National Electric Power Regulatory Authority
Islamic Republic of Pakistan

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Registrar

No. NEPRA/Advisor(CTBCM)/RFP-07/ 2522-28

March 15, 2024

Chief Executive Officer,
K-Electric Limited (KEL),
KE House, Punjab Chowrangi,
39 – B, Sunset Boulevard, Phase-II,
Defence Housing Authority
Karachi.

Subject: **Decision of the Authority in the matter of RFP Document Submitted by K-Electric Limited for the Development of 200 MW (AC Peak) Site Neutral Hybrid Power Project at Dhabeji Grid**

Enclosed please find herewith the subject Decision of the Authority along with Additional Note of Mr. Mathar Niaz Rana (nsc), Member (NEPRA) (total 17 pages) in the matter of RFP Document Submitted by K-Electric Limited for the Development of 200 MW (AC Peak) Site Neutral Hybrid Power Project at Dhabeji Grid.

Enclosure: As above

(Engr. Mazhar Iqbal Ranjha)

Copy to: (alongwith Copy of Subject Decision)

1. Secretary, Ministry of Energy (Power Division), 'A' Block, Pak Secretariat, Islarnabad.
2. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
3. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.
4. Secretary, Ministry of Inter Provincial Coordination, (Secretariat of Council of Common. Interests), Government of Pakistan, Cabinet Block, Cabinet Secretariat, Islamabad.
5. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad.
6. Managing Director, National Transmission & Despatch Company Limited 414-WAPDA House, Lahore.

Decision of the Authority

in the matter of the RFP Document submitted by K-Electric Limited for the Development of 200 MW (AC Peak) Site Neutral Hybrid Power Project at Dhabeji Grid

(1). The Authority notified the National Electric Power Regulatory Authority Competitive Bidding Tariff (Approval Procedure) Regulations, 2017 (the "NCBTR") on May 03, 2017, to lay down the procedure for approval of tariff arrived at through a competitive bidding process. Under the relevant provision of the NCBTR, K-Electric Limited ("KEL" or the "Petitioner") vide its letter dated 29.11.2022 submitted the subject Request for Proposal ("RFP") for the development of 200 MWp renewable hybrid power project (wind and solar) at Dhabeji Grid Karachi (the "Project") for approval of Authority under the NCBTR. KEL requested the Authority for the approval of reverse competitive bidding and approval of benchmark tariff for this purpose.

(2). The Authority admitted the RFP and decided to hold a public hearing on the matter. Accordingly, the public hearing was held on June 13, 2023. Subsequently, KEL vide its letter dated July 14, 2023, proposed a benchmark tariff of US Cents 5.1313/kWh. In the said letter, the Petitioner also requested USD indexation on 100% of the proposed benchmark tariff. KEL explained this indexation request has been made due to the ongoing economic and financial challenges in the country, which has resulted in a significant surge in country risk premiums. According to KEL, the said indexation is likely to attract maximum interest from the prospective bidders for the development of the Project, which will ultimately result in competitive tariff bids.

(3). Later, KEL through its letter dated October 16, 2023, requested the Authority to allow open competitive bidding, while providing relaxation under Regulation 14 (2) of the NCBTR. It further requested to allow the same concessions and incentives being offered by the Federal Government to upcoming solar projects, which was approved by the Authority vide its decision dated September 06, 2023, in case of RFP for the development of 600 MW solar power project at Muzaffargarh. KEL asked for 80% of the tariff to be linked to the value of the US dollar. It also requested variations in SOFR and KIBOR to be applied to a certain percentage of the tariff, to be decided by NEPRA. Additionally, the Petitioner requested a one-time exchange rate adjustment for the remaining 20% of the tariff at the Commercial Operation Date ("COD").

(4). In justification of its request for open competitive bidding, it added that open competitive bidding would be a more prudent approach as this would allow investors to factor in the uncertainty of future market conditions and have the opportunity to make a better representation of the market developments, expected returns, financing mix and its applicable rates, potentially leading to greater participation. KEL emphasized that in current times of diminishing investor interest in Pakistan, the open bidding mechanism would incentivize the investors and ensure fast-track implementation of the Project.

(5). The Authority considered the revised request of KEL and decided to conduct another public hearing on the matter, which was held on November 14, 2023. This hearing was attended by various stakeholders both in-person and online via Zoom, including representatives of KEL, NTDCL, Sindh

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Energy Department ("SED"), and the public at large. The advertisement for the hearing was published in newspapers on November 04, 2023, and separate notices of hearing were also sent to the relevant stakeholders on November 06, 2023.

(6). The following paragraphs contain the discussions on each issue framed for the proceedings. This discussion includes the submissions/responses of KEL, and comments of stakeholders, followed by Observations/Findings and Decisions of the Authority.

Whether the proposed open competitive bidding is justified and can be allowed under the NCBTR?

(7). KEL in its latest communication requested the Authority to allow open competitive bidding, rather than the earlier proposed reverse auction with benchmark tariff. The Petitioner submitted that any benchmark tariff fixed by the Authority may not adequately reflect the rapidly changing market conditions, and could lead to minimal participation in the bidding process. KEL mentioned the significant global disruptions, including economic, financial, geopolitical, and COVID-related challenges, particularly the economic fallout from the Russian-Ukraine war and the Pandemic to support its request. KEL explained that these factors have caused an unprecedented increase in commodity prices, heightened volatility, and unpredictability in the global market. Talking about the local situations, KEL pointed out that the drastic devaluation of the local currency and rising inflation in the last couple of years have increased uncertainty for investors. In view thereof, KEL submitted that adopting open competitive bidding would be a more prudent approach, which will allow investors to factor in the prevailing uncertainties of global and local market conditions, and make a more informed representation of different parameters of tariff. In this regard, KEL also referred to the decision issued by the Authority whereby the RFP in respect of the 600 MW solar PV project was approved, wherein the open competitive bidding was allowed by the Authority.

