



## **JOINT ELECTRICITY REGULATORY COMMISSION**

### **FOR MANIPUR & MIZORAM**

#### **AIZAWL ::: MIZORAM**

### **NOTIFICATION**

**No.H.11019/28/12-JERC, dated the 14<sup>th</sup> June, 2012:** In exercise of powers conferred under Section 181 read with Clause (b) of Sub-section (1) of Section 86 of the Electricity Act, 2003 and all powers enabling it in that behalf and after publication as required under Section (3) thereof, the Joint Electricity Regulatory Commission for Manipur and Mizoram hereby makes the following Regulations.

#### **CHAPTER – 1**

#### **Introduction**

The Cost of power constitutes the largest single component of the average supply cost of electricity. It is the responsibility of distribution licensees to ensure least cost of power so as to minimize the overall cost of supply. With the introduction of trading, gradual development of competitive market of electricity and technical innovations for regional and inter-regional transfer of power, opportunities exist for the distribution licensees to procure power from different sources by analyzing the cost.

At present, the States of Manipur and Mizoram do not have adequate generation of its own. They depend on the allocated share of power from the Central Sector Generating Stations of NER and are unable to meet the power requirement of their consumers with the available

allocated share. With rapid expansion in the distribution network, emphasis on rural electrification and industrial growth, the power requirement of the State also continues to grow and additional purchases are to be made according to the need.

In the present power market scenario, spot market transactions are not likely to account for a major share of purchase of power by the licensee. Therefore, the Commission considers that it has a special responsibility to ensure that the power procurement under a term contract entered into by the licensee(s) are based on a demonstrated least cost method. Accordingly, the following Regulations are made to provide a framework for ensuring the scheduling and dispatch of power at the lowest cost possible.

## **CHAPTER – 2**

### **General**

#### **1. Short Title, Commencement & Applicability**

1. These Regulations shall be called the **Joint Electricity Regulatory Commission for Manipur and Mizoram (Power Purchase and Procurement) Regulations, 2012.**
2. The Regulations shall come into force on the date of their publication in the Official Gazettes of Manipur and Mizoram.
3. They shall apply to all distribution licensees within the States of Manipur and Mizoram for purchase and procurement of power for distribution and supply in states.

## CHAPTER – 3

### Definitions

2. In these Regulations, unless the context otherwise requires –

“**Act**” means the Electricity Act, 2003 (36 of 2003);

“**Area of Supply**” means the area within which a distribution licensee is authorized by his license to supply electricity;

“**Commission**” means the Joint Electricity Regulatory Commission for the States of Manipur and Mizoram;

“**Distribution Licensee**” means a licensee authorized to operate and maintain a distribution system to supply electricity to consumers in his area of supply. The Electricity Department, Government of Manipur is the distribution licensee in case of Manipur and the Power & Electricity Department, Government of Mizoram, in case of Mizoram;

“**License**” means a license granted under Section 14 of the Act;

“**Supply**” means, in relation to electricity, the sale of electricity to a licensee or consumer;

“**Unrestricted Demand**” means the simultaneous maximum power demand by all categories of consumers at any point of time in a year plus 5% reserve;

The words and expressions used in these Regulations but not defined herein shall have the same meaning as assigned to them in the Act. Expressions used herein but not specifically defined in these Regulations or in the Act but defined under any law by a competent legislature and applicable to the electricity industry shall have the same meaning assigned to them in such law.

## **CHAPTER – 4**

### **Power Planning**

#### **3. Power Planning**

The process of power procurement starts with the formulation of a plan which essentially involves hectic preparation of demand/ load forecast and assessment of the power availability and the additional capacity to be procured.

Every licensee shall, before resorting to structured bidding process, assess and plan in accordance with the guidelines laid down in this Regulation and submit the plan to the Commission for its approval.

