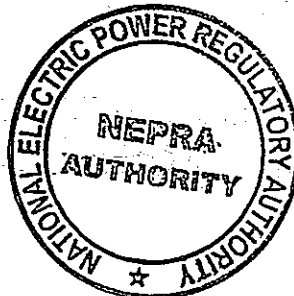
Incorporated under the then Indian Companies Act, of 1882

now the Companies Act, 2017

to engage in the distribution of electric power to the consumers in its Service Territory on a non-exclusive basis subject to and in accordance with the terms and conditions of this Licence.

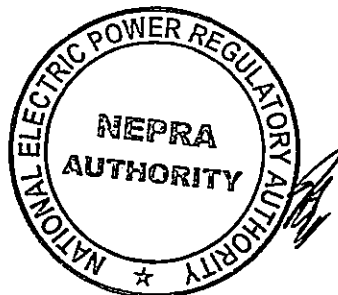
This Licence is given under my hand on 19<sup>th</sup> day of January Two Thousand & Twenty Four and expires on 18<sup>th</sup> day of January Two Thousand Forty Four.

  
\_\_\_\_\_  
Registrar



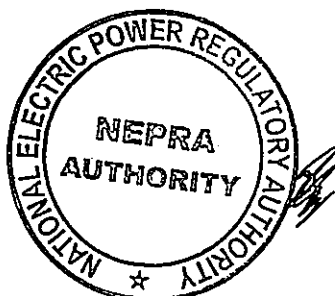
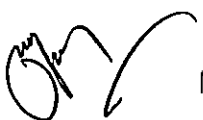
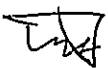
**Article-1**  
**Definitions**

- 1.1 In this Licence, unless there is anything repugnant in the subject or context,
- (a). "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (Act No. XL of 1997), as amended from time to time;
  - (b). "Applicable Documents" means the rules, regulations, terms and conditions of any licence, registration, authorization, determination, any codes, manuals, directions, guidelines, orders, notifications, agreements and documents issued or approved under the Act;
  - (c). "Applicable Law" means the Act and the Applicable Documents;
  - (d). "Authority" means the National Electric Power Regulatory Authority constituted under Section 3 of the Act;
  - (e). "Commercial Code" or "Market Commercial Code" means the commercial code prepared and maintained by the Market Operator pursuant to Sections 23A and 23B of the Act as amended from time to time and approved by the Authority;
  - (f). "Competitive Trading Bilateral Contract Market" or "CTBCM" means electric power market established in accordance with the high-level and detailed designs approved by the Authority vide its determinations dated 5<sup>th</sup> day of December 2019 and 12<sup>th</sup> day of November 2020 as may be amended by the Authority from time to time, or any competitive electric power market that may replace CTBCM in the future;
  - (g). "Connection Charges" means the charges made or levied or to be made or levied by the distribution licensee for carrying out works, provisions and installation of electrical facilities, meters, electric lines and circuits, and ancillary Distribution System, together with charges in respect of maintenance and repair of such items in so far as not otherwise

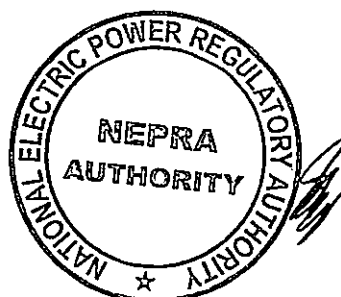
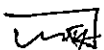


recoverable as use of system charges, and in respect of disconnection and the removal of electrical facilities, electric lines and circuits, and ancillary meters following disconnection, or such other charges as may be determined by the Authority from time to time;

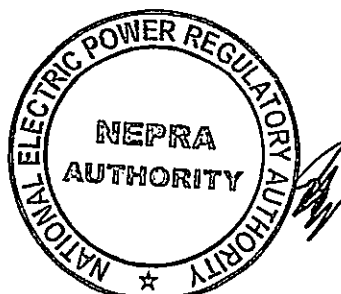
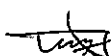
- (h). "Consumer Eligibility Criteria" means the National Electric Power Regulatory Authority Consumer Eligibility Criteria (Distribution Licensees) Regulations, 2022 as amended or replaced from time to time;
- (i). "Distribution Business" means the business of distribution of electric power services being carried on or to be carried on by the Licensee pursuant to and in accordance with the terms and conditions of this Licence and other Applicable Documents;
- (j). "Distribution Code" means the code prepared by the Licensee and approved by the Authority, which defines the technical and operational standards and procedures for the distribution licensees and all those connected to the Distribution System of the Licensee as specified in the Distribution Regulations;
- (k). "Distribution Eligibility Criteria Rules" means the Eligibility Criteria (Distribution Licences) Rules, 2023 as amended from time to time;
- (l). "Distribution Facilities" means electrical facilities operating at the Distribution Voltage and used for the movement or delivery of electric power;
- (m). "Distribution Regulations" means the National Electric Power Regulatory Authority Licensing (Distribution) Regulations, 2022 as amended from time to time;