<u>**Observations/Findings and Decision of the Authority**</u>

(8). The Authority noted that although Regulations 4(4) and 8(3) of the NCBTR mandate the approval of a benchmark tariff for competitive bidding. However, Regulation 14(2) of the NCBTR empowers the Authority to relax the requirements, for reasons to be recorded in writing and subject to such conditions as it may deem fit. It is noted that the Authority also relaxed the requirement of competitive bidding with benchmark tariff in the case of the 600 MWp solar PV project, and allowed the relevant agency to carry out open competitive bidding in that case. The basis of that relaxation was the prevailing economic and financial challenges being faced both globally and locally. Given that KEL has also raised similar contentions, the Authority has decided to relax the requirement of the NCBTR and hereby allow KEL to hold open competitive bidding (without benchmark tariff) in the instant case. However, with open competition, the Authority has decided that it shall have the power to reject the bid if considered imprudent. KEL is directed to make this condition a part of RFP documents, before floating the same to prospective bidders.

What would be the mechanism for assessment and approval of prudent tariff for the project after processing the project under open competitive bidding?

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(9). KEL during the hearing explained that all bids received will be initially evaluated as per the stipulated technical criteria. Then the financial bids of technically qualified bidders will be opened for evaluation. The bidder having the lowest tariff will be declared as successful. It further added that the selection of the successful bidder will be subject to the approval of the Authority of the Bid Evaluation Report. KEL emphasized that a competitive bidding mechanism is generally considered to be the most effective mode for price exploration, and the completion of an effective and independent competitive bidding process with sufficient participants, will itself ensure prudency of tariff and price competitiveness. The petitioner further added that it is expecting healthy competition during the bidding process for the Project (having 13 pre-qualified applicants) which will ensure that the lowest bid price is received for the Project.

(10). KEL also submitted that in its capacity as the Auction Administrator for the Project, it will be including the following assessment in its Bid Evaluation Report for consideration of the Authority:

- An independent assessment of the lowest bid received which will be based on the then prevailing market prices and macro-economic conditions.
- Reduction in the generation cost of KEL by the addition of projects through the expected displacement of generation on expensive fuel.

Observations/Findings and Decision of the Authority

(11). The Authority noted that while approving the RFP for the 600 MWp solar PV power project of the Private Power & Infrastructure Board ("PPIB") at Muzaffargarh, it had outlined the following conditions to assess the prudency of the tariff;

"...in case of open competitive bidding, the Authority has decided that for this purpose the bid evaluation report submitted by the Petitioner will include analysis on whether the lowest bidder's tariff aligns with the government's given Framework Guidelines and objectives of other applicable documents in consultation with CPPA-G and NTDC for displacement of expensive based on a current or fresh iteration of the IGCEP by NTDC. The declaration of Successful Bidder after fulfilment of condition in the bid evaluation report may be approved by relevant government forum(s)."

(12). Approval of the 600 MWp solar PV power project was given in light of the Framework Guidelines, for which the Government Agency, i.e. PPIB approached the Authority. One of the primary objectives of these Framework Guidelines was the displacement of expensive fuel. Consequently, the Authority established specific criteria for the evaluation of the prudency of tariff. That is, it was required that a current or fresh iteration of the Indicative Generation Capacity Expansion Plan ("IGCEP") be carried out, to ascertain whether the ultimate objective (displacement of expensive electricity) shall be fulfilled on the successful bid tariff. To have an additional layer of scrutiny, the declaration of the successful bidder was also required to be approved by the relevant Government Forum(s).

(13). On the other hand, KEL is a private utility, hence, the requirement for the declaration of successful bidders by any relevant Government Forum (as specified in the case of 600 MWp) may not be applicable in this case. The Authority further noted that the current generation basket price of KEL is

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relatively more expensive than that of CPPA-GL, therefore, the sole criterion of displacement of expensive fuel would not suffice the purpose, as any bid lower than the energy purchase price of KEL would make the case for procurement.

(14). In view thereof and given the submissions of KEL, the Authority decided that KEL shall conduct a comprehensive assessment of the successful bid, considering the then prevailing macroeconomic and market conditions. This shall include assessing the successful bid while considering the prevailing cost of modules, wind turbine generators (WTGs), and other equipment. The cost of funds and other parameters, as considered appropriate, shall also be considered for that purpose. Additionally, the assessment and analysis of displacement of expensive electricity shall also be carried out, to essentially check and confirm the basis on which this capacity was optimized in the IGCEP and included in the Power Acquisition Program ("PAP"). Furthermore, KEL shall also include the mechanism for assessment of transmission/wheeling cost as a check in its comprehensive assessment. The lowest number obtained from any of the criteria mentioned will be used as a benchmark for determining the prudency of the tariff. KEL shall be having powers for the rejection of that bid in case it is found imprudent. In the event of an acceptance of a successful bidder by KEL, the assessments as highlighted above shall be made a part of the Bid Evaluation Report, which is to be submitted to the Authority for approval.

