

# National Electric Power Regulatory Authority Islamic Republic of Pakistan

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Subject:

ORDER IN THE MATTER OF APPROVAL OF BID EVALUATION REPORT SUBMITTED BY THE PAKHTUKHWA DEVELOPMENT ORGANIZATION (PEDO) FOR 12.3 MW NANDIHAR HYDROPOWER PROJECT

Please find enclosed herewith the order of the Authority (11 pages) in the subject matter for information and necessary action.

Enclosure: As above

(Syed Safeer Hussain)

#### Chief Executive Officer

Pakhtunkhwa Energy Development Organization (PEDO) Government of Khyber Pakhtunkhwa First Floor, A-Block, Abdul Wali Khan Multiplex, Civil Secretariat, Peshawar

CC: Secretary, Energy and Power Department, Government of Khyber Pakhtunkhwa, First Floor, A-Block, Abdul Wali Khan Multiplex, Civil Secretariat, Peshawar

# ORDER IN THE MATTER OF APPROVAL OF BID EVALUATION REPORT SUBMITTED BY THE PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION (PEDO) FOR 12.3MW NANDIHAR HYDROPOWER PROJECT

#### BACKGROUND

- This Order shall dispose of the bid evaluation report filed by PEDO for the 12.3MW Nandihar Hydropower Project
- 2. Brief facts of the case are that the Government of Khyber Pakhtunkhwa (the "GoKP") through the Pakhtunkhwa Energy Development Organization (hereinafter referred to as "PEDO" or the "Relevant Agency") intends to implement the 12.3 MW Nandihar Hydropower Project (HPP) (the "Project") under the KP Hydropower Policy 2016 (the "Policy"). The Project is to be developed as an Independent Power Producer ("IPP") on a Build-Own- Operate-Transfer (BOOT) basis. The Project is a run of river facility on the Nandihar River, located in the Village Batle/ Kuz Gandhur of the District Battagram. The project is nearly 12 km from District Battagram immediately at Karakoram Highway (KKH) which is about 330 km from Peshawar.
- 3. The project history provided by PEDO has highlighted that comprehensive inventory studies for identification of hydropower potential in the mountainous areas of KP has been carried out by the GoKP, represented by the then Pakhtunkhwa Hydel Development Organization (PHYDO). PEDO conducted the feasibility studies for the site through a joint venture of consultants, comprising of NDC, BAK and Hydro-Tech, in association with LI and KEC.
- 4. Under the initiative, the Project and 5 other sites were identified by PEDO for the development of hydropower projects. These projects shall contribute 518 MW in total to the national grid. Accordingly, PEDO simultaneously processed these projects for award of tariff through competitive bidding. On 12th February 2016, PEDO's BoD decided to advertise the following Six (6) Solicited Hydropower Projects for development in Private Sector on BOOT basis as per KP Hydropower Policy 2016:

Sr. No	Description	MW	Location
1	NARAN	188	Kunhar River Kaghan Naran
2 .	SHIGO KAS	102	Panjkora River, Distirct Lower Dir
3	ARKARI GOL	99	Arakari, District Chitral
4	4 BATAKUNDI		Batakundi, District Mansehra
5	GHORBAND	20.6	Ghorband, District Shangla
6 NANDIHAR		12.3	Nandihar Khawar, District Battagram
Total		518	

5. PEDO proceeded to develop a generic Request For Proposal (RFP) applicable for all six of the above projects, and submitted the same for approval to the Authority. Approval of the RFP, with certain amendments, was granted by the Authority, on 26-10-2016, under the National Electric Power Regulatory Authority Competitive Bidding Tariff (Approval Procedure) Regulations, 2014 (the "CBTR 2014"). Subsequently, vide letters dated 14-11-2016 and 03-04-2017, the Authority further approved amendments to the RFP on the





subjects of sharing of spread (in case of lower negotiated spreads with lenders) and assessment of custom duties and cess. Further clarifications were also provided to PEDO on other matters, including geological risk mitigation through reopeners.

