

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/R/Dir(Technical)/TRF-100/1540-1546 February 1, 2023

Chief Executive Officer
Alternative Energy Development Board (AEDB)
2nd Floor, OPF Building,
Sector G-5/2,
Shahrah-e-Jamhuriat,
Islamabad

Subject: Decision of the Authority in the matter of Approval of Request for Proposal (RFP) submitted by Alternative Energy Development Board (AEDB) for Competitive Bidding of 600 MWP Solar PV Projects at Muzaffargarh

Dear Sir.

Enclosed please find herewith the subject Decision of the Authority along with Dissenting Note of Mr. Maqsood Anwar Khan, Member NEPRA (Total 28 Pages) in the matter of Approval of Request for Proposal (RFP) submitted by Alternative Energy Development Board (AEDB) for Competitive Bidding of 600 MWP Solar PV Projects at Muzaffargarh, for information, record and further necessary action.

Enclosure: As above

(Engr. Mazhar Iqbal Ranjha)

CC:

- 1. Secretary, Ministry of Energy (Power Division), 'A' Block, Pak Secretariat, Islamabad
- 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 OFAPPROVAL OF REQUEST FOR PROPOSAL (RFP) SUBMITTED BY ALTERNATIVE ENERGY DEVELOPMENT BOARD (AEDB) FOR COMPETITIVE BIDDING OF 600 MWP SOLAR PV PROJECTS AT MUZAFFARGARH

A. **BACKGROUND**

- (i). In exercise of the powers conferred by Section 7(3) and 47 of the Regulation of Generation, Transmission and Distribution of Electric Power Act 1997 as amended from time to time ("NEPRA Act") read with Rule 17(3) (vi) of NEPRA Tariff (Standards and Procedure) Rules, 1998 ("Tariff Rules"), the Authority on May 03, 2017 notified the NEPRA Competitive Bidding Tariff (Approval Procedure) Regulations, 2017 ("NCBTR, 2017"), to lay down the procedure for approval of tariff arrived at through a competitive bidding process.
- (ii). Federal Government in its meeting held on October 18, 2022 approved the Framework Guidelines for fast track solar PV initiatives, 2022 ("Framework Guidelines"). One of the area under the Framework Guidelines is "Substitution of Expensive Imported Fossil Fuel with Solar PV Energy". AEDB vide its letter dated November 21, 2022 submitted the Request for Proposal ("RFP") documents under the NCBTR, 2017 for competitive bidding in respect of 600 MW solar PV project to be developed at Muzaffargarh, 23 km away from the national grid, under the Framework Guidelines.
- (iii). Along with the RFP, AEDB submitted the (a). Framework Guidelines, (b). Energy Purchase Agreement ("EPA"), (c). Implementation Agreement ("IA"), (d). Grid Interconnection Study (which was carried out by National Transmission and Despatch Company Limited ("NTDC") and (e). Site Lease Agreement (to be signed between AEDB and successful bidder). AEDB submitted that the EPA and IA have been approved by the Economic Coordination Committee ("ECC") of the Cabinet in its meeting held on November WER RE

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B. ADMISSION OF THE RFP DOCUMENTS AND NOTICE OF PUBLIC HEARING

(i). The Authority considered the RFP documents and after detailed deliberations decided to conduct public hearing in the matter on January 09, 2023 at 10:00 AM. Accordingly, the notice of public hearing was published in the daily newspapers (Dawn and Jang) on December 28, 2022, stating the schedule of hearing, Zoom link, inviting the relevant stakeholders to participate in the hearing through filing comments and interventions requests. Additionally, separate letters were also sent to stakeholders, considered relevant in the matter.

C. ISSUES FRAMED FOR THE PUBLIC HEARING

- (i). Following is the list of the issues which was approved by the Authority for the hearing on the subject matter:
 - 1. Why the Project cannot be developed under the provisions of ARE Policy, 2019, duly approved by Council of Common Interest instead of Framework Guidelines 2022?
 - Whether the processing of Project is not inconsistent with the provisions of the ARE Policy, 2019 which states that the first round of competitive bidding shall be conducted for Category-III projects, and whether the necessary actions and subsequent approvals as required under the ARE Policy, 2019 have been complied with for the Project?
 - 3. Whether the Framework Guidelines under which the instant RFP has been submitted is only for this specific Project or it shall be continued for future projects as well? This needs to be noted that for all future projects, under CTBCM, the contracts shall be bilateral i.e., between DISCOs and the power projects.



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- 4. Why the project development regime of Build Own Operate & Transfer (BOOT) is being adopted instead of Build Own Operate (BOO)?
- 5. Whether the non-observance of the pre-qualification process would result in delaying the development timelines of the Project?
- 6. Whether the Project has been included in the approved Indicative Generation Expansion Plan and Transmission System Expansion Plan?
- 7. Whether the relevant studies in the feasibility study of the Project have been approved by the concerned entities, where applicable?
- 8. Whether the yearly indexation of 70% of the tariff with USD, as proposed in the RFP, is justified?
- 9. Whether the impact of income tax as proposed in the RFP is to be included in the benchmark tariff or otherwise? If yes, then whether that should be approved as pass through item or be made part of the tariff?
- 10. Whether the technical and financial evaluation criteria as proposed in the RFP is justified?
- 11. Whether the consent to procure electricity from the Project has been obtained from CPPAGL AND whether the interconnection commitments for the Project have been obtained from the relevant entities? Do the timelines for building the transmission system match with Project's COD timelines?
- 12. Whether the purchase of land by NTDC and its subsequent lease to AEDB is justified and consistent with the applicable law, ARE Policy, 2019 and prudent

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- utility practices AND Whether to include the cost of land of PKR 1.4 billion in the project cost OR be allowed as lease rentals in the benchmark tariff?
- 13. Why the site of Quaid-e-Azam solar power park, having the required land, grid and other infrastructure, is not being considered for the proposed project?
- 14. Whether the proposed Bid Evaluation Committee is in accordance with the provisions of NEPRA Competitive Bidding Tariff (Approval and Procedure) Regulations, 2017 as well as ARE Policy, 2019?
- 15. Whether the amounts of different fees and charges, as specified in the RFP, are justified?
- 16. What would be the mechanism for the selection of next bidder in case the successful bidder decides, for any reason, to not develop the project?
- 17. Any other issue(s) with the approval of the Authority
- (ii). The RFP Documents and list of issues were hosted on NEPRA's website for ready reference, which was informed to stakeholders through public as well as separate notices.