- (n). "Distribution Service Manual" means the manual of instructions developed by the Licensee and approved by the Authority detailing instructions and guidance to the persons connected or to be connected to the Distribution System of the Licensee as described in the Distribution Regulations;
- (o). "Distribution Services" means planning, expansion, up-gradation, rehabilitation, reinforcement, operation and maintenance of the Distribution System by the Licensee to deliver and transfer electric power to or for the persons connected with its Distribution System within its Service Territory in an efficient, reliable and non-discriminatory manner and in accordance with Performance Standards, including providing cost-effective distribution connection services and non-discriminatory Open Access to its Distribution System to the eligible consumers, licensees, captive generating plants and generation companies subject to, the applicable charges including but not limited to payment of connection charges, Use of System Charges or any such other charges as may be determined by the Authority from time to time;
- (p). "Distribution System" includes the Distribution Facilities and electric lines or circuits, meters, interconnection facilities or other facilities operating at the Distribution Voltage, and shall also include any other electric lines, circuits, transformers, sub-stations, interconnection facilities or other facilities determined by the Authority as forming part of the Distribution System, whether or not operating at the Distribution Voltage;
- (q). "Distribution Voltage" means any voltage below the minimum transmission voltage as defined in the Act;
- (r). "Entities" means housing colonies, societies, industrial estates, shopping malls, plazas, complexes or high-rise buildings, which have already laid Distribution Facilities for providing Distribution Services within the area owned or administered by them;



- (s). "Grid Code" means the code prepared by the system operator licensee under Section-23H of the Act and approved by the Authority;
- (t). "Investment Programme" or "Distribution Investment Plan" means the Investment Programme of the Licensee prepared in accordance with the Distribution Regulations, Distribution Code or any other Applicable Documents;
- (u). "Licence" means this licence granted to the Licensee under Sections-20 and 21 of the Act;
- (v). "Licensee" means K-Electric Limited (KEL) or its successors or permitted assigns;
- (w). "Licensing Regulations" mean the National Electric Power Regulatory Authority Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021 as amended or replaced from time to time;
- (x). "National Grid Company" means the person engaged in the transmission of electric power and granted a licence under Section 17 of the Act;
- (y). "Net Metering Regulations" means the National Electric Power Regulatory Authority (Alternative & Renewable Energy) Distributed Generation and Net Metering Regulations, 2015 as amended or replaced from time to time;
- (z). "Open Access" means the access to a network licensee's system or its associated facilities for movement and delivery of electric power, subject to the terms and conditions as provided in the Act, the NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022 and use of system agreement, on non-discriminatory basis to (i). an electric power supplier for supply of electric power to its consumers or (ii). a captive generating plant for delivery of the electric power from generation facility to the destination of its use or (iii). any other person,



including a licensee for delivery of electric power from a designated place to another designated place;

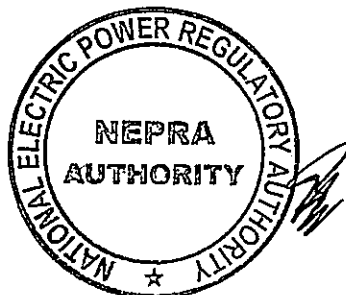
- (aa). "Performance Standards" means relevant applicable standards for Distribution Services as specified by the Authority and as amended or replaced from time to time;
- (bb). "Power Safety Code" means the NEPRA Power Safety Code for Licensees, 2021 approved by the Authority as amended or replaced from time to time;
- (cc). "Service Territory" means the territory or area specified in Schedule-I of this Licence within which the Licensee is authorized to carry out Distribution Business on a non-exclusive and non-discriminatory basis;
- (dd). "Use of System Charges" shall include all charges related to use of distribution system, use of transmission system, system operator services, market operator services, metering service provider services and any other charges as determined by the Authority that may arise due to advent of the open access and market liberalization.

1.2 Words and expressions used but not defined herein shall have the same meanings as assigned to them in the Act, the Distribution Regulations or any other Applicable Documents.

## **Article-2** **Compliance with the Applicable Law**

2.1 The Licensee shall comply with the Applicable Law, as amended or replaced from time to time, while performing its functions as Licensee.

2.2 The Licensee shall be obligated to follow and comply with the Distribution Regulations in letter and spirit, as if all provisions of the said regulations are incorporated in the terms and conditions of this Licence.



**Article-3**  
**Grant of Licence**

This Licence is granted to the Licensee to provide Distribution Services within its Service Territory, as provided in Schedule-I of this Licence on a non-discriminatory and non-exclusive basis, in accordance with the Act and relevant provisions of the Applicable Documents in a prudent, safe, reliable and efficient manner:

Provided that the Service Territory of the Licensee shall not include the area where the Entities other than the Licensee have laid down their distribution network at the time of issuance of this Licence and opt to apply for the grant of Distribution Licence from the Authority.

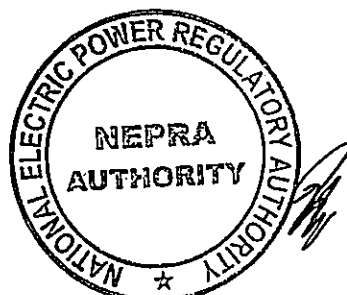
Provided further that if the "Entities", other than those already holding distribution licence, do not approach the Authority for grant of Distribution Licence within twelve (12) months of issuance of this Licence, the Authority may extend the Service Territory of the Licensee to include the area of Entities for providing Distribution Services.