- 6. The Authority, thereby, approved PEDO's RFP to undertake competitive bidding of the above-mentioned six hydropower projects in accordance with the provisions of the CBTR 2014. The Authority did not issue a Benchmark tariff on the condition that NEPRA reserved the right to reject PEDO's recommended successful bidder where the guoted rate is found to be imprudent or unreasonable, as provided under Regulation 5 of the CBTR 2014.
- 7. PEDO then proceeded with the competitive bidding process and called for bids for all six projects. Upon receiving and processing of all bids, PEDO proceeded to submit the Bid Evaluation Reports to the Authority for approval, including the Bid Evaluation Report for the Project on 19-10-2017. Further information and documents-in-support were sought by the Authority, vide letter dated 08-12-2017. Revised documents were then sent by PEDO on 26-12-2017.

#### THE PROCESS

- As per the information submitted by PEDO, notice of invitation of bids for the Project was published in two international newspapers and one local newspaper, from 18-03-2016 till 11-04-2016. In response, sixteen registrations were made with PEDO by interested parties and the same quantity of Pre-Qualification Documents ("PQDs") were purchased. Subsequently, ten Proposals/Statement of Qualifications ("SOQs") were submitted to PEDO by private sponsors.
- 9. An independent consultant, namely Baker Tilly Mehmmod Idrees Qamar, was hired by PEDO for the evaluation of the submitted proposals. After detailed evaluation of the proposals in light of the criteria and provisions of the PQDs, four out of ten applicants were successfully pre-qualified. The following provides details of all proposals submitted to PEDO for the Project:-





	Investor's Details	Registration & Pre-Qualification Details					
Company / Firm Name		Date of Registration	Date of Purchase of PODs	Last Date for Submission of SOOs	Date of Submission of SOOs	Pre-Qualified or Not (remarks)	
1	M/S Markhor Energy	22-Mar-2016	22-Mar-2016	14-Jun-2016	14-Jun-2016	Yes	
2	M/s Sachal Engineering Works	29-Mar-2016	29-Mar-2016	14-Jun-2016	14-Jun-2016	No	
3	Sinotec Company Ltd	31-Mar-2016	31-Mar-2016	14-Jun-2016	No Submission	NA	
4	Mardan Power	5-Apr-2016	5-Apr-2016	14-Jun-2016	14-Jun-2016	No	
5	LTL Projects Pvt Ltd	8-Apr-2016	8-Apr-2016	14-Jun-2016	14-Jun-2016	No	
6	AlBahar Alahmar UAE	12-Apr-2016	9-Apr-2016	14-Jun-2016	No Submission	NA	
7	Ms Aquagen Pvt Ltd	19-Apr-2016	14-Apr-2016	14-Jun-2016	10-Jun-2016	No	
8	Ms Army Welfare Trust	5-May-2016	5-May-2016	14-Jun-2016	14-Jun-2016	Yes	
9	Ms Technican Enterprises Pvt Ltd	9-May-2016	9-May-2016	14-Jun-2016	No Submission	NA	
10	Ms Swati Enterprises Pvt Ltd	9-May-2016	9-May-2016	14-Jun-2016	14-Jun-2016	No	
11	DESCON ENGINEERING LTD	10-May-2016	10-May-2016	14-Jun-2016	14-Jun-2016	Yes	
12	Power World Pvt Ltd	12-May-2016	10-May-2016	14-Jun-2016	No Submission	NA	
13	Nizam Energy Pvt Ltd	13-May-2016	12-May-2016	14-Jun-2016	No Submission	NA	
14	Qadir & Company	1-Jun-2016	1-Jun-2016	14-Jun-2016	No Submission	NA	
15	Power World JV	8-Jun-2016	7-Jun-2016	14-Jun-2016	14-Jun-2016	Yes	
16	Naveena Exports Limited	14-Jun-2016	14-Jun-2016	14-Jun-2016	14-Jun-2016	No	

- 10. From the sixteen sponsors who had purchased PQDs from PEDO, on ten submitted SOQs for the purposes of pre-qualification, out of which four successfully fulfilled the parameters for pre-qualification, namely:
  - i. M/s Markhor Energy
  - ii. Army Welfare Trust
  - iii. DESCON Engineering
  - iv. Power World JV
- 11. Subsequently, PEDO conducted competitive bidding amongst the pre-qualified sponsors in the form of a single-stage two-envelope process. Amongst the four pre-qualified sponsors, all purchased the RFP. Accordingly, only two bids were received against the purchased RFPs, on 25-04-2017, by PEDO, from the following sponsors:-
  - Power World JV (in a joint venture between Power World Limited and Sino Hydro Corporation Lts.);and
  - ii. M/s Markhor Energy Ltd.
- 12. The bids were received under the single-stage two-envelope process, where Envelope-I comprises of the Technical Proposal and Envelope-II comprises of the Financial Bid. In accordance with clause 3.3.1 of the RFP, Envelope-I (Technical Proposal) from both bids





were opened and analyzed in accordance with the responsive test laid down in the approved RFP. Both bidders fulfilled the prescribed technical qualifications. Envelope-II (Financial Bids) were then opened for both bidders by the PEDO Evaluation Committee on 24-07-2017. The contents of Envelope-II contained specified proformas, as prescribed in the RFP, and detailed evaluation of the same was to be undertaken based on the following parameters:-

