

# National Electric Power Regulatory Authority Islamic Republic of Pakistan

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December 18, 2025

Subject:

DECISION OF THE AUTHORITY REGARDING PETITIONS FILED BY XWDISCOS FOR DETERMINATION OF USE OF SYSTEM CHARGES TO THE EXTENT OF GRID CHARGES

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority (total 30 Pages).

 The subject Decision of the Authority is being intimated to the Federal Government for filing of application of uniformization of the determined grid charges across all DISCOs, so that the same may be imposed uniformly upon all BPCs and other open access users, as envisaged in NE Plan and Eligibility Criteria (Electric Power Supplier Licences) Rules, 2023.

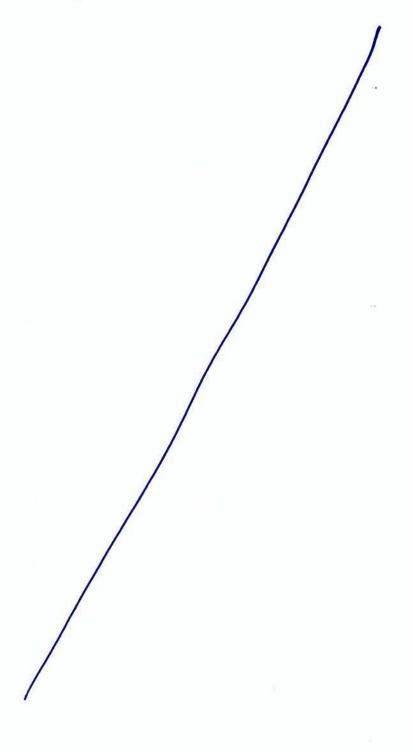
Enclosure: As above

Secretary,
Ministry of Energy (Power Division),
'A' Block, Pak. Secretariat,
Islamabad.

## Copy to:

- 1. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad
- 2. Mr. Shehriyar Abbasi, Deputy Secretary, Cabinet Division, Cabinet Secretariat, Islamabad
- Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad
- Chief Executive Officer, Faisalabad Electric Supply Company Ltd. (FESCO), Abdullahpur, Canal Bank Road, Faisalabad
- Chief Executive Officer, Gujranwala Electric Power Company Ltd. (GEPCO), 565/A, Model Town, G.T. Road, Gujranwala.
- Chief Executive Officer, Hyderabad Electric Supply Co. Ltd. (HESCO), WAPDA Offices Complex, Hussainabad, Hyderabad.
- Chief Executive Officer, Islamabad Electric Supply Co. Ltd. (IESCO), Street # 40, Sector G-7/4, Islamabad.
- Chief Executive Officer, Lahore Electric Supply Company Ltd. (LESCO), 22-A, Queens Road, Lahore
- Chief Executive Officer, Multan Electric Power Co. Ltd. (MEPCO), Headquarter, Khanewal Road Multan.
- Chief Executive Officer, Peshawar Electric Supply Company (PESCO), WAPDA House, Shami Road, Sakhi Chashma, Peshawar.
- 11. Chief Executive Officer, Quetta Electric Supply Company Ltd. (QESCO), Zarghoon Road, Quetta.
- Chief Executive Officer, Sukkur Electric Power Company Ltd. (SEPCO), Administration Block, Thermal Power Station, Old Sukkur.
- 13. Chief Executive Officer, Tribal Areas Electric Supply Company Limited (TESCO), Room No. 213, 1st Floor, WAPDA House, Shami Road, Sakhi Chashma, Peshawar.

- 14. Chief Executive Officer, Hazara Electric Supply Company (HAZECO), 426/A, PMA Link Road, Jinnah abad Abbottabad
- 15. Managing Director, National Grid Company (NGC), 414-WAPDA House, Lahore
  16. Chief Executive Officer, Independent System and Market Operator (ISMO), ISMO Building, Pitras Bukhari Road, H-8/1, Islamabad





# DECISION OF THE AUTHORITY REGARDING PETITIONS FILED BY XWDISCOS FOR DETERMINATION OF USE OF SYSTEM CHARGES TO THE EXTENT OF GRID CHARGES

- 1. The Authority issued its wheeling charge determination vide Order dated 11.01.2021. The said determination of the Authority was subsequently challenged by DISCOs before the Honorable Islamabad High Court (IHC), Islamabad. The Honorable IHC, vide order dated 03.03.2023 directed NEPRA to decide the matter within a period of ten (10) weeks frm the date of receipt of the said order.
- 2. The Authority specified NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022, ("Open Access Regulations or the Regulations"), which were subsequently notified by vide SRO 1994(I)/2022 dated 02.11.2022.
- 3. Pursuant to Clause 7 of the Regulations, DISCOs are required to file Petitions before the Authority, for determination of their Use of System Charges. Clause 7 of the Regulations provides as under;
  - Filing of petition and determination of use of system charges; Within ninety days following the date of notification of these regulations, each distribution licensee, in consultation with the respective supplier of last resort, shall prepare and submit a separate petition to the Authority for determination of its use of system charges. Such petition shall be accompanied with a statement which will set out the basis upon which the use of system charges shall be calculated in such manner and with such details as shall be necessary.
- 4. Pursuant to the Regulations, the EX WAPDA Distribution Companies (hereinafter referred to as "XWDISCOs" or the "petitioner") filed petitions for the determination of their Use of System charges (UoSC) /wheeling charges, based on the tariffs determined for the FY 2022-23, which were accordingly admitted by the Authority. The Ministry of Energy (Power Division) (MOE-PD), conveyed that since the Authority's rebasing of the consumer-end tariff for FY 2023-24 was at an advanced stage, while the UoSC Petitions had been filed on the basis of FY 2022-23 tariff determinations the petitions required revision to revision to incorporate the updated tariff figures tariff for FY 2023-24.
- 5. Subsequently, the uniform tariff along-with the individual tariffs of all XWDISCOs for FY 2023-24 were determined by the Authority for FY 2023-24 notified by Federal Government vide SRO dated July 26, 2023 effective form July 01, 2023. Pursuant thereto, the USoC petitions filed by XWDISCOs based on tariff figures based on FY 2022-23 were returned, with directions to file revised petitions incorporating the tariff data for FY 2023-24.
- 6. In compliance, all XWDISCOs (except SEPCO) filed their revised UoSC petitions based on the tariff determined for FY 2023-24, which were admitted by the Authority. Subsequently, SEPCO also filed its petition for determination of UoSC charges, which was also admitted by the Authority. A joint hearing of all XWDISCOs in the matter was conducted on 28.11.2023.
- During a Sectoral briefing on the Power Sector, the Prime Minister of Pakistan constituted a Committee tasked with proposing an optimal wheeling charge structure for the approval of the Federal Cabinet. The Committee comprised theMoE-PD as Lead, Ministry of of Finance (MoF), Ministry of Industries & Production (MoI&P), NEPRA, CPPA-G and NTDC. The MoE-PD vide notification dated 03.06.2024, formally notified the Committee with



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Additional Secretary-II (Power Division) as lead and representatives from Finance Division, MoI&P, NEPRA, CPPA-G, NTDC and K-Electric with Dr. Fayyaz Chaudhary & Mr. Abid Lodhi were included as co-opted members.

- 8. Separately, the Cabinet Committee on Energy (CCoE), vide decision dated 22.11.2023, constituted a Committee comprising of Minister for Finance, Revenue & Economic Affairs (Convener), Minister for Commerce, Industries & Production, Minister for Power & Petroleum, Secretary Power Division, Member Energy, Ministry of Planning, Development & Special Initiatives, to deliberate holistically on the issue of wheeling charges and recommed a viable way forward thereon, to the CCoE. In parallel, the Minister for Power also established a a working group to further undertake deliberations and conduct stakeholder consultations on the wheeling charges framework
- 9. The MoE (PD) submitted a summary to the Economic Coordination Committee (ECC) of the Cabinet, titled "Approval of Amendments in the National Electricity Plan Strategic Directive 87". The ECC approved the summary vide decision dated 17.07.2025 and subsequently ratified by the Cabinet vide Case No CCe-O5/02/2025 dated 29.07.2025.
- 10. The SD 87 of NE Plan has accordingly been amended as under;

Open access charge shall be recovered as per the following mechanism:

(a) the grid charges shall include, but not limited to, the use of transmission and distribution system charges, market and system operator fee, metering service charges and cross subsidy. Such grid charges shall be imposed on a uniform basis upon all bulk power consumers and any other open access user to provide level playing field to equally placed bulk power consumers of the respective supplier of last resort.

(b) (i) the frameworks / policy guidelines issued by the Federal Government, from time to time, stipulating the mechanism to deal with stranded costs on account of market liberalization and open access. The framework / policy guidelines shall be applicable for a period of five years and the quantum of demand allowed for wheeling under the framework / policy guideline shall be 800MW, such quantum may be revised by the Federal Government based on market realities and the need for further liberalization. The frameworks / policy guidelines shall:

- (A) reflect market realities;
- (B) include measures and incentives to facilitate open access / wheeling of an allowed quantum of demand for a given period under the Competitive Trading Bilateral Contract Market (CTBCM);
- (C) provide mechanism for a transparent competitive auction process for allocation of the allowed quantum and applicability of contribution to the stranded costs thereto; and
- (D) such other matters as deemed necessary to safeguard consumer interests and advance the economic and social policy objectives of the Federal Government. The Authority shall approve the competitive auction results within thirty days of submission by the Independent System and Market Operator of Pakistan (Guarantee) Limited (ISMO).
- (b) (ii) in the event the framework/policy guidelines is not in field or the quantum of demand allowed for a particular period has been exhausted; or any person intends to avail open access without the competitive auction process stipulated in the frameworks / policy guidelines,







then the Authority shall, on an application made by respective licensee or ISMO (as the case may be), determine other costs equal to the total generation capacity charges recovered from the equally placed bulk power consumers of the suppliers of last resort, either in a volumetric form (kWh) or through fixed charges. Such costs shall continue to be paid in the said manner till such time as may be reviewed by the Federal Government as per the procedure laid down in the applicable rules.