**Article-4**  
**Licence Fee**

The Licensee shall pay to the Authority the licence fee in the amount, time and manner as specified in the National Electric Power Regulatory Authority (Fees) Regulations, 2021 as amended or replaced from time to time.

**Article-5**  
**Term and Renewal**

5.1 This Licence is granted for a term of twenty (20) years from the date of its issuance and shall remain valid for such period, subject to compliance with the Act, rules, regulations and other Applicable Documents. The Licensee shall submit, at least ninety (90) days before the expiry of this Licence, an application to the Authority for renewal of the term of this Licence in accordance with the Act, rules and regulations as may be applicable at that time.



5.2 In the event the Authority decides to renew the Licence, the Authority may renew the same on such revised terms and conditions as it deems appropriate in accordance with the Act and Applicable Documents at the time of renewal of the Licence. The Authority may renew or refuse an application for renewal of Licence after recording reasons in writing thereof.

**Article-6**  
**Modification of Licence**

6.1 The Licensee may, at any time during the term of the Licence, submit to the Authority a Licensee Proposed Modification in accordance with Section 26 of the Act read with relevant provisions of the Licensing Regulations;

6.2 The Authority may, at any time during the term of the Licence, communicate to the Licensee an Authority Proposed Modification in accordance with Section 26 of the Act read with relevant provisions of the Licensing Regulations.

**Article-7**  
**Transfer and Assignment of Licence**

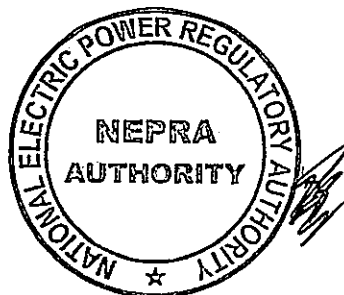
7.1 The Licensee shall not, without the prior written approval of the Authority, surrender, assign or transfer the Licence to any person under the provisions of the Act;

7.2 The Licensee shall seek approval of the Authority for any surrender, assign or transfer of the Licence to any person at least ninety (90) days prior to the envisaged date of such transfer, assignment or surrender.

**Article-8**  
**Tariff**

8.1 The Licensee shall charge a person availing Distribution Services, only such tariff including Use of System Charges or Connection Charges as determined and approved by the Authority from time to time.

8.2 If the tariff is not already determined by the Authority at the time of issuance of this Licence, the Licensee shall, not later than thirty (30) days following the date of grant of the Licence file a petition before the Authority for determination of its tariff in accordance with the Applicable Documents.





### **Article-9**

#### **Obligation to Provide Open Access and Maintaining Quality of Services**

9.1 The Licensee shall be obligated to provide Open Access to its Distribution System during the term of its Licence as mentioned in Article-5, within its Service Territory on a non-discriminatory basis and shall frame schemes in respect of the same.

9.2 The Licensee shall comply with the applicable Performance Standards to ensure quality of Distribution Services by establishing and maintaining the standardized and non-discriminatory procedures for the timely provision of connections, Open Access, redressal of complaints, effective customer services and maintenance of Distribution System in accordance with provisions of the applicable rules, Distribution Regulations, Distribution Code, Grid Code and other Applicable Documents.

### **Article-10**

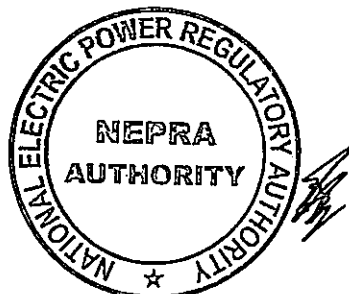
#### **Distribution Planning**

The Licensee shall ensure that its Distribution System is planned, designed, implemented, reinforced, expanded, maintained and operated in a manner that fully complies with the Distribution Regulations, quality of service and achieving distribution Performance Standards, in compliance with the Act, the Grid Code, the Distribution Code and other Applicable Documents.

### **Article-11**

#### **Investment Programme, Acquisition and Disposal of Assets**

11.1 The Licensee shall develop and submit its five (05) years Investment Programme or Distribution Investment Plan to the Authority for its approval as stipulated in Section 32 of the Act, and in accordance with the Distribution Regulations and other Applicable Documents. The Licensee shall maintain and publicly make available the approved Investment Programme for satisfying its service obligations. The implementation status and any changes in the approved five (05) years Investment Programme shall be submitted to the Authority on an annual basis for its consideration and approval.



11.2 The Licensee shall not, except under a prior authorization, acquire, whether on ownership basis, lease, hire-purchase, or any other mode of possession or use, any tangible or intangible asset of a nature or value inconsistent with or which is not expressly or by necessary implication stated in the Investment Programme of the Licensee and approved by the Authority in accordance with the Applicable Documents.