What is the rationale for the selection of a hybrid project? Whether KEL has carried out any studies/analysis in this regard and/or whether the basis for the selection of 75%:25% criteria for Wind: Solar hybrid solution is justified?

What are the synergies as a result of hybrid solution that could lead to lower costs?

(15). The petitioner submitted that considering the demand pattern of consumers in KEL's territory, and expected peak periods in the future, it plans to induct a combination of base load and renewables (solar, wind and hydel) to meet its demand in accordance with the respective technologies' generation profiles. It further submitted that it has planned initially to induct around 150 MW of wind-based power generation in its system and additional wind-based generation will be added after completion of the Variable Renewable Integration ("VRE") study of the KEL's system, which is currently ongoing. To optimize the available land resources, KEL submitted that it has decided to include a minimum solar capacity in the Project.

(16). According to KEL, this hybrid facility shall result in better management of wind intermittency with a stable power output over time. KEL specified that with the hybrid project, cost savings of around 10% are expected in land cost due to its better utilization. It explained that while installing 150 MW wind turbines, the portion of land between turbines can accommodate around 25% to 40% (of total installed capacity i.e. 200 MW) of solar panels. KEL submitted that a technical analysis/study has been carried out to assess the portion of solar capacity that can easily be accommodated within the required wind farm. Additionally, KEL informed that this arrangement will yield around 32% of cost savings in the Electrical Balance of the Plant ("EBOP") due to reduced infrastructure and better land utilization, and on an overall basis, this arrangement results in 5-6% tariff savings which translates into USD 45 Million over the term of the project. Lastly, KEL submitted that keeping in view the

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uncertainty of the land parcels available with the prospective developers, a minimum of 25% solar installation is necessitated in the RFP which can easily be achieved by all the developers, regardless of the land parcels having perfect wind strip or not.

Observations/Findings and Decision of the Authority

(17). Given the above submissions, the Authority agrees with KEL's decision to choose a hybrid project over the originally planned 150 MW wind power project. This decision is justified as it offers benefits in terms of land usage, shared infrastructure, and consequent cost savings. The Authority observed that the hybrid project could be established at two separate locations with individual interconnection points, with a mandatory minimum of 50 MW (AC Peak) of solar power installation. However, the analysis submitted by KEL indicates that the optimized tariff is attained with 60:40 of wind and solar respectively i.e. 132 MW of wind and 88 MWp of solar. Essentially, KEL has left this thing to be decided by the bidders whether to increase the share of solar PV while reducing the corresponding MWs of wind or vice versa. Certainly, there would be certain limitations to how much solar can be installed at a single site, and once a certain percentage of the site is covered with solar panels (along with wind turbines), it becomes difficult to add more panels without expanding to another parcel of land, which ultimately requires additional cost in terms of EBOP as well as additional land. Further, the addition of solar modules, more than a certain limit, would not be possible given the cutoff criteria of a capacity factor of 31%. Given these considerations, the Authority is of the view that the regulation of the mix of hybrid would have been relevant if the approval of the RFP by KEL had been sought on the benchmark tariff. With the open competitive bidding auction design, the potential synergies will be evident from the bids to be submitted by the prospective bidders. The parties who would present the most optimized synergies, given the minimum requirement and criteria set for capacity factor, will propose a lower tariff. Therefore, the Authority agrees with the submissions of KEL and considers this issue as settled.

Whether the proposal of KEL to hold up to 49% equity share in the SPV is prudent/acceptable under the prevailing applicable laws?

(18). KEL in its RFP had stated that upon issuance of the LOI, the successful bidder shall form the Special Purpose Vehicle ("SPV"), and KEL at its sole discretion will participate as a shareholder in the SPV, either through its affiliate or its subsidiary, that may hold up to 49% shareholding in the SPV. During the public hearing held on November 14, 2023, KEL submitted that it will hold up to 25% of the equity in the SPV, instead of up to 49% as earlier stated in the RFP.

KEL submitted that the project is being developed under the NCBTR, which does not contain any restriction or prohibition on KEL from conducting the bidding process and having equity shareholding in the Project while being the Power Purchaser, so long as KEL has obtained all the necessary authorizations and/or approvals required as part of its licensed activities for generation, transmission, distribution and supply under the applicable laws. It further submitted that previously the Authority had allowed KEL's participation in the case of Datang Power Project.

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(19). KEL further submitted that it will invest in the SPVs after the completion of the bidding process. The bid evaluation process will be overseen by an Independent Consultant, and it will only commence discussion on potentially acquiring ownership (by way of cash equity) in the SPVs, once the successful bidder has been notified, based on the least cost tariff and subsequent negotiations. KEL further submitted that it will be a non-controlling shareholder, with up to 25% equity in the SPVs, and any investment in the SPVs will be made after obtaining requisite regulatory approvals. It stated that KEL's equity stake in the SPVs will have a positive impact on the overall activities of the projects, as KEL will be able to supervise key project milestones and ensure their timely completion.

(20). With respect to the Energy Purchase Agreement ("EPA"), the Petitioner submitted that the agreement to be signed between KEL and SPV will be on an arm's length basis, which will also be submitted to the Authority for approval. It further highlighted that the established SPV, as an independent entity, will have its own Board of Directors, and all corporate decisions or business transactions will be subject to requisite board approval as required under the Companies Act, 2017. To this effect, any transaction between KEL and the SPV will be subject to the terms of the Companies Act, 2017 which regulates related party transactions and excludes interested directors from being involved in the decision-making process. KEL in support of equity participation also shared legal opinion from a law firm namely RIAA Barker Gillette.

