



DRAFT NEPRA DISTRIBUTION COMPANIES POWER ACQUISITION (STANDARDS & PROCEDURE) REGULATIONS, 2020

SUSTAINABLE ENERGY FOR PAKISTAN (SEP) PROJECT

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BRIEF DESCRIPTION OF DELIVERABLE

In Pakistan, despite unbundling of vertically integrated power sector into separate generation, transmission and distribution entities, power acquisition remained central, as currently being administered by CPPA-G. The proposed market model as recently approved by NEPRA, considered this a clash of interest on the part of CPPA, being responsible for market operations, as well. Therefore, power acquisition on behalf of DISCOs is proposed to be restructured as a Special Purpose Trader (SPT).

NEPRA highlighting the vision for power acquisition, recorded in its determination,¹ “CPPA-G has been signing the contracts/agreements with the IPPs to procure power on behalf of the DISCOs. However, in the future market, DISCOs (as Suppliers) ²will directly sign bilateral contracts with the generation companies”; underscored importance of demand forecasting by DISCOs. The other avenues of power acquisition by DISCOs in their role as supplier’s are provided as (i) competitive bidding to be initially administered by the Independent Auction Administrator (IAA) under relevant NEPRA regulations and (ii) small power plants connected directly to the DISCO’s network under physical PPAs; two part or energy only based on technology. Here, additionally, the exchange of power under net-metering may have to be factored.

The draft Power Acquisition (Standards and Procedure) Regulations have been formulated based on the given parameters under section 32(4) of the NEPRA Act and the above referenced determination of NEPRA on CTBCM detailed design and Implementation Road Map (IRM). Introduction of the instant regulations further necessitate review of the existing NEPRA regulations such as the Competitive Bidding Tariff (Approval Procedure) Regulations, 2017, for addressing requirements of the sector post- CTBCM, with the option of incorporating competitive bidding procedure within the instant regulations.

¹ Determination of the Authority in the matter of Detailed Design and Implementation Roadmap of the Competitive Trading Bilateral Contract Market (CTBCM) dated Nov. 12, 2020 <https://.org.pk/licensing/Licences/CTBCM/2020/LAM-01%20Determination%20CTBCM%2012-11-2020.PDF>

² Need to remind ourselves that supplier role of disco is going to end pursuant to section 23E (proviso to sub-section 1) of the NEPRA Act.

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Islamabad, _____, 2020

S.R.O. ____ (I)/20.- In exercise of the powers conferred by section 47 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997) read with section 32(1) thereof, the National Electric Power Regulatory Authority is pleased to lay down regulations for its approval of distribution company's power acquisition programmes, namely:-

1. Short title and commencement._

- (1) These regulations may be called the National Electric Power Regulatory Authority distribution companies power acquisition (standards & procedure) regulations, 2020.
- (2) They shall come into force at once.

2. Definitions._

- (1) In these regulations, unless the context otherwise dictates:-
 - (i) "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act, 2020;
 - (ii) "admission" means acceptance of the power acquisition plan of a distribution company by the registrar, to have been filed in accordance with the requirements of these regulations;
 - (iii) "aggregation" means the joint effort of the distribution companies or IAA to aggregate and jointly procure their demand for electric power in satisfaction of their licence obligations to achieve economies of scale;
 - (iv) "base load" means the minimum amount of electric power required over a given period of time;
 - (v) "competitive bidding" means the method of acquisition, open for participation by all interested persons and consists of the following processes a) advertisement or publication; b) pre-bid conference; c) pre-qualification; d) bid evaluation; and e) award of contract;
 - (vi) "emergency power" means power required by the distribution company in the event that the actual power supply falls below its load demand due to force majeure or other similar circumstances that are beyond the control of the distribution company and such shortfall cannot be addressed through any reasonable means within a month;
 - (vii) "independent auction administrator" means the entity or entities registered with the Authority to facilitate distribution companies to comply with their capacity obligations through acquisition of new capacity and energy to serve their load;
 - (viii) "indicative generation capacity expansion plan", means the results of expansion planning studies conducted by National Transmission and Dispatch Company as per the criteria specified in the grid code providing a comprehensive view of the existing generating system, future electricity demand forecast and future power

generation options in addition to the expansion study results implemented after approval of the Authority and as updated annually;

- (ix) “power acquisition cell” means a business unit of the distribution company, comprising of, at a minimum, a financial expert with knowledge of electricity generation pricing; a technical person with knowledge and/or experience with any local or international competitive bidding procedures and a legal person with prior knowledge and experience of dealing with competitive bidding;
 - (x) “power acquisition process” means the process wherein the distribution company awards contracts for power acquisition as per its power acquisition programmes approved under these regulations either through competitive bidding or negotiated purchase of power from distributed power generation;
 - (xi) “power acquisition plan” means a distribution company’s plan for acquisition of a variety of demand-side and supply-side electric power resources to meet the needs of its consumers in a cost effective manner, to be submitted for the approval of the Authority;
 - (xii) “power policy portfolio” means acquisition of power by a distribution company under government power policies against an allocated portion of the capacity from mix of hydro, thermal and renewable energy generation plants; and
 - (xiii) “Request for Proposal” or “RFP” means a document approved by the Authority that includes the necessary information, benchmark parameters, terms & conditions and bid evaluation criteria etc.;
- (2) Words and expressions used and not defined in these regulations but defined in the Act shall have the meanings as assigned to them in the Act.

