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**Jharkhand State Electricity Regulatory Commission, Ranchi**

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**Notification**  
**4<sup>th</sup> October, 2019**

**JSERC(Planning, Coordination, Development and Approval of an economic and efficient Intra-State Transmission System)Regulations, 2019**

**Notification No. 72**

**CHAPTER I:**  
**GENERAL**

**A1: PREAMBLE**

- 1.1 The Electricity Act, 2003, along with specifying all the norms also specifies the promotion of competition, protecting interest of consumers and supply of electricity to all areas.
- 1.2 Under section 61 (c) of the Act, the Commission is empowered to specify the terms and conditions for the determination of tariff and in doing so shall also be guided by factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments.
- 1.3 The JSERC (State Grid Code) Regulations, 2008 and its amendments, provides the planning code, planning criterion and other aspects for planning and development of Jharkhand State Grid System. In the State Grid Code, an investment approval process has been provided for the projects to be executed by the existing Transmission Licensee. However, in future, the projects may be awarded on tariff based competitive bidding process under Section 63 of the Electricity Act, 2003. Therefore, the existing State Transmission Licensee might not execute the projects. The developer may be selected through tariff based competitive bidding process.

1.4 The investments made in Intra-State Transmission System may ultimately be recovered through tariff and as per the sharing mechanism determined by the State Commission. Further, there are multiple Distribution Licensees and Generating Companies in the State. Therefore, there is a need to have a transparent, economical, co-ordinated and consultative process for planning for the development of intra state transmission system in an optimal matter.

1.5 In exercise of the powers conferred under clause 181 of the Act and all other powers enabling it in this behalf, the Jharkhand State Electricity Regulatory Commission (JSERC) hereby makes the following regulations to enable a more transparent, economical, co-ordinated and consultative process during the planning of Intra-State Transmission System in the state of Jharkhand.

#### **A2: Short title and commencement**

2.1 These Regulations shall be called the Jharkhand State Electricity Regulatory Commission (Planning, Coordination, Development and Approval of an economical and efficient Intra-State Transmission System) Regulations, 2019;

2.2 These Regulations shall come into force from the date of its publication in the Official Gazette of the Government of Jharkhand;

2.3 These Regulations shall extend to the entire state of Jharkhand;

#### **A3: Definitions and interpretation**

3.1 In these Regulations, unless the context otherwise requires-

- a) **“Act”** means the Electricity Act, 2003;
- b) **“Commission”** means the Jharkhand State Electricity Regulatory Commission referred to in Section 82 of the Act;
- c) **“Grid Coordination Committee or Committee”** means the Committee constituted by the Commission as per the Section 5 of State Grid Code.
- d) **“Licence”** means a licence granted by the Commission under Section 14 of the Act to a person to undertake intra-state transmission of electricity, and includes a deemed licence;
- e) **“Licensee”** means a person who has been granted a licence, and includes a deemed licensee;
- f) **“Petition”** means and includes all petitions, applications, complaints, appeals, replies, rejoinders, supplemental pleadings, other papers and documents filed in relation thereto, and the word “Petitioner” shall be construed accordingly;
- g) **“Project”** means an element or elements of the intra-state transmission system;
- h) **“Renewable Purchase Obligation (RPO)”** shall be as defined in JSERC (Renewable Energy Purchase Obligation and its compliance) Regulations, 2016 and its amendments;
- i) **“Secretary”** means the Secretary of the Jharkhand State Electricity Regulatory Commission;
- j) **“State Grid Code”** means the JSERC (State Grid Code) Regulations, 2008 and its amendments as specified by the Commission under clause (h) of sub-section (1) of Section 86 of the Act;
- k) **“Transmission Charges”** means the transmission charges approved or adopted, as the case may be, by the Commission for the project;
- l) **“Transmission Licensee”** means the licensee authorised to establish or operate transmission lines in the State of Jharkhand;

3.2 Words or expressions used and not defined in these Regulations but defined in the Act or the State Grid Code shall have the meanings respectively assigned to them in the Act or the State Grid Code respectively;