11.3 The Licensee shall not sell, dispose of, encumber or otherwise transfer any asset unless such sale, disposal, encumbrance or transfer of assets is properly documented and done in a manner that ensures transparency, value for money and in accordance with the approved policy of the Board of Directors for this purpose. Any sale, disposal of assets, encumbrance etc. shall be properly reflected in its books of accounts and accounted for its tariff determination;

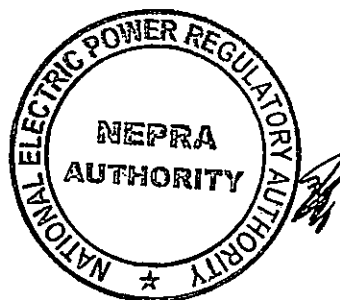
Provided that any proposed sale, disposal, encumbrance or transfer of assets amounting to more than ten percent (10%) of its total assets in a financial year shall require prior approval of the Authority.

#### **Article-12**

##### **Obligation to Provide Digitized Plotting and Maintaining GIS Mapping**

12.1 The Licensee shall maintain and provide to the Authority, a digitized Geographic Information System (GIS) mapping on annual basis of its Distribution System identifying each transformer, grid station, low tension and high-tension systems, etc. of the Distribution System as geospatial information within six (06) months of the issuance of this Licence and an updated digitized map every twelve (12) months afterwards. The Licensee shall also on the first day of July of every year, provide to the Authority an updated map of its Distribution System, clearly demarcating the extensions, if any, made in the immediate preceding year.

12.2 The map to be submitted under Article 12.1, shall be on a 1:50000 scale accurate map preferably prepared by Survey of Pakistan, clearly demarcating the extensions made, if any, in the immediate preceding year.



**Article-13**  
**Distribution Service Manual**

In accordance with Section 21 of the Act, read with the Distribution Regulations, within ninety (90) days of the issuance of this Licence, the Licensee shall submit its Distribution Service Manual for review and approval of the Authority.

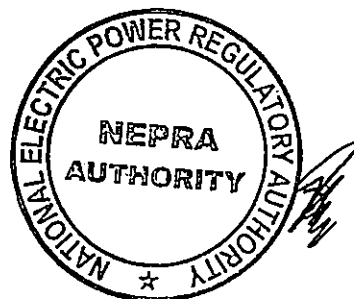
**Article-14**  
**Obligations with Respect to CTBCM**

14.1 The Licensee shall participate in the development of CTBCM in such manner as may be directed by the Authority from time to time. The Licensee shall, in good faith, work towards implementation and operation of the aforesaid competitive trading arrangement in advancing a goal of market liberalization in a manner and time period specified by the Authority.

14.2 The Licensee shall ensure that it enters into necessary agreements as may be required under the Grid Code, Market Commercial Code, Distribution Code or any other Applicable Documents. The Licensee shall carry out its obligations under these agreements in good faith and shall ensure non-discriminatory treatment to all electric power suppliers, consumers including bulk power consumers, generation companies and other licensees.

14.3 The Licensee shall establish and maintain market implementation and regulatory affairs department which shall be appropriately staffed for dealing with market related agreements, planning, regulatory affairs, matters related to CTBCM implementation and operations or such other matters as may be directed by the Authority from time to time.

14.4 The Licensee shall not indulge itself in discriminatory and anti-competitive practices and shall follow the directions of the Authority or Competition Commission of Pakistan in this regard.



**Article-15**  
**Net Metering**

15.1 The Licensee shall ensure that it complies with the requirements and timelines specified in the Net Metering Regulations. Further, the Licensee shall submit periodic reports in such form and manner as may be required by the Authority with regard to compliance with the Net Metering Regulations. Subject to any further details required by the Authority, the Licensee shall submit a monthly report to the Authority specifying number of applications received along with the installed capacity, number of applications allowed along with the date of approval and status of installation of net metering facility, number of applications pending along with capacity thereof and reasons for delays, if any.

15.2 The Licensee shall establish adequate processes, checks and balances that may be necessary to ensure unnecessary delays in processing of net metering facility applications filed under the Net Metering Regulations are avoided and any persons responsible for any delays in this regard are held accountable.

**Article-16**  
**Compliance with the Performance Standards**

The Licensee shall comply with the relevant Performance Standards as may be specified by the Authority, as amended or replaced from time to time:

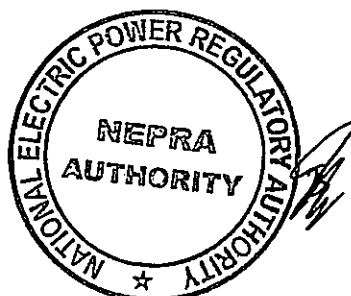
Provided that till such time the Authority separately specifies Performance Standards for Distribution Licensees, the National Electric Power Regulatory Authority Performance Standards (Distribution) Rules, 2005 shall continue to be followed by the Licensee to the extent as may be applicable to the Distribution Business.

**Article-17**  
**Compliance with the Grid Code and Distribution Code**

The Licensee shall comply with the relevant provisions of the Grid Code and Distribution Code as may be approved by the Authority, as amended or replaced from time to time.

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**Article-18**  
**Complaints and Dispute Resolution**

18.1 The Licensee shall make available complaint-handling mechanism that provide consumers, electric power suppliers, other licensees and generation companies with expeditious, fair, transparent, in-expensive, accessible, speedy and effective dispute resolution related to Distribution Services in accordance with the Distribution Regulations and other Applicable Documents.