D. COMMENTS OF STAKEHOLDERS

(i). In response to the above, the Authority received comments from twelve (12) stakeholders including Northern Power Generation Company Limited ("NPGCL"), Renewable Energy First ("RE First"), Mr. Nasir Ayyaz, Mr. Mahar Irshad Sial, Kot Addu Power Company Limited ("KAPCO"), HUBCO, Bridge Factor, PEDO, Lincoln's Law Chamber on behalf of PEDO & Government of Khyber Pakhtunkhwa ("GoKP"), SCATEC, NTDC and Central Power Purchasing Agency Guarantee Limited ("CPPAG"). The



aforementioned stakeholders inter alia, provided response to issues of hearing as provided under the relevant heads of the report.

E. PUBLIC HEARING

- (i). The Authority conducted the public hearing as per the schedule on January 09, 2023 at NEPRA Head Quarters and the same was attended by various stakeholders both in-person and Online via zoom link, inter alia, including AEDB, NTDC/NPCC, CPPAG, Ministry of Energy (Power Division) ("MoE(PD)"), Private Power & Infrastructure Board ("PPIB"), Pakhtunkhwa Energy Development Organization ("PEDO"), Punjab Power Development Board ("PPDB"), Energy Department Govt. of Sindh ("EDGoS"), Energy Department Govt. of Balochistan ("EDGoB"), representatives of various project developers, representatives of IPPs, media persons and the representative of general public at large.
- (ii). During the hearing, AEDB submitted that site of the project has been changed and the new site is 3 km away from the national grid. AEDB also informed that revised feasibility study has been carried out for the new site.
- (iii). Post hearing, NEPRA wrote letter to AEDB on January 12, 2023 requiring to submit the (i) grounds for changing the site of the project, (ii) documents and evidences of the land cost as claimed in the RFP, (iii) written comments on the issues framed by the Authority for hearing and (iv) rejoinder on the submissions as advanced by the commentators. AEDB submitted its response vide letter dated January 13, 2023 and January 18, 2023.
- (iv). With regards to changing the site, AEDB submitted that it could not purchase the proposed land (initially identified at Muzaffargarh) due to the reason that large chunks of this land were being used by the locals for agricultural purposes. AEDB further stated that though no material change would have required in the feasibility study but for the sake of abundant caution the said study was immediately got revised completely in respect of the new proposed site from the consultant.

(v). Later, AEDB vide its letter dated January 26, 2023 informed that ECC in its meeting held on January 17, 2023 reconsidered its earlier decision dated November 14, 2022 and approved (i) indexation of tariff with exchange rate variations on quarterly basis, (ii) payment to projects developed under Framework Guidelines shall be ensured on 60th day of invoice from a dedicated solar account to be maintained by CPPAG. AEDB requested to process the RFP and approve the benchmark tariff in light of the above mentioned decision of the ECC.

F. ANALYSIS/FINDINGS AND DECISION OF THE AUTHORITY

Following is the issue wise summary of the discussions held during the proceedings followed by findings, analysis and decision thereon by the Authority.

Issue No.1: Why the Project cannot be developed under the provisions of ARE Policy, 2019, duly approved by Council of Common Interest instead of Framework Guidelines 2022?

- (i) Lincoln's Law Chamber on behalf of GoKP and PEDO submitted that as per Article 154 of the Constitution of Pakistan, the Council of Common Interest ("CCI") alone is competent to formulate and regulate policies in relation to the subject of electricity. Further, section 14(A) of the NEPRA Act provides for National Electricity Policy be approved by the CCI and National Electricity Plan to be prepared and approved by Federal Government (in consultation with the provinces), and NEPRA is obligated to perform its functions in accordance therewith. The Authority should not recognize the Framework Guidelines as a valid legal document as it has been approved without the consultation of the provinces, not approved by the CCI and hence it is in derogation of the Constitution of Pakistan and the NEPRA Act.
- (ii) Mr. Nasir Ayyaz commented that as per NEPRA Act and NEPRA (Electric Power Procurement) Regulations, 2022 ("NEPPR, 2022") the proposed project must comply



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with the relevant provisions of the law. The policy making power rests only with the CCI under the Constitution of Pakistan and therefore, the proposed project cannot be considered as an exception to regulatory provisions merely on the basis of the Framework Guidelines.

- (iii) RE First submitted that the procurement of renewable energy under the Framework Guidelines is in violation of Indicative Generation Capacity Expansion Plan ("IGCEP") and Alternative and Renewable Energy Policy, 2019 ("ARE Policy").
- (iv) AEDB responded that (i). it has distinct and independent legal mandate under AEDB Act, 2010 to develop national strategy, policies and plan for facilitation and utilization of alternative and renewable energy resources, (ii) AEDB Act provides for undertaking technical, economic and financial evaluation, which according to AEDB allows it to conduct competitive auctions, the mandate which has not been impaired upon by the provisions of ARE Policy, (iii) the policy directions of the Federal Government (in the form of Framework Guidelines) are binding on AEDB under Section 16 of the AEDB Act and submission of RFP to the Authority is in compliance of such policy directions, (iv) the process of conduct of bidding by energy department of provinces as given in the ARE Policy was considered to be impractical, inconvenient, onerous and inconsistent with the best procurement practices; this anomaly has rightly, lawfully and effectively substituted by the subsequent policy, regulatory framework, promulgation of the National Electricity Policy, 2021 ("NE Policy"), approval of Competitive Trading Bilateral Contract Market ("CTBCM") design and the NEPPR-2022), (v). Ministry of Law & Justice has already cleared the question on the legality of Framework Guidelines including mandate of AEDB to conduct auctions. In response to the submission of commentators, AEDB submitted that the proposed project is being developed under the Framework Guidelines that are completely aligned with the NE Policy, and ARE Policy and is also well within the quantum for solar PV specified in the approved IGCEP 2021-30.
- (v) The Authority has analyzed this matter in detail in light of the provisions stipulated in the Constitution of Pakistan, NEPRA Act, AEDB Act, Policies as approved by CCI and applicable regulatory framework.