## **CHAPTER-II:**

### **A4: OBJECTIVE and SCOPE of the regulations:**

- 4.1 These regulations shall apply to State Transmission Utility (STU), State Load Despatch Centre (SLDC), Transmission Licensees, Distribution Licensees, Generating Companies including Captive Generating stations and Open Access consumers, that are connected or are planning to connect to the Intra-State Transmission System, Grid Co-ordination Committee (GCC) and any other relevant entity recognized by the Commission and involved in the planning and development of the Intra-State Transmission System.
- 4.2 These regulations shall be in addition to the State Grid Code and other applicable JSERC Regulations, and shall lay down the broad principles, procedures and processes to be followed for planning, co-ordination, development and approval of an efficient, co-ordinated, reliable and economical Intra-State transmission System in the State of Jharkhand.
- 4.3 These regulations shall lay down broad principles and processes to bring about transparency and ensure wider participation of stakeholders in the planning process through consultations.
- 4.4 These regulations shall also lay down the norms to be followed by the State Transmission Utility in getting approval of the planned intra-state transmission schemes from the GCC and Commission before initiation of execution of such schemes as per Section 62 or Section 63 of the Act.

### **A5: Roles and responsibilities**

- 5.1 The STU shall plan the Intra-State Transmission Systems and while doing so, shall undertake system studies for development of the transmission system. It shall also ensure proper coordination and ensure inputs from various agencies such as SLDC, Transmission licensees, Distribution licensees, Generating Companies including Captive Generating stations, Open Access Consumers and other entities in the State. If required, the STU can seek inputs from RLDCs, NLDC, CEA, RPCs etc. also. The inputs from various stakeholders shall form the input to the system studies, which shall be carried out on a scientific basis by catering to the load growth and to improve the network strengthening and reliability of the network in the State. The inputs shall be provided in the format prescribed by the GCC.
- 5.2 The SLDC shall provide periodic operational statistics and feedback to the STU along with supporting analysis and details, which have a bearing on the planning process of Intra-State Transmission System.
- 5.3 The Generating Companies including Captive Generating stations and Open Access Consumers, connected or intending to connect to Intra-State Transmission System, shall provide the technical data as per format prescribed by the GCC.
- 5.4 Generating Companies including Captive Generating stations connected to or intending to connect to Intra-State Transmission System shall furnish status of their projects to the STU from time to time as specified in detailed procedure, which is to be prescribed by the GCC.

5.5 All the Distribution licensees in the State shall undertake periodic load growth studies within their license area and provide inputs to the STU for carrying out system studies. The Distribution licensees shall also provide details to the STU in respect of

- (a) Ongoing downstream projects which are under implementation along with the expected date of commissioning, and
- (b) New downstream networks which are being planned by them

5.6 All the Transmission Licensee (s) in the State shall also provide details of the following:

- (a) Ongoing transmission projects which are under implementation along with the expected date of commissioning, and
- (b) New transmission projects which are being planned by them, including their parent.

5.7 The STU shall consider all the inputs and undertake system/ load flow studies across the state.

5.8 The STU shall submit the results of the system/ load flow studies and scenarios of planned projects along with base case (with cost/ benefit analysis) to the GCC with all the inputs/ assumptions. The members of the GCC shall discuss, review, comment and give consent to the final plan. In case any modifications are required, it shall suggest the modifications to STU.

5.9 Since the Intra-State Transmission projects shall be integrated with the Inter-State Transmission System, the STU shall share the final signed off-version with Central Electricity Authority (CEA)/ Regional Power Committee (RPC) for information and to seek feedback/ comments. RPC, on receipt of proposal from STU, shall consider and convey its feedback to STU within 3 months of receipt of such proposal.

### **CHAPTER-III:**

#### **A6: Strengthening/ upgradation of the transmission system**

6.1 The STU while planning the Intra-State Transmission System in the form of expansion or upgradation shall also consider (but not limited to) the following, in addition to the guidelines given in the JSERC (State Grid code) Regulations 2008 and its subsequent amendments:

- a. New and emerging technologies;
- b. Cost-benefit analysis outcome;
- c. Likely shutting down of old/ inefficient Generating Stations;
- d. Renewable capacity addition;
- e. Renewable Purchase Obligation;
- f. System adequacy from the perspective of black start/ start-up supply;
- g. Requirement of reactive power;
- h. Optimal utilization of resources to ensure an efficient and economical system;
- i. Upstream/ downstream infrastructure with respect to the augmentation or upgradation or uprating of the existing system;
- j. Consideration to inter-state schemes planned by CTU and perspective plan prepared by CEA; and
- k. Policy initiatives of Government of India and Government of Jharkhand.

