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KARNATAKA POWER TRANSMISSION CORPORATION LIMITED
CIN No.: U40109KA1999SGC025521

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Kaveri Bhavan, K.G Road,
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Sub: Constitution of Grid Code Review Panel. - regarding.

- Ref:**
- 1) Letter No. KERC/M/1/15-16/647 dated 13.05.2016 of the Secretary, KERC.
 - 2) Letter No. KERC/M/1/16-17/1060 dated 01.07.2016 of the Secretary, KERC.
 - 3) Gazette Notification No. KERC/J/02/1/2000 dated 02.02.2016 of Karnataka Electricity Grid Code(KEGC), 2015
 - 4) Note no. CEE(P&C)/SEE(Plg)/EE(Plg-S)/KCO-93/15870/F-10/14-15 dated 01.10.2014 of the CEE (P&C), KPTCL.

Preamble:

The Hon'ble Karnataka Electricity Regulatory Commission has notified the KEGC & KEDC Regulations 2015. As per Section-3, of KEGC-2015, KPTCL is the State Transmission Utility(STU), that also holds the Transmission Licence required to implement and ensure compliance with the Karnataka Electricity Grid Code(KEGC) and to carry out periodic review and seek for amendments of the same. A review panel shall be constituted by the STU comprising of the representatives of the Users of the Transmission system. The STU will be responsible for managing and implementing the GRID CODE for discharging its obligations with the Users. As such, KERC had sought compliance from Transmission and Distribution Licensees. As per Clause 3.3.1 of KEGC, a Grid Code Review Panel has to be constituted by the STU i.e. KPTCL involving various stakeholders.

The Review Panel shall carry out the following functions:

- i) Maintenance of the Grid Code and its working under continuous scrutiny and review.
- ii) Consideration of all requests for review made by any User and publication of their recommendations for changes to the Grid Code together with reasons for such changes.

iii) Issue of guidance on interpretation and implementation of the Grid Code.

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EE (MIS)	iii)
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SEE (IT&MIS)	

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A/15/11/2016

- iv) Examination of the problems raised by any User.
- v) Ensuring that the changes/modifications proposed in the Grid code are consistent and compatible with Indian Electricity Grid code(IEGC).
- vi) Analysis of major Grid disturbances soon after their occurrence.
- vii) Review the progress of the Committee formed for coordination and monitoring of protection functions for the entire grid.

Now, the Chief Engineer Electy(P&C), KPTCL has submitted the nominations from various stakeholders to be included in the Grid Code Review Panel.

In the backdrop of these, and in order to adhere to the instructions of Hon'ble KERC, Grid Code Review Panel is to be constituted.

Hence this Order.

Order no: KPTCL/B28(a)/20951/2015-16

Date: 14-12-2016

The Grid Code Review Panel is here by constituted with the following representatives, to carry out the functions as enumerated in Clause 3.4.1 of KERC Grid Code, 2015:

Sl. No.	Organization	Designation of Member	
1	STU(KPTCL)	Director(Transmission)	Chairperson
2	SLDC(KPTCL)	Chief Engineer Electy.,(SLDC)	Member
3	KPCL	Chief Engineer(Electrical Designs)	Member
4	SRPC	Superintending Engineer	Member
5	NTPC	General Manager Commercial	Member
6	PGCIL	DGM(RTAMC), Bengaluru	Member
7	SRLDC	Additional General Manager(SO-II & C&M)	Member
8	BESCOM	CGM, Operations BESCOM	Member
9	MESCOM	Chief Engineer Electy., MZ	Member

10	CESC	General Manager(Tech)	Member
11	HESCOM	General Manager(Tech)	Member
12	GESCOM	Superintending Engineer Electy(MRT-LDC)	Member
	IPP>50MWs		
13	M/s VishWind		Member
14	M/s Suzlon		Member
15	M/s Mythra		Member
16	M/s Vyshali		Member
17	M/s Gamesha		Member
18	M/s NSL		Member
19	M/s Bhoruka		Member
	IPP<50MWs		
20	M/s NHEPL		Member
21	STU(KPTCL)	Chief Engineer Electy(P&C)	Member Secretary- Convenor


Deputy General Manager (Tech)
KPTCL

To:

1. The Secretary, KERC, 6th & 7th Floor, Mahalaxmi Chambers, No.9/2, M.G Road, Bengaluru-560001.
2. The Managing Director, BESCO, HESCOM, MESCOM, CESC, GESCOM.
3. The Director(Technical), BESCO, HESCOM, MESCOM, CESC, GESCOM.
4. All Chief Engineers (Electy), KPTCL.
5. All Financial Advisors, KPTCL/ESCOMs
6. All Superintending Engineers (EI), W & M/Works Circle, KPTCL.
7. All Executive Engineers (EI), MWD/TL&SS Division, KPTCL.
8. PS to the Managing Director, KPTCL, Kaveri Bhavan, Bengaluru.
9. PS to the Director(Transmission), KPTCL, Kaveri Bhavan, Bengaluru.