 Similarly, Rule 5 of the Supplier Eligibility Criteria Rules, 2023 has also been amended as under;

# "5. Billing, collection and deposit of certain charges;

- (1) Any person who has been granted a license for supply of electric power as a competitive supplier by the Authority, shall bill and collect from its bulk power consumers, and make timely deposit to the relevant distribution licensee in the designated account, all the (i) grid charges including the amount of cross subsidy and (ii) other costs arising on account of market liberalization and advent of open access, namely, the stranded costs. The said charges shall be deposited by the competitive supplier on accrual basis, i.e. the amount actually billed to the consumers for the billing cycle.
- (2) The Authority shall(i) determine the grid charges including the amount of cross subsidy and (ii) approve or determine other costs under sub-rule (b)(i) or (b)(ii) [as the case may be] arising on account of market liberalization and advent of open access, namely, the stranded costs, in accordance with the provisions of the National Electricity Policy, National Electricity Plan and such other economic and social policy objectives as may be provided by the Federal Government to the Authority, including the following, namely:—
- (a) the grid charges shall include, but not limited to, the use of transmission and distribution system charges, market and system operator fee, metering service charges and cross subsidy. Such grid charges shall be imposed on a uniform basis upon all bulk power consumers and any other open access user to provide level playing field to equally placed bulk power consumers of the respective supplier of last resort.
- (b)(i) the frameworks or policy guidelines issued by the Federal Government, from time to time, stipulating the mechanism to deal with stranded costs on account of market liberalization and open access. The framework or policy guidelines shall be applicable for a period of five years and the quantum of demand allowed for wheeling under the framework of policy guideline shall be 800MW, such quantum may be revised by the Federal Government based on market realities and the need for further liberalization. The frameworks or policy guidelines shall:
- (A) reflect market realities;
- (B) include measures and incentives to facilitate open access or wheeling of an allowed quantum of demand for a given period under the Competitive Trading Bilateral Contract Market (CTBCM);
- (C) provide mechanism for a transparent competitive auction process for allocation of the allowed quantum and applicability of contribution to the stranded costs thereto; and
- (D) such other matters as deemed necessary to safeguard consumer interests and advance the economic and social policy objectives of the Federal Government. The Authority shall





approve the competitive auction results within thirty days of submission by the Independent System and Market Operator of Pakistan (Guarantee) Limited (ISMO).

(b)(ii) in the event the framework or policy guidelines is not in field or the quantum of demand allowed for a particular period has been exhausted; or any person intends to avail open access without the competitive auction process stipulated in the frameworks or policy guidelines, then the Authority shall, on an application made by respective licensee or ISMO (as the case may be), determine other costs equal to the total generation capacity charges recovered from the equally placed bulk power consumers of the suppliers of last resort, either in a volumetric form (kWh) or through fixed charges. Such costs shall continue to be paid in the said manner till such time as these are reviewed by the Federal Government, as per the procedure laid down in sub rule (3) of this rule.

(c) subject to rule 5(2)(b)(i):

- (A) the above charges or costs shall be imposed on uniform basis across the country till the time the uniform tariff is applicable, and thereafter shall be applicable as per the tariff of each distribution licensee holding the supplier of last resort license; and
- (B) the periodic adjustment of any component of the above charges or costs shall be made by the Authority from time to time similar to the periodic adjustment of tariff of other consumers of suppliers of last resort.
- (d) The competitive supplier and any other open access user shall pay grid charges and other costs approved or determined by the Authority in the manner specified by it.
- (3) The principles set forth in sub-rule (2)(b)(ii) may be modified by the Federal Government as per the procedure laid down hereunder;
- (a) any proposal for deviation of stranded costs under sub-rule(2)(b)(ii) shall be submitted by the Division to which the business of electricity stands allocated to the Ministry of
- (b) for evaluation of any such proposal, the Ministry of Finance shall hire an independent consultant to study the impact of such proposal on the national exchequer and remaining consumers of suppliers of last resort;
- (c) upon submission of the final report by the independent consultant to the Ministry of Finance, the Ministry of Finance shall only endorse such proposal where the fiscal space is available in the budget to support such modification in the charges and shall verify that no burden shall be passed on to the remaining consumers of the suppliers of last resort; and
- (d) any proposal endorsed by the Ministry of Finance shall be submitted to the Federal Government for consideration and approval.
- (4) The Authority shall, in determining, modifying or revising (i) the grid charges including the amount of cross subsidy and (ii) other costs arising on account of market liberalization and advent of open access, namely, the stranded costs, perform its functions in accordance with the National Electricity Policy, National Electricity Plan and other principles provided by the Federal Government, including the principles contained in sub-rule (2) and as modified from time to time to time in accordance with sub-rule (3)."
- 12. Pursuant to the foregoing, and with reference to the relevant provisions of National Electricity Policy ("NE Policy") and National Electricity Plan, as amended ("NE Plan") read together with NEPRA Open Access (Interconnection and Wheeling of Electric Power)



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Regulations, 2022 ("Open Access Regulations") and Rule 5 of the Eligibility Criteria (Electric Power Supply Licenses) Rules, 2023, (amended from time to time), all XWDISCOs i.e. GEPCO, IESCO, LESCO, MEPCO, HESCO, FESCO, SECPO, QESCO, PESCO, TESCO and HAZECO submitted petitions for determination of Use of System Charges to the extent of Grid Charges only for FY2025-26. These petitions were filed in alignment with NEPRA determination for consumer-end-tariff for FY 2025-26 and Rule 3 of the NEPRA (Tariff Standards and Procedure) Rules, 1998 (Tariff Rules); The relevant provisions referred by XWDISCOs in their petitions are as under;

- a) Clause 4.4, 5.5.2(f), 5.5.2(g), 5.5.4, 5.6.5 and 5.6.7 of NE Policy.
- b) Strategic Directives 87 (as amended) and 88 of the NE Plan.
- c) Regulation 7 of Open Access Regulations; wherein; Each distribution licensee, in consultation with the respective supplier of last resort shall, within ninety days following the date of notification of Open Access Regulation, submit separate petition to the Authority for determination of use of system charges.

### 13. DISCO further submitted that;

- i. for the purposes of instant petition, DISCO being a network licensee, is obligated to provide open access, to its network, to open access users on non-discriminatory basis.
- ii. For the said obligation, DISCO is entitled for recovery of use of system charges in line with use of system agreement, as determined by the Authority.
- iii. The use of system charges shall include:
  - a) Transmission Use of System Charges (NTDC, PGC) irrespective of the placement of BPC & the respective generator.
  - b) System Operator Charges
  - c) Metering Service Provider Charges
  - d) Market Operator Charges
  - e) Distribution Margin Charges w.r.t to the voltage level (132kv, 11kv etc.) and consumer category wise for all possible BPCs.
  - f) Cross-Subsidy Charges (consumer category wise for all possible BPCs)
  - g) The stranded costs as per frameworks or policy guidelines provided by the Federal Government.

#### 14. DISCO also highlighted that;

- i. Currently applicable Transmission Use of System (TUoS) charges, as already determined by NEPRA, compositely represent the charges relating to Transmission Network Operator(s)/Licensee(s), System Operator and Metering Service Provider. Accordingly, the said TUoS charges remain part of use of system charges till separate charges for each of the said service providers are separately determined by NEPRA.
- Market Operator Fee / Charges (MoF) will be recovered by Market Operator as per the mechanism provided in the Market Commercial Code. Accordingly, without prejudice







- to being part of Cost of Service, these shall not form part of use of system charges to be recovered directly by DISCO.
- iii. Cross subsidy will be assessed based on Cost-of-Service analysis for the applicable consumer categories of all possible BPCs, which is according to the principles of uniformity as provided in the National Electricity Policy.
- iv. As prescribed by the Government on the recovery of costs that arise due to market liberalization and advent of the open access, namely, the Stranded Costs, will be as determined by the Authority as per the frameworks and policy guidelines provided by the Federal Government. It is clarified that as per the provisions of the NE Plan, a separate request will be submitted for determination of this component upon arising of the need.
- v. As the transmission and distribution losses will be charged to market participants of open access through the mechanism as provided in the Market Commercial Code, therefore, such charges shall not be levied under the use of system charges, as requested under the instant petition.
- vi. The use of system charges, including the Distribution Margin charges, as approved by the Authority, will be applicable with reference to those eligible Bulk Power Consumers (BPCs), who opt for supply from a Competitive Supplier (CS), other than Supplier of Last Resort (SoLR).
- vii. The use of system charges shall be with reference to voltage level (132/66 kV, 11/33 kV) for the applicable consumer categories of all possible BPCs. The component-wise Cost of Service, as per outcome of the detailed Cost of Service Study and consequent assessment of component-wise Use of System Charges for the applicable BPCs is provided.
- viii. UoSC purposed in this petition, and as determined by the Authority, shall be charged from the Competitive Supplier and any other open access user.
- ix. Power Factor Penalty as provided in applicable documents shall remain applicable in addition to the Use of System Charges.
- Any charges, taxes and surcharges as imposed by the Government shall be applicable.
- 15. The XWDISCOs further submitted that, since petitions for the FY 2025-26 are now being filed for the determination of the Use of System/ Wheeling Charges to the extent of grid charges only, based on the tariff figures determined by the Authority for the FY 2025-26, all previous petitions for determination of UoSC for FY 2022-23 and F'Y 2023-24 along-with their respective addendums, may be treated as withdrawn.
- 16. The Authority noted that the petitions filed by all XWDISCOs are similar in nature. Each DISCO stated that its petition for determination of use of system charges has been developed based on the basis Cost of Service Study (CoSS) (FY 2025-26), which forms an integral component of the petition, and provided their CoSS separately. It has further been submitted that most, if not all, of the relevant costs are fixed in nature; therefore, the natural mode of recovery should be through a fixed charge (in terms of Rs./kW/Month). Nevertheless, the following options have been presented for the Authority's consideration and determination:
  - i. Use of system charges recovery in term of Rs./kW/Month shall provide guaranteed stream of revenue to cover for costs which are fixed in nature. This may, however, over burden



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the relevant consumers, thus undermining the very purpose of CTBCM and open access regime.

- ii. Use of system charges recovery in term of Rs./kWh will render the service providers and the SOLR to face the revenue loss arising from low load factor of the eligible BPCs. On other hand, open access users shall be benefitted for any favorable Energy or Capacity Imbalance at the Market. This option may not provide a balanced approach to promised sharing of risks and rewards under CTBCM regime.
- iii. Use of system charges recovery through a hybrid approach i.e. partly through fixed charge in terms of Rs./kW/Month (subject to minimum MDI compared to the contracted load) and partly in terms of Rs./kWh, may provide a balanced plausible approach for all the involved parties. It is submitted that, in order to ensure level playing field for consumers of SOLR and CS, the recovery of use of system charges may have same charging mechanism.
- 17. XWDISCOs further submitted that the methodology and process prescribed under the FACOS model, for the purpose of allocating demand-related costs (kW or MW) utilizes the average of monthly system peak demand across various consumer categories to establish the allocation base. While this allocation framework is rational judicious and in line with international best practices, it yields demand figures that are lower than the actual (billable) Maximum Demand Indicators (MDIs) recorded for respective consumers.. Consequently, using the same MW demand as denominator for determining demand based rates results in comparatively higher per MW charges. In view thereof, XWDISCOS have developed a second proposal, namely, fully cost recovery in terms of Rs./kW and option (iii), hybrid partial cost recovery in terms of Rs./kW, has been developed based on billable MDIs of B-3, B-4 and C-2 customer categories.
- 18. The XWDISCOs further proposed that each component of use of system charges as detailed in the instant petitions should be subject to periodic adjustment/indexations. It has been submitted that whenever any such component is adjusted for regulated consumers of the suppliers of last resort, a corresponding adjustment in the relevant component of the USoC applicable to eligible Bulk Power Consumers (BPCs) shall be made simultaneously.
- 19. It also stated that under the existing stipulations of the NEPRA Act, a consumer who purchases or receives electric power, at one premises, in an amount of one megawatt or more is considered as a (BPC). In this regard, the XWDISCOs have presented the position concerning consumers with the potential to reach a load of one megawatt or more load at connection voltages 11 kV and above. However, it has been categorically stated that any consumer, regardless of sanctioned load or supply voltage, who is engaged in the resale of power beyond the point of supply shall not be treated as a BPC.