#### **4. Demand Forecast**

1. Every distribution licensee shall make an assessment of Demand for Power in MW and Energy in MU which shall be the unrestricted demand for all categories of both HT and LT consumers, for a short term and a long term. The Short-term demand forecast for a year shall be on monthly basis, and the long term demand for ten years, on annual basis.
2. The monthly forecast shall indicate the power demand during different periods of the day (peak, off peak and normal) and the assessment of the seasonal demand shall be broken down into weekly, daily and hourly forecasts. This estimate shall include load curtailment plan also.

#### **5. Method of Assessment of Demand Forecast**

1. The assessment of demand for electricity shall be in MW/MU.
2. The demand forecast shall be based on
  - (a) Trends and statistical analysis of historical data

- (b) Future projections commensurate with growth
  - (c) Forecasts expected to result from implementation of business plans, efficiency improvement programmes, investment plans, maintenance schedules of the licensee's self generation plants & the central generating stations and other sources of power.
  - (d) The analysis must also consider the impact of the provisions of the Electricity Act and possible interests of consumers to open access and captive generation.
3. The demand estimation shall consider the previous year's position, current year's projection and econometric & statistical forecasting of demand for next ten years.

It shall take into consideration the following, among other relevant informations and inputs:

- (a) Consumer category-wise demand growth/ forecast for ten years for morning peak, evening peak and off-peak hours.
- (b) Unrestricted demand and load shedding
- (c) Opportunity Cost of load shedding in companion with cost of service and the projected marginal cost of power.
- (d) Plans for reducing the requirement during the forecast period through efficient demand side management.
- (e) Projected improvements due to implementation of several plans and improvement measures.

(f) Overall economic growth projection of the State.

4. In the demand forecast for a short term, the pending applications for electricity connections shall also be taken into account.

6. **Assessment of the Power Availability**

1. Along with the demand forecast, the licensee shall also assess the availability of power on monthly basis at different time periods of the day (peak, off peak and normal) in the ensuing year and on annual basis in the subsequent plan period of ten years.

2. The supply plan shall consider among other relevant information and inputs, the following:

(a) Existing shared sources of power including State owned, Central Government owned generating plants, non-conventional energy generators, CPPs and IPPs.

(b) Generating plants with exclusive contracts for power supply to the distribution licensee.

(c) Availability of power from traders, neighbouring States, power exchange and other sources on competitive basis.

(d) New generating plants, UMPPs etc share due for commissioning.

(e) Renovation and modernization, upgradation, phasing out of existing plants.

(f) Constraints in intra-inter regional/ State, if any, affecting the bulk power transfer and other technical factors.

- (g) Trend of frequency in the grid and possibility of over drawal without incurring high UI charges.

**7. Consultation**

1. The licensee shall make short-term and long-term demand and supply availability assessments in consultation with any or all concerned including State sector generating companies, transmission/ distribution licensees, central sector generating companies and transmission companies, State/ Regional/ National Load Dispatch Centers and Central Electricity Authority.
2. The licensee may also make enquires with the power trading licensees and surplus States to estimate the likely availability and price of power across the country for peak, off-peak and normal periods.

**CHAPTER – 5**

**Power Procurement Plan**

**8. Power Procurement Plan**

The licensee shall always endeavour to make the consumers avail of power at least cost considering all options available during the three kinds of periods.

1. **Short term Power Procurement Plan**
  - (a) The short-term power procurement plan presents power demand and supply positions for a maximum time span of one year. The licensee shall prepare this kind of plan to facilitate arrangements for short-term scheduling and or backing down considering-

- (i) short-term power purchase agreements
  - (ii) annual maintenance schedule of own generators, and
  - (iii) day ahead/ term ahead/ spot and other short term trade.
- (b) The short-term power procurement plan shall be the least cost plan (least financial cost to the licensee), the ultimate objective being to make available secure and reliable power supply to all consumers with economically viable tariffs while satisfying power supply planning and security standards.
- (c) The short-term power procurement plan shall cover different periods of the day (i.e. off-peak, peak and normal) and take into account the following:
- (i) Unrestricted demand and restricted demand forecast for the ensuing year;
  - (ii) Forecast of energy and capacity availability from each of the existing sources of power;
  - (iii) Power purchase costs as per the ARR of the current year, approved by the Commission;
  - (iv) Impact of the above on the ARR for the ensuing year;
  - (v) Trend of grid frequently in comparison to the earlier, to evaluate the possibilities of over-drawing from the grid as a substitute for firm short or long term trade agreements, without incurring high UI charges.