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- (vi) Article 154 (1) of the Constitution of Pakistan stipulates that the Council shall formulate and regulate policies in relation to matters in Part II of the Federal Legislative List and shall exercise supervision and control over related institutions. The subject "Electricity" is placed in Part II of the Federal Legislative List, and the CCI is empowered to formulate and regulate policies in relation to electricity.
- (vii) The Authority is exclusively responsible for regulating the provision of electric power services under the NEPRA Act. As per Section 14(A) of the NEPRA Act, the Authority is to perform its functions in accordance with the NE Policy and NE Plan. The NE Policy is to be approved by the CCI and the NE Plan is to be prepared by the Federal Government, in consultation with the provinces, which should be in accordance with the NE Policy.
- (viii) In pursuant to the constitutional stipulations, CCI approved the ARE Policy in October, 2020 which is in field and comprehensibly governs the development of renewable energy projects including solar PV projects. Additionally, the NE Policy has also been approved by the CCI in 2021 providing the overarching umbrella for reform, development, improvement and sustainability of the power sector. The ARE Policy is one among the portfolio of policies together comprising the NE Policy. According to AEDB, the limitations in the ARE Policy with regards to competitive bidding by provinces have been addressed in the NE Policy.
- (ix) AEDB submitted that pursuant to Section 8(a) of its Act, one of its function is "to develop national strategy, policies and plans for utilization of alternative and renewable energy resources to achieve the targets approved by the Federal Government in consultation with the Board". The Framework Guidelines have been developed and approved following the above provisions of the AEDB Act.
- (x) The Authority considered the foregoing and is of the view that though AEDB is empowered to develop policies and plans under its Act, however, in the presence of ARE Policy which has been approved by the CCI in accordance with the provisions of the constitution and the NEPRA Act, the subject project should have ideally been developed under the aforementioned policy. The submission of AEDB that the limitations of the ARE



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Policy have been addressed in the NE Policy, also strengthens the development of the subject project under the ARE Policy. It was observed by the Authority that the modalities of expensive fuel displacement was also well covered under the section 1.4.4 of the ARE Policy. However, being policy and executive matter, the Authority considers that the Federal Government shall look into the issue of applicability and enforceability of the Framework Guidelines in presence of the ARE Policy and ensure observance of legal and codal requirements.

Issue No.2: Whether the processing of Project is not inconsistent with the provisions of the ARE Policy, 2019 which states that the first round of competitive bidding shall be conducted for Category-III projects, and whether the necessary actions and subsequent approvals as required under the ARE Policy, 2019 have been complied with for the Project or otherwise?

- (i). GoKP and PEDO submitted that the Framework Guidelines is a deviation from the ARE Policy and not acceptable to GoKP. The role of the provinces has been ousted unilaterally and unlawfully without the sanction of the competent forum, i.e. CCI. Under ARE Policy, all the procurement of renewable energy is to be done under the Steering Committee while balancing the development across all the provinces. The bidding for category-III projects should be prioritized as per the ARE Policy, as five (5) solar PV projects, whose Letters of Intent ("LOIs"), were issued by GoKP falls under category-III.
- (ii). RE First submitted that category-III projects are waiting for competitive bidding for the last four (4) years, even after the Cabinet Committee on Energy ("CCoE") decision. It further submitted that some of the category-III projects were awarded lowest tariff but did not materialize, as power division did not notify their tariffs. The current auction ignores category-III projects which undermines investors' confidence and affects the market trust. It further stressed that the present RFP does not provide any information with regards to the steering committee, which is supposed to take part in this rigorous exercise.
- (iii). At the outset, AEDB submitted that the opinion as advanced by Ministry of Law & Justice may be referred in this regard. AEDB added that the RFP and Security Package



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Documents ("SPDs") for category-III projects were finalized by AEDB immediately upon approval of IGCEP, 2021-30 by NEPRA in September, 2021 and receipt of confirmation of Interconnection Ready Zones ("IRZs") from NTDC/DISCOs in April, 2022. The finalized RFP documents were placed before the AEDB Board in May, 2022 for approval, however, the approval of the same was deferred owing to concerns of provinces that the competitive bidding of category-III projects is to be carried out by the provinces. Several meetings have been held with the provinces to resolve the matter by Power Division, however, the matter still remains unsettled. AEDB will carry out the competitive bidding of category-III projects soon as the matter is settled with the provinces.

- (iv). The Authority considers that the point of inconsistency of Framework Guidelines with the ARE Policy has been discussed in detail in the previous issue. Nevertheless, the Authority considers it important to discuss here that as per the ARE Policy. the first round of the competitive bidding is to be carried out for the procurement of energy from the projects falling in the category-III of the CCoE decision dated April 04, 2019 (subsequently modified in June, 2020). It is relevant to point out that the AEDB vide its letter dated May 11, 2020, submitted two RFP documents to carry out competitive bidding for the procurement of electricity, each from solar and wind power projects that hold LOIs and fall under category-III of the CCOE decision dated April 04, 2019. The Authority after due processing, including public hearing, approved the RFP documents on February 10, 2021. However, that bidding has not yet been carried out. In the above matter, it is also important to note that the benchmark tariff of Rs. 6/kWh was approved by the Authority with yearly indexation of 2.5% thereon. The cost of equipment and the terms of financing at that time were quite on the lower side, compared to the prevailing market conditions. If the bidding had taken place at that time, the projects might have been constructed at cheaper tariff and with no exposure to the foreign exchange fluctuations for entire duration of the projects. This would have resulted in lowering of average cost of generation and huge savings in foreign exchange reserves of the country.
- (v). The Authority is of the view that the competitive bidding for category-III projects should be carried out at the earliest. A considerable capacity of utility scale solar PV projects









has been optimized in IGCEP 2022-31 (in form of block), which can be addressed by procurement of electricity from category-III projects through competitive bidding.

Issue No.3: Whether the Framework Guidelines under which the instant RFP has been submitted is only for this specific Project or it shall be continued for future projects as well? This needs to be noted that for all future projects, under CTBCM, the contracts shall be bilateral i.e., between DISCOs and the power projects.