Copy to:

10. The Superintending Engineer (EI), IT & MIS with a request to arrange to upload this order in the KPTCL website for view of the officers of KPTCL.

RNI No. KARBIL/2001/47147



ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ

ಅಧಿಕೃತವಾಗಿ ಪ್ರಕಟಿಸಲಾದುದು

ಬೆಲೆಬಿಡುಗಡೆ ಪತ್ರ

ಭಾಗ- IVA Part-IVA	ಬೆಂಗಳೂರು, ಮಧವಾರ, ಶುಕ್ರವಾರ ೦೩, ೨೦೧೬ (ಮಾಘ ೧೪, ಶಕ ವರ್ಷ ೧೯೩೭) Bengaluru. Wednesday, February 03, 2016 (Magha 14, Shaka Varsha 1937)	ಪಂ. ೨೧೨ No. 212
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KARNATAKA ELECTRICITY REGULATORY COMMISSION

No. 9/2, 6th & 7th Floors, Mahalaxmi Chambers, M.G.Road, Bengaluru - 560001

NOTIFICATION

No. KERC/J/02/1/2000, Dated: 02-02-2016

KARNATAKA ELECTRICITY GRID CODE [KEGC], 2015

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SECTION-3

MANAGEMENT OF GRID CODE AND ROLE OF VARIOUS ORGANIZATIONS

3.1 INTRODUCTION:

- 3.1.1 The Karnataka Power Transmission Corporation Limited (KPTCL), which is the State Transmission Utility (STU), that also holds the Transmission Licence required to implement and ensure compliance with the Karnataka Electricity Grid Code (KEGC), herein after called GRID CODE, and to carry out periodic review and seek for amendments of the same. A Review Panel shall be constituted by the STU, as required in this Section, comprising of the representatives of the Users of the Transmission System.
- 3.1.2 No change in this GRID CODE, however small or big, shall be made without being deliberated upon and agreed to by the GRID CODE Review Panel and approved by the Commission.
- 3.1.3 The STU will be responsible for managing and implementing the GRID CODE for discharging its obligations with the Users. The STU will not be, however, required to incur any expenditure on account of travel etc., of any other member of the panel other than its own representative.

3.2 OBJECTIVE:

- 3.2.1 The objective of this Section is to define the method of management of GRID CODE documents, implementing any changes/modifications required and the responsibilities of the constituents (Users) to effect the change.

3.3 GRID CODE REVIEW PANEL:

- 3.3.1 The Chairperson of the Grid Code Review panel shall be an Engineer of the STU not below the rank of Chief Engineer (Electricity). The Member Secretary of the Panel shall also be nominated by the STU. The Panel shall consist of the following members on the recommendations of the heads of the respective organizations:

- a) Chief Engineer of the State Load Despatch Centre (SLDC)
- b) One Chief Engineer or General Manager of the Karnataka Power Corporation Limited (KPCL).
- c) One senior representative from the Southern Regional Power Committee (SRPC).

- d) One representative at senior executive level from the National Thermal Power Corporation Limited (NTPC).
- e) One representative at senior executive level from the Power Grid Corporation of India Limited (PGCIL).
- f) One representative at senior executive level from the Southern Regional Load Despatch Centre (SRLDC).
- g) One representative at senior executive level from each Distribution & Retail Supply Licensee.
- h) One representative at senior executive level from each of the IPPs feeding the Karnataka State Power Grid and feeding not less than 50 MW.
- i) One representative from all the IPPs and CPPs of small Power Plants of less than 50 MW capacity on rotation basis.

3.3.2 Any other member can be co-opted as a member of the Panel when directed by the Commission.

3.3.3 The functioning of the Panel shall be coordinated by the STU. The Member Secretary nominated by the STU shall be the convener.

3.3.4 The STU shall inform all the Users, the names and addresses of the Panel Chairperson and the Member Secretary at least seven days before the first meeting of the Panel. Any subsequent changes shall also be informed to all the users by the STU. Similarly, each User shall inform the names and designations of their representatives to the Member Secretary of the Panel, at least three days before the first Panel meeting, and shall also inform the Member Secretary in writing regarding any subsequent changes.