Sr. No.	Consumption Category	Tariff Category	Voltage Level	Remarks
1	General	A-2 & A-3	N/A	As per the existing tariffs, no kW sanctioned load quantification or connection voltage is applicable to A-2 and A-3 tariff categories. Accordingly, these are not considered BPC for the purposes of this petition. However, these customers, based on the sanctioned load, may be connected at 11 KV level, as required. Any such customer falling within the definition of BPC, and subject to the approval of the Authority, will be considered in the analogy of C2.
2	Industrial Consumer ranging from 500 kW to 5 MW. [extendable to 7.5 MW under conditions]	B-3	11/33 KV	B.3 consumer ranges from 500 kW to 5 MW. [Extendable to 7.5 MW under conditions]. It is clarified here that the consumers of this category below 1MW shall not be treated as eligible for open access.
3	Industrial	B-4	66/132 kV and above	This tariff is applicable for supply to Industries for all loads of more than 5MW receiving supply at 66kv, 132 kV and above and also for Industries having load of 5MW or below who op to receive supply at 66 kV or 132 kV and above.
4	Bulk Supply Ranging from 500 kW to 5 MW. [extendable to 7.5 MW under conditions]	C-2 (b)	11/33 KV	Bulk Supply consumer ranges from 500 kW to 5 MW.  [Extendable to 7.5 MW under conditions] Although the Bulk Supply C-2 customers are at 11/33 KV connection level. It is clarified here that the consumers of this category below 1MV shall not be treated as eligible BPCs for open access. Further, the consumers falling under the resale shall not be considered as eligible BPC.
5	Bulk Supply	C-3 (b)	66 KV & al	the use of system charges for C-3(b) category of consumers are assessed in the analogy of C-2(b) adjusted with differential of allowed losses at 11/33 kV (C-2) and 66/132 kV (C-3). The consumers falling under the resale shall not be considered as eligible BPC.
6	Housing Colonies attached to Industries	н	N/A	As per the existing tariffs, no kW sanctioned load quantification or connection voltage is applicable to H tariff category. Further, these connections are resale in nature. Accordingly, these are not considered BPC for the purposes of this petition.
7	Azad Jammu & Kashmir	K	N/A	The supply feed for AIK customer category is more than 1 MW at 11 kV level. However, the same is primarily for resale purpose, therefore, not considered as BPC.

#### 20. XWDISCOs further stated that;

- ✓ any subsidy provided by the Government to the industrial or any other eligible BPC, as applicable, will be dealt with according to the directions and terms and conditions thereof as decided by the Government. However, for the purposes of this petition, such subsidies are not considered.
- ✓ Captive power producers, using the DISCO network for wheeling of power to user destination will be considered "Market Participant" in terms of Market Commercial Code and will be dealt with accordingly. The use of system charges shall fully apply in manner applicable to any other eligible BPC.
- ✓ Captive generation and consumption points at the same location taking additional supply from the local supplier of last resort (SOLR) shall be considered a regulated consumer of the SOLR with applicable regulated tariff. Quantum of additional sanctioned / contracted load (in terms of MW) shall be considered to determine its status as BPC in terms of the Act. In case, such BPC choose to exercise option for open access, the use of system charges shall apply in full.
- Captive power producer / user supplying / receiving electric power at same premises, where DISCO network is totally not used, the use of system charges shall NOT apply in any way or manner.





- Use of System Charges provided in the instant petition shall be applicable to all such BPCs who will opt to get supply of electric power from competitive supplier including the captive generator using the network to wheel its power to the destination of its use. Such charges shall be fully applicable to any new eligible BPC or incremental consumption, obtaining supply of electric power from competitive supplier without any exception.
- 21. In view of the foregoing,, the XWDISCOs requested that use of System Charges be determined, at this stage, only to the extent of grid charges. With respect to stranded cost (as capacity charges), XWDISCOs submitted that although the requisite workings has been prepared, a separate request for determination of this component shall be filed as and when required, in accordance with the provisions of the NE Plan. The petitioners further requested that the Authority is requested to allow inter disco settlement on behalf of uniform UoSC (as per provisions of NE Plan), similar to the mechanism presently applied for the consumer end tariff.
- 22. The petitioners additionally requested that all previously filed petitions related to the determination of use of system charge may be treated as withdrawn.
- 23. The Authority admitted the petitions filed by GEPCO, IESCO, LESCO, MEPCO, HESCO, FESCO, SECPO, QESCO, PESCO, TESCO and HAZECO in principle,, subject to the condition that the petitioners submit copies of their respective Board Resolutions authorizing the filing of the petitions. The required Board Resolutions were subsequently provided..
- 24. To proceed further in the matter, and to ensure that a just, informed and transparent determination is made, the Authority decided to conduct a public hearing. The hearing was scheduled for 18.09.2025, for which notice was published in national newspapers, and also uploaded on NEPRA's website along-with copies of all petitions. Individual notices were also issued to all the relevant stakeholders.
  - i. The following issues were framed for deliberation during the hearing, as well as for submission of written and oral submissions and were uploaded on NEPRA website. Whether the requested Use of System Charges (UoSC) to the extent of Grid Charges are in line with NEPRA Act, NE Policy & other applicable documents?
  - ii. What are the basis and methodology adopted by DISCOs for calculation of Use of System Charges (UoSC) to the extent of Grid Charges?
  - iii. Whether the Grid charges be applied based on Rs./kW/M or Rs./kWh basis and what will be frequency to periodically review such charges?
  - iv. Whether the application of Grid Charges shall only be on those consumers having bilateral contracts with competitive Suppliers or also for those consumers having any other source of supply?
  - v. Any other issue that may come up during the proceedings.
- 25. Hearing was held as per the schedule on 18.09.205. The hearing was attended by large number of participants in person and through zoom, including CEOs of all DISCOs, Additional Secretary MoE (PD), CFO K-Electric, MD PPMC, representatives of ISMO & CPPA-G, Fatima Energy, PPDB, APTMA, and representatives of media etc. .



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- 26. On behalf of all XWDISCOs, a single presentation was given by DG MIRAD GEPCO, which presented the view point of all the Petitioners on each issue.
- 27. Different commentators submitted their comments during the hearing and in writing as well. A summary of relevant comments of all stakeholders along-with rejoinder by DISCOs is as under;
  - I. Mr. Rehan Javed representing KATI submitted comments vide email dated 10.09.2025. The same were forwarded to DISCOs for rejoinder. A summary of comments along-with rejoinder is as under;
  - ✓ Basis and Methodology. The DISCO petitions claim to derive UoSC from cost-of-service studies, but the underlying method is opaque and apparently inflated. Key inputs (load estimates, loss factors, and components of cost) are not transparently disclosed. Instead of isolating genuine network costs, the proposed formula blends unrelated charges: for example, generation capacity payments and broad cross-subsidy pools have been treated as "grid" costs. This approach appears to double-count losses and bounce legacy subsidies into the UoSC. Industrial consumers already compensate for technical losses by injecting extra energy via market mechanisms; charging an additional "loss allowance" in UoSC duplicates costs without added value.
  - ✓ Duplication of charges. The DISCOs' formula adds a losses component on top of existing loss compensation. This results in industry paying twice for the same energy lost enroute. Losses should be settled through the market code rather than re-charged via wheeling fees.
  - ✓ Stranded costs treated improperly. By dumping full embedded generation payments and cross-subsidies into one lump, the petition ignores any amortization or growth-based recovery. There is no clear depreciation schedule or offset as new assets come online. As a result, the immediate UoSC level is catastrophically high. A valid approach would strictly isolate transmission and distribution costs for big consumers, with clear formulas. Instead, the petition treats everything vaguely as part of "grid charges," making it impossible to verify or trust.
  - ✓ Regulatory scope. The petitions interpret "extent of grid charges" too broadly, effectively asking for a blanket subsidy recovery. This goes beyond what the law explicitly prescribes for system charges. There should be a clear sunset clause for non-network charges.
  - ✓ Cross-subsidy conflicts. National Policy calls for gradual removal of cross-subsidies. Yet here the DISCOs propose to reinforce them via UoSC. Even if statutes include broad language on subsidy recovery, the policy context is clearly to ease the burden on competitive transactions over time, not to inflate it suddenly.
  - ✓ Uniform tariff mismatch. UoSC must reflect the current approved network tariff. If NEPRA has fixed a uniform distribution tariff, then "grid charges" have already been defined. If intended to recover unrecovered distribution deficits, that should be done through transparent tariff mechanisms, not by using UoSC as a catch-all. We urge NEPRA to carefully check consistency with the NEPRA Act's fairness provisions and with the explicit cap (if any) on UoSC in the Open Access Regulations. Any ambiguity should be resolved in favor of the market's efficiency and the clear policy goal of strengthening open access.



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- ✓ Pricing Structure. The base charge should be per kW of agreed load (plus a modest perkWh component for losses or variable costs, if any). Recovering fixed grid costs via a kW-month rate ensures each consumer pays in proportion to the load reserved on the system. High-load industries (typical heavy manufacturers) use the network more intensively, and should bear a correspondingly larger share of fixed costs, which a kW fee does. If UoSC is purely per kWh, an industry with steady high output could face runaway charges that exceed actual cost causation. A per-kWh charges can disincentivize load factor improvements. A sensible two-part tariff (fixed demand charge plus small variable charge) better reflects practice in other markets.
- ✓ Review frequency. Any grid charge must be adjustable to changing conditions. At minimum, it should align with the regular tariff cycle (annual or as per periodic tariff review) so that inflation, cost changes or new investments are reflected.
- ✓ Applicability Conditions. By regulation, UoSC is meant to enable third-party wheeling it should be confined to bulk power consumers under open-access contracts. If a consumer has a licensed supplier selling via the transmission/distribution system, it should pay UoSC. If not, they pay the ordinary tariff. Firms that continue to take supply from their local DISCO under the existing tariff schedule already pay for network use via their tariff; imposing UoSC on them would be unjust, double charging. Likewise, if a company uses captive generation off-grid, it should not face UoSC on generation it never injects into the grid. NEPRA should explicitly limit UoSC to eligible Open Access transactions.
- ✓ Improve transparency. DISCOs should publish the detailed worksheets and assumptions behind the UoSC. All components (like distribution margin, losses calculation, capital base, etc.) must be verifiable. Absent clear data, the Authority should assume any excess is unwarranted.
- ✓ Layered cost recovery. We support a back-loaded or growth-based model for any remaining adjustments. For instance, a small fixed UoSC now with incremental increases as more consumers join the market would share the burden equitably. This mirrors international practice: countries like India introduced cross-subsidy surcharges for open access but planned for them to fall over time as tariffs converged. Pakistan should similarly avoid front-loading its entire adjustment.
- ✓ Progressive cross-subsidy removal. A clear timetable should be available to align retail prices with cost-of-service, reducing the very gap that the DISCOs now want to recover via UoSC. Any permanent subsidy should be explicitly identified (e.g. lifeline block) rather than implicitly dumped on exporters. Industries cannot carry the cost of DISCO inefficiency. NEPRA should ensure that any potential shortfall from reduced UoSC is offset by requiring distribution companies to cut losses, rationalize procurement, and improved billing efficiency.