18.2 The Licensee shall maintain daily, weekly, monthly, quarterly and yearly data of all the complaints received, resolved and pending with the Licensee for resolution. The Licensee shall submit an annual report to the Authority regarding the complaints received, resolved and pending thereof.

18.3 The Licensee shall develop and maintain an online complaint handling and tracking system that shall be updated in real time to inform the complainant regarding current status of its complaint.

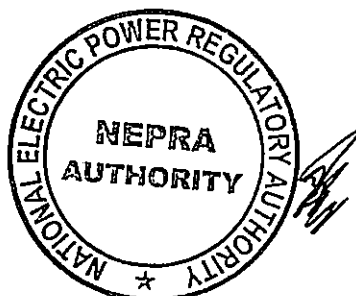
**Article-19**  
**Compliance with Health Safety and Environmental Standards**

The Licensee shall follow the standards laid down by the Authority for distribution and transmission of electric power, including health, safety, and environmental protection in accordance with the Power Safety Code and such other instructions as may be issued by any Federal or Provincial Agency.

**Article-20**  
**Investigation and Proceedings by the Authority**

20.1 In case of any non-compliance with the terms and conditions of this Licence or Applicable Documents by the Licensee, the Authority may conduct investigation and proceedings in a manner as stipulated under Section 27A of the Act.

20.2 Any fines or penalties imposed by the Authority under the Act and Applicable Documents, shall be promptly paid by the Licensee.



**Article-21**  
**Corporate Social Responsibility**

The Licensee shall comply with the NEPRA Social Investment Guidelines 2021, as may be amended from time to time and submit a report on its activities pertaining to Corporate Social Responsibility on an annual basis.

**Article-22**  
**Accounting Practices**

The Licensee shall maintain accounts in the manner laid down by the Authority in the National Electric Power Regulatory Authority (Uniform System of Accounts) Regulations, 2022, as well as in accordance with relevant provisions of the Distribution Regulations and other Applicable Documents.

**Article-23**  
**Maintenance of Record**

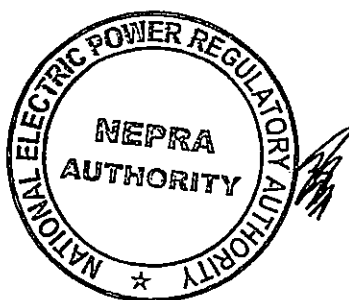
**23.1** The Licensee shall keep complete and accurate record and other data relating to the licensed activities including any contractual arrangements, agreements and any other information as may be specifically required by the Authority.

**23.2** All records and data referred to above shall be maintained in good order and condition and by taking reasonable measures to ensure security of the data for a minimum period of five (05) years after the expiry of such record, arrangement or agreement or for such further extended period as the Authority may specifically require under the Distribution Regulations.

**23.3** The Authority shall have the right, upon forty eight (48) hours prior written notice to the Licensee, to examine the records and data of the Licensee at any time during normal office hours.

**Article-24**  
**Provision of Information**

**24.1** Any information required by the Authority from the Licensee, shall be provided in good faith ensuring that it is accurate, up-to-date and presented in a manner that is easily understandable and in accordance with Section 44 of the Act. The Licensee



shall ensure that the correspondence with the Authority is made by a duly authorized person not below the rank of Chief Engineer.

24.2 The Licensee shall be subject to such penalties as may be specified in the relevant Regulations made by the Authority, for failure to furnish such information as may be required from time to time by the Authority and which is or has been in the control or possession of the Licensee.

#### **Article-25** **Communication**

25.1 The Licensee shall designate a person not below the rank of Chief Engineer, who will act as a primary contact with the Authority on the matters related to this Licence. The Licensee shall communicate the Authority promptly about any change in contact details.

25.2 All communication with the Authority must be made in writing or through authorized electronic mailing address.

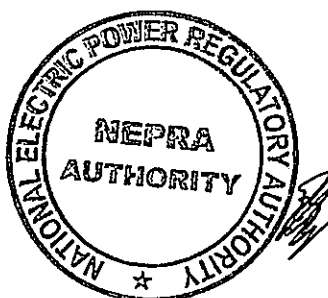
#### **Article-26** **Compliance with Eligibility Criteria**

26.1 The Licensee shall ensure that as and when the Distribution Eligibility Criteria Rules are notified by the Federal Government, the Licensee shall comply with the eligibility criteria and all other requirements of the Distribution Eligibility Criteria Rules.

26.2 The Licensee shall immediately inform the Authority in writing if circumstances exist that justify a reasonable expectation that the Licensee may not have sufficient resources available to conduct its licensed business for a period of twelve (12) months, or cannot comply with one or more requirements of the Distribution Eligibility Criteria Rules.

#### **Article-27** **Economic Purchasing of Services and Assets**

The Licensee shall ensure that the procurement of assets and services is undertaken in a most economical manner that ensures value for money in accordance with the applicable laws.