- Project Cost Evaluation i-
- Evaluation of Annual Operation and Maintenance Cost ii-
- iii- Evaluation of Insurance Cost
- Evaluation of Financing Terms and Conditions
- Evaluation of Financial Model and offered Levelized Tariff V-
- 13. The bidders provided the breakdowns of Project Cost as per the format given in the Proforma XI "Project Cost Summary" of their financial bids. The following illustrates the values furnished by PEDO in comparison to feasibility estimates:-

Diddono	Local Portion	Foreign Portion	Total Cost @ Rs. 104.7	Cost / MW
Bidders	Rs. million	US\$ million	US\$ million	US\$ million
Power World JV	3, 3,376	19.90	52.13	4.24
Markhor Energy	4,142	21.40	60.96	4.96
Feasibility Study estimate @ Rs. 99/US\$	3,376	15.55	47.10	3.83

D:ddaua	Debt Equity		Financing	Financing		
Bidders	Debt	Equity	Period	(Rate)	Source	
Power World JV	80%	20%	10 Years	6.00%	SBP Financing for small HPP's (less than 50MW)	
Markhor Energy	80%	20%	10 Years	8.52%	6.02% + 2.5% (3M KIBOR)	

	Unit	Power World JV	Markhor Energy	Feasibility Study
Total Annual O&M Cost	US\$/Annum	725,893	1,200,000	601,168
Total Annual O&M Cost	% of Proj. Cost	1.39%	1.97%	1.28%
Variable OSM Cost	%	30	17	-
Variable O&M Cost	US\$/Annum	217,767	200,000	-
Fixed OSM Cost	%	70	83	-
Fixed O&M Cost	US\$/Annum	508,125	1,000,000	-

	Unit	Power World JV	Markhor Energy	Feasibility Study & RFP
Project Cost	US\$ (Million)	52.13	60.96	47.10
EPC Cost	US\$ (Million)	40.30	45.60	33.81







Insurance	% of EPC Cost	0.40%	1.20%	1.00%	
Cost	US\$/Annum	161,211	548,623	338,079	

#### **EVALUATIONS OF PEDO**

- 14. PEDO has asserted that the bid received from Power World JV is substantially responsive with respect to its completeness, competitiveness and reasonableness, and has the lowest rank due to the following reasons:
  - i. Total Project Cost quoted by Power World JV as US\$ 52.13 Million (US\$ M 4.24/MW) is lowest among all bidders and is 10.68% higher than the estimated feasibility study total project cost of US\$ 47.10 Million (US\$ M 3.83 / MW). Project Cost quoted by Markhor Energy is 29.43% higher than the estimated feasibility study total project cost.
  - ii. Total Annual O&M Cost quoted by Power World JV as US\$ 0.726 Million is lowest among bidders but is higher the feasibility O&M cost estimate of US\$ 0.601 Million by 20.75%. Markhor Energy's proposed annual O&M cost is at US\$ 1.2 Million.
  - iii. Power World JV has availed cheaper financing @ 6.00% as compared to Markhor Energy's 8.52% rate of financing.
  - iv. Interest during Construction proposed by Power World JV is US\$ 3.40 Million which is lowest among the bidders. IDC proposed by the other bidder Markhor Energy is 183.4% higher than the value estimated in the feasibility study.
  - v. The Insurance cost quoted by Power World JV is lower in comparison to other bidders.
- 15. PEDO concluded that the bid received from Power World JV is lower compared to other bidders, since it offers the lowest investment cost, the lowest annual O&M cost and attractive and competitive terms of financing. The quoted tariff @ 10.4489 Rs/kWh (or 9.98 Cents/kWh) has been calculated by PEDO using the tariff model provided by the lowest bidder (i.e. Power World JV) and is evaluated on the basis of benchmark assumptions as 10.4002 Rs/kWh or 9.9334 Cents/kWh.
- 16. The final calculated bid rate for both bidders is as follows:-