3.4 FUNCTIONS OF THE REVIEW PANEL:

3.4.1 The functions of the Review Panel are as follows:

- (a) Maintenance of the GRID CODE and its working under continuous scrutiny and review.
- (b) Consideration of all requests for review made by any User and publication of their recommendations for changes to the GRID CODE together with reasons for such changes.
- (c) Issue of guidance on interpretation and implementation of the GRID CODE.
- (d) Examination of the problems raised by any User.
- (e) Ensuring that the changes/modifications proposed in the GRID CODE are consistent and compatible with Indian Electricity Grid Code (IEGC).

- (f) Analysis of major grid disturbances soon after their occurrence.
- (g) Review the progress of the committee formed for coordination and monitoring of protection functions for the entire grid.

The Review Panel may hold as much number of meetings as required subject to the condition that at least one meeting shall be held in every three months. Sub-meetings may be held by the STU with the User to discuss individual requirements and with groups of Users to prepare proposals for Panel meeting for taking a decision.

3.5 REVIEW AND REVISIONS:

- 3.5.1** The Users seeking any amendment to the Grid Code shall send written requests to the Member Secretary of the panel with a copy to the Commission. If the request is sent to the Commission directly, the same shall be forwarded to the STU. The STU shall, in consultation with the Distribution & Retail Supply Licensees, Generating Companies, Central Transmission Utility (CTU), SRLDC and such other persons as the Commission may direct, review the GRID CODE provisions after proper examination.
- 3.5.2** All the comments received from the members of the Panel shall be scrutinized and compiled by the STU. These comments, along with comments of STU shall be sent to all the members for their response in favour or otherwise, for the proposed change/modification. If necessary, the STU shall convene a meeting of the Panel for deliberations. The Member Secretary shall present all the proposed revisions of the Grid Code to the Panel for its consideration.
- 3.5.3** Based on the response received, the STU shall finalize its recommendation regarding the proposed modification / amendment and submit the same along with all the related correspondence to the Commission for approval. The KERC shall approve the same after holding a Public Hearing.
- 3.5.4** The STU shall send the following reports to the Commission at the conclusion of each review meeting of the Panel:
 - i. Reports on the outcome of such review.
 - ii. Any proposed revision to the Grid Code as the STU reasonably thinks necessary for achievement of the objectives referred to in the relevant paragraphs.
 - iii. All written representations and objections submitted by the Users at the time of review.

3.5.7 The STU shall keep copies of the Grid Code with the latest amendments and shall make it available at a reasonable cost to any person requiring it.

3.6 Non-Compliance

- i. If any user fails to comply with any provision of the Grid Code the user shall inform the SLDC and Grid Code Review Panel without delay the reasons for its non-compliance and shall remedy its non-compliance promptly.
- ii. SLDC shall bring the non compliance to the notice of the Commission.
- iii. Consistent failure to comply with the Grid Code provisions may lead to disconnection of the user's plant and / or facilities.

3.7 Code Responsibilities

- i. In discharging its duties under the Grid Code, STU shall rely on information which shall be furnished by the Users.
- ii. STU shall not be held responsible for any consequences that arise from its reasonable and prudent actions on the basis of such information.

3.8 Confidentiality

STU shall not, other than as required by the Grid Code, disclose such information to any person other than Central or State Government and the Commission without the prior written consent of the provider of the information.

3.9 Dispute Settlement Procedures

- 3.9.1. In the event of any dispute regarding interpretation of any part/section of the Grid Code provision between any User and STU, the matter may be referred to the Commission for its decision. The Commission's decision shall be final and binding.
- 3.9.2. In the event of any conflict between any provision of the Grid Code and any contract or agreement between STU and Users, the provision(s) of the Grid Code shall prevail.

3.10 Directives

- i. Any directions issued by the State Government under section 37 of the Electricity Act 2003, shall be promptly informed to the Commission and all

Users by STU.

- ii. Any directives issued by the Commission from time to time shall be complied with by STU and all Users.

3.11 Compatibility with Indian Electricity Grid Code

This Grid Code is consistent/compatible with the IEGC. However, in matters relating to inter-State transmission, if any provision of the State Electricity Grid Code is inconsistent with the provisions of the IEGC, then the provisions of IEGC as notified by CERC shall prevail.