#### Rejoinder by XWDISCOs;

✓ Basis and Methodology. The Petition(s) are based on the Cost-of-Service studies caried out
by DISCOs and regulated tariffs determined by the Authority. The Cost-of-Service model
systematically allocates the Revenue Requirements for the year, already determined by the
Authority. Therefore, question of duplication or, otherwise, inflated costs, does not arise.
The functionalities adopted in the FACOS Model are duly considered and concurred upon

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by the Authority under various petitions. Key inputs, assumptions and methodology for cost allocation are clearly defined and explained in the Cost-of-Service study submitted along-with Petition(s). For the purpose of cost allocation, all costs (including generation capacity payments) have to be considered along-with allowed level of losses for each voltage level. The methodology adopted, which allocates costs based on multiple cost causation triggers, i.e. energy (kWh), consumers (Nos.) and capacity (MW or KW) in Cost-of-Service, is true reflection of principle of "cost causation". The costs are not blended arbitrarily; rather, they are disaggregated by function and transparently allocated based on already NEPRA determined revenue requirement. Therefore, the question of "cost padding" does not apply.

- ✓ Duplication of charges. The energy losses are separately procured by the "open access users", therefore, the Petition has NOT requested any charge on account of energy losses. Mentioning of cost associated with energy losses is only for the purpose of disclosure and transparency, and not for additional recovery. Hence, there is no duplication of loss recovery in the proposed UoSCs / Grid Charges.
- ✓ Stranded costs treated improperly. It is reiterated that stranded costs are not included in the proposed UoSCs / Grid Charges. The National Electricity Plan's Strategic Directive 87 explicitly requires stranded cost recovery, if any, to be dealt with under a separate policy framework. The current Petition is limited to grid charges based on the approved revenue requirement and excludes stranded cost components. Cross-subsidies, however, are included only as required under Rule 5 of the Eligibility Criteria (Electric Power Supplier Licences) Rules, 2023 and in line with the NE Policy's which mandate of providing a level playing field. Thus, the requested rates for UoSCs / Grid Charges are neither inflated by stranded costs nor misaligned with NEPRA's determinations.
- ✓ Regulatory scope. All charges forming part of the requested Use of System Charges / Grid
  Charges are in line with the applicable Regulations and Rules; particularly the amended
  Rule-5 of the Eligibility Criteria (Supplier of Electric Power Licences) Rules, 2023.
- ✓ Cross-subsidy conflicts. The cross-subsidy included in the Petition(s) is in line with the
  Rules / Regulations. It may also be noted that the value of cross-subsidies has decreased over
  the period, being in line with the essence of the mentioned policy context.
- ✓ Uniform tariff mismatch. The Petition(s) for determination of UoSCs / Grid charges are in full reflection of Revenue Requirements and the applicable tariffs already determined by the Authority. The regulated Uniform National Tariff includes fixed charges, however, the same are applicable for equally placed regulated consumers. The instant Petition(s) are to determine the applicable Use of System Charges / Grid Charges for the "open access users" in transparent manner. It is important to note that the UoSCs / Grid Charges are reflection of NEPRA determined tariffs as the basis for these Grid Charges.
- ✓ Pricing Structure. Although the XWDISCOs have offered 3 possible methods of charges, i.e. the Fixed per kW/Month, variable per kWh and the hybrid Rs./kWh + Rs./kW/Month; the method suggested in the instant comments, i.e. predominantly fixed Rs./kW/Month + modest per-kWh charge, is more aligned to the hybrid method.
- ✓ Review frequency. Agreed and recommended for consideration of the Authority.



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- ✓ Applicability conditions. The UoSCs / Grid Charges should be applicable to the open access users as per the Regulations and the Rules. Sub-rule 5(2)(d) of the Eligibility Criteria (Electric Power Supplier Licences) Rules, 2023 explicitly states that:
  - "(d) The competitive supplier and any other open access user shall pay grid charges and other costs approved or determined by the Authority in the manner specified by it."
  - SD 87 (a) of NE Plan states that: "...Such grid charges shall be imposed on a uniform basis upon all bulk power consumers and any other open access user to provide level playing field to equally placed bulk power consumers of the respective supplier of last resort."

According to Regulation 2(1)(n) of the NEPRA Open Access Regulations, 2022, an "open access user "means any person who is availing open access under these regulations;

✓ Regulation 2(1)(m) of said Regulations defines:

"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, these regulations and use of system agreement, on non-discriminatory basis to: an electric power supplier for supply of electric power to its consumer(s); 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;
- ✓ Improve transparency. As already submitted, the proposed Use of System Charges / Grid Charges are based on systematic allocation of the DISCO level Cost of Service, also known as Revenue Requirement duly determined by the honorable Authority. All such determinations and the instant Petition(s) are publicly available at NEPRA website.
- ✓ Layered cost recovery. The proposed rates of UoSCs / Grid Charges, upon determination by the Authority, shall be applicable to open access users only. Accordingly, the lower or higher number of open access users does have impact on requested rates. Further the suggestion does not provide the recovery mechanism for the shortfall in case of charging UoSCs / Grid Charges at a rate less than the reflected cost.
- ✓ Progressive cross-subsidy removal. Cost-of-Service assessed and the UoSCs / Grid Charges requested are totally based on the Annual Revenue Requirements duly determined by the honorable Authority. Therefore, the question of passing on inefficiencies does not arise. Further, the requested UoSCs / Grid Charges do not include losses.
- III. Mr. Junaid Naqi, also representing KATI, submitted written comments vide letter dated 12.09.2025. Summary of comments is as under;
  - The methodology presented by DISCOs unfairly bundles stranded costs, Debt Servicing Surcharge, cross subsidy, DM, Transmission UoSC, and losses into the wheeling charges. The wheeling charges should only include wires, substations and technical losses and not policy surcharges or stranded costs as doing so is not aligned with NEPRA Act and NE Policy but also contradicts the intent of Open Access Regulations, 2022.





- ✓ Since per unit wheeling charges already include DSS, stranded cost, cross subsidy DM and losses, grid charges must remain Rs./kWh based to reflect actual usage. If fixed cost is required to be built in these charges, then it must be minimum and strictly limited to declared standby demand, not on sanction load. Further, it should be quarterly indexed on the basis of CPI and FX and one time annual true-up.
- ✓ Grid charges should only apply where grid is physically used and should not apply to captive users and embedded solar users, however, a fixed per KW charge based on sanctioned load should be recovered from the net metering users to share the fixed network costs.
- IV. Fatima Energy during hearing and vide letter dated 17.09.2025 raised the following issues;
  - ✓ Under the CTBCM regime, the grid charges should be applied on a per kWh basis rather than on a Rs/kW/month basis. This approach aligns with the volumetric (energy-based) principle of cost determination, as the actual usage of the transmission/distribution network is more directly linked to the units of energy wheeled through the system instead of the maximum demand/contracted capacity. Charging on Rs/kWh also ensures fairness and alignment with actual energy usage. For example, some industrial consumers often face operational and business constraints requiring them to shut down or curtail load on daily basis. For instance, steel production units routinely shut down for a few hours daily for cleaning and maintenance, while seasonal industries such as those in the food sector experience fluctuating demand cycles. In such cases, daily and monthly consumption varies significantly. If charges are levied on a fixed (Rs/kW/month) basis, it would impose an undue financial burden on BPCs and render operations unviable.
  - ✓ Reference Market Commercial Code section 3.3.2.2.(h), BPC bilateral contract is for at least 2 years, therefore review of UoSC should also be aligned accordingly.
  - ✓ In terms of Section 2(v) of the NEPRA Act, "distribution" means the ownership, operation, management or control of distribution facilities for the movement or delivery to consumers of electric power but shall not include the ownership, operation, management and control of distribution facilities located on private property and used solely to move or deliver electric power to the person owning, operating, managing and controlling those facilities or to tenants thereof; Therefore, interconnection facilities used solely for delivering electric power from a generator to a consumer located on private property-without involving any public property, third party, or DISCO territory-and which are owned, operated, managed, and controlled by the respective BPC, without using any transmission or DISCO network, shall not constitute a distribution activity under the NEPRA Act. In light of the foregoing, it is proposed that all such arrangements falling within the above category be allowed direct power supply within the same premises, without the imposition of any grid or network charges. It is important to mention that certain power plants have already made investments and operating under the aforesaid philosophy being legacy contracts. These should be specifically protected from any regime change.
  - ✓ Various relevant documents are still not issued/under review by the relevant entities or that
    may be under process for approval of the Authority and publication, such as revised market
    commercial code, determination/notification of UoSC, and relevant draft agreements,
    which are essential for the market participants for alignment of existing wheeling
    agreements as well as evaluation of financial impact of determinations of use of system
    charges under the new regulations or integration of existing arrangement under various





options available under CTBCM/regulations etc. The Authority is requested that the execution of revised terms may be prospective from the date of notification of CMOD of CTBCM including approval of modifications required pursuant to dry run test of market and publication of other relevant documents. A period of one year may be provided for transition into new regime to align all existing contracts and agreements with the new regulations and documentation including financial evaluations for business continuity.

- V. Mr. Tanveer Bari of KCCI submitted that UoSC should be uniformly applicable on the consumers of K-Electric, and should K-Electric also file its petition for determination of the UoSC.
- VI. Representative of APTMA objected on the inclusion of cross subsidy in the UoSC and proposed that UoSC shall be charged on volumetric basis i.e. Rs./kWh. APTMA vide letter dated 16.09.2025, submitted as under;

## Cost of Service Basis for Wheeling Charges

√ The main purpose of open access through power wheeling is to provide bulk power consumers, particularly industries with competitively priced and clean energy. However, the approved wheeling charge of Rs. 12.55/kWh (plus an uncertain bid price), equivalent to ~4.5 cents/kWh, renders the mechanism financially unviable. Out of this charge, Rs. 5.85/KWh (~2 cents/kWh) is reasonable, covering the actual Use of System Cost, distribution margins, and technical losses. The balance is inflated by Rs. 3.23/kWh in Debt Servicing Surcharge (DSS) and Rs. 3.47/kWh in cross-subsidies, which are legacy costs of the grid, unrelated to the cost of service. This distortion undermines the very purpose of open access and blocks industrial participation. Such a regime makes wheeling commercially irrelevant as the full cost of power sourced through open access would far exceed even the existing inflated grid tariffs of ~Rs. 34/kWh, leaving consumers with no incentive to source electricity through this avenue, and defeating the objective of introducing competitive electricity markets. APTMA strongly submits that wheeling charges must be determined on a strict cost-of-service basis-in the range of 1-1.5 cents/kWh, as determined by the cost-of-service studies sanctioned by the respective XWDISCOs-covering only UoSC, technical losses, and distribution margins. Crosssubsidies, debt servicing, stranded costs, and other legacy burdens should not be imposed on open-access transactions. Without this correction, open access will fail at inception, and the power sector will lose the opportunity to transition toward market liberalization.