	Bid Rate		Evaluated Rate		Bids	Lavaliand
Bidder	c/KWh Rs/KWh		US c/KWh	Rs/KWh	Ranking	Levelized Tariff
Power World JV	9.9800	10.4489	9.9334	10.4002	1st Ranked	Lowest
Markhor Energy	13.3889	14.0182	13.3475	13.9748	2nd Ranked	Higher







#### FINDINGS OF THE AUTHORITY

- 17. The documents of the recommended bidder have been reviewed to ensure that they fulfill the "Responsiveness Test" relating to technical evaluation. The test provides for a checklist to ensure that the bids submitted are complete in all respects and compliant with the requirements prescribed in the RFP, including submission of Technical Data of the plant, commitment to adhere to the Minimum Technical Requirements, Proposed Project Schedule, Bid Bond, Integrity Pact etc. The recommended bidder, namely Power World JV, has furnished all this information and related documentation with its Technical Bid.
- 18. Upon review, the Authority required clarification on whether the values submitted by the recommended bidder are to be evaluated in gross or net terms and the maximum level of auxiliary consumption fixed for the site as per the RFP. PEDO clarified, vide letter dated 22-01-2018, that the capacity of Nandihar HPP specified in the RFP is in gross terms and that the maximum auxiliary consumption had been fixed at 1.5% during the pre-bid meetings with sponsors. A letter was presented by PEDO containing the stated information, which had been sent to pre-qualified bidders on 04-04-2017.

## Bid Evaluation Report

- 19. Numerous inconsistencies and deficiencies have been observed by the Authority in the documents submitted by PEDO and the sponsor bids.
- 20. As per section 6.2 (ii) of the RFP, bidders were required to submit a "main bid" and an "alternate bid". The 'main bid' was to be submitted on the basis of capacity and energy figures given in feasibility studies. The 'alternate bid' was to contain bidder-proposed recommendations for better design and greater capacity. It has been observed that the bidder has not submitted any 'alternate bids' with its 'main bid' in contravention of section 6.2(ii) of the RFP.
- 21. In addition, using the RFP approved values of auxiliary consumption (1.5%), a plant factor of 64.7% and a net capacity of 12.115MW, net generation is correctly computed as 68.667GWh. This figure for net generation shall be used for the purposes of this order.
- 22. Furthermore, the bid evaluation report is not strictly in the format as prescribed in the RFP and deviations therefrom have not been rationalized or explained in the report. The RFP duly approved by the Authority dictates specific benchmarks for evaluation of bids for each site, which include *inter alia* the following parameters:
  - i- <u>Currency Exchange Rate:</u> Pak Rs to US\$ exchange rate to be as per reference date which is defined in RFP as the date one month prior to the date of issuance of RFP i.e. 7th October, 2016 which is 104.7
  - ii- <u>Base Interest Rates:</u> Base LIBOR or KIBOR to be as per reference date which is 6.02% KIBOR and 0.8716% LIBOR
  - iii- Insurance Cost: The insurance cost for the minimum cover required under contractual obligations with the Power Purchaser not exceeding 1% of the EPC cost will be treated as pass through. However, if the Bidder quoted the tariff on lowest







insurance figure, for example, 0.6%, then the quoted figure shall be considered as final figure and no adjustment on this account will be allowed.

- iv- Sinosure fee: In case export credit agency fee or Sinosure fee on foreign financing is payable, the Reference Tariff quoted by the Bidder should include this export credit agency fee subject to maximum of 7% as is generally allowed by the NEPRA in tariff determinations. No adjustment in the total project capital cost will be allowed on account of Sinosure or other credit insurance fees at COD.
- v- <u>Custom Duties:</u> The custom duties and cess directly imposed on the company shall be adjusted as per actual. It shall be mandatory for the bidders to account for custom duties and cess @6.05% of the quoted offshore EPC cost
- vi- Plant factor: For levelization purpose only, the total CPP charges calculated in terms of Rs/kW/Hour (based on 100% annual plant factor i.e. equivalent to 8760 hours) shall be divided by 64.7% (plant factor), and shall be defined in terms of Rs./kWh instead of Rs./kW/Hour.
- vii- Foreign/Mix Financing: For the purpose of evaluation only, the discount rate used for levelizing the foreign debt servicing component shall be 10% plus the annual rupee depreciation/ appreciation rate over the last 15 years against that particular foreign currency in which the loan is denominated (USD, GBP, EUR or JPY). The discount rate for evaluation purposes shall remain 10% for all other tariff components regardless of the denomination of loan.
- 23. In light of the foregoing, the Bid Evaluation Report submitted by PEDO has been found to not be in strict compliance with the above parameters, as prescribed in the approved RFP. However, material compliance of the same has been observed by the Authority.