6.2 When the augmentation of transmission system is undertaken for renewable energy sources, transmission system shall be planned by considering estimated renewable capacity additions in the state, Renewable Purchase Obligation (RPO) of the state and utilizing the available margins in the system being planned for conventional power.

#### **A7: Process of transmission planning**

7.1 The STU shall carry out transmission planning as under:

- a. The STU shall carry out transmission planning for five (5) years and shall update the same each year. The STU shall plan the entire exercise well in advance and submit to the Commission as per the stipulated timelines given in the JSERC (State Grid Code) Regulations, 2008 and its amendments;
- b. Consider applications for long term access, projections of electricity demand and generation, policy imperatives including renewable energy addition, national electricity plan and operational feedback from SLDC in terms of reliability and congestions;
- c. Consider inputs from SLDC, Generating Stations including Captive Generating stations, Open Access Consumers, Distribution Licensee (s) and Transmission Licensee (s). The inputs have to be submitted to STU within 30 days. Provided, that the inputs shall mean consultations signed/ forwarded from the Managing Director/ Chief Executive Officer/ Chairman or equivalent of the concerned organisations;
- d. Conduct system studies for various probabilistic scenarios which includes generation and load scenarios during peak, off-peak and other than peak/ off-peak hours for different seasons considering low, moderate and high renewable capacity addition, varying import/export requirements and scheduling of various generating stations under economic dispatch for which variable cost of existing and upcoming generating stations shall be factored in;

- e. Prepare base case for each probabilistic scenario (options) by considering details of generation from Generating Stations including Captive Generating stations and demand from the Distribution and Transmission licensees and Open Access Consumers in the State, existing, under-construction and upcoming Inter-State and Intra-State Transmission System up to desired voltage level for the above exercise. While preparing the scenarios, the STU shall determine the schemes with proper phasing based on an end to end basis considering all upstream and downstream projects;
- f. Consider options of upgrading the existing transmission system in place of building new transmission lines such as increasing line loading through use of compensation, re-conductoring, etc., for optimally utilizing the existing assets, should also be considered;
- g. The STU shall also review the Intra-State Transmission System in the event of change in commissioning schedule of upstream and downstream system, shift of target region, phase out of generating units, operational feedback of SLDC and exit from long term consumers;
- h. Carry out a midcourse correction for transmission system, based on progress of implementation of generating stations and upstream/ downstream systems, to the extent possible in respect of (i) reconfiguration of planned transmission system, (ii) phasing of transmission elements and (iii) delay/ deferment of some of the transmission elements;
- i. The STU shall complete the initial planning exercise in a period of 3 months from the initiation of the process. Before finalizing the transmission scheme, STU shall publish the details of all probabilistic scenarios and suggested transmission schemes in its website and seek stakeholder's comments by giving a period of 30 days. STU shall finalise the draft transmission scheme(s) only after considering the responses received from stakeholders. The STU shall also keep all planning scenarios in archive for stakeholder comments also;
- j. The STU shall review the stakeholder comments before finalising the schemes. Acceptance or rejection of any comment should be supported by proper justification. The STU shall finalise the schemes within 21 days of receiving stakeholder comments;
- k. The finalised schemes along with results of system studies, scenarios, investments, cost-benefit analysis, assumptions, methodologies, planning criteria, stakeholder comments etc. shall be placed before the GCC;
- l. The members of the GCC shall review the proposal of the STU in totality and give comments/ suggestions with 30 days of receipt of the schemes from STU. The STU shall have 14 days to incorporate the comments/ suggestions and re-submit the same before GCC for sign off. The members of the GCC has to undertake prudence check and give its consent to the proposal within 30 days in the form of a joint sign-off to the planned scheme (s).
- m. In case, GCC does not reach to a consensus upon the receipt of the modified proposal (in case of any modifications prescribed by the GCC in the sub- section (l.) above), then the GCC shall approach the Commission with the points of contention and represent a detailed case for review. In case STU is of the view that the scheme is in interest of grid security/ stability or decongesting the network or overcoming a contingency, it shall record this in writing and submit the same before the Commission.
- n. The Commission shall review the proposed schemes and issue necessary regulatory direction. The STU shall make the necessary changes to the scheme as directed by Commission and the same shall be considered as the final signed-off version.

- o. Post finalisation by GCC, the STU shall submit the final signed-off version before the CEA/ RPC for their views. They on receipt of proposal from STU, shall consider and convey their views to STU, preferably within 3 months of receipt of such proposals.