#### Basis of Application: Per kWh, Not Capacity

✓ APTMA also submitted that Grid Charges should be applied strictly on a per-kWh usage basis. The distribution network is fundamentally a "wire business"-its costs are driven by the flow of energy and the maintenance/upkeep of assets, not by long-term fixed generation capacity obligations. Imposing charges on a kW/month basis would unfairly penalize industrial consumers who may not draw consistent volumes from the grid, particularly when reliability is low or when they invest in their own efficient captive or renewable generation. A per kWh methodology is not only economically rational but also internationally consistent, ensuring fairness, transparency, and a direct link between system use and system cost.





# Hybrid Consumption and CTBCM Cap

- ✓ In addition to the wheeling charge determination, two issues risk undermining operationalization of open access arrangements:
- ✓ Hybrid consumption is currently penalized as hybrid users are charged at the marginal rate of the grid, pushing their blended tariff above the normal grid tariff. We submit that hybrid consumption must be allowed at the normal grid tariff, not the marginal rate, so that industries can practically combine grid and bilateral supply.
- √ The 800 MW cap on CTBCM capacity is arbitrary and artificially restricts participation. A
  minimum cap of 1,500 MW is necessary for scale, industrial relevance, and meaningful
  competition. For Pakistan's power sector to move towards competition and efficiency, it is
  imperative that:
- ✓ In view of the above, APTMA requested that;
  - Wheeling charges be determined strictly on a cost-of-service basis (1-1.5 cents/kWh), excluding cross-subsidies, DSS, and other legacy costs.
  - Grid charges be applied only on per-kWh usage, not capacity.
  - Hybrid consumption be permitted at normal grid tariffs
- 28. Based on the submissions made in the petitions, the comments received during the hearing and through written submission made by the petitioners and other stakeholders, and after due consideration of the NEPRA Act, th NE Policy, NE Plan and other applicable documents, the issue wise discussion/ findings are set out hereunder;
- 29. Issue 01: Whether the requested Use of System Charges (UoSC) to the extent of Grid Charges are in line with NEPRA Act, NE Policy & other applicable documents?
- 29.1. The petitioners submitted that the XWDISCOs are existing licensees for the distribution and supply of electric power. In pursuance of the relevant directives contained in the NE Policy 2021, the NE Plan 2023-27, read with NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022 ("Open Access Regulations") and Rule 5 of the Eligibility Criteria (Electric Power Supply Licences) Rules, 2023, the instant Petitions have been filed. In this regard, various provisions of the NE Policy, 2021, relevant to the instant case, were referred to, as detailed below;

# National Electricity Policy (NE Policy) 2021;

<u>Clause 4.4</u> provides that sustainability of the entire power sector pivots around the financial and commercial viability of its individual sub-sectors. This will be done by:

- a. promoting investments on least cost basis balanced with development in the underserved areas;
- b. having cost-reflective tariffs in transmission and distribution, to the extent feasible;
- c. timely passing of costs to the consumers, while netting off any subsidies funded by the Government; and

d. recovery of costs arising on account of open access, distributed generation, etc.







<u>Clause 5.5.2</u>: The approved wholesale market design, its implementation and subsequent development take into account the following;

- (f) "providing a level playing field to all market participants through uniform application of cross-subsidization and other grid charges to consumers of all suppliers;
- (g) "the Government shall take a decision on the recovery of costs that arise due to advent of the open access and market liberalization;"

Clause 5.5.4: In order to ensure implementation of wholesale market design and its further evolution, the Regulator shall in a timely manner frame, modify and evolve regulatory framework for, inter alia, supply, procurement, open access/wheeling, competitive bidding, import of power, and ensure effective market monitoring and enforcement. Provided that after implementation of CTBCM, every transmission licensee and distribution licensee shall offer, to all market participants, non-discriminatory open access/wheeling to its respective transmission or distribution system and interconnection services in accordance with CTBCM or, the terms determined under the policy and legal framework."

Clause 5.6.5: The Regulator, in order to ensure liquidity of the power sector, provide a level playing field for the development of wholesale market and to facilitate prudent projects of the Government, may impose additional charge(s) which shall be deemed to be costs incurred by the distribution companies / electric power supplier(s). Such additional charge may take into account the sustainability, socio-economic objectives and commercial viability of the sector, affordability for the consumers and the policy of uniform tariff. Similarly, the Government may also incorporate, in the consumer-end tariff any surcharge imposed by it, which shall also be deemed to be cost incurred by the distribution companies / electric power supplier(s) and shall be collected by them in discharge of their public service obligations.

Clause C5.6.7: The Regulator will provide for recovery of costs arising on account of distributed generation and open access in the consumer-end tariff, as decided by the Government. Further, the Government may announce, from time to time, various concessional packages to incentivize additional consumption to minimize such costs."

### NE Plan 2023-27- SD 87 to 90 provides:

- Open access charges shall be recovered from all consumers opting for open access through competitive supplier.
- ii. Grid charges, including use of transmission and distribution system charges, Market and system operator fee, cross subsidy charges, metering service charges etc., shall be recovered
- iii. from all consumers, opting for open access, till the currency of this NE-Plan or as amended by the Government;
- iv. The Federal Government shall provide the frameworks or policy guidelines, from time to time, stipulating the mechanism for recovery of the stranded costs on account of market liberalization and open access.
- v. Determination of use of system charges is a prerequisite of for CMOD (CTBCM).



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Eligibility Criteria (Electric Power Supplier Licenses) Rules, 2023: The Rule 3(g)(C) of the Eligibility Criteria (Electric Power Supplier Licenses) Rules, 2023 (the Supplier Rules), requires an electric power supplier to be eligible, among others, for the following:

3(g)(C): collection and deposit of following charges, as may be determined by the Authority, in a timely manner, including but not limited to:

- i. transmission use of system charges;
- ii. distribution use of system charges;
- iii. market and system operator fee; and
- iv. any other charges as provided in rule S of these rules;"
- 29.2. The petitioners further submitted that Rule 5(1) of the Supplier Rules (as amended) obligates a supplier of electric power to bill and collect from the BPCs, , and to make timely deposits to the relevant distribution licensee in the designated account, all the applicable charges, including (i) grid charges including the amount of cross subsidy, and (ii) other costs arising on account of market liberalization and advent of open access, namely, the stranded costs. It was further submitted that Rule 5(2) of the Supplier Rules (as amended) mandates the Authority to determine the (i) grid charges including the cross subsidy component and (ii) other costs arising on account market liberalization and advent of open access, i.e. stranded costs in accordance with the provisions of NE Policy, NE Plan and such other economic and social policy objectives as may be prescribed by the Federal Government.. Additionally, as per Rule 5(2)(b) of the Supplier Rules, the grid charges shall include, inter alia the use of transmission and distribution charges, market operation fee, metering service charges and cross subsidy, to be imposed on uniform basis upon all BPCs of the competitive supplier. It was noted that the Federal Government shall, from time to time, provide the requisite frameworks or policy guidelines stipulating the mechanism for recovery of stranded cost on account arising from market liberalization and open access.
- 29.3. During the hearing, the petitioners reiterated the submissions made in the petitions and submitted that the proposed Use of System Charges, limited to the extent of Grid Charges are in total alignment with NEPRA Act, NE Policy & other applicable documents.
- 29.4. The Authority observed that, in terms of the NEPRA Act, it is required to be guided by the National Electricity Policy, the National Electricity Plan and such guidelines as may be issued by the Federal Government for the purpose of giving effect to the National Electricity Policy and National Electricity Plan. In this regard, Clause 5.5.2 (f) of the National Electricity Policy envisages the provision of a level playing field to all market participants through the uniform application of cross-subsidization and other grid-related charges to consumers of all suppliers.
- 29.5. The Authority further observed that the NE Plan similarly emphasizes ensuring a level playing field for all market participants through the uniform application of open access charges and Open access charge shall be recovered as per the following mechanism:

SD 87

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(a) the grid charges shall include, but not limited to, the use of transmission and distribution system charges, market and system operator fee, metering service charges and cross subsidy. Such grid charges shall be imposed on a uniform basis upon all bulk power consumers and





any other open access user to provide level playing field to equally placed bulk power consumers of the respective supplier of last resort.

(b)(i) the frameworks /policy guidelines issued by the Federal Government, from time to time, stipulating the mechanism to deal with stranded costs on account of market liberalization and open access.

(b)(ii) in the event the framework / policy guidelines is not in field or the quantum of demand allowed for a particular period has been exhausted; or any person intends to avail open access without the competitive auction process stipulated in the frameworks / policy guidelines, then the Authority shall, on an application made by respective licensee or ISMO (as the case may be), determine other costs equal to the total generation capacity charges recovered from the equally placed bulk power consumers of the suppliers of last resort, either in a volumetric form (kWh) or through fixed charges. Such costs shall continue to be paid in the said manner till such time as may be reviewed by the Federal Government as per the procedure laid down in the applicable rules.

#### **SD 88**

prior to the CMOD, the Regulator shall determine open access charges in accordance with the provisions of Strategic Directive 087. Such charges shall only be applicable for the consumers opting for open access through national grid.

#### SD 89

each Supplier of Last Resort shall file a petition to Regulator for determination of the open access charges.