#### Power World JV Bid

- 24. In has been noted that the bid submitted by Power World JV has used a lagging power factor of 0.85 for the complex and generating units. However, as per Section 4.1.1(ii) of the approved RFP, the lagging factor has to be assumed in the range 0.80-0.95.
- 25. As described above, evaluation of tariff by PEDO was to be conducted by taking the reference date base interest rate and bids were to be ranked on the basis of lowest spread offered from the said rate. Power World JV agreed to take SBP Renewable energy financing at a fixed rate of 6%, while the reference date KIBOR is at 6.02%. Therefore, the Power World evaluation of the tariff has been made on the basis of a flat rate of 6% cost of financing, which is incorrect.
- 26. Further, as highlighted earlier, an incorrect figure of net generation for the Project as 68.4243GWh has been used by PEDO and the same has also been used by Power World JV.







27. As such, based on the RFP defined benchmarks, the evaluated tariff for Power World JV is correctly calculated to Rs 10.4135kWh, against PEDO's evaluated tariff of Rs 10.4002 per kWh and Power World JV's quoted rate of Rs 10.4489 per kWh.

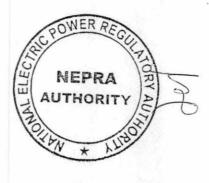
# Markhor Energy Bid

- 28. It has been noted that in Markhor Energy's bid, the correct value of net generation, namely 68.667 GWh has been used by PEDO, by assuming net capacity at 12.1155MW and plant factor at 64.7%.
- 29. As such, based on the RFP defined benchmarks, the evaluated tariff for Markhor Energy is correctly calculated to Rs 13.9784 per kWh against PEDO's evaluated tariff of Rs 13.9748 per kWh and Markhor's quoted tariff of Rs 14.0182 per kWh.
- 30. Lastly, for both bidders, debt financing has been made in local currency. Therefore, debt servicing components of tariff for the bidders need not be adjusted with the revised discount rate of 10% + 3.58%. The rate of 3.58% is the Cumulative Annual Growth rate (CAGR) fixed by PEDO for such adjustments.

### Findings of the Authority

- 31. The Authority has examined and reviewed the documents and information submitted by PEDO for the purposes of approval of Bid Evaluation Report in the of case Nandihar HPP. The quoted and evaluated tariff rates from bids of Markhor Energy and Power World JV have been correctly computed as specified above and shall be employed for the purposes of the following order.
- 32. Accordingly, the Authority shall rely upon the following comparative rates for ascertaining the ranking of bidders in terms of rates:-





Assumptions	Power World JV	Markhor Energy
Capacity gross (MW)	12.3	12.26
Capacity net (MW)	12.054	12.07
Auxiliary consumption	2%	1.50%
Generation (gWh)	68.424	68.46
Plant factor	64.80%	64.70%
EPC (\$million)	40.3	45.65
Project Cost (\$million)	52.13	60.96
Project Cost (\$million per mW	4.24	4.97
Cost of debt		
Local	6%	6.02% + 2.5%
IRR	13.01%	15.55%
Capital Structure	80   20	80   20
Construction period (months)	48	36
	Rs/kWh	Rs/kWh
Tariff Proposed by Bidder	10.4489	14.0182
Tariff evaluated PEDO	10.4002	13.9748
NEPRA Evaluated	10.4135	13.9784