(21). CPPAGL submitted that the equity holding of KEL in the SPV may raise the conflict of interest situation regarding the processing of the financial invoices. It added that KEL may consider itself in an awkward situation to decide the matters specifically related to the calculations of Forecasting Error and Non-Project Missed Volume ("NPMV") in the EPA. CPPA-GL stated that KEL, being the equity holder, will watch its rights and avoid any Forecasting Error Rebate that may be triggered under the EPA, rather than passing its benefits to the consumers. Likewise, the NPMV mechanism can also be mishandled during the projects' operations, when the claimant is the verifier.

(22). KEL in response to the concerns raised by CPPA-GL submitted that the Authority, being the Regulator, shall approve the EPA to be signed between KEL and power producers. It explained that all the costs paid to power projects are claimed by KEL in its consumer end tariff, which is reviewed and verified by the Authority, before allowing the same for the recovery. This eliminates all the risks of any expensive claims by KEL. About the Forecasting Error and NPMV calculations, KEL responded that these computations shall be done following the standard mechanism as given in the EPA.

(23). During the hearing held on November 14, 2023, it was also discussed the equity share of KEL should be clearly defined upfront so that the prospective bidders would have a clear idea regarding how much equity amount they have to arrange. Secondly, it was debated whether it should be left to the discretion of the investors to get the participation of KEL in the equity share, or it should be on the demand of KEL. The representative of Bridge Factor submitted that the participation of KEL in the SPV should be at the discretion of the successful bidders. He further added that in case the Authority decides to allow KEL, at its discretion, for equity participation, then a percentage should be decided upfront rather than allowing it to negotiate the same at the time of formation of the SPV. This will give a clear picture to the prospective bidders regarding the amount of equity to invest and would

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also help them to negotiate better indicative term sheets with the financial institutions, commercial banks, etc. One of the commentators namely Mr. Arif Bilwani said that equity participation of KEL should be allowed as it may lead to better cost of capital.

Observations/Findings and Decision of the Authority

(24). The Authority noted that there are no legal restrictions on KEL's equity participation in the SPV under the NCBTR, or any other laws and related regulatory framework. Additionally, the Competition Commission of Pakistan ("CCP") or the Public Procurement Regulatory Authority ("PPRA"), did not object to KEL's proposal subject to requisite approvals, when comments were obtained by NEPRA on similar RFP being processed by KEL i.e., Winder, Bela Sites. The only consideration in this proposal is the concern about the conflict of interest. That is KEL, being both the shareholder of the SPV and power purchaser, would implement certain terms of the EPA in its favor, instead of passing on the benefits thereof to the consumers. CPPA-GL during the proceedings has also advanced its comments highlighting the concerns of conflict of interest.

(25). KEL responded that the conflict of interest should be managed, instead of disallowing the transactions on this basis. In this regard, KEL talked about the verification and approvals of the Authority for EPAs and quarterly adjustments, to negate the point that it can somehow benefit itself with equity participation in the SPV.

(26). The Authority considered the above submissions and noted that KEL is a vertically integrated utility and possesses the Generation License, and therefore it can set up its generation facilities. This means that KEL is not barred from establishing plants with 100% equity of its own. The issues (invoicing, NPMV, etc.), being highlighted by CPPA-GL under the pretext of conflict of interest with KEL's equity participation (up to 25% in the SPV), would be manifold with plants developed on 100% equity of KEL. Since the establishment of KEL's owned generation plants is not prohibited, therefore, it is considered that this matter of non-controlling equity participation requires management of possible conflicts, instead of rejecting this proposal. In this relation, the Authority considers that the approvals of EPA and then verifications of quarterly adjustments by NEPRA shall reduce the possibility for KEL to benefit itself from this arrangement. For specific contentions of CPPA-GL, the Authority thinks that the claims of NPMV and Forecasting Error (or any other issue about EPA), shall be approved subject to verification from NEPRA. If necessary, the Authority may consider appointing an Independent Auditor for this purpose, with the decision to be made while approving the EPA. Therefore, the Authority decides to allow KEL to hold equity in the SPV. This participation of KEL in the SPV shall be up to 25%, non-controlling, and the terms and conditions thereof shall be specified in the Share Purchase Agreement ("SPA"). The SPA will be included as part of RFP documents when it is floated to the potential bidders. Further, KEL shall seek approval of the Authority for this transaction, as required under its licenses and relevant provisions of the applicable documents.

(27). Notwithstanding the above, it was also deliberated whether the discretion for equity participation should be vested with the successful bidder or KEL. The Petitioner submitted that it intends to participate as a shareholder in the SPV, at its sole discretion, with a potential holding of up to 25% equity. A few commentators opposed the discretion of KEL and submitted that this option should be

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left with the successful bidders. Given that the responsibility of constructing, operating, financing, etc. of the Project is with the successful bidder, the Authority found it appropriate that this option should also rest with them. The bidders should take this decision while considering the value KEL participation is going to bring for project execution, financing, and other aspects. The Authority also considers that with more bidders (including both who shall have the intent of KEL's equity share and who shall not) participating in the competitive bidding, this arrangement will foster healthy competition, which would ultimately lead to competitive rates. For clarity, KEL is directed to communicate upfront, while floating the RFP, its desired level of equity participation percentage (a fixed number) with a maximum limit of 25%. This will enable the bidders to have certainty regarding the remaining amount they have to arrange, in case they plan for a share of KEL's equity participation.