- (i). In the Framework Guidelines, it is given that the CPPAG shall purchase all the power generated by the projects developed under the said initiative.
- (ii). GoKP and PEDO submitted that the SPDs to be signed under the Framework Guidelines shall tie the hands of the Government for next twenty five (25) years, instead of contracts under CTBCM, which are going to be bilateral without any sovereign guarantees and commitments. RE First submitted that the fast-track initiative with 25 years EPA with CPPAG as the single buyer, is against the spirit of CTBCM.
- (iii). AEDB responded that as per the Framework Guidelines approved by the Federal Government, appropriate capacity for solar PV generation will be procured based on CPPAG identification of imported fossil fuel based thermal power plants, whose expensive energy can be substituted with solar energy during the day according to the technical and contractual limitations.
- (iv). The Authority has approved the CTBCM detailed design vide its determination issued on November 11, 2020. In the said determination, it is specified that upon operationalization and implementation of the CTBCM, which is due to happen by or before April, 2023, the agreement for the procurement of electric power shall be signed bilaterally between the DISCOs (suppliers of last resort) and the power generation companies. Foregoing in view, the Authority considers that once CTBCM is operationalized, the energy from the future projects shall be procured/contracted by the parties duly licensed to perform those functions at that time, as per applicable law.



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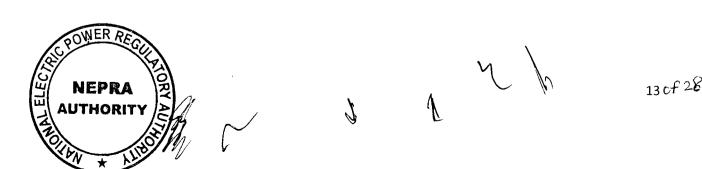
Issue No.4: Why the project development regime of Build Own Operate & Transfer (BOOT) is being adopted instead of Build Own Operate (BOO)?

- (i). BOOT regime was approved in Framework Guidelines whereby the project sponsor, upon the lapse of the EPA term of twenty five (25) years, shall transfer the ownership of the complex and all associated equipment to GoP. Accordingly, RFP has also been filed asking for the approval of benchmark tariff on BOOT basis.
- (ii). GoKP commented that provinces must get the transfer of the projects as done in the earlier concessions in the nature of BOOT. SCATEC commented that the project should remain in BOO model as it will help reduce the tariff, considering that Pakistan is moving towards multiple buyer/seller regime.
- (iii). AEDB submitted that the primary reason for opting the proposed BOOT model is that this model would yield two-fold advantages for the GoP, (i) With minimal tariff impact in the form of redeeming of equity spread over full term of the project, GoP will acquire/take over the project at the end of the concession period free of cost, while utility of such solar projects is expected to go way beyond the initial term of 25 years or the same land can be used for more efficient new technologies available at that time; (ii) CTBCM implementation is imminent, with opening of the market, it is beneficial for the GoP to acquire all these projects and then at its option either outsource their operations and get free energy or sell them to third parties against value consideration.
- (iv). The Authority considered the submissions of AEDB and noted that the impact on the tariff in BOOT model versus BOO is negligible. The argument of cheaper electricity generation, post completion of the term, as advanced by CPPAG also carries weightage. Therefore, the Authority decided to approve the benchmark tariff under the BOOT model. Regarding the point raised by GoKP for transfer of projects to the provinces, the Authority considers that the said issue is a policy matter and may be decided at the level of Government.



Issue No. 5: Whether the non-observance of the pre-qualification process would result in delaying the development timelines of the Project?

- (i). AEDB did not carry out the prequalification process for the subject matter and submitted that single stage two envelope bidding process shall be followed for the competitive bidding. The two envelope process shall be comprising of technical and financial evaluation, with lowest tariff being the main criteria for the selection of the bidder. In the Framework Guidelines also, it is provided that single stage two envelope bidding process is to be adopted.
- (ii). GoKP and PEDO submitted that although the prequalification process is not mandatory but it will create visibility and transparency in the evaluation of financial and technical strength of the competing parties.
- (iii). In response, AEDB submitted that proposed bidding structure is in line with the NCBTR, 2017. Additionally, AEDB submitted that considering the objective of substitution of expensive thermal power with solar PV energy as a quick fix, long term benefit and time constraints, the bidding process was structured on single stage two envelope basis. However, AEDB asserted that within the process of evaluation of technical bid, all bidders will be required to meet minimum criteria of proving their financial and technical robustness, which is in fact a pre-qualification of sponsors before opening of financial bids.
- (iv). The Authority noted that a complete section has been stipulated in the NCBTR, 2017 for the pre-qualification process. It is observed that the technical evaluation criteria prescribed in the subject RFP entails the evaluation of ability to execute project, relevant experience, legal and regulatory compliance, financial ability (net worth) etc. of the bidders, which largely fulfills the requirement of pre-qualification process as given in the NCBTR, 2017. Foregoing in view, the Authority considers that the submissions of AEDB in the matter are acceptable.



Issue No 06: Whether the Project has been included in the approved Indicative Generation Expansion Plan and Transmission System Expansion Plan?

- (i). GoKP and PEDO submitted that to ensure consistency, the project should be the part of the approved IGCEP. RE First submitted that the procurement of renewables under said initiative violates the primacy of IGCEP. It further added that procurement of renewables by circumventing the IGCEP undermines not only the national policy but also the extensive planning and optimization exercise carried out by relevant authorities to ensure timely, affordable and reliable addition of capacity into the national grid. Mr. Nasir Ayyaz commented that as per his understanding, it is not included in the approved IGCEP and there is no approved TSEP as yet.
- (ii). AEDB responded that the approved IGCEP provides block allocations for renewable energy projects based on least-cost optimization. The capacity of the proposed project is well within the quantum for solar PV technology provided in the approved IGCEP. Further, AEDB emphasized that the project will utilize existing transmission lines so there is no issue with regards to non-compliance with TSEP.
- (iii). During the public hearing, CPPAG commented that the project is already considered in the IGCEP-2022-31 as the energy generated from the project shall be utilized for substitution of expensive energy from imported fossil fuels which will result in lowering of the average power generation cost and savings of foreign exchange reserves. On query of NEPRA, CPPAG provided analysis confirming that the project will result in lowering of the consumer end tariff. Further, NTDC has also submitted that the subject project may be considered as part of blocks stated in IGCEP-2022-31.
- (iv). The Authority noted that in compliance with the assumption set approved by the CCI, block allocation has been provided in the IGCEP for candidate/optimized VRE projects. In this regard, a block of 3,120 MW for solar PV projects has been optimized at utility level in the IGCEP 2022-31 for the year 2024-25. It is also noted that the interconnection arrangement of the subject project is also included in the scope of



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TSEP (Phase-I) report. Foregoing in view, the Authority considers that the subject project is included in the scope of IGCEP and TSEP.