**Article-28**  
**Information and Operational Technology Security**

28.1 The Licensee shall develop a robust information and operational technology strategy outlining the planning and execution roadmap for ensuring transparency, effectiveness, efficiency and security in all operations of the distribution of electric power in accordance with the relevant provisions of the National Electric Power Regulatory Authority (Security of Information Technology and Operational Technology) Regulations, 2022 and other Applicable Documents.

28.2 In order to improve its efficiency and to enhance customer services, the Licensee shall deploy and upgrade its IT infrastructure which includes establishing the distribution load dispatch centers, SCADA and other modern and state of the art software relating to operation in consultation with the independent technical experts after going through detailed cost to benefit analysis.

28.3 All computer programs or systems used by the Licensees shall be adequately secured as per the requirements of the Applicable Documents and the relevant information and operational technology standards.

28.4 The Licensee shall develop a cyber-security protection system for its Distribution System with well-defined communication and reporting channels. The Licensee shall enforce security standards to measure and manage risks, as well as to define and maintain processes. While developing IT infrastructure, all the cyber-security risks must be addressed in a timely manner and managed to prevent cascading incidents as per Applicable Documents.

**Article-29**  
**Insurance**

29.1 The Licensee shall ensure that all of its assets are adequately insured against possible risks in accordance with an assets insurance policy approved by its Board of Directors.

29.2 Any insurance claims shall be promptly made to the respective insurance company and realized appropriately.





29.3 All field workforce of the Licensee who may be vulnerable to life risks owing to their nature of work, shall be adequately insured.

**Article-30**  
**Effective Coordination**

30.1 The Licensee shall ensure prompt and effective coordination with the system operator, market operator and other relevant entities to comply with the relevant provisions of the Grid Code, Distribution Code, Market Commercial Code and other Applicable Documents.

30.2 The Licensee shall share the information and data, through its website or portal, related to planned maintenance outages, demand forecasts, transmission and distribution plan and information regarding network constraints.

**Article-31**  
**Preparation for Emergencies and Security Arrangements**

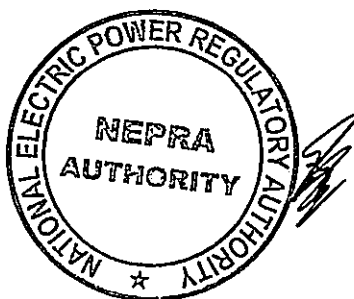
31.1 The Licensee shall, as soon as possible, inform its consumers of any emergency or security issue of which it may be aware which may arise in association with, or which may be relevant to its Licensed obligations.

31.2 The Licensee shall take such actions as the Authority may reasonably require to plan and prepare for emergencies including taking part in necessary tests and exercises.

**Article-32**  
**Credit Rating & Financial Health**

32.1 The Licensee shall, every two (02) years, get itself credit rated through a credit rating agency licensed by the Securities and Exchange Commission of Pakistan and which is on the panel of State Bank of Pakistan.

32.2 The credit rating report of the Licensee shall be submitted to the Authority for its information along with corrective measures being taken and/or to be taken to improve the financial health and credit worthiness of the Licensee. The Authority may, if deemed necessary, issue directives to the Licensee for taking measures in order to



improve the financial health and credit rating.

**Article-33**  
**Functional and Legal Separation**

33.1 The functional and legal separation of distribution and supply business of the Licensee shall be undertaken in accordance with the provisions of this Licence, determinations and directions of the Authority, as issued from time to time.

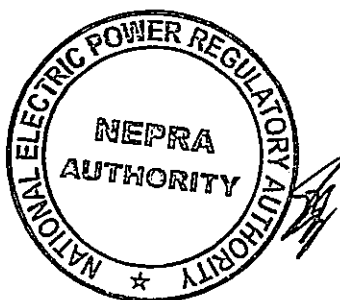
33.2 The Licensee shall, at the earliest but not later than two (02) years from the date of grant of this Licence, separate its functions, as Distribution Company and Supplier of Last Resort Company, into two (02) distinct legal entities and apply to the Authority for transfer of the Licence to the relevant entity, if required. In the event, these two (02) functions are not separated in two (02) distinct legal entities, the same shall be treated as a persistent contravention of the terms and conditions of the Licence and the Authority may initiate legal proceedings against the Licensee accordingly, and also issue such directions as may be deemed appropriate that may include appointment of an administrator in respect of functions of the Licensee.

33.3 Until such time the functions of the Licensee as Distribution Business and Electric Power Supply are not separated in two (02) distinct legal entities, the Licensee shall ensure that its business is operated in such a manner that the functions, accounts, operations and management of the Distribution Business are segregated from the Electric Power Supply Business so that the said functions are carried out independently, transparently and impartially without any interference.

**Article-34**  
**Interpretation of the Licence Provisions**

34.1 In accordance with the provisions of the Act, the Authority shall make the interpretation of any or all of the provisions of this Licence. The decision of the Authority in this regard shall be final.

34.2 Where any obligation under this Licence is expressed to require performance within a specified time limit, that obligation shall continue to be binding and enforceable after that time limit if the Licensee fails to perform that obligation within that time limit

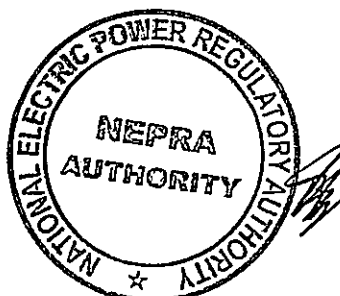


(but without prejudice to all rights and remedies available against the Licensee by reason of failure of the Licensee to perform within the specified time limit).