Whether it is justified to evaluate the bids based on combined generation and transmission tariff?

(28). KEL submitted that the Project will be connected to Dhabeji Grid Station through a dedicated 220 kV transmission line. It further added that KEL will itself add the indicative transmission tariff to the financial bid submitted by the bidders and accordingly lowest bidder based on aggregate tariff (both generation and transmission) will be selected. In support of its argument, KEL apprised that this approach is aligned with section 5.8.3 of the National Electricity Policy ("NE Policy"), which states that the criteria for the inclusion of transmission cost for candidate generation projects may be considered in the National Electricity Plan ("NE Plan"). KEL also highlighted that the same criterion was approved by the Council of Common Interest ("CCI") while approving the assumptions for the first iteration of the IGCEP 2021-30. KEL stated that the indicative cost of the transmission line shall be included in the evaluation criteria to ensure a reduction in overall consumer tariff. For this purpose, KEL has proposed the transmission tariff of 0.56 PKR/KWh, for the first 5 km from Dhabeji Grid, and then 0.06 PKR/KWh for every additional km, which will be added to the generation tariff of each bidder, for the purpose of evaluation.

<u>Observations/Findings and Decision of the Authority</u>

(29). The Authority observed the relevant sections of the NE Policy and noted that the proposition made by KEL in this regard is justified because the consumer ultimately pays the overall tariff. Nonetheless, the Authority observed that the transmission cost proposal would put the bidder(s), who are far from the Dhabeji Grid, at a significant disadvantage position. In other words, bidder(s) with land located far from the Dhabeji Grid Station will be at a natural disadvantage due to the higher transmission costs being factored into the evaluation of their bids. This might also lead to bidders, with sites closer to the grid, deciding to increase their generation bids, knowing that the offers of the other bidders would be exposed to higher transmission costs. This could potentially lead to an unfair advantage for bidders with sites closer to the grid and distort the overall bidding process. The Authority also deliberated on various factors such as resource availability, land cost, and civil works cost, which could potentially offset the higher transmission cost differential for projects located away from Dhabeji Grid. It was noted that the solar and wind potential within a 50 km radius would remain consistent, and therefore would not offset the cost of transmission being included for evaluation. In terms of land cost, the Authority observed that the cost of land near the Dhabeji Grid Station (close to Karachi city) might be higher compared to areas at a distance, however, this assumption may not

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be accurate, especially if all parties end up obtaining land on a lease basis from the Government of Sindh for the Project. Regarding the cost of civil works, the Authority considered that land parcels in Gharo (closer to Karachi) are marshy and would require higher construction costs, particularly for the wind power portion of the Project. However, the Authority acknowledged that this could partially offset the transmission cost, as the civil works cost is not a significant portion of the total project cost.

(30). In view of the above discussions, the Authority considers it important to rationalize the proposed transmission cost to achieve the goal of reducing the overall tariff, without compromising the fairness of the bidding process. Therefore, the Authority reviewed the basis for arriving at the additional impact of every km of transmission line (Rs. 0.06/kWh), as proposed by KEL and after rationalizing all relevant parameters (while referring to the NEPRA's approvals in the relevant cases), the Authority has worked out that the transmission cost for every additional km should not exceed Rs. 0.03/kWh. Accordingly, the Authority decided to approve the transmission cost component of Rs. 0.56/kWh/km for the first 5 km, and then Rs. 0.03/kWh for every additional km for evaluation purposes.

Whether the prequalification of the bidder has been followed by KEL as per the provisions of the NCBTR?

(31). KEL submitted that the RFP will be circulated to the prequalified bidders. KEL vide its letter dated June 12, 2023, also submitted the list of prequalified bidders. The petitioner during the hearing submitted that it had followed a detailed pre-qualification process wherein the prequalification documents were floated which contained criteria for technical and financial evaluation along with legal and regulatory compliance. It further added that a total of 16 parties participated in the prequalification process, out of which 13 parties were qualified and 03 were declared as disqualified in the process.

(32). The technical evaluation criteria in the prequalification process state that the interested party has ownership, development, and commissioning experience of a minimum of one renewable project of 50 MW or a thermal project of 100 MW along with 03 years management and/or operations of a minimum 01 power project of 50 MW. In financial evaluation, KEL requires that the average net worth of the party shall be more than $60 million debt to equity ratio shall be 75:25 and the debt service coverage ratio shall be equal to and greater than 1.2. In legal compliance, it requires the bidders to provide litigation history along with the history of social, environmental, and regulatory compliance.

<u>**Observations/Findings and Decision of the Authority**</u>

(33). The Authority noted that KEL has already carried out the prequalification process, and has shortlisted a number of qualified bidders on that criteria on reverse competitive bidding. However, KEL has now requested open competitive bidding, which is a new auction design. This new design may attract more prospective bidders to participate as compared to the reverse competitive auction design earlier approved. Additionally, it is noted that under Regulation 9 of the NCBTR, notice of inviting

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bids has to be published, whether or not the pre-qualification has already been carried out. Keeping in view Regulation 9 of the NCBTR and KEL's request for open competitive bidding, the petitioner is directed to publish the notice of inviting bids for this Project for the information of the public at large. KEL is further directed to apply/include the pre-qualification criteria for new prospective bidders as part of its technical evaluation process. However, the previously prequalified bidders may not be required to undergo the prequalification process again.