Issues No.7: Whether the relevant studies in the feasibility study of the Project have been approved by the concerned entities, where applicable?

- (i). GoKP and PEDO submitted that there is no visibility on the conduct and approval of the feasibility study. SCATEC commented that the feasibility study needs to be approved by the panel of experts of the relevant authorities. The bidders must be provided the approved studies, otherwise, timeline needs to be adjusted in case these are to be approved after the selection of the bidders. KAPCO highlighted that the RFP states that detailed grid interconnection/impact studies, including load flow, short circuit, transient stability study, etc. shall be carried out by the project company using actual design data of the project. If the project developer has to carry out these studies, then the given timeline for bidding is very difficult to achieve.
- (ii). In response to the above, AEDB submitted that it has already carried out the preliminary feasibility studies through GIZ, NESPAK and NTDC, required by the bidders to finalize their bids. The same will be shared with the bidders as part of the RFP. The successful bidder will be required to get approval of the relevant studies from concerned quarters, which is also one of the conditions of the letter of conditional award. AEDB further clarified that although the timelines of the bidding process have been for fast track development of such projects, however, the RFP provides for extension in the bidding process, if required, depending on the circumstances.
- (iii). In this regard, the Authority has observed that Regulation 7(e) of the NCBTR, 2017 provides for the contents of RFP, which includes detailed feasibility study. AEDB submitted a detailed feasibility study of the project as part of the RFP documents covering (a). Solar Assessment Study; (b). Transportation Study; (c). Geo Technical/Sub Soil Investigation Study; (d). Hydrogeological Study; (e). Topographic Survey; (f) Environmental Impact Assessment (EIA) Study; and (g). Grid Interconnection Study. The above feasibility study shall be shared with the bidders along with the RFP. The



approvals of studies, where required, shall be obtained by the successful bidder. In view of the said, the Authority considers that the issue stands addressed

Issue No.8: Whether the yearly indexation of 70% of the tariff with USD, as proposed in the RFP, is justified?

- (i). The indexation on 70% of the tariff with change in PKR/USD on quarterly basis was approved in the Framework Guidelines. In the RFP, the adjustment to the extent of 70% of the tariff has been requested on annual basis. Vide its letter dated January 26, 2023, AEDB requested for allowing above variations in tariff on quarterly basis.
- (ii). RE First submitted that the proposed indexation in the RFP is quite higher and will result in massive increase in tariff given the high devaluation of PKR against USD. GoKP and Mr. Nasir Ayyaz also did not support the indexation of tariff proposed in the RFP. SCATEC submitted that proposed indexation on 70% of the tariff is not bankable and requested to link the same with the amount of debt and equity on quarterly basis. SCATEC also requested that one-time adjustment may also be allowed to account for the change during the construction period of the project. Bridge Factor submitted that the 70% indexation with USD shall only cover the debt part and requested to provide this coverage on equity and O&M parts also. Further, Bridge Factor requested to provide the said indexation on quarterly basis instead of annual basis as debt repayments are to be made after every quarter to lenders. Additionally, Bridge Factor requested for the provision of variations due to change in LIBOR/SOFR, presenting the ground that currently the rates are on the higher side and setting tariff at such higher prevailing cost shall be unfavorable for the consumers.
- (iii). In the Framework Guidelines, it is mentioned that the total foreign exchange cost component of the project shall be arranged by the successful bidder through foreign funding sources. The Authority considered the indexations that have been approved in the tariff cases of solar PV projects under cost plus regime, established on foreign financing. Additionally, the factor of high fluctuations of the exchange rates, especially in last couple of



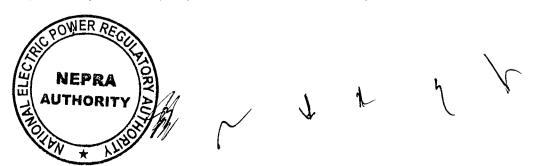
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years, was also deliberated upon. Foregoing in view, the Authority has decided to approve the adjustment of 70% of the approved tariff with the change in exchange rates, on quarterly basis based on exchange rate prevailing on the last day of the preceding quarter. The Authority finds it important to mention here that the benchmark tariff being approved in the decision has been computed in a way that the impact of variations of relevant indices on 30% portion of the tariff, which is to remain fixed, has been accounted for upfront.

Issue No.9: Whether the impact of income tax as proposed in the RFP is to be included in the benchmark tariff or otherwise? If yes, then whether that should be approved as pass through item or be made part of the tariff?

- (i). The income tax of 15% on the income and gains of the power producer was approved in the Framework Guidelines. In the RFP also, it is stated that the income tax of 15% shall be imposed on profits and gains of the company.
- (ii). GoKP and PEDO commented that the income tax cannot be made a pass through as it is the liability of the sponsors/project company and not the consumers. Further, GoKP submitted that the rate of tax should be harmonized as applicable to other solar power projects. SCATEC submitted that the tax exemption should be reintroduced to reduce the burden on the end-consumer.
- (iii). AEDB submitted that since income tax on profits and gains is dependent on the realization of the profits by the generation company, which may not be true for each financial year, it seems prudent that it should not be assumed within benchmark tariff. Rather any tax on profits and gains should be treated as pass-through item under the EPA as and when incurred. This will act as a safeguard against excessive payments to project developer on account of assumed profits and gains from power generation.
- (iv). The Authority considered the submissions of AEDB and is of the view that the proposition of pass through of the income tax would be unfavorable also in case of higher profits reported by the company. Therefore, the Authority has decided to not allow income

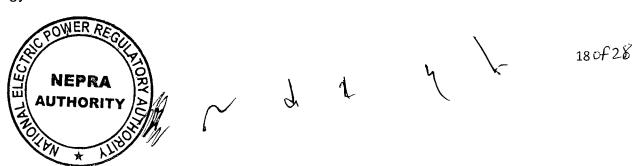
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tax as a pass through item and the impact thereof has been included in the computation of benchmark tariff.