**Article-35**  
**Suspension or Revocation**

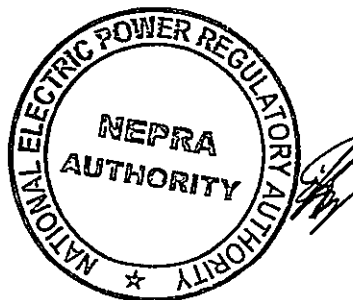
**35.1** Without prejudice to the powers of the Authority under the Act, upon being satisfied that the Licensee is not discharging its functions in accordance with the Act and Applicable Documents including terms and conditions of the Licence, or otherwise fails to carry on its Distribution Business in the interests of the competitive electric power market, the Authority may, after providing an opportunity to show cause, take such measures as it deems expedient including, but not limited to, suspension or cancellation of the Licence and take such other action as may be necessary to safeguard the interests of all stakeholders.

**35.2** Where the Authority revokes or suspends the Licence of the Licensee, it may appoint an administrator to take over its functions and management.



### **SCHEDULE-I**

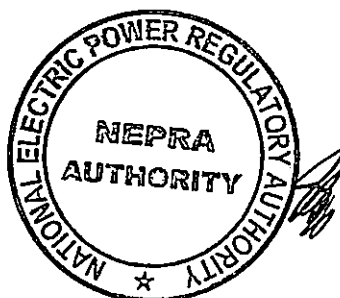
**The Details of the Territory<sup>1</sup> (i.e. Geographical Boundaries) within which the Licensee/K-Electric Limited is Authorized to Conduct its Distribution Activities/Services.**



A handwritten signature and a small rectangular stamp.

<sup>1</sup> The territory shall not include the Service Territory of any other distribution licensee.

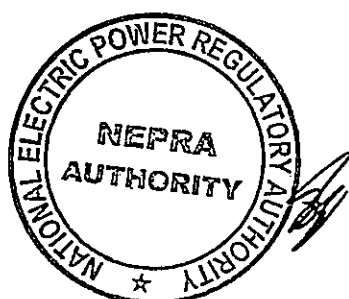
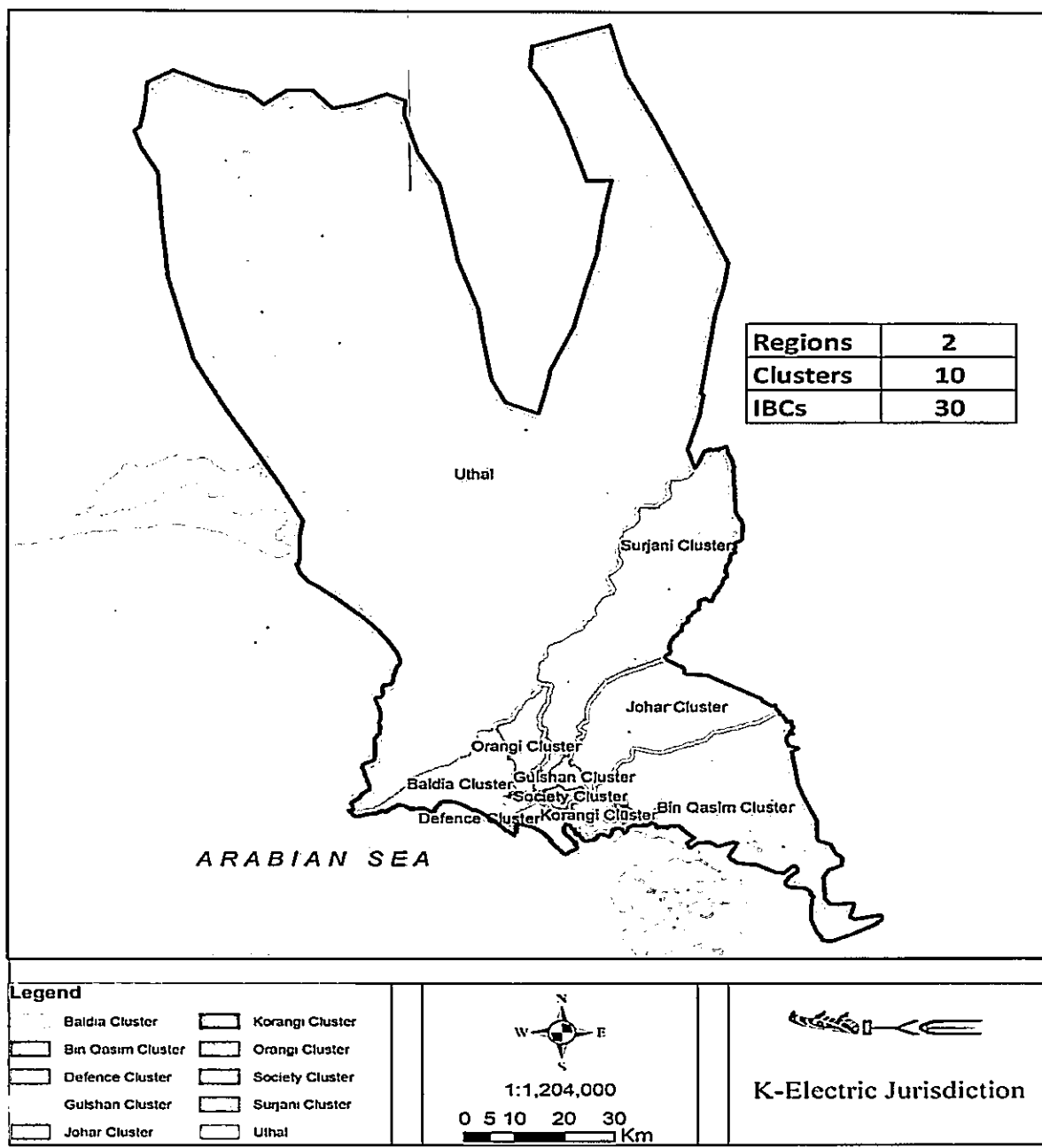
**Territorial Limit/Boundaries**  
**of the Licensee/KEL on the**  
**Map of Pakistan**