Whether it is justified to develop the project under the BOO regime?

(34). KEL submitted that Build Own Operate Transfer ("BOOT") has concessions from the government whereas KEL's private company nature leads it to prefer the successful bidder to develop the project on Build Own Operate ("BOO") model. KEL also submitted that past projects approved under BOO such as Oursun, Gharo, FPCL, and SNPC validate this regime. The petitioner further submitted that the only requirement stipulated under the NE Policy 2021 is for the expansion of the distribution network under section 5.3.6 which reads as follows:

"Different financing or investment options may be explored by the State-owned distribution companies for expansion of the distribution network, including financing/investment by Provincial Governments or DFIs, PPP models (only on BOOT & BOT basis) and Government to Government arrangements."

(35). By stating above mentioned facts, KEL submitted that since no concessions are being provided to KEL therefore BOO model is the most practical regime to follow as it provides the private developer the financial incentive to invest and operate the Project.

Observations/Findings and Decision of the Authority

(36). In this regard, the Authority observed that the request of KEL for the development of the Project under the BOO regime is in line with the decisions of the Authority in case of projects based on cost plus or on upfront tariff basis. Therefore, the request of KEL is justified hence the Project is allowed to be developed under the BOO model.

What would be the mechanism for the acquisition and pricing of land?

(37). KEL submitted that the land acquisition for the Project shall be the responsibility of the successful bidder. However, the bidder will be required to demonstrate, with evidence, the status of land availability. KEL further submitted that in order to allow maximum participation it has provided flexibility to the bidder as (a) those Bidder(s) who are currently under the ownership of the requisite land parcel(s), shall provide the documentary evidence (including but not limited to allotment letter from the Government of Sindh (if applicable), coordinates and copy of attested ownership documents) of ownership along with the bid and (b) those Bidder(s) who are currently not in the possession/ownership of the requisite site, must have a commitment from the landowner(s), Government of Sindh, or any other entity having land(s) along with timelines for completion of proposed deal/arrangement.

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(38). KEL added that the bidder who falls under the category (b) above, and should they be declared successful bidder, shall provide documentary evidence of site acquisition and possession within 02 months from the declaration of successful. If the successful bidder is in the process of site acquisition and fails to obtain title and possession of the site within two (02) months, it will have the right to disqualify the bidder along with the encashment of the Performance Guarantee ("PG"). However, KEL may allow an extension in the time for finalization of site acquisition and possession at its own discretion or disqualify the successful bidder without encashment of PG. In case of disqualification of the successful bidder, KEL will declare the bidder with the second lowest bid as the successful bidder.

Observations/Findings and Decision of the Authority

(39). The Authority has observed that this particular issue was initially framed when KEL submitted the RFP for competitive bidding with a Benchmark Tariff. However, with the shift to an open bidding process, it would be more appropriate for the bidders to account for this cost, either upfront or periodic payments, in their bids, based on their perceived/actual value of land. This dynamic makes it challenging to establish a fixed rate for land cost, especially for a location-neutral plant.

(40). Furthermore, the Authority noted that the proximity of land to the Dhabeji Grid may contribute to higher costs, but bidders could potentially offset this higher cost of land through lower wheeling/transmission charges, and vice versa. Accordingly, the Bidder(s) who offers the most competitive tariff, accounting for these factors, will be declared successful. Therefore, the Authority shall not delve into the business of pricing land for the project being developed under an open competitive bidding model.

Whether the proposed indexation mechanism is justified?

(41). KEL in its latest submission dated October 16, 2023, has requested the Authority to approve the following mechanism for tariff indexation:

$$\text{Revised AT} = \text{AT} * \text{Kx\%}\left[\frac{Rev\,KIBOR}{Ref\,KIBOR} - 1\right] + \text{AT} * \text{Sx\%}\left[\frac{Rev\,SOFR}{Ref\,SOFR} - 1\right] + \text{AT} * 80\% * \left[\frac{ER\,Rev}{ER\,Ref} - 1\right] + \text{AT} * 20\% * \left[\frac{ER\,Rev\,(one\,time)}{ER\,Ref} - 1\right] + \text{AT}$$

(42). The exchange rate adjustment has been claimed on 80% of the tariff, with 20% of the tariff to be adjusted one-time at the time of COD due to the change in parity. It has also been requested to allow SOFR and KIBOR variations on certain percentages of tariff, which are to be specified by the Authority which is a similar indexation mechanism as approved by the Authority in the matter of PPIB's RFP for 600 MWp solar PV power project.

(43). Justifying its proposed tariff indexation mechanism, KEL reiterated the current financial and economic challenges being faced both locally and globally. The Petitioner additionally presented the statistics that PKR has witnessed devaluation at an annual rate of 32% against USD since 2021, while the inflation rate stands at 31.4% over 2022. Stating these contentions, KEL submitted that it believes that the approval of an appropriate indexation mechanism is very critical to maximize investor

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participation in the bidding process and to safeguard the investor returns during project execution and operations.