2. **Medium-term and Long-term Power Procurement Plan**

- (a) Based on the analysis of the demand forecast and assessment of supply availability, the licensee shall prepare medium term and long term power procurement plan, as the case may be, in advance of the concerned period with its plans for procurement of power and it shall include:
- (i) projected demand in MW/MU
  - (ii) forecast of generation from owned stations and purchases from other stations or sources with which the licensee entered into long term PPAs;
  - (iii) assessment of gap; and
  - (iv) plans to fill up the gap and the sources of supply
- (b) While preparing a medium term/ long term power procurement plan, the licensee shall consider:
- (i) the balance requirement of power and energy during the plan period after accounting for the power procurement arrangements already entered into
  - (ii) plans for procuring additional capacity required
  - (iii) measures for demand curtailments
  - (iv) proposed method of competitive solicitations including criteria for evaluation of alternative options
  - (v) providing of least cost plan i.e. least financial cost to the licensee with ultimate objective of making available secure and reliable power supply to all consumers with economically viable tariff keeping in view the power supply planning and security standards

- (c) The licensee shall also prepare and furnish month-wise details of past years (with year wise totals) indicating power produced by
  - (i) state generators
  - (ii) central sector generating units
  - (iii) other generators with whom long term/ medium term power purchase agreements have been entered into
  - (iv) short-term purchases made in MU and costs along with unit cost
  - (v) category wise sales and losses in his area of supply
  
- (d) The licensee shall submit to the Commission an updated medium term/ long term power procurement plan for the previous year as approved by the Commission and included in the annual ARR filing to take the latest developments into consideration.

## 9. **Approval of the Plan**

The Commission shall communicate its approval of the power procurement plan within 8 weeks from the date all necessary information/ data requested as given below, have been furnished to the satisfaction of the Commission.

1. The power procurement plan including the demand forecast and assessment of availability for the ensuing year commencing from the month of April, shall be submitted by the licensee to the Commission by the 30<sup>th</sup> November of each year.

2. The long-term plan for the following ten years shall also be submitted by 30<sup>th</sup> November of each year, duly updating the long-term power procurement plan submitted in the previous year as approved by the Commission, to take the latest developments into account.
3. The distribution licensee shall provide load forecast and power procurement plan for both short-term and long-term in proper formats. The Commission may call for such additional information and data as it may deem necessary for approving load forecast and power procurement plan and the licensee shall furnish such information within 2 weeks from being asked to do so.
4. The Commission may, at its discretion, ask the licensee to publish the main details of the power procurement plan in such form and in such manner as it may prescribe, so as to enable any member of the public who desires to file objections, comments or suggestions, to do so in the manner indicated in the Conduct of Business Regulations of the Commission. The Commission shall consider such representations before approval of the plan.
5. To facilitate the approval of the plan, the licensee shall provide following details for the past five years along with the plan before the Commission
  - (a) Month wise details (with year wise total) indicating power produced within the State and purchased from different sources along with detailed costs.
  - (b) Month wise category wise sales and losses in the licence area with demand met.

**CHAPTER – 6**  
**Power Purchase Agreements**

**10. Evaluation of PPA**

Any new medium term or long term power purchase agreement and amendments to existing PPAs entered by the licensee, shall be subject to the approval of the Commission. While approving the proposed agreement, the Commission shall take into account the following:

- (a) Necessity
- (b) Reasonability of cost.
- (c) Promoting efficiency, economy, equitability and competition.
- (d) Conformity with guidelines for investment approval.
- (e) Conformity with requirements of quality, continuity and reliability of supply.
- (f) Conformity with safety and environmental standards.
- (g) Conformity with criterion of power purchase as laid down by the Commission.
- (h) Conformity with policy directives including National Electricity Policy, National Tariff Policy and National Power Plan.