- 29.6. Similarly, the Eligibility Criteria Supplier Rules 2023, (as amended), requires the Authority to determine (i) grid charges including the amount of cross subsidy and (ii) other costs arising on account market liberalization and advent of open access, namely stranded costs in accordance with the provision of NE Policy, NE Plan and such other economic and social policy objectives as may be provided by the Federal Government. The said Rules further provide that grid charges shall include, iner alia, the use of transmission and distribution system charges, market and system operator fee, metering service charges and cross subsidy. Such grid charges are required to be imposed on a uniform basis upon all BPCs and other open access users in order to ensure a level playing field among similarly placed BPCs of the respective supplier of last resort. The Rules further stipulate that these charges or costs shall be imposed on uniform basis across the country for so long as the uniform tariff remains applicable, and thereafter, shall be applicable as per the tariff of each distribution licensee holding the supplier of last resort license. Any periodic adjustment of any component of the above charges or costs shall be determined by the Authority from time to time, in a manner analogous to the periodic adjustment of tariffs applicable to other consumers of suppliers of last resort.
- 29.7. In view of the foregoing discussion, the Authority understands that the petitions filed by XWDISCOs for determination of Use of System Charges to the extent of grid charges are in line with the provisions of NEPRA Act, NE Policy, NE Plan, Eligibility Criteria Rules 2023 and other applicable documents, as amended from time to time. Accordingly, the use of





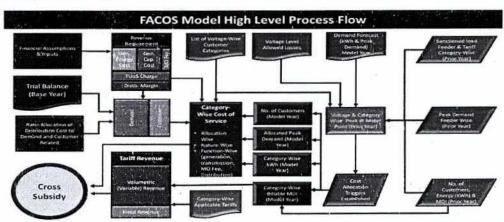


system charges to the extent of grid charges are being determined through the instant decision

- 29.8. With regard to the petitioners' request that all previously filed petitions for determination of UoSC for FY 2022-23 and F'Y 2023-24 along-with their respective addendums, may be treated as withdrawn, the Authority notes that the UoSC to the extent of grid charges are being determined on the basis of the latest tariff numbers determined for the FY 2025-26. Once notified, these charges shall be applicable prospectively. Consequently, there remains no practical purpose in processing earlier petitions based on superseded tariff numbers which, even if determined, would not be applied. In view thereof and as per the request of the petitioners, all such petitions along-with addendums, are hereby returned.
- 30. Issue 02: What are the basis and methodology adopted by DISCOs for calculation of Use of System Charges (UoSC) to the extent of Grid Charges??
- 30.1. The petitioners submitted that the instant petitions for determination of use of system charges have been developed on the basis of the Cost-of-Service Study (COSS) (FY 2025-26), which forms an integral part of these petitions. As per the petitioners, that the methodology employed in developing the Fully Allocated Cost of Service Study (FACOS) Model closely aligns with the standards that are used internationally. The FACOS Model undertakes the three conventional stages of a cost-of-service study, , namely, functionalization, classification, and allocation. The functionalities adopted in the FACOS Model are detailed below;
  - The COSS is based on computation of cost of providing electricity to each consumer class and thereafter allocating the cost to each category and computation of tariff thereof. This study is based on international best practices and aims to map all the consumers of each DISCO with the cost centers and power distribution levels. The purpose of this study is to arrive at cost reflective tariffs giving proper price signals to the customers and to standardize the tariff-setting methodology and make it more understandable and agreeable.
  - ✓ The cost allocation model is based on certain standard assumptions as below;
    - Energy Cost is 100% allocated on the basis of each customer class share in the total energy (kWh) received by DISCO at CDP points;
    - Capacity Cost and Transmission cost is 100% allocated in the ratio of each customer class peak demand (kW) to the DISCO's computed peak demand.
    - O&M cost to the extent of Repair and Maintenance, Depreciation, working capital (if any) and
    - Other income is allocated to each level of power distribution (132/66kV, 11kV, 0.4/0.2kv) in accordance with the proportionate shore of assets deployed to provide service at that voltage level divided by the total assets deployed for power distribution.
    - Advertising expense and bill collection charges ore allocated 100% on the basis of proportionate number of Customers in each customer class to the total number of customers.



- Remaining heads of O&M cost, i.e., Salaries, wages and other miscellaneous
  expenses are allocated to each level of power distribution (132/66kV, 11kv,
  0.4/0.2kv) based on the allocated distribution margin (excluding advertising, bill
  collection and administrative expenses) for that voltage level divided by DISCO's
  total distribution margin (excluding advertising, bill collection and administrative
  expenses).
- Other income and amortization of deferred credit is allocated to each level of power distribution (132/66kv, 11kv, 0.4/0.2kv) based on the allocated distribution margin (excluding administrative expenses) for that voltage level divided by DISCO's total distribution margin (excluding administrative expenses).
- Prior year adjustment is allocated on the basis of respective share of each customer category in every functionally classified item.
- ✓ At a high level, FACOS process comprises of the following three (3) fundamental steps:
  - Functionalization: The identification of each cost element as one of the basic utility service "functions" (e.g. generation/Power Purchase Price, transmission, distribution and customer).
  - Classification: The classification of the functionalized costs based on the billing component/determinant that each is associated with (e.g. kWs of capacity, kWhs of energy or number of customers).
  - iii. Allocation: The allocation of the functionalized and classified costs to customer classes, based on respective service requirements / parameters (e.g. kWs of capacity, kWhs of energy and the number of customers) of each class.
- 30.2. The petitioners also presented the following high-level process flow of FACOS methodology during the hearing;



30.3. During the hearing, the petitioners submitted that the proposed (UoSC) have been determined using the (FACOS) Model. The FACOS model allocates various functional costs (i.e. generation, transmission use of system, market operator fee, and distribution / supply) based on cost triggers like energy (kWh), demand (MW), and the number of consumers at each voltage level (132 kV,11 kV, and 220/400 volt).





- 30.4. It was further submitted that the FACOS model is a professionally structured tool that aligns with international practices. It's considered reasonably accurate, though minor human errors are expected. The model's assumptions and methodologies have been thoroughly examined and approved by the Authority. **Cross-subsidy** is the difference between a consumer category's average determined tariff and its allocated cost of service. A category cross-subsidizes if its average tariff is greater than its allocated cost; it receives a subsidy if the average tariff is less than the allocated cost. In line with revised Rule-5 of Eligibility Criteria (Electric Power Supplier Licences) Rules, 2023 and amended Strategic Directive-87 of National Electricity Plan 2023-27, the stranded cost (as capacity charges); although otherwise forming part of the assessed/calculated Cost of Service, has not been included in proposed rates for determination of Grid Charges.
- Based on the foregoing assumptions and methodology, the petitioners requested for the following Gid charges on Rs./kWh basis;

	Rs./kWh													
Sr. No.	DISCOs	В3	B4	C2(a)	C2(b)	C3(b)	A2(c)	А3	D2(b)					
1	LESCO	8.996	6.015	20.318	19.905	12.578	15.944	17.012						
2	IESCO	15.421	3.704		18.845	20.283								
3	FESCO	9.625	10.844		13.424	9.296	19.525	15.673	9.487					
4	GEPCO	6.969	6.136		15.907	15.386								
5	HESCO	7.064	10.613		8.845	11.897	18							
6	SEPCO	12.030	10.320	AM	20.090	19.040								
7	MEPCO	5.415	3.804		16.172	7.079								
8	PESCO	7.517	5.961		7.822	10.694								
9	HAZECO	9.025	7.448		12.429	13.726								
10	TESCO	12.522	9.592	N	29.393	26.063								
11	QESCO	17.390	17.227		21.816	22.294								

- 30.6. The Authority has examined the data/ FACOS Model submitted by DISCOs and also held consultations with various DISCOs regarding the methodology and data inputs employed for the determination of the COS. While the DISCOs have demonstrated considerable progress in improving data input and cost allocations to various consumer categories; the Authority observes that the following areas/ points needs further improvement / consideration;
  - Proper assessment of sanctioned loads for various consumer categories below 11 KV level, for accurate allocation of costs.
  - ii. Voltage wise break-up of losses in line with NEPRA allowed levels.
  - Periodic up-dation of factors used for allocation of costs to various voltage levels, as currently the same are based on older studies.
  - iv. Allocation of feeder wise peak load to various consumer categories below 11 KV level, based on their respective sanctioned loads, resulting in abnormal load factors, owing to inappropriately assessed sanctioned loads, may result in inaccurate cost allocation.
  - v. Some DISCOs initially included negative PYA as part of Distribution Margin. Subsequently, DISCOs revised their FACOS model, whereby the relevant amount of PYA was allocated as part of Capacity charges. Further, the voltage wise losses assumed by DISCOs in their FACOS model were initially not in line with the NEPRA determinations, but were later corrected.





- 30.7. In addition, the Authority noted the following;
  - ✓ Total Margin, including margin allowed for Supply Business, has been included for calculation of wheeling charges.
  - ✓ Entire amount of Prior Year Adjustment (PYA) has been included while calculating Wheeling charges, including amount related with Supply Business.
  - ✓ Sales for different voltage levels were not as per the allowed SoT for the FY 2025-26.
  - ✓ Inconsistencies in voltage-wise losses.
  - ✓ Exclusion of Maker Operation Fee (MoF) from grid charges.
  - ✓ QESCO did not use Revenue Requirement & projected sales allowed for FY 2025–26.
- 30.8. The aforementioned issues were communicated to all the Petitioners. XWDISCOs, in light of these issues, submitted their revised numbers as under;

Description	IESCO	HESCO	GEPCO	SEPCO	PESCO	TESCO	MEPCO	FESCO	HAZECO	QESCO	LESCO
132kv	19.63	10.45	5.54	9.88	5.77		3.45	10.26	12.38	52.27	4.38
11kv	11.95	7.55	6.45	17.64	11.12	3.77	6.24	9.45	7.22	15.04	9.96
B3	15.70	7.47	5.84	12.37	7.21	17.74	5.00	9.26	7.37	14.63	8.80
B4	18.29	10.65	5.54	10.66	5.07	-	3.40	10.41	6.81		5.34
C2	19.44	9.28	14.75	20.43	7.32	16.65	15.87	12.98	11.86	15.46	19.74
C3	20.86	11.83		y #	1.30		6.13	8.69	26.77	56.95	11.91
C2(a)			Α					-		anancar.	20.14
A2(c)								×			15.77
A3		Sec.	January 50.			2		-			16.85

- 30.9. The petitioners, while submitting their revised numbers, further contended that the supply margin ought to be included in Grid Charges, otherwise would be a stranded cost. Similarly, PYA part of Supply margin may also be included in Grid Charges
- 30.10. While determining the Grid Charges, the Authority has adopted the following assumptions;
  - Revenue Requirement (RR) as determined for each DISCO/ SoLR for the FY 2025-26.
    - ✓ Energy Purchase Price (EPP)
    - ✓ Capacity Purchase Price (CPP)
    - ✓ NTDC/HVDC cost
    - ✓ Market Operator Fee (MoF)
    - ✓ Distribution Margin (DM)
    - ✓ Prior Year Adjustments (PYA)
  - Total DM bifurcated into Network & Supply Business costs, as Grid Charges are required to be restricted to the extent of cost attributable to the Wire Business.
  - PYA bifurcated into PPP and DM, with DM portion of PYA, further bifurcated into Network & Supply Business costs.
  - Out of total allowed amount for DM and PYA, only costs related with Network business has considered for the purpose of calculation of Grid charges.
  - Losses as allowed by the Authority to each DISCO for the FY 2025-26.