- 33. From the foregoing, it is evident that the bid received from Power World JV is decidedly lower than its competing bidders, with a tariff of Rs 10.4135 per kWh as compared to Markhor Energy tariff of Rs 13.9784 per kWh.
- 34. As such, the lowest ranked bidder in 12.3 MW Nandihar Hydropower project appears to be Power World JV.
- 35. PEDO, being the relevant agency, has submitted the instant Bid Evaluation Report for the Nandihar Hydropower Project in pursuance of Regulation 3(xi) of the CBTR 2014, for approval of the Authority and notification of successful bidder. It has been noted by the Authority that the Bid Evaluation Report prepared and furnished for approval by PEDO lacks scrupulousness and depth in terms of its analyses, and is replete with mistakes, omissions and deficiencies. It has also been noted that this has been PEDO's first competitive bidding experience for hydropower projects, that inherently pose acute complications due to the compounding parameters involved, including complex civil works, unforeseeable geographical conditions etc. Since there is no material deviation from the RFP, the Authority, despite of the observed deficiencies, errors and omissions in PEDO's Bid Evaluation Report, hereby approves the Bid Evaluation Report and shall proceed with evaluating the rates arrived at through competitive bidding process on the benchmarks of reasonableness and prudency.
- 36. It is pertinent to mention at the outset that the focal point of tariff determination by the Authority through any mode i.e. competitive bidding or any other methodology, is consumer interest and welfare. Consumer interest may be defined as the maximization of consumer





welfare, which includes competitive energy pricing, energy supply security and curtailment of monopolistic and predatory practices of utilities. Consumer interest is the Authority's primary concern when exercising its regulatory authority, with greater weight placed on potential risks to consumers than on potential benefits to licensees. This obligation to protect and preserve consumer interest is prescribed under the Section 7(6) of the NEPRA Act.

- 37. Furthermore, the National Electric Power Regulatory Authority Licensing (Distribution) Rules, 1999 place an obligation on distribution companies to procure electricity economically, with the Authority being responsible for ensuring economic procurement and rationalized consumer-end tariffs. As such, the Authority has to oversee and regulate all electricity being generated and procured, where rates have a direct impact on the consumer-end basket price for energy.
- 38. Under the CBTR 2014, Regulation 5 grants NEPRA the powers to reject any bidders recommended by Relevant Agencies in their competitive bidding Bid Evaluation Reports where the rates are found to be 'imprudent or unreasonable'. This benchmark of prudence and reasonableness is to be fulfilled by the rates arrived at through competitive bidding and the Authority has an obligation to evaluate the same on the basis of consumer interest, as prescribed under law and elaborated above.
- 39. In the instant case, the Authority needs to determine whether the rate quoted, and evaluated by PEDO and correctly calibrated by NEPRA, by the lowest ranked bidder, namely Power World JV, meets the benchmark of reasonableness and prudence.
- 40. It is a generally accepted principle that prices arrived at through the operation of market forces and competitive bidding shall yield lower rates, in comparison to regulated and discretionary price determinations. Since the Authority has not issued a benchmark tariff in the instant competitive bidding process, it will be in fitness of things to compare the lowest ranked tariff rate of Rs. 10.4135 per kWh with those of comparable hydropower project tariffs. In comparison to other small hydropower tariffs awarded by the Authority, including the upfront tariff for small (1 to 25MW) hydropower plants, the lowest ranked rate is observed to be imprudently high. When compared to the approved Upfront tariff [high head local financing], after making adjustments for plant factor cost of funds, capital structure, exchange rate etc., the Rs. 10.4135 per kWh rate is approximately Rs 2 per kWh to Rs 3 per KWh higher than the generous upfront tariff rates.
- 41. In consideration of the foregoing, the Authority hereby finds the quoted parameters, factors, assumptions and, consequent, evaluated rate of Rs. 10.4135 per kWh to be unreasonable and imprudent. The quoted rate is thereby rejected.
- 42. Without prejudice to the foregoing, the Authority further provides the following general directions to PEDO, to ensure the following in all future competitive bidding processes
  - Sites with better features and technical parameters, leading to lower tariffs shall be selected first for competitive bidding;
  - Feasibility studies shall be reviewed by international and reputable consultant(s) to ensure optimized project design and higher project economies and efficiencies;







- iii. Site specific bidding shall be conducted without clubbing other sites, to ensure maximum participation of investors, higher competition and lower rates
- iv. Independent and reputable consultant(s) shall be engaged for the purposes of bid evaluation, with preference given to firms/JVs with strong technical background and experience in competitive bidding in the power sector.

#### AUTHORITY

Himayat Utlah Khan Member

Saif Ullah Chattha

Vice Chairman

16.2.2018

Syed Masood al-Hassan P(/2

Member

Brig (R) Tariq Saddozai

Chairman