**11. Approval of PPA**

Agreements or arrangements entered by the licensee prior to the commencement of these Regulations shall be deemed to have been made under these Regulations and shall remain in force until the dates of their expiry:

Provided that the Commission may, after due consideration, order that an agreement or arrangement be cancelled or terminated if it is satisfied that the terms and conditions thereof are not in the interests of the consumers at large.

## **CHAPTER – 7**

### **Procedure for Power Procurement**

#### **12. General Procedure**

1. The licensee shall notify the proposal to procure power to attract the maximum number of technically and financially qualified bidders to supply the required power.
2. The licensee shall issue a Request for qualifications
  - (a) to ascertain the technical suitability and the eligibility of the bidders
  - (b) specify the requirements of power and the terms and conditions under which power is to be supplied.
3. The licensee shall indicate the procedure and the criteria for evaluation of bids and the selection of the successful bidder and also the time schedule thereto.
4. The licensee shall adhere to the procurement procedure, including notification, specified by the Commission from time to time.
5. The Commission shall review the procedure adopted by the licensee to ensure that the power procurement is made in a transparent manner, and also conduct investigation wherever

it is noticed that the procedure followed is not in accordance with specified procedure.

6. The Commission may direct the licensee to take corrective steps, including cancellation of the tender and declaring the result as null and void wherever necessary.
7. The Commission shall accord approval, as and when necessary, if any deviation is required from the guidelines issued by the Ministry of Power, Government of India.

**13. Update the Monthly Procurement Plan**

1. The licensee shall review and update the monthly forecast and power purchase plan after considering changes in demand, availability, cost, market conditions and all other relevant factors.
2. The licensee shall evaluate the power position for the subsequent month preferably on the first of 4<sup>th</sup> week of the current month based on the expected demand and availability of the generation/ purchase from secured resources and other sources on merit order. Merit order stack for each month shall be prepared considering the availability from all sources including internal hydro/ thermal sources, power from traders/ exchange/ neighbouring States / UI etc. Based on such evaluation, the licensee shall update the power purchase and procurement plan to minimize the cost of power.
3. The process shall be completed and an updated monthly power plan and procurement plan shall be furnished to the Commission before the commencement of every month.

4. After the close of each month, the licensee shall furnish the details to the Commission of actual scheduling of energy along with cost in comparison with the plan.
  5. If any time during the month, power is available at lower cost from sources such as neighbouring States, traders, exchange/ UI etc., the same shall be arranged by deviating from the plan provided merit order principle is followed. The deviation shall be intimated to the Commission with reasons along with the actual details.
  6. The Commission shall evaluate the procurement plan and may seek clarification if such process is found to be against the principles laid down. In such circumstances, the licensee may be required substantiate the reasons for such action.
  7. The Commission after considering the clarification of the licensee, may allow to pass on to the tariff or decline the additional cost of purchase if imprudently incurred as the case may be.
  8. Short term purchase of power shall be exercised only through transparent competitive bidding process ensuring maximum participation from the sellers of power.
14. **Short term Power Procurement Procedure**
1. The licensee shall have proper mix of long term, medium term and short term (including monthwise or weekly or daily) contractual against agreements for procurement of energy for

meeting the seasonal and daily variations in demand so as to take advantage of the market conditions.

2. Scheduling of power for each month shall be planned in advance taking into consideration availability and cost of power from internal sources and outside, market conditions, expected changes in demand, and cost of power.
3. As long as transparent and prudent bidding or institutional mechanism is adopted and commercial considerations are honoured the licensee shall be at liberty to procure power within the specified limit from any source for short term purpose.
4. The licensee may undertake short term purchase by entering into contracts for the same on strictly merit order basis.
5. Prior approval of the Commission will be necessary for such contracts except for emergency purchases due to natural calamity, failure of generators or transmission lines, which may be got ratified subsequently.