- Criteria used to allocate the allowed RR among different consumer categories is as under;
  - ✓ Energy Purchase Price (EPP) 100% based on unit basis (kWhs).
  - ✓ Capacity Purchase Price (CPP) 100% based on Demand (MDI)
  - ✓ NTDC/HVDC/MoF 100% based on Demand (MDI)
  - ✓ DM Demand, Number of Customers, Others (energy)
- The MoF included while working out Grid charges.
- Cross Subsidy worked out as the difference between Cost of Service (CoS) of each category and its applicable tariff.
- 30.11.Based on the foregoing assumptions, and the information and FACOS model submitted by DISCOs, the Cost of Service of each DISCO along-with grid charges, for different consumer categories at different voltage levels has been worked out, as detailed below;

Cost of Service	IESCO	LESCO	FESCO	GEPCO	MEPCO	PESCO	HESCO	QESCO	SEPCO	TESCO	HAZECO
Cost of Service						Rs./kWh					
132 kV	20.45	34.04	26.27	45.46	33.17	30.49	27.01	86.93	28.21	4	77.81
11 kV	25.52	28.06	28.48	31.41	33,40	25.04	31.38	27.29	24.25	17.86	28.98
220 V & 400 V	31.40	31.61	33.79	34.16	34.82	39.95	47.03	42.33	36.13	48.71	34.69

Grid Charges	Fixed Grid Charge	IESCO	LESCO	FESCO	GEPCO	MEPCO	PESCO	HESCO	QESCO	SEPCO	TESCO	HAZECO	
CARATTE STOCK OF STOCK	Rs./kW/M	Rs./kWh											
B-4	1.00	14.90	4.21	9.54	5.52	3.44	5,68	9.11	36.57	7.62	*	12.34	
C-3	1.00	23.70	11.67	18.09	5.52	11.45	14.01	20.69	36.57	20.56		12.34	
B-3	1.00	12.11	8.99	8.97	6.04	4.83	10.95	6.48	9.49	12.19	15.55	8.09	
C-2 (a)	1.00	22.68	19.49	19.32	4.71	15.13	21.39	16.65	20.57	22.24	25.78	18.70	
C-2 (b)	1.00	20.82	17.75	17.33	15.29	13.12	19.59	14.06	18.80	19.93	24.72	16.80	
A-2 (C)	1.00	22.18	19.02	18.96	16.68	14.52	20.90	16.24	20.25	21.28	26.52	18.31	
A-3	1.00	21.90	18.56	19.60	17.26	15.24	21.00	15.84	19.85	21.48	27.94	18.68	
D-2(b)	1.00	9.76	6.61	6.42	4.71	4.83	8.49	4.34	7.70	9.27	13.89	5.80	

- 30.12. The Authority observed that, in terms r of NEPRA Open Access Regulations, 2022, each distribution licensee, in consultation with its respective supplier of last resort, is required to prepare and submit a separate petition to the Authority for determination of its use of system charges. Accordingly, in line with the Open Access Regulations 2022 and relevant provisions of NE Plan, each of the SoLR filed its separate petition for determination of UoSC to the extent of grid charges only in the first stage. Accordingly, the Authority has decided to determine separate UoSC to the extent of grid charges for each DISCO, at different voltage levels and for different consumer categories at the same voltage level.
- 30.13. Upon determination of the individual Use of System Charges for each DISCOs, the Government of Pakistan may, in accordance with the relevant provisions of NE Plan, submit a request for uniformization of the determined grid charges across all DISCOs, so that the same may be imposed uniformly upon all BPCs and other open access users.
- 31. Issue 03: Whether the Grid charges be applied based on Rs./kW/M or Rs./kWh basis and what will be frequency to periodically review such charges?
- 31.1. The petitioners submitted that most of the costs, if not all, are fixed in nature, therefore, the natural mode of recovery should be fixed (in terms of Rs./kW/Month) charge. However, following options have also been proposed for consideration of the Authority;
  - Use of system charges recovery in term of Rs./kW/Month metered shall provide guaranteed stream of revenue to cover for costs which are fixed in nature. This may,





however, over burden the relevant consumers thus undermining the very purpose of CTBCM and open access regime.

- ✓ Use of system charges recovery in term of Rs./kWh will render the service providers and the SOLR to face the revenue loss arising from low load factor of the eligible BPCs. On the other hand the open access users shall be benefitted for any favorable Energy or Capacity Imbalance at the Market. This option may not provide a balanced approach to promised sharing of risks and rewards under CTBCM regime.
- ✓ Use of system charges recovery through a hybrid approach, i.e. partly through fixed charge in terms of Rs./kW/Month (subject to minimum MDI compared to the contracted load) and partly in terms of Rs./kWh may provide a balanced plausible approach for all the involved parties. It is submitted that, in order to ensure level playing field for consumers of SOLR and Competitive Supplier, the recovery of use of system charges may have same charging mechanism.
- ✓ It further submitted that methodology and process as per FACOS model, for the purpose of allocation of demand (kW or MW) related costs, allocates average of monthly system peak demand to different categories to arrive at the allocation base. This allocation, despite being rational, judicious and in line with international norms, results in less than actual (billable) MDIs of respective customers. Accordingly, taking the same MW demand as denominator for demand (MW) based rate making will result in higher per MW rates. In consideration thereof, a second proposal for arriving at demand base rates i.e. whole cost recovery in terms of Rs./kW and option (iii), hybrid partial cost recovery in terms of Rs./kW, has been developed based on billable MDIs of B-3, B-4 and C-2 customer categories.
- 31.2. During the hearing, the petitioners submitted that, under the existing tariff regime, customers are charged uniformly across the country and at different voltage levels. However, certain categories, including the industrial consumer are being charged on two-part tariff basis i.e. fixed charge per kW/month or per connection/month and a variable charge per kWh. As elements of the grid charges, are mostly fixed in nature and linked to available capacity (MW/kW), therefore, a charge in Rs./kW/month would be more realistic and reflective. However, this may face practical challenges due to history of volumetric (kWh) tariffs, thus, a hybrid model may be considered. i.e. partially volumetric (Rs./kWh) and partially on capacity (Rs./kW/month) basis.
- 31.3. The Petitioners also stated that review of these charges, should be inherent part of Periodic tariff adjustments of regulated tariffs as provided in Rule-5(2)(c)(B) of the Eligibility Criteria (Electric Power Supplier Licences) Rules, 2023.
- 31.4. Regarding application of UoSC, the Petitioner submitted that a charge in Rs./kW/month would be more realistic and reflective, however, may face practical challenges due to history of volumetric (kWh) tariffs, therefore, a hybrid model may be considered. i.e. partially volumetric (Rs./kWh) and partially on capacity (Rs./kW/month) basis.
- 31.5. Mr. Rehan Javed proposed that base charge should be per kW of agreed load (plus a modest per-kWh component for losses or variable costs, if any).
- 31.6. APTAM on the other hand suggested to apply Grid Charges strictly on a per-kWh usage basis.



North of



- 31.7. Fatima Energy also proposed that grid charges should be applied on per kWh basis rather on a Rs/kW/M basis. Mr. Junaid Naqi has also supported per kWh application of Grid Charges.
- 31.8. The Authority noted that various stakeholders have proposed different methodologies for the application of Grid Charges i.e. either on per kW basis or on per kWh basis or combination of both. Given that the CTBCM is at an early stage of implementation and its commercial operation date is yet to be achieved, the Authority considers it more prudent to adopt a simplified recovery mechanism for recovering Grid Charges in order to facilitate market initiation. At the same time, as the DISCOs have pointed out, most grid-related costs are fixed in nature. Accordingly, the Authority deems it appropriate to introduce a national fixed charge on a per-kW basis to signal the prospective evolution of charging structure towards a greater alignment between fixed and variable components for open access users.
- 31.9. In view of the above,, the Authority has decided to levy grid charges primarily on per kWh basis, as provided in the given table along-with Rs.1/kW/Month as fixed charge on all open access users.

Grid Charges	Fixed Grid Charge	IESCO	LESCO	FESCO	GEPCO	MEPCO	PESCO	HESCO	QESCO	SEPCO	TESCO	HAZECO
	Rs./kW/M						Rs./kWh			2		
8-4	1.00	14.90	4.21	9.54	5.52	3,44	5.68	9.11	36,57	7.62	-	12.34
C-3	1.00	23.70	11,67	18.09	5.52	11.45	14.01	20.69	36.57	20.56		12.34
B-3	1.00	12.11	8.99	8.97	6.04	4.83	10.95	6.48	9.49	12.19	15.55	8.09
C-2 (a)	1.00	22.68	19.49	19.32	4.71	15.13	21.39	16.65	20.57	22.24	26.78	18.70
C-2 (b)	1.00	20.82	17.75	17.33	15.29	13.12	19.59	14.06	18.80	19.93	24.72	16.80
A-2 (C)	1.00	22.18	19.02	18.96	16.68	14.52	20.90	16.24	20.25	21.28	26.52	18.31
A-3	1.00	21.90	18.56	19.60	17.26	15.24	21.00	15.84	19.85	21.48	27.94	18.68
D-2(b)	1.00	9.76	6.61	6.42	4.71	4.83	8.49	4.34	7.70	9.27	13.89	5.80

- 31.10. It is also pertinent to note that, in terms of SD 87 of the NE Plan, in the event the framework / policy guidelines, stipulating the mechanism to deal with stranded costs on account of market liberalization and open access, are not in force or where the quantum of demand permitted for a specified period has been exhausted; or where any person intends to avail open access without the competitive auction process stipulated in the frameworks / policy guidelines, then the Authority shall, on an application made by respective licensee or ISMO (as the case may be), determine other costs equal to the total generation capacity charges recovered from the equally placed bulk power consumers of the suppliers of last resort, either in a volumetric form (kWh) or through fixed charges. Such costs shall continue to be paid in the said manner till such time as may be reviewed by the Federal Government as per the procedure laid down in the applicable rules.
- 31.11.In view thereof, any person seeking to avail open access without the competitive auction process, shall be liable to also pay the stranded cost. Accordingly, for such consumers, the total grid charges including stranded cost would be as under;





Starnded Cost	Fixed Grid Charge	IESCO	LESCO	FESCO	GEPCO	MEPCO	PESCO	HESCO	QESCO	SEPCO	TESCO	HAZECO
	Rs./kW/M						Rs./kWh					
132 kV		8.42	19.44	13.00	29,36	19.36	16.19	14.07	31.51	15.75	*:	52.80
11 kV		11.46	13.23	13.03	14.96	16.78	10.08	15.74	11.31	10.48	6.20	12.71
Grid Charges	Fixed Grid	IESCO	LESCO	FESCO	GEPCO	MEPCO	PESCO	HESCO	QESCO	SEPCO	TESCO	HAZEC

Grid Charges Including Stranded	Fixed Grid Charge	IESCO	LESCO	FESCO	GEPCO	мерсо	PESCO	HESCO	QESCO	SEPCO	TESCO	HAZECO		
cost	Rs./kW/M		Rs./kWh											
8-4	1.00	23.33	23.66	22.54	34.88	22.80	21.87	23.18	68.09	23.36		65.14		
C-3	1.00	32.13	31.11	31.09	34.88	30.82	30.19	34.76	68.09	36.31		65.14		
8-3	1.00	23.56	72.23	22.00	21.00	21.60	21.03	22.22	20.81	22.67	21.76	20,80		
C-2 (a)	1.00	34.13	32.73	32.35	19.67	31.90	31.48	32.39	31.88	32.72	32.98	31.41		
C-2 (b)	1.00	32.27	30.99	30.36	30.25	29.90	29.67	29.80	30.11	30.41	30.92	29.51		
A-2 (C)	1.00	33.64	32.25	31.99	31.64	31.29	30.99	31.98	31.56	31.76	32.72	31.02		
A-3	1.00	33.35	31.79	32.63	32.22	32.02	31.08	31.59	31.16	31 96	34.15	31.39		
D-2(b)	1.00	21.72	19.85	19.45	19.67	21.60	18.57	20.08	19.01	19.75	20.09	18.51		