Issue No. 10: Whether the technical and financial evaluation criteria as proposed in the RFP is justified?

- (i). GoKP and PEDO submitted that the technical and financial evaluation criteria should be as per ARE Policy, 2019 read with the NCBTR, 2017. They further submitted that locking of existing and present technology with 20% output availability of the installed capacity for a concession term of 25 years is imprudent. RE First submitted that the stringent requirement of the bidder regarding past experience of at least 30 MW and pre specified role as developer, EPC contractor and direct and indirect ownership of 30 MW project inhibit the entry of new or growing market players.
- (ii). In response, AEDB submitted that the criteria for technical evaluation provided in the RFP has been finalized keeping in view the provisions of the Framework Guidelines, NCBTR, 2017 and with the objective of creating more competition in the market. AEDB further submitted that the requirement of bidder's past experience is appropriate considering the local market conditions and would not at all be restrictive for global market players. Requiring no past-experience of power projects would be detrimental to the project development especially with stringent timelines.
- (iii). The Authority considers that the proposed technical evaluation criterion adequately covers the measurement of the financial strength and past performance of the bidders as well as the technical requirements to be met for the development of the project. The financial evaluation criterion is based on the lowest tariff, which does not warrant any change. Therefore, the Authority considers that the evaluation criteria as proposed by AEDB is justified. The Authority finds it important to clarify here that the benchmark tariff has been computed using the energy numbers which were calculated considering the availability of resource at the proposed site while taking into account the output yield of the best available technology.



Issues No.11: Whether the consent to procure electricity from the Project has been obtained from CPPAGL AND whether the interconnection commitments for the Project have been obtained from the relevant entities? DO the timelines for building the transmission system match with Project's COD timelines?

- (i). GoKP and PEDO submitted that commitments from the relevant departments should be obtained. Mr. Nasir Ayyaz commented that all these documents should have been available with the Authority prior to publication of the RFP being basic pre-requisite.
- (ii). In this regard, AEDB responded that the proposed project has been finalized in consultation with and consent of CPPAG and NTDC.
- (iii). The Authority noted that the board of CPPAG has already approved the EPA to be signed with the successful bidder. Further, the Authority has observed that NTDC has already included the interconnection arrangement of the subject project in the TSEP (Phase-I), to be completed in 2024-25 which corresponds with the timelines of the development of the subject project. Foregoing in view, the Authority considers that the response of AEDB in the matter is acceptable and the issue stands settled.

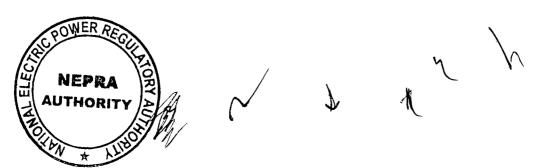
Issue No 12: Whether the purchase of land by NTDC and its subsequent lease to AEDB is justified and consistent with the applicable law, ARE Policy, 2019 and prudent utility practices AND Whether to include the cost of land of PKR 1.4 billion in the project cost OR be allowed as lease rentals in the benchmark tariff?

(i). In the RFP documents, it is stated that the land shall be acquired by NTDC and provided to the project sponsors on lease by the GoP through AEDB. AEDB submitted that the total area of the land identified by NTDC for the development of 600 MW solar PV project at Muzaffargarh, Punjab is approximately 2,400 acres. The land is private and is located at a distance of 23 km from Muzaffargarh Thermal Power plant. Furthermore, AEDB submitted that the total cost of land is Rs. 1,400 million that is being funded through Public Sector Development Plan ("PSDP") on Cash Deposit Loan ("CDL") and requested the Authority to consider the cost of land with 15% markup as a separate line item of the



benchmark tariff. Further, AEDB requested to account for the markup cost of 25 months, i.e. from the date of release of funds by the Finance Division and achievement of COD.

- (ii). SCATEC submitted that the legal competency and capacity of NTDC for acquisition and leasing of land to AEDB and further sub leasing must be critically scrutinized, as any lacunae in title or procurement may lead to huge repercussions for the Project. The land must be clearly demarcated officially through the legal process and be free from all encumbrances, charges, disputes, and litigations and there should not be any bar/burden on the proposed land with respect to CDL. The Project Documents (including land document) must ensure specific flexibility and possibility of extension of timelines, in case of delay in finalization of acquisition and leasing of land. Further, SCATEC submitted that the cost of the lease is considerably higher and will ultimately increase the burden on the consumers.
- (iii). Mr. Nasir Ayyaz commented that AEDB is not mandated to lease land under AEDB Act, 2010. Moreover, the land should be acquired and then leased by the same entity instead of involving intermediaries like AEDB as it may result in cost escalation. NTDC also does not have any mandate for acquiring land on behalf of generation plants. Thus this may either be done by the respective provincial government or any existing generation company of the Federal Government, as the plant is being proposed to be installed on BOOT basis.
- (iv). RE First submitted that no reasons has been provided in the RFP for the selection of this specific site. GoKP submitted that the purchase of land by NTDC for leasing to AEDB for sub-leasing to IPP is not permitted under the law. Further, GoKP submitted that allowing cost of land of Rs. 1.4 billion in the tariff is not in consumers' interest.
- (v). NPGCL submitted that the proposed solar PV plant, based on bifacial solar technology, can be installed at existing location (514 acres) of TPS Muzaffargarh, which will significantly reduce the project execution time, consequent fuel import bill, installation cost and final tariff for end consumers by utilizing the existing infrastructure including land, interconnection facilities, civil structure, water availability and manpower at TPS Muzaffargarh.