3. Power supply acquisition plan._

- (1) Each distribution company shall develop and submit its power acquisition plan after undertaking cost-benefit analysis of the power supply requirements of its eligible consumers for approval of the Authority as its power acquisition programme under regulation 5.
- (2) The distribution company shall consider following factors while evaluating its power supply requirements:-
 - (a) prevailing power purchase cost in the market;
 - (b) energy demand forecasting;
 - (c) power system;
 - (d) load matrix; and
 - (e) energy mix.
- (3) The power supply acquisition plan shall contain the following information:
 - (a) historical data on peak demand, supply contract, energy sales and energy purchase;
 - (b) 10- year monthly peak demand forecast, energy sales, existing contracts and their expiration;
 - (c) committed energy and demand for competitive power acquisitions;

- (d) current supply and demand status of the distribution company;
 - (e) indicative schedule for competitive bidding taking into consideration the required construction period in the case of new generation plants; and
 - (f) synchronization with integrated generation capacity expansion plan approved by the Authority.
- (4) Subject to the applicable tariff determination guidelines issued by the Authority from time to time, each distribution company, shall submit its power acquisition plan not later than ____ of ____ each [year or ____ months before the submission of multi-year tariff petition] based on the methodology issued by the Authority for its tariff determination.

4. Preparing the power acquisition plan._

- (1) The distribution company shall, through its board of directors, establish a power acquisition cell, with relevant skill and experience. The power acquisition cell shall be able to prepare, arrange and coordinate with relevant agencies for dealing with the affairs of power acquisition.
- (2) The power acquisition cell shall work year round for the collection, analysis and synchronization of data generated by the distribution company with other agencies *inter-alia*, the independent auction administrator and the system operator as required under regulation 3.

5. Procedure for the approval of power acquisition programme._

- (1) Subject to the guidelines issued by the Authority from time to time in this respect, each distribution company shall file its power acquisition plan, duly approved by its board of directors, within the time- period given by the Authority.
- (2) The power acquisition plan, once submitted shall be reviewed by the Authority for its completeness in accordance with Annexure – I to these regulations within 10 days of its receipt.
- (3) The Authority may seek such further information as deemed necessary facilitating approval of the power acquisition programme of the distribution company.
- (4) The distribution company shall submit any information, clarification and such further details required to be submitted by the Authority within the time allowed by the Authority. In the event of any difficulty in submitting any necessary information to the Authority, the distribution company may submit its position to the Authority for such extensions in time as deemed appropriate by the Authority.
- (5) The Authority, in order to seek views, comments and expert advice of the stakeholders, shall hold public hearing, before approving power acquisition programme of a distribution company.
- (6) The power acquisition programme based on proposed power acquisition plan of a distribution company shall be approved within [one month] of its admission and for such term as may be determined by the Authority.
- (7) Pending detailed review of a power acquisition plan submitted by a distribution company, emergency acquisition may be approved by the Authority, as an interim decision of the Authority.

6. Power acquisition programme._

- (1) Each distribution company shall strictly adhere to the power acquisition programme approved by the Authority and place a copy thereof on its website.
- (2) After approval of the power acquisition programme, each distribution company shall file a quarterly report, with the Authority, in respect of implementation of its power acquisition programme.
- (3) In the event of any difficulty in execution of the power acquisition programme, the distribution company shall, immediately, report the incident to the Authority for appropriate guidance.

7. Modes of power acquisition._

- (1) Each distribution company, while preparing its power acquisition plans shall consider various modes of power acquisition to satisfy its supply obligations, which, *inter-alia*, include the following:
 - (a) Power policy portfolio;
 - (b) Competitive bidding;
 - (c) Distributed generation; and
 - (d) Net-metering
- (2) The power acquisition plan of a distribution company shall also account for various demand side management measures which may have impact on its overall power acquisition requirements.