15. **Medium Term/ Long Term Power Procurement Procedure**

1. Long term purchase shall be by competitive bidding process. The bidding process shall be as per the guidelines issued by the Central Government under Section of the Act.
2. The proposal of competitive procurement process should consider the following:
  - (a) The manner in which the licensee plans to advertise the proposal and notify potential bidders so as to attract the maximum number of technically and financially qualified bidders to provide the required power.



- (b) The request for qualifications to be issued, to ascertain the technical suitability of potential bidders and the manner in which the eligibility of companies to bid for supply of power, by the licensee.
  - (c) The request for proposals clearly specifying the requirements of the licensee and the terms and conditions subject to which power is to be supplied, as embodied in a draft power purchase agreement (PPA).
  - (d) The procedure and criteria to be used by the licensee for evaluation of bids and for selection of the winner, including an explanation of the way in which the lowest bid would be evaluated to test its acceptability.
  - (e) The time schedule for conducting the above process and announcing its outcome.
  - (f) The power procurement process shall –
    - (i) ensure that the proposals obtained by the licensee conform to the technical, economic and other criteria in accordance with the Act and the guidelines of the Central Government, issued under Section 63 of the Electricity Act, 2003.
    - (ii) secure the integrity, transparency and effectiveness of the process.
3. The purchase tariff in cases of generating companies, which are not covered under the process of competitive bidding as per Section 63 of the Electricity Act, 2003 shall be determined under Section 62 of the Act.

4. Any long term power purchase arrangements made through MOUs and PPAs with the generating companies by the distribution licensee prior to the issue of these guidelines will not come under the purview of these guidelines till its validity.
5. All power purchase for a period of more than one year and less than 10 years will also be treated at par with long term power purchase.

## **CHAPTER – 8**

### **General Conditions of Procurement**

#### **16. Criteria for Power Purchase**

The Commission shall lay down the criteria for power purchase by the licensee taking into consideration:

1. policy directives of the Central or State Governments on power purchase, allocation including temporary allocation and diversion of power from different sources, generation from conventional and non-conventional energy sources within the State;
2. guidelines on competitive bidding issued by MOP, Government of India from time to time.;
3. consultation with State Transmission Utility, transmission licensees, generating companies, distribution licensees and State Load Despatch Centre to meet power shortages and restrictions to be imposed;
4. provision for spinning reserve or frequency control capacity;

5. mechanism for spot or bilateral purchase or overdrawal/ under drawal of active and reactive power by distribution licensees;
6. principle of least cost commensurate with the power system stability, system voltage, frequency profile and system losses;
7. power purchase and load management during under-frequency, over-frequency and island operations;
8. giving preference for generation at zero cost, which may include:
  - (a) generation from run of river or casual based hydro stations
  - (b) generation from non-conventional energy sources like wind, solar etc. but for which generation may waste; or generation from storage type hydro plant but for which generation may result in spillage of water.

17. **General Conditions**

The distribution licensee shall comply with the following:

1. procurement shall be in an efficient and economical manner under a transparent process.
2. It shall be ensured:
  - (a) Power required is to meet the licensee's service obligation
  - (b) Power requirement is in accordance with the load forecast and power purchase plan approved by the Commission.