Observations/Findings and Decision of the Authority

(44). As mentioned, KEL has requested a tariff indexation mechanism similar to one approved by the Authority in the RFP of the 600 MWp solar PV project. It is worth noting here that earlier the Federal Government opted for parity variations on the lesser percentage of tariff. According to PPIB, the investors, among other reasons, did not opt to bid under the earlier scheme due to prevailing economic conditions. As a result, the Federal Government later decided to introduce a relatively incentivized scheme instead. KEL has also presented arguments revolving around financial and economic challenges to justify its request for the said tariff indexation mechanism. The Authority considered these points in detail and found the request of KEL justified. Based on these considerations, the Authority has decided to approve quarterly indexation mechanism, which is detailed in the Order part of this decision.

Whether the criteria for technical and financial evaluation is acceptable?

Technical Evaluation:

(45). KEL submitted that a pre-qualified bidder interested in submitting its bid pursuant to the RFP will be required to submit separate envelopes, one each for Technical Proposal and Tariff Proposal.

(46). Concerning the technical evaluation, KEL submitted detailed mandatory conditions like distance from Dhabeji Grid Station, Generation Capacity of the Project, Site Availability/Arrangement for the Project, Hybrid Project technology, Capacity Factor of the Project, Tier-1 Solar Panels, Type tested WTGs, inclusion of reactive power compensation device, compliance with Grid Code and Distribution Code and submission of technical studies, etc. as knock–off criteria. The Technical criteria also contain marks for EPC and O&M contractor performance, HSE, and contribution to local economy development.

(47). It further submitted that the bidders being successful from the knocking-off/screening criteria would be technically and financially evaluated. The bidders scoring above 70 marks out of 100 during the technical evaluation will be eligible for financial evaluation. KEL submitted that the technical criterion in the RFP is as per prudent norms and has also been developed in line with the criteria approved by the Authority for the 150 MWp Winder and Bela solar PV projects.

Observations/Findings and Decision of the Authority

(48). The Authority has noted that technical evaluation criteria majorly comply with the equipment specifications, performance of the contractors, HSE, compliance with grid code and local community development criteria. Therefore, the technical evaluation criteria being proposed by KEL in its RFP are justified.

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(49). Further, the Authority directs KEL to also evaluate the bidders on their contribution to support the local industry, for which local material sourcing and initiatives of Corporate Social Responsibility ("CSR") may be assessed.

Financial Evaluation:

(50). Regarding the financial evaluation criteria, KEL in its RFP has submitted that selection will be based on the lowest Bid Tariff. The Authority considers that the same is justified. However, it is also important to explain here the tariff scheme, which is being approved in this decision. The bidders submitting the financial bids for the generation part shall only state a single tariff number, which shall be considered for financial evaluation + transmission charges to be added by KEL for assessment purpose. The bidder offering the generation lowest tariff combined with transmission charges shall be considered successful, though subject to subsequent KEL's assessment and approval of the Authority. If declared/approved as successful, this generation tariff number shall remain applicable throughout the control period, subject to indexation at COD and then quarterly during project operations, following the indexation mechanism as given in this decision. The actual debt servicing period, financing mix, or any other factor, shall not change the structure of the tariff.

Whether the proposed Bid Evaluation Committee is in compliance with NCBTR-2017?

(51). KEL submitted that Regulation 3(e) of NCBTR states that "the committee constituted by the Relevant Agency for evaluation of the bids has at least one member having expertise in competitive bidding and fulfilling the independence requirement." It further added that accordingly, the Bid Evaluation committee will include at least one independent member as required under NCBTR while the rest of the members will be selected internally from KEL.

Observations/Findings and Decision of the Authority

(52). The Authority noted Regulation 3(1)(e) of NCBTR states that the relevant agency may also appoint a reputable consultant having experience as determined by the Authority who fulfills the requirement of independence for evaluation of bids. Considering the above mentioned, the Authority is of the view that the submissions of KEL regarding appointment of an independent consultant in the Bid Evaluation Committee is justified. However, KEL is directed to finalize the independent member/consultant in accordance with the provisions of NCBTR and submit its name to the Authority for information. KEL is further directed that members selected internally from KEL shall have no direct interest in the Project, and a cross functional team shall be selected for this purpose.

Scheduling of Auction:

(53). Representative of Bridge Factor during hearing of the all RFPs submitted by KEL stated that the Authority may consider about giving approvals of the RFPs in phases (having ample time between each approval) rather than approving all RFPs at once. He further added that it will allow the investors to fully engage in one project at a time and to negotiate better with the lenders while signing the

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term sheet. Furthermore, approval in phases will help the potential bidder and investors to check the market conditions.

Observations/Findings and Decision of the Authority

(54). The Authority noted that in case the Authority approves the RFP all at once, this might help in reducing the consumer end tariff, owing to economy of scale, in case one bidder is considered successful for all the projects. The Authority decided to approve the subject RFP without approving any schedule for the conduct of the bidding while leaving the discretion to KEL to complete all the auctions as per the timelines stipulated in the relevant regulatory framework.