- (vi). Mr. Mahar Irshad Sial submitted that the proposed land is not feasible for the project as the land is cultivated and agricultural. He further submitted that subject project should be developed at TPS Muzaffargarh, as it has abundant vacant and barren land and most of the essential requirements are already available.
- (vii). During the hearing, AEDB submitted that site of the project has been changed and the new site is 3km away from national grid. AEDB also informed that revised feasibility study has been carried out for the new site and the same has been submitted to NEPRA vide letter dated January 06, 2023. AEDB submitted that it could not purchase the proposed land (initially identified at Muzaffargarh) due to the reason that large chunks of this land was being used by the locals for agricultural purposes. Now most of the land identified for the Project is located in Kot Addu instead of Muzaffargarh. It is noted that in the feasibility study of the new site, the requirement of land has been increased to 2,572 acres from the earlier submission of 2,400 acres
- (viii). With respect to acquisition of land by NTDC, AEDB submitted that every corporate entity can acquire property on its own name. It added that license has been granted by the Authority to NTDC for one of its functions, which does not mean that it cannot acquire land. Had the NTDC been established as a special purpose company to perform any particular function then land acquisition by it would not be right.
- (ix). With respect to comment of NPGCL, AEDB responded that the development of the 600 MWp solar PV project at the vacant land available at TPS Muzaffargarh is not possible primarily due to (i) the land is not sufficient for the development of the proposed 600MWp solar project, (ii) the land is already mortgaged against the sukuk bonds issued by the relevant entity of the GOP.
- (x). The Authority considers that ARE Policy prescribes that the land of the projects shall be made available by the provinces, the provision which is not being exhausted in the subject matter. The Authority considers that claim of cost of land with 15% markup is not acceptable given the fact that the ownership of land, at the end of contract period, shall remain with GoP. The Authority hereby decides that yearly lease rentals at the rate of 5%



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(Rs. 70 Million) of the proposed cost of land (Rs. 1,400 Million) is allowed to be charged by the successful bidder from the consumers to be transferred to AEDB. This translates into tariff impact of Rs. 0.06/kWh. This impact has not been included in the benchmark tariff and being approved as a separate line item, as requested by AEDB.

Issues No.13: Why the site of Quaid-e-Azam Solar Power Park (QASPP), having the required land, grid and other infrastructure, is not being considered for the proposed project?

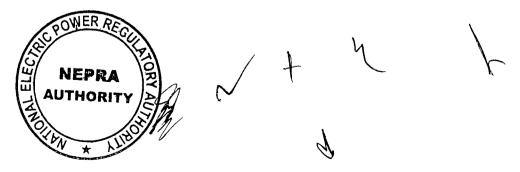
- (i). GoKP and PEDO submitted that that QASPP developed by the Government of Punjab provides for a much more suitable site in relation to availability of land, grid interconnection, established solar surveys, solar output, infrastructure availability, etc.
- (ii). AEDB clarified that the land available at QASPP has already been allocated to project companies listed under Category-III. Therefore, the same cannot be used for open competitive bidding of the proposed project.
- (iii). The Authority considers that the availability of solar resource at QASPP is more favorable and the required infrastructure already exists. However, according to AEDB, the land available at QASPP has already been allocated to other project companies (i.e. 6x100 MW projects under category-III of the CCoE decision dated April 04, 2019). The above contention of AEDB may be the reason that subject project cannot be developed at QASPP, however, this calls for expeditious actions for the conduct of competitive bidding for category-III projects so that the sites having the better resource and developed infrastructure can be utilized.



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Issue No. 14: Whether the proposed Bid Evaluation Committee (BEC) is in accordance with the provisions of NEPRA Competitive Bidding Tariff (Approval and Procedure) Regulations, 2017 as well as ARE Policy, 2019?

- (i). AEDB in the RFP has proposed the following constitution of Bid Evaluation Committee ("BEC"):
 - Three representatives duly appointed by AEDB;
 - Two representative duly appointed by the Purchaser;
 - One representative duly appointed by NTDC:
 - One independent member duly appointed by the Ministry of Energy, Power Division.
- (ii). GoKP and PEDO in its submissions proposed that constitution of BEC should be in line with the ARE Policy including constitution of Steering Committees with representation of provinces. Mr. Nasir Ayyaz submitted that the Authority may not concern itself with the BEC rather stipulate that acceptance of any successful bid must be subject to grant of concurrence and approvals by the regulator.
- (iii). AEDB submitted that proposed constitution of BEC is line with the provisions mentioned in NCBTR, 2017. It further responded that AEDB shall submit the Bid Evaluation Report and accordingly the successful bidder shall apply to NEPRA for approval of tariff.
- (iv). The Authority noted that under the NCBTR, 2017, the only requirement with respect to constitution of BEC is to have at least one independent member. The Authority considers that the said criterion has been fulfilled in the constitution of BEC as proposed in the RFP. However, the Authority hereby directs AEDB to ensure the compliance with the relevant provisions of the NCBTR, 2017, while selecting the independent member in BEC.

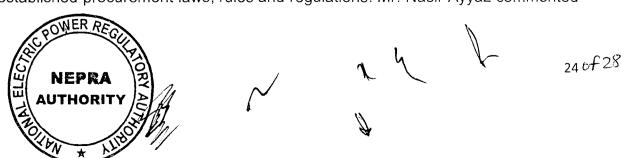


Issue No. 15: Whether the amounts of different fees and charges, as specified in the RFP, are justified?

- (i). The Authority noted that the Federal Government has approved the fee structure in the Framework Guidelines, which accordingly has been stated in the RFP by AFDB.
- (ii). GoKP, PEDO and SCATEC submitted that amount of fee and charges may be kept minimal in order to ensure wide participation. SCATEC additionally requested that fee upon achievement of financial close may be waived off by the Authority.
- (iii). AEDB responded that amounts have been set after thorough consideration/deliberation and in view of industry norms and have been duly approved by the Federal Government under the Framework Guidelines.
- (iv). The Authority considers that the proposed amount of bid bond and performance guarantee works out to be 2% and 3% of the estimated project cost, respectively, which shall be returned upon completion of respective milestones. Furthermore, the remaining fees and charges as proposed to be charged by AEDB works out to be around 0.2% of the estimated project cost. In light of the above, the Authority considers that the fee and charges as proposed in the subject RFP are justified.