- (c) All economic, technical, system and environmental aspects of commercially viable alternatives have been examined (including arrangement for reducing the level of demand) in a manner approved by the Commission.
- 3. Procurement procedure shall be as per the guidelines issued by the Ministry of Power, Government of India and/ or the directions/ instructions issued by the Commission from time to time on
  - (a) power procurement plan and
  - (b) power procurement procedure.
- 4. No power purchase shall be made without an authorization from the Commission except in the case of power purchases for less than 6 months which shall be subject to the criteria laid down by the Commission.
- 5. Furnish copies of contracts/ agreements for procurement of power purchase (both long term, medium term and short term) to the Commission within one month of conclusion of the agreements/ contracts.
- 6. Make short term power purchase as and when need arises but not as a matter of routine and shall be for a minimal period and quantity for balancing the supply and demand under extraordinary situations.
- 7. Make short term power procurement power through transparent bidding process as per the guidelines issued by the Ministry of Power vide Resolution No. 23/25/2011-R&R dt. 15.05.2012.

8. Make efforts for contracting power purchases for a long period, to ensure that all the consumers can be supplied with power at the lowest tariff to the extent possible.
9. While affecting the purchase, strict merit order plan shall be addressed to by the licensee all times, by considering availability of power from all possible sources.
10. The licensee shall also endeavour not to overdraw from the grid other than the permissible levels duly considering the system stability and applicable Regulations so as not to invite penalty.
11. The licensee shall endeavour at all times when the voltage is low, not to import reactive power from the grid. Requirements of reactive compensation in the State Power System shall be based mainly on recommendations of the Regional Load Despatch Centre.

**18. Information to SLDC**

The licensee shall fulfill the following procedure while resorting to power purchase

1. intimate its daily requirement to SLDC a day in advance
2. implement the criteria for power purchase as laid down in the power procurement plan and as directed by the Commission.
3. the SLDC shall work out the incremental and total cost of power purchase from each source based on relevant parameters such as fixed cost, variable cost, incentive, penalty etc and inform all the distribution licensees for adoption.

## CHAPTER – 9

### Intervention in the Procurement Process

#### 19. Intervention in the Procurement Process

1. During the period when the procurement process is on in accordance with these guidelines, the Commission may issue any order interrupting the process only on the grounds of
  - (a) of mala-fide or improper conduct; and/ or
  - (b) the manner in which the licensee is conducting the procurement process differs materially from its proposal as reviewed by the Commission; and
  - (c) on other reasonable grounds.
2. These provisions are without prejudice to the Commission's right to investigate and take appropriate action on credible information of malpractice becoming available to it.
3. Any investigation of a procurement process will be initiated by a notice of inquiry and conducted in accordance with the Commission's Conduct of Business Regulations. The licensee shall not enter into any commitment to procure power or act upon such a commitment pending the outcome of the investigation.
4. If the Commission determines that the procurement process was unsatisfactory with reference to criteria given in these guidelines, the Commission may order the licensee to take

necessary corrective steps, including requiring it temporarily to suspend the procurement process, or to cancel it and declare the results null and void.

5. If the results of the procurement process are declared null and void, the licensee shall so notify to the public and bidders.
6. Nothing in these guidelines shall prevent the Commission from investigating or taking such other action, as it deems appropriate, with respect to a completed power purchase agreement in the exercise of its responsibilities under the Act.

## **CHAPTER – 10**

### **Miscellaneous**

#### **20. Removal of Difficulties**

The Commission may, by general or specified order, remove any difficulty in implementing the provisions of these Regulations, not being inconsistent with the Act in the manner considered appropriate.

#### **21. Power to Relax**

The Commission reserves the right to relax any of the provisions of these Regulations or any of the directives or guidelines issued from time to time subject to such conditions as it may deem necessary.

#### **22. Power to Amend**

The Commission may, at any time, on an application or suo moto amend, modify, alter any of the provisions of these Regulations, as it may deem necessary.

23. **Savings**

Nothing in these Regulations shall be deemed to limit or otherwise affect the power of the Commission

- (a) to issue any order direction, as it may deem necessary in public interest;
- (b) to adopt any procedure, in conformity of with provisions of the Act, which is at variance to the provisions of these Regulations;
- (c) to deal with any matter or exercise any power under the Act for which no Regulations have been framed.

By Order of the Commission,

Sd/-

(A. CHHAWNMAWIA)

Secretary