3.12 Role of various Organizations

3.12.1 Role of SLDC

In accordance with Section 32 of the Electricity Act, 2003, the State Load Despatch Centre (SLDC) shall have the following functions:

- (i) The State Load Despatch Centre shall be the apex body to ensure integrated operation of the power system in the State.
- (ii) The State Load Despatch Centre shall,—
 - a) be responsible for optimum scheduling and despatch of electricity within the State, in accordance with the contracts entered into with the licensees or the generating companies operating in the State;
 - b) monitor grid operations;
 - c) keep accounts of the quantity of electricity transmitted through the State Grid;
 - d) exercise supervision and control over the intra-State transmission system; and
 - e) be responsible for carrying out real time operations for grid control and despatch of electricity within the State through secure and economic operation of the State grid in accordance with the Grid Standards and the Grid Code.
- (iii) The following are contemplated as exclusive functions of SLDC:
 - a. Data acquisition and supervisory control, state estimation, security analysis.
 - b. System Operation and control of the state grid covering contingency analysis, contingency ranking and operational plan on real time basis by conducting operational load flow studies using real time data.

- c. Furnishing feedback to STU on planning, on the issues of transmission strengthening, system protection requirement, congestion /bottlenecks.
 - d. Responsible for conducting demand forecast within the State, LGBR analysis, outage planning coordination & operation and analysis of the grid security.
 - e. Scheduling/ Re-scheduling of Generation.
 - f. System restoration following grid disturbances.
 - g. Metering and data collection of the energy transaction within the State Grid.
 - h. Compiling and furnishing data pertaining to system operation.
 - i. Operation of state Deviation Settlement Mechanism (DSM) pool account, state reactive energy account and other functions as directed by the Commission.
 - j. Display transmission line loadings, critical lines with contingent conditions and inform in writing to the STU on the transmission bottlenecks for remedial measures with a copy to the Commission.
 - k. Display of power map with power flow in the critical lines.
- (iv) In accordance with Section 33 of the Electricity Act, 2003, the State Load Despatch Centre in the State may give such directions and exercise such supervision and control as may be required for ensuring the integrated grid operations and for achieving the maximum economy and efficiency in the operation of power system in the State. Every licensee, generating company, generating station, sub-station and any other person connected with the operation of the power system shall comply with the directions issued by the State Load Despatch Centre under subsection (1) of Section 33 of the Electricity Act, 2003. The State Load Despatch Centre shall comply with the directions of the Regional Load Despatch Centre.
- (v) In case of inter-state bilateral and collective short-term open access transactions having a state utility or an intra-state entity as a buyer or a seller, SLDC shall accord concurrence or no objection or a prior standing clearance, as the case may be, in accordance with the Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) Regulations, 2008, amended from time to time.

3.12.2 Role of ALDC :

The Area Load Despatch centre shall:

- a. Comply with the directions of SLDC.
- b. Coordinate in outage management.
- c. Assist SLDC to ensure integrated operation of the power system in the State grid.
- d. Assist SLDC for monitoring the grid operations within its control area.

- e. Assist SLDC for supervision and control over the intra-State Transmission system, within its area and be responsible for carrying out real time operation.
- f. Keep accounts of the quantity of electricity transmitted through its control area.

3.12.3 Role of STU:

Section 39 of the Electricity Act, 2003, outlines that the functions of the State Transmission Utility (STU) shall be,-

- a) to undertake transmission of electricity through intra-State transmission system and inter State transmission under bilateral agreements;
- b) to discharge all functions of planning and co-ordination relating to intra-State transmission system with,
 - i) Central Transmission Utility;
 - ii) State Governments;
 - iii) Generating Companies;
 - iv) Regional Power Committees;
 - v) Central Electricity Authority (CEA);
 - vi) Licensees;
 - vii) Any other person notified by the State in this behalf;
- c) to ensure development of an efficient, congestion free, reliable, coordinated and economical system of intra-State transmission lines for smooth flow of electricity from a generating station to the load centers;
- d) to provide non-discriminatory open access to its transmission system for use by,
 - i. any licensee or generating company on payment of the transmission charges; or
 - ii. any consumer as and when such open access is provided by the State Commission under sub-Section (2) of Section 42 of the Act, on payment of the transmission charges and a surcharge thereon, as may be specified by the State Commission.

3.14 UNTIL A GOVERNMENT COMPANY OR ANY AUTHORITY OR CORPORATION IS NOTIFIED BY THE STATE GOVERNMENT, THE STATE TRANSMISSION UTILITY SHALL OPERATE THE STATE LOAD DESPATCH CENTRE.