ORDER OF THE AUTHORITY:

(55). Given the foregoing, the Authority has decided and directed as follows:

i. **Open Competitive Bidding:** KEL is allowed to conduct open competitive bidding, without benchmark tariff, for the subject projects. Further, KEL is directed to include the criteria for rejection of the bids, in case the lowest bid is considered imprudent on the basis of the criteria detailed in this decision.

ii. **Criteria for Prudence and Assessment of Bid:** KEL will evaluate the prudency of the successful bid based on prevailing equipment cost, combined with the cost of funds. Additionally, the analysis for the confirmation of displacement analysis as per IGCEP and PAP shall also be carried out. Moreover, the assessment of the Bid shall be carried out on the overall tariff including transmission/wheeling charges. KEL shall have powers for the rejection of the bid in case it is found imprudent, based on the mentioned criteria. If the bid is found to be prudent, these assessments will be included in the Bid Evaluation Report, to be submitted for approval to the Authority. The Authority shall reserve the right to reject the Bid Evaluation report of the successful bidder if found imprudent and unreasonable.

iii. **Rationale for Selection of Hybrid Project:** The rationale provided by KEL for the selection of the hybrid project is justified. Regarding synergies as a result of hybrid projects, the Authority noted that in open competitive bidding, the potential synergies, i.e. the percentage of wind and solar in the project, will be evident from the bids to be submitted by the bidders.

iv. **Equity Participation of KEL:** KEL is allowed to hold a non-controlling equity share in the SPV. However, the successful bidder will decide if they want KEL to be part of the equity shareholding in the SPV. For clarity, KEL shall declare upfront its desired equity share percentage, capped at up to 25%. Furthermore, KEL shall specify the terms and conditions in the SPA, and the same shall be made part of RFP documents when floated to the potential bidders.

v. **Evaluation of Bids on Combined Generation and Transmission Tariff:** The submissions of KEL regarding the evaluation of bids based on combined generation and transmission tariff are justified. Accordingly, the Authority decided to approve the transmission cost

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component of Rs. 0.56/kWh/km for the first 5km, and then Rs. 0.03/kWh for every additional km for evaluation purposes.

vi. **Prequalification Criteria:** KEL is directed to make the RFP documents publicly available for the other interested parties and prospective bidders at large. The pre-qualification criteria for new prospective bidders shall be made part of the technical evaluation process. However, the previously prequalified bidders shall not be required to undergo the prequalification process again, their earlier qualification is deemed valid.

vii. **Development Regime:** The Authority allows the development of the Project under the BOO regime.

viii. **Treatment for Cost of Land:** The qualified bidders shall account for the cost of land in their bids.

ix. **Indexation Mechanism:** The Authority has approved the following quarterly tariff indexation mechanism;

Revised AT	=	$AT*Kx\%\left[\frac{Rev\ kibor}{Ref\ Kibor}-1\right]+AT*Sx\%\left[\frac{Rev\ sofr}{Ref\ sofr}-1\right]+AT*80\%*\left[\frac{ER\ Rev}{ER\ Ref}-1\right]+AT*20\%*\left[\frac{ER\ Rev\ (one\ time)}{ER\ Ref}-1\right]+AT$
AT	=	Awarded Tariff
Kx%	=	Percentage of AT to be indexed with KIBOR variation which in the instant case is 8%
Sx%	=	Percentage of AT to be indexed with SOFR variation, which in the instant case is 7%
Rev KIBOR	=	Quarterly revised 3-month KIBOR, as on the last day of the preceding quarter
Rev SOFR	=	quarterly revised Term or Daily SOFR, as the case may be based on the GoP policy decision on the transition from LIBOR to SOFR, as on the last day of the preceding quarter
Ref KIBOR	=	21.28%
Ref SOFR	=	5.3671%
ER Ref	=	288.65 Rs. /USD
ER Rev	=	The revised exchange rate as of the last day of the preceding quarter

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ER Rev (one time)	=	The revised exchange rate is average of the exchange rates of each day during the maximum construction period of 18 months, starting from the date of Financial Close.

Note: 1st adjustment shall be made for the quarter in which the COD occurs. This adjustment will be applicable from the COD until the end of that quarter. The subsequent adjustments will be applicable for the entire quarters

x. **Technical and Financial Evaluation Criteria:** The Authority decided to approve KEL's proposed technical and financial evaluation criteria.

xi. **Bid Evaluation Committee:** The Authority decided to direct KEL to finalize the independent member/consultant in accordance with the provisions of the NCBTR. KEL is further directed that the members selected internally from KEL shall have no direct interest m the project and an internal cross-functional team shall be selected for this purpose.

xii. **Scheduling of Auction:** The Authority decided to approve the subject RFP without approving any schedule for the conduct of the bidding while leaving the discretion to KEL to complete all the auctions as per the timelines stipulated in the relevant regulatory framework.

AUTHORITY

Rafique Ahmed Shaikh
(Member)

Engr. Maqsood Anwar Khan
(Member)

*

Mathar Niaz Rana (nsc)
(Member)

Amina Ahmed
(Member)

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Waseem Mukhtar
(Chairman)

* My additional note is also attached

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ADDITIONAL NOTE

1. The pre-qualification process for the project was done earlier prior to allowing open competitive bidding process so is not relevant now as the earlier model of procurement has changed. Now placing the pre-qualification criteria in the technical evaluation part may provide an edge to the already pre-qualified bidders in terms of negotiating with the potential lenders and suppliers before bids submission as compared to those bidders who will undertake the prequalification through technical bid after submission of the same along with financial bid in the bidding process. Therefore, in my opinion fresh prequalification under the guidelines given in the section 15 of Public Procurement Rules 2004 may be done. So all prequalified firms may submit technical and financial bids on equal footing.

Mathar Niaz Rana (nsc)
Member (Tariff)

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