Issue No. 16: What would be the mechanism for the selection of next bidder in case the successful bidder decides, for any reason, to not develop the project?

- (i). The mechanism for selection of next successful bidder, in case of default of the successful bidder, is not provided in the RFP documents.
- (ii). GoKP and PEDO submitted that next bidder in line should be declared successful in case highest rank bidder fails to achieve the required milestones in accordance with the established procurement laws, rules and regulations. Mr. Nasir Ayyaz commented



that AEDB can consider to invite the next lowest evaluated bid or go for re-tender as it may deem appropriate at that time.

- (iii). AEDB responded that this depends at which stage the successful bidder decides not to develop the project. In case where the bidding process is complete and the bidder has entered into binding contract, the said contract will govern the further process. However, if successful bidder quits the process, prior to completion of the bidding process and before signing a binding contract, its bid bond will be en-cashed and AEDB will carry out the competitive bidding process afresh.
- (iv). The Authority considers that a mechanism be incorporated in the RFP documents for selection of next bidder, in case successful bidder quits. Preferably, AEDB shall make the best efforts to convince the next bidder in line to match with the bid of the successful bidder.

Issue No. 17: Any Other Issue with the approval of the Authority

Timelines to Complete Project

- (i). KAPCO stated that considering the size of the project and challenges to arrange foreign financing due to economic conditions of the country, the timelines of the project are very challenging. SCATEC submitted that (a) timelines to achieve FC must be enhanced to 180 days from LOS; (b) consequences for not achieving the FC in stipulated timeline be clearly stipulated; and (c) considering the fact that company has to construct sub/grid station on site, the COD must be either extended by 4 months or the stipulated 600 days should start from the required date of FC, instead of issuance of LOS; Moreover, environmental and social issues (if raised) will require further flexibility in the timelines.
- (ii). AEDB submitted that the timelines of the bidding process have been set in consideration of the Government's vision of fast track development of such projects under the Framework Guidelines. However, the RPF provides for extension in the bidding process if required depending on the circumstances.

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(iii). Considering the above submissions of the commentators, the Authority is of the view that AEDB should facilitate the interested bidders during the bidding process and ensure that the competitive bidding process is completed as per the timelines given in RFP and NCBTR, 2017.

Dedicated Solar Debit Account

- (i). ECC in its meeting held on January 17, 2023 has reversed its earlier decision of November 14, 2022 and has allowed the creation of dedicated solar account for the projects to be developed under the Framework Guidelines. The above decision of ECC was communicated by AEDB to the Authority vide letter dated January 26, 2023 with the request to approve the RFP accordingly.
- (ii). The Authority considers that it had opposed the creation of dedicated account vide its letter dated November 11, 2022 on the pretext that this will create discrimination with the payment arrangement agreed with the other power generation companies. The said position of NEPRA was earlier approved by ECC in its meeting held on November 14, 2022. Further, it is noted that this issue was not advertised by the Authority for the proceedings on the subject matter. In view thereof, the Authority decides to maintain its earlier position in this matter.



G. Order of the Authority:

In view of the foregoing, the Authority hereby decides to approve the RFP documents with unit based benchmark tariff of Rs. 7.8449/kWh (3.4108 cents/kWh) for the control period of 25 years, with indexation of 70% on the tariff due to change in exchange rate variations, on quarterly basis. AEDB is directed to consider and comply with the decisions, directions and observations of the Authority as stated against each of the aforementioned issues.

AUTHORITY

Rafique Ahmed Shaikh (Member)

Magsood Anwar Khan (Member)

Mathar Niaz Rana (nsc)

Mi ni-A

(Member)

Tauseef H. Faroogi (Chairman)

My dissent Note 1'D altachplz. Attack. Make it a part of determination.



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Dissending Note by Membria (ric/KP)



The Federal Government's initiative for the fast track solar PV utility scale projects development for substitution of expensive imported fossil fuel with Solar PV Energy is commendable. The development of indigenous and the renewables resources is need of power sector and economy to ensure the affordable and sustainable tariff for the consumer of the Pakistan. However, the process compliant and transparent decision making it is necessary so that the alternative and renewables energy (ARE) projects are developed in accordance the Constitution of Pakistan, Applicable Laws, Council of Common Interest (CCI) approved Policies and other regulatory framework.

It should be noted that as per Article 154 of the Constitution of Pakistan, the CCI alone is competent to formulate and regulate policies in relation to the subject of electricity. Further, section 14(A) of the NEPRA Act stipulates that National Electricity Policy (NE Policy) be approved by the CCI and NEPRA have to perform regulatory functions accordingly. As per understanding the "Framework Guidelines, 2022" are not approved by the CCI so same may not be recognized as valid legal and applicable document, as it has been approved by Federal Government without the consultation of the provinces, and hence it is in derogation of the Constitution of Pakistan and the NEPRA Act.

It is also important to mention that after due processing, the CCI, duly represented by federal and provinces under Article 153 and as empowered under Article 154 of Constitution has approved the Alternative & Renewable Policy 2019 (ARE Policy, 2019) for the competitive basis development and procurement from ARE projects to achieve the goal of affordable tariff for consumers. It should be noted that the ARE Policy, 2019 is still in field and in my humble opinion, the development of renewable resources including wind, solar and other ARE technologies should be encouraged and developed in compliance to the provisions of the ARE Policy, 2019.

In the current case, Alternative Energy Development Board (AEDB) has submitted the RFP for the development of 600 MW Solar PV Power Project at Muzaffargarh before the Authority, under the federal Government approved Framework Guidelines, 2022; which in my opinion is not appropriate and legally sustainable framework as it appears as the parallel regime with the ARE Policy, 2019. Hence, I am of the considered view that development of solar PV projects under the Framework Guidelines, 2022 while ignoring the CCI approved and applicable ARE Policy, 2019 is tantamount to disregard to the CCI approved Policies and may have far reaching impacts on the power sector of Pakistan.

Considering the above grounds, In my individual capacity as member, I reverently disagree with the the majority of members decisions and my dissent may be made part of determination in the matter.

Magsood Anwar Khar