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

JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION

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, 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 will 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 will be selected through tariff based competitive bidding process.

1.4 The investments made in Intra-State Transmission Systems will ultimately be recovered through tariff and as per the sharing mechanism determined by the State Commission. Further, there are multiple Distribution Licensee 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) **"Application"** means the application made for grant of licence or, for amendment of licence, as the case may be, and includes annexures, enclosures to such application;

c) **"Authority"** means the Central Electricity Authority referred to in sub-section(1) of section 70 of the Act;

d) **"Central Transmission Utility"** means any Government company which the Central Government may notify under sub-section (1) of section 38 of the Act;

e) **"Commission"** means the Jharkhand State Electricity Regulatory Commission referred to in Section 82 of the Act;

f) **"Consumer"** means any person who is supplied with electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving electricity with the works of a licensee, the Government or such other person, as the case may be;

g) **"Distribution licensee"** means the licensee (s) authorised to operate and maintain a distribution system for supplying electricity to the consumers in the State of Jharkhand;

h) **"Generating Company"** means any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person, which owns or operates or maintains a Generating station;

i) **"Generating station" or " station"** means any station for generating electricity, including any building and plant with step-up transformer, switch yard, switch-gear, cables or other appurtenant equipment, if any used for that purpose and the site thereof, a site intended to be used for a generating station, and any building used for housing the operating staff of a generating station, and where electricity is generated by water-power, includes penstocks, head and tail works, main and regulating reservoirs, dams and other hydraulic works, but does not in any case include any sub-station;

j) **"Grid Coordination Committee or Committee"** means the Committee constituted by the Commission as per the Section 5 of State Grid Code.

k) **"Inter-State Transmission System"** includes –

(i) any system for the conveyance of electricity by means of main transmission line from the territory of one State to another State;

(ii) the conveyance of electricity across the territory of an intervening State as well as conveyance within the State, which is incidental to such inter-State transmission of electricity;

(iii) the transmission of electricity within the territory of a State on a system built, owned, operated, maintained or controlled by Central Transmission Utility.

l) **"Intra-State transmission system"** means any system for transmission of electricity other than an inter-State transmission system;

m) **"Licence"** means a licence granted by the Commission under Section 14 of the Act to a person to undertake intra-state transmission of electricity;

n) **"Licensee"** means a person who has been granted a licence, and includes a deemed licensee;

o) **"Open access"** means the non-discriminatory provision for the use of transmission lines or distribution system or associated facilities with such lines or system by any licensee or consumer or a person engaged in generation in accordance with the regulations specified by the Appropriate Commission;

p) **"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;

q) **"Project"** means an element or elements of the intra-state transmission system;

r) **"Regional Power Committee"** means a committee established by resolution by the Central Government for a specified region for facilitating the integrated operation of the power systems in that region;

s) **"Renewable Purchase Obligation (RPO)"** shall be as defined in JSERC (Renewable Energy Purchase Obligation and its compliance) Regulations, 2016 and its amendments;

t) **"Secretary"** means the Secretary of the Jharkhand State Electricity Regulatory Commission;

u) **"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;

v) **"State Transmission Utility" or "STU"** means the State Transmission Utility notified by the State Government under sub-section (1) of Section 39 of the Act;

w) **"Transmission Charges**" means the transmission charges approved or adopted, as the case may be, by the Commission for the project;

x) **"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 Grid Code shall have the meanings respectively assigned to them in the Act or the Grid Code;

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 planning to connect to the Intra-State Transmission System, Grid Co-ordination Committee (GCC) and any other relevant entity recognized by the Commission 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 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 Licensees 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 networks which are being planned by them

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 network 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 schemes shall be integrated with the Inter-State Transmission System, the STU after finalization of the base case shall submit results along with system studies, methodologies, assumptions and planning criteria followed before the 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. If no feedback/ comments is received from RPC within the given timeframe, it can be considered that there is no comment/ feedback from RPC.

CHAPTER-III:

A6: STRENGHTENING/ UPGRADATION OF THE TRANSMISSION SYSTEM

6.1 The STU shall, 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 of the existing system;

j. Consideration to inter-state schemes planned by CTU; 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 as per the timelines given in the JSERC (State Grid Code) Regulations, 2008.

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 Generating Stations including Captive Generating stations, Open Access Consumers, Distribution Licensees and Transmission Licensees. In case, the required input is not made available by them, STU shall approach the Commission for required input;

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;

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. Before finalizing the transmission scheme, STU shall publish the details of all probabilistic scenarios and suggested transmission schemes on its website and seek stakeholder's comments by giving a period of minimum of 21 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;

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. 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 in the form of a joint sign-off to the planned scheme (s).

m. In case, GCC doesn't reach to a consensus within 30 days of 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 approval. 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. The STU shall also submit the finalised schemes before the RPC for information and feedback. RPC, on receipt of proposal from STU, shall consider and convey its feedback to STU within 3 months of receipt of such proposal. If no feedback/ comments is received from RPC within the given timeframe, it can be considered that there is no comment/ feedback from RPC.

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. If any of the above does not respond within 30 days, it shall be construed that consultation with that respective Company/ Licensee/ Consumer/ Person is complete and STU shall proceed further.

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 and RPC (if any). STU has to mention reasons for accepting/ rejecting any suggestion from stakeholder (s).

A8: REGULATORY FILINGS

8.1 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. Feedback/ suggestions from RPC if any – minutes of the meeting etc. may be attached

c. Results of the system studies carried out by STU;

d. Assumptions and Inputs considered in system studies;

e. Status of upstream/ downstream transmission system;

f. Status of consultation with the stakeholders along with Comments/ suggestions of stakeholders and its treatment.

g. Likely capital costs and estimated monthly tariff;

h. Likely timeline of execution;

i. Any other point as mentioned in State Grid Code.

8.2 If any Intra-State transmission project is to be developed using grant from Government of Jharkhand, regulatory approval for such project is not required.

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 any of the provisions of these Regulations, the Commission may, by general or special order, do anything not being inconsistent 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 as may be necessary for 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)

(A.K. Mehta)

Secretary

Jharkhand State Electricity Regulatory Commission