- Rs./kW/M is to be charged based on sanctione load.
- 31.12. With regard to the periodic adjustment of Grid Charges, the Supplier Eligibility Rules 2023, provide that any periodic adjustment of any components of such charges or costs shall be determined by the Authority from time to time analogous to the periodic adjustment of tariffs applicable to other consumers of suppliers of last resort. It is important to highlight that due to quarterly adjustments, cost of service of BPCs connected with the Grid varies owing to uniform application of monthly and quarterly adjustments. The SD 87 of NE Plan states that grid charges shall be imposed on a uniform basis upon all bulk power consumers and any other open access user to provide level playing field to equally placed bulk power consumers of the respective supplier of last resort. Therefore, non-periodic adjustment of grid charges may impact the interest of either the bulk power consumers (BPCs) opting for open access or of existing SoLRs, which does not appear to be the intent of the National Electricity Plan.
- 31.13. While, an annualized review of grid charges could have offered greater predictability to the open access users, the Authority, in view of the express provisions of the Supplier Eligibility Rules 2023, has decided to periodically adjust the grid charges, from time to time similar to the periodic adjustment of tariff of other consumers of suppliers of last resort. Accordingly, all DISCOs are directed to file their Grid Charges adjustment petitions, complete in all respect, along with their quarterly tariff adjustment requests.
- 31.14. The DISCOs also requested that inter-DISCO settlement be allowed in respect of uniform gird charges (as per provisions of NE Plan) on the similar lines currently applicable for consumer end tariffs. The Authority noted that since the grid charges are being determined individually for each DISCO, therefore, Inter DISCO settlement of uniform applicable Grid Charges, would be decided once the Ministry files request for uniformization of the determined grid charges across all DISCOs, so that the same may be imposed uniformly upon all BPCs and other open access users.
- 31.15. In view thereof, XWDISCOs in consultation with the Ministry, are directed to formulate an inter disco settlement mechanism, owing to uniform imposition of Gird Charges, on similar lines as being done for consumer end tariff and quarterly tariff adjustments, for consideration of the Authority.
- 32. Issue No.04: Whether the application of Grid Charges shall only be on those consumers having bilateral contracts with competitive suppliers or also for those consumers having any other source of supply?
- 32.1. The Petitioners on the issue submitted that UoSC, as approved by the Authority, will be applicable with reference to those eligible Bulk Power Consumers (BPCs) who opt for supply from a competitive supplier, other than supplier of last resort. The Petitioners further stated







that UoSC shall be applicable to all such BPCs who will opt to get supply of electric power from competitive supplier including the captive generator using the network to wheel its power to the destination of its use. Such charges shall be fully applicable to any new eligible BPC or incremental consumption, obtaining supply of electric power from competitive supplier without any exception.

- i. A captive power producer / user using DISCO network for wheeling of power to User destination will be considered "Market Participant" in terms of Market Commercial Code and will be dealt with accordingly. The use of system charges shall fully apply in manner applicable to any other eligible BPC.
- ii. The cases of captive generation and consumption points at the same location taking additional supply from the local supplier of last resort (SOLR) shall be considered a regulated consumer of the SOLR with applicable regulated tariff. The quantum of additional sanctioned / contracted load (in terms of MW) shall be considered to determine its status as BPC in terms of the Act. In case, such BPC choose to exercise option for open access, the use of system charges shall apply in full.
- iii. In case of captive power producer / user supplying / receiving electric power at same premises where DISCO network is totally not used, the use of system charges shall NOT apply in any way or manner.
- 32.2. The Authority noted that Rule 5 (1) of the Eligibility Criteria (Electric Power Supplier Licences) Rules, 2023, states that any person who has been granted a license for supply of electric power as a competitive supplier by the Authority, shall bill and collect from its bulk power consumers, and make timely deposit to the relevant distribution licensee in the designated account, all the (i) grid charges including the amount of cross subsidy and (ii) other costs arising on account of market liberalization and advent of open access, namely, the stranded costs. The said charges shall be deposited by the competitive supplier on accrual basis i.e. the amount actually billed to the consumers for the billing cycle.
- 32.3. Similarly, Rule 5 (2) (a) provides that such grid charges shall be imposed on a uniform basis upon all bulk power consumers and any other open access user to provide level playing field to equally placed bulk power consumers of the respective supplier of last resort.
- 32.4. The Sub-rule 5(2)(d) of the Eligibility Criteria Rules, 2023 explicitly states that:
  - "(d) The competitive supplier and any other open access user shall pay grid charges and other costs approved or determined by the Authority in the manner specified by it."
- 32.5. Similarly, SD 87 (a) of NE Plan states that: "...Such grid charges shall be imposed on a uniform basis upon all bulk power consumers and any other open access user to provide level playing field to equally placed bulk power consumers of the respective supplier of last resort."
- 32.6. According to Regulation 2(1)(n) of the NEPRA Open Access Regulations, 2022, an "open access user" means any person who is availing open access under these regulations;
- 32.7. The term "Open Access: has been defined in the Open Access Regulations as under;



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"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, these regulations and use of system agreement, on non-discriminatory basis to:

- an electric power supplier for supply of electric power to its consumer(s); 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;
- 32.8. In view of the aforementioned provisions of the NE plan, Supplier Rules and other applicable documents, all BPCs of a competitive supplier, as well as any other open access user, are liable to pay the Grid charges. Likewise, a captive power producer opting to avail open access for wheeling electric power to its destination of use, shall also be liable to pay the grid charges. Accordingly, the grid charges as determined by the Authority shall be applicable to
  - (i) All such BPCs, having a bilateral contract with a competitive Supplier, getting electricity through open access and
  - (ii) Captive power producers, supplying power to its destination of use through open access. However, Captive power plants, supplying power without opting for open access, shall not be levied gird charges.
- 32.9. It is also pertinent to note that with respect to distributed generation, the NE plan under SD 90 states that stranded costs, arising on account of distributed generation (including self-consumption & net metering) by consumers utilizing grid connection, shall be recovered pursuant to the mechanism provided in Strategic Directive 074. SD 74 envisages the progressive incorporation of fixed charges into tariffs of all consumer categories except protected consumers. Such fixed charges shall duly account for, inter alia, share of capacity cost in cost of service, market interventions, consumption behaviors and affordability of consumers. It is aimed that by FY-2027, the fixed charges shall account for at least 20% of the fixed cost of the respective categories evaluated through a cost-of-service study. Therefore, for consumers opting for distributed generation (through 3<sup>rd</sup> party also), grid charges may not be levied and such consumers' need to be regulated through revision in tariff design, whereby quantum of fixed charges per month may be enhanced.
- 32.10.In view of the foregoing, the Grid Charges both with and without stranded costs, for each XWDISCO for various consumer categories at different voltage levels, based on the information and FACOS model submitted by DISCOs, is tabulated below;

Grid Charges Without Stranded	Fixed Grid Charge	IESCO	LESCO	FESCO	GEPCO	MEPCO	PESCO	HESCO	QESCO	SEPCO	TESCO	HAZECO		
Cost	Rs./kW/M		Rs./kWh											
6-4	1.00	14 90	4.21	9.54	5.52	3.44	5,68	9.11	36.57	7.62		12.34		
C-3	1.00	23.70	11.67	18.09	5.52	11.45	14.01	20.69	36.57	20.56		12.34		
8-3	1.00	12.11	8.99	8.97	6.04	4.83	10.95	6.48	9.49	12.19	15.55	8.09		
C-2 (a)	1.00	22.68	19.49	19.32	4.71	15.13	21.39	16.65	20.57	22.24	26.78	18.70		
C-2 (b)	1.00	20.82	17.75	17.33	15.29	13.12	19.59	14.06	18.80	19.93	24.72	16.80		
A-2 (C)	1.00	27.18	19.02	18.96	16.66	14.52	20 90	16.24	20.25	21,28	26.52	18.31		
A-3	1.00	21.90	18.56	19.60	17.26	15.24	21.00	15.84	19.85	21,48	27.94	18.68		
D-2(b)	1.00	9.76	6.61	6.42	4.71	4.83	8.49	4.34	7.70	9.27	13.69	5.80		

Starnded Cost	Fixed Grid Charge	IESCO	LESCO	FESCO	GEPCO	MEPCO	PESCO	HESCO	QESCO	SEPCO	TESCO	HAZECO		
	Rs./kW/M													
132 tV		8.42	19.44	13.00	29.36	19.36	16.19	14.07	31.51	15.75		52.80		
11 kV		11.46	13.23	13.03	14:96	16.78	10.98	15.74	11.31	10.48	6.20	12.71		
Grid Charges Including Stranded	Fixed Grid Charge	IESCO	LESCO	FESCO	GEPCO	MEPCO	PESCO	HESCO	QESCO	SEPCO	TESCO	HAZECO		
cost	Rs./kW/M	Re./kWh												
0-4	1,00	23.33	23,60	22.54	34.88	22.80	21.87	23,18	68.09	23.36		65,14		
C-3	1.00	32.13	31.11	31.09	34.88	10.82	30.19	34.76	68 09	36.31		65.14		
0-3	1.00	23.56	22.73	22.00	21.00	21.60	21.03	22,22	20.81	22.67	21.76	20.80		
C-2 (a)	1.00	34.13	32.73	32.35	19.67	31.90	31.48	32.39	31.88	32.72	32.98	31.41		
C-2 (to)	1.00	32.27	30.99	30.36	30.25	29.90	29.67	29.80	30.11	30.41	30.92	29.51		
A-2 (C)	1.00	33.64	32.25	11.99	31.64	31.29	30.99	31.96	31.56	31.76	32.72	31.02		
A-3	1.00	33.35	31.79	32.63	32.22	32.02	31.08	31.50	31.16	31.06	34.15	31.39		
D-2(b)	1.00	21.22	19.85	19.45	19.67	21.60	18.57	20.08	19.01	19.75	20.09	18 51		



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33. The instant decision is intimated to the Federal Government, for filling of application for uniformization of the determined grid charges across all DISCOs, so that the same may be imposed uniformly upon all BPCs and other open access users, as envisaged in NE Plan and Eligibility Criteria (Electric Power Supplier Licences) Rules, 2023.

# AUTHORITY

Amina Ahmed

Member

Engr. Maqsood Anwar Khan Member

Waseem Mukhtar Chairman

NEPRA AUTHORITY