## 7.2 Consultation from Stakeholders

- a. STU shall consult with all stakeholders such as SLDC, Transmission licensee (s), Distribution licensee (s), Generating companies including Captive Generating stations, Open Access Consumers, Grid Co-ordination Committee and other stakeholders identified relevant by the Commission;

Provided that consultations with Generating companies including Captive Generating stations / Transmission Licensee (s)/ Distribution licensee (s)/ Open Access Consumer (s) shall mean consultations signed/ forwarded from the Managing Director/ Chief Executive Officer/ Chairman of concerned Generating company including Captive Generating stations/ Transmission Licensee (s) / Distribution licensee (s)/ Open Access Consumer (s) or its specifically designated nominee.

- b. The STU shall ensure transparency while carrying out transmission planning through sharing of information, underlying assumptions, methodology, planning criteria and result of system study regularly.
- c. The STU shall publish the following on its website and update the same on a yearly basis:
  - i. Detailed justification for the scheme along with details of the complete scheme;
  - ii. Results of System studies;
  - iii. Assumptions made in system studies and inputs received from stakeholders;
  - iv. Comments/ suggestions of stakeholders along with its treatment;
  - v. Likely capital costs and estimated monthly tariff;
  - vi. Likely timeline of execution;
  - vii. Status of upstream/ downstream system.
- d. STU in discharge of its functions under Section 39 (2)(b) of the Act may make such procedure and prescribe such forms as may be necessary for the purpose of planning and co-ordination relating to Intra-State Transmission System, which is not inconsistent with these regulations or any other regulations of the Commission

7.3 The STU shall finalise the Intra- State transmission plan for five (5) years and also for each annual revision after incorporating all stakeholder comments, suggestions and recommendations from the GCC/ CEA/ RPC (if any). STU has to mention reasons for accepting/ rejecting any suggestion from stakeholder (s).

## **A8: Regulatory filings**

- 8.1 Post finalisation of the schemes by GCC, the STU shall submit the schemes before the Commission for Regulatory approval.
- 8.2 The STU at the time of seeking regulatory approval, shall submit the following to the Commission
  - a. Recommendations/ Consensus/ sign-off on the scheme(s) by GCC;
  - b. Results of the system studies carried out by STU;
  - c. Assumptions and Inputs considered in system studies;
  - d. Status of upstream/ downstream transmission system;
  - e. Status of consultation with the stakeholders along with Comments/ suggestions of stakeholders and its treatment.
  - f. Likely capital costs and estimated monthly tariff;
  - g. Transmission project (s) identified on an end to end basis;

- h. Likely timeline of execution with proper phasing of sub-project (s);
- i. Views of RPC and CEA– minutes of the meeting etc. may be attached
- j. Any other point as mentioned in State Grid Code.

**8.3 Exception:-** if any Intra-State transmission project (s) are developed exclusively using the grant from the State or Central Government, it would be under intimation to the Commission by S.T.U that all the processes have been diligently completed.

**A9: Manpower deployment in transmission planning**

9.1 STU shall ensure proper and adequate manpower for conducting transmission planning exercise on a yearly basis.

**A10: Miscellaneous**

- 10.1 The STU shall be the custodian of the base case files and system study files along with all relevant details of final accepted network configuration.
- 10.2 STU shall furnish to the Commission status of on-going schemes and status of approval of proposed schemes on quarterly basis.

**A11: power to amend**

11.1 The Commission may, at any time and on such terms as to costs or otherwise, as it may think fit, amend any defect or error in any proceeding before it, and all necessary amendments shall be made for the purpose of determining the real question or issue arising in the proceedings.

**A12: Power to remove difficulties**

12.1 If any difficulty arises in giving effect to these Regulations, the Commission may remove, by general or special order, consistent with the provisions of the Act, which appears to it to be necessary or expedient for the purpose of removing the difficulties.

**A13: Repeal and Savings**

- 13.1 Nothing in these Regulations shall be deemed to limit or otherwise affect the inherent powers of the Commission to make such orders for the ends of justice to meet or to prevent abuses of the process of the Commission.
- 13.2 Nothing in these Regulations shall, expressly or impliedly, bar the Commission dealing with any matter or exercising any power under the Act for which no Regulations have been framed, and the Commission may deal with such matters, powers and functions in a manner it thinks fit.

By Order of the Commission,

**Rajendra Prasad Nayak,**  
Secretary  
Jharkhand State Electricity Regulatory Commission.