**Territorial Limit/Boundaries of the Licensee/KEL  
on the Map of Provinces of Sindh & Balochistan**

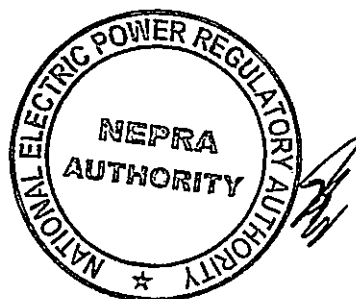


**Detail of Territory (Geographical Boundaries, Districts)**  
**Within which the Licensee/KEL is Authorized to Conduct**  
**Distribution Activities/Services**



## SCHEDULE-II

The details of distribution facilities including the type of distribution system (underground/overhead), type of HT/LT conductor/cable, length of HT/LT line, number of grid stations (category wise), number of power transformers, number of feeder(s), number of distribution transformers, voltage level, frequency, voltage and frequency regulation, and other specific details pertaining to Distribution System linked with the Licensee/K-Electric Limited.





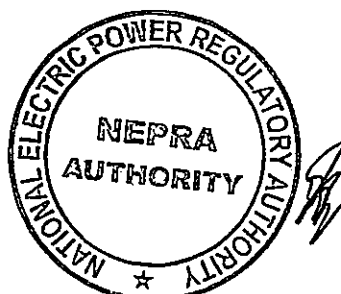
## DETAIL OF DISTRIBUTION SYSTEM OF K-ELECTRIC LIMITED

### A. General Information

(i).	Name of the Company/ Licensee	K-Electric Limited
(ii).	Registered/Business Office of the Company	KE House, 39-B, Sunset Boulevard, Phase-II, Defence Housing Authority, Karachi, Pakistan
(iii).	Location of the Distribution Facilities	Karachi and its adjoining areas including Dhabeji and Gharo, as well as Hub, Uthal, Winder & Bela

### B. Distribution System

(i).	Type of Distribution System (Overhead Lines/Underground Cables)	Overhead lines & Underground Cables	
(ii)	Type of HT Conductors	Tiger, Lynx, DOG, 3/0 Copper	
(iii).	Type of HT Cables	300 sq. mm Aluminum XLPE 3 Core armored, 400 sq. mm Aluminum XLPE 3 core armored, HT ABC	
(iv).	Type of LT Conductor	DOG & Rabbit	
(v).	Type of LT Cables	4 Core XLPE Al. armored (16,35,95,150 & 300 sq. mm), 4 Core PVC (Cu) armored (16,35,70,120 &240 sq. mm), single core XLPE (50,70,120,240 sq. mm), single core PVC (50,70,120,240,300 sq. mm),4 core LT ABC (16,50,95 sq. mm), 2 Core XLPE (10 sq. mm), 2 Core PVC(10 sq. mm), 4 Core PVC (CU) (16,35 sq mm)	
(vi).	Length of HT Line	10,891 Km	
(vii).	Length of LT Line	19,370 Km	
(viii).	No. of Feeders	2,068 (1,757 Public + 311 Dedicated)	
(ix).	Number of Grid Stations	220 KV grids of K-Electric	10
		132 KV grids of K-Electric	58
		66 KV grids of K-Electric	3
		Consumer Grid Stations maintained & Operated by Consumers	12



		(01 X 220 KV + 11 X 132 KV)	
		Total	83
(x).	Number of Power Transformers	181	
(xi).	Power Transformers Installed Capacity (MVA) (132/11kV & 66/11kV)	6,965	
(xii).	Number of Distribution Transformers	31,261	
(xiii).	Distribution Transformers Capacity (MVA)	8,808	
(xiv).	Voltage level (KV)	Transmission Network	220,132,66
		Distribution Network (KV)	11, 0.4, 0.230
(xv).	Frequency	50 Hz	
(xvi).	Regulation	Voltage	± 5%
		Frequency	± 1%