8. Standards of power acquisition._

- (1) Each distribution company in preparation of its power acquisition plan shall keep the following standards in view:-
 - (a) power acquisition plan shall take into account the national energy plan issued by the Federal Government;
 - (b) clear, fair and transparent competitive processes shall be adopted for power acquisition ensuring greater private sector participation in the provision of adequate generation capacity to meet the capacity demand;
 - (c) to adopt practices whereby the distribution company is seen accountable in the provision of affordable electric power to its consumers;
 - (d) transparency in the conduct of competitive bidding through wide dissemination of bid opportunities and participation of all interested generation companies;
 - (e) adherence to least cost manner in ensuring that each distribution company is able to meet the demand of its consumers at any given time;
 - (f) the power acquisition contract awarded through competitive processes shall be implemented diligently; and
 - (g) simple, streamlined and efficient power acquisition process applicable to the specific requirements of each distribution company shall be embodied in its power acquisition plan. These requirements shall particularly satisfy, the following

technical, economic and other parameters:-

- (i) base load, mid-merit and/or peaking capacities;
- (ii) the amount of energy to be delivered;
- (iii) type of fuel or resource, whether convention fossil fuel or renewable energy resources;
- (iv) choice of other emerging systems and technology;
- (v) environmental standards;
- (vi) timing and delivery of supply; and
- (vii) such other considerations of the distribution company as may be applicable.

9. Role of Independent Auction Administrator._

- (1) An independent auction administrator shall facilitate power acquisition by the distribution companies, in line with the certificate of registration issued by the Authority.
- (2) The duties of the independent auction administrator may, include:-
 - (a) execution of competitive bidding process to bring new generation in the system for capacity procurement by the distribution companies;
 - (b) to get guarantees for eligible distribution companies in need of support of the GoP;
 - (c) to develop standardized contract templates for acquisition of power;
 - (d) to make proposals comprising of actions and measures required for the successful implementation of the competitive bidding;
 - (e) aggregation of requirements provided by each distribution company that is not already covered;
 - (f) facilitate distribution companies in the preparation of their procurement plans based on the indicative generation capacity expansion plan and in seeking required regulatory approvals for the power acquisition programmes of the distribution companies;
 - (g) prepare the standard bidding documents and submit as required by the Authority, for approval; and
 - (h) assist distribution companies in finalizing the bilateral power purchase agreements and energy purchase agreements with each generator that has been declared successful in a bid.

10. Competitive Bidding by the Independent Auction Administrator._

- (1) An independent auction administrator shall help distribution companies in organizing competitive bidding for new generation capacity, in line with relevant NEPRA regulations on the subject as may be specified from time to time.

- (2) The independent auction administrator shall post the invitation to bid on its website and at other related websites of distribution companies', power division etc. Similarly, other ways and means of communication shall be adopted such as publication in national daily newspapers of wider circulation both in English and Urdu language.
- (3) The manner and time involved in undertaking a competitive bidding by the independent auction administrator shall be approved by the Authority and any time involved in execution of the competitive bidding process shall be fully reflected in the power acquisition plans presented by the distribution companies under regulation 3.
- (4) An independent auction administrator shall form separate committees for the conduct, supervision and post bidding stages of the competitive bidding with due representation of the concerned distribution company(ies).

II. Guidelines for power acquisition._

- (1) The Authority may, from time to time, issue guidelines assisting distribution companies in fulfilling their obligations to procure power under various modes and arrangements.
- (2) A distribution company may, in case of any difficulty, seek clarifications from the Authority, in discharge of its obligations under these regulations.

POWER SUPPLY ACQUISITION PLAN

List of existing contracts and details

Supply contracted	Power Generation Co.	PPA Effective date	PPA Expiration	Contracted Capacity MW	Contracted Energy MWH	Base load/Peak ing/Mid-merit	Embedded /Grid Connected	Fuel Type	Installed Capacity and Net Dependable capacity

POWER SUPPLY ACQUISITION PLAN

10 Year Monthly Forecasted Data

Year	Forecast			Contracted PPAs		Uncontracted Demand & Energy		Committed for Competitive Bidding	
	Coincident Peak Demand (MW)	Off peak Demand (MW)	Energy Requirement (MWh)	Demand	Energy	Demand	Energy	Demand	Energy
2021									
Jan									
Feb									
Mar									
April									
Dec									
2022									
Jan									

POWER SUPPLY ACQUISITION PLAN

10 Year Monthly Historical Data

Year	Forecast			Contracted PPAs		Uncontracted Demand & Energy		Committed for Competitive Bidding	
	Coincident Peak Demand (MW)	Off peak Demand (MW)	Energy Requirement (MWh)	Demand	Energy	Demand	Energy	Demand	Energy
2021									
Jan									
Feb									
Mar									
April									
Dec									
2022									
Jan									

POWER SUPPLY ACQUISITION PLAN

Schedule of Competitive Bidding

Base/mid/merit/ peaking	For Competitive Bidding		Proposed Contract		Proposed Schedule [MM/YYYY]					
	Demand	Energy	Start Month & Year	End Month & Year	Publication of Invitation to bid	Pre-bid Conference	Submission and opening of Bids	Bid Evaluation	Awarding	PPA signing
Mid-merit										