

**N/156/17**

**BEFORE THE KARNATAKA ELECTRICITY REGULATORY COMMISSION AT BENGALURU**

**No. 16 C-1, Miller Tank Bed Area, Vasanth Nagar, Bengaluru- 560052**

**Dated: 14<sup>th</sup> June 2018**

**Present:**

Shri M.K. Shankaralinge Gowda	..	Chairman
Shri H.D. Arun Kumar	..	Member
Shri D.B. Manival Raju	..	Member

**OP No. 90/2017**

**In the matter of Amendments and Modifications on KERC (Smart Grid) Regulations, 2015  
and KERC (Electricity Supply) Code, 2004.**

1. Chamundeshwari Electricity Supply Corporation Ltd.,  
29, Kaveri Grameena Bank Road, Vijayanagar 2<sup>nd</sup> stage,  
Mysuru- 570 009
2. Mangalore Electricity Supply Company Ltd.,  
MESCOM Bhavana, Kavoov Cross Road,  
Mangaluru- 575 004  
(Represented by Just Law, Advocates) ... Petitioners

**ORDER**

- 1) Chamundeshwari Electricity Supply Corporation Limited (CESC), the 1<sup>st</sup> petitioner, had filed this petition seeking certain amendments viz., addition of some definitions and modifications to the existing KERC (Smart Grid) Regulations, 2015 and KERC (Electricity Supply) Code, 2004, for better implementation of the of the Smart Grid Project.
- 2) The Commission, while hearing the petition observed that, since the other ESCOMs are also in the process of starting Smart Grid pilot projects, they

may also file the petition with regard to the changes required in the Regulations. The Commission had allowed sufficient time to the other ESCOMs to file the petitions. The Mangalore Electricity Supply Company Limited (MESCOM) had impleaded itself as Petitioner No.2 in the case on 28.11.2017. Thereafter, on 10.4.2018 at the instance of the Commission, the CESC had filed a memo producing concept paper on Smart Grid so as to invite comments and suggestions from all the stakeholders.

3) After examining the contents of the petition, we observe as follows:

- i. CESC has not completed the implementation of the Pilot project of Smart Grid, which was taken up during 2013, in VV Mohalla, Mysuru City, utilising grants from MoP, funds from capex programme of CESC & the system integrator (M/s Enzen Global Solutions) in the ratio of 50%: 25% : 25% to meet the total cost of Rs.32.59 Crores. The work was awarded to the said system integrator on 30.04.2014, with a time line of 18 months for completion. The Pilot project should have been completed by the end of October, 2015 as per DWA. But, the project is still stated to be under progress.
- ii. The pilot project was started by CESC well before the KERC (Smart Grid) Regulations, 2015 were notified by the Commission. Even after the Smart Grid Regulations were notified, the CESC has not indicated as to whether it has made efforts to comply with the Smart Grid Regulations, in matters like constituting a Smart Grid Cell, indicating its roles & responsibilities, conducting Baseline study and development of data, Formulating the Smart Grid Plan, Programmes and Projects and whether, it has attempted to take up Monitoring, Evaluation, Measurement and Verification of execution and performance of the Smart Grid Programme and Project.
- iii) As the pilot project has not been operationalized, the consumer interaction and any agreement with the consumers to participate in DSM, Demand Response (DR) and other functionalities of the

Smart Grid project are not yet taken up by CESC. The CESC is required to conduct a number of consumer interaction meetings to involve them voluntarily in the Smart grid initiative and run the DSM, DR and Remote operation as well as data handling functionalities on a mock basis, to demonstrate to the consumers, the benefits of the project.

- iv) After such an exercise, the CESC can fine-tune the implementation of the Smart Grid functionalities and thereafter seek amendments and modifications to the existing Regulations like CoS, Standards of Performance and Tariff Regulations apart from the Smart Grid Regulations.
  - v) There should be uniform definitions throughout the Country for Smart Meter, Blackout, Brownout, Communication system, protocol etc. and these definitions are to be developed in consultation with the Indian Smart Grid Forum (ISGF) (a PPP initiative of MoP to advise Government on policies and programmes for promotion of Smart Grids in India) and CEA.
  - vi) Without a full fledged, time tested Smart Grid project, learning and proper analysis of data on different parameters, it is not practicable to prescribe the tariff incentives, Demand Response and other functionalities upfront.
- 4) Therefore, the Commission directed the CESC under this office letter dated 2.5.2018 to explain the significance of each of the proposed definitions and functionalities to justify the amendments sought and to submit a detailed reply after consulting the CEA and ISGF, within a period of one month for taking further action. Also, the views of Indian Smart Grid Forum were sought in the matter.
- 5) The Commission notes that no reply is received from CESC so far. The reply of ISGF is received on 15.5.2018. The gist of the reply is as follows:

*'1. Smart Grid is an evolving concept. As new products and solutions are introduced in different technology domains (electrical engineering, renewable energy, energy storage, automation, communication, information technologies, robotics, artificial intelligence etc) many of them may be relevant and cost effective to deploy for optimizing the resources and operations of the electric grid. Hence new and new technologies will constantly get added to the bouquet of smart grid solutions. Keeping this in mind, the Model Smart Grid Regulations issued by Forum of Regulators decided not to specify any products or technologies; rather the regulations specified few functionalities in the model regulations (Chapter-1, Section-2) and added a list of indicative components of the smart grid projects in Schedule –X.*

*2. Smart Grid Regulations issued by KERC is in line with Model Smart Grid Regulations issued by Forum of Regulators. Hence there is no need for defining some of the products and functionalities as requested by CESC. For example, Peak Load Management can be achieved through various means – time of use pricing signals, demand response with incentives, critical peak pricing with penalties and through direct load control by the utility remotely. Radio Frequency, GPRS etc are different technologies which are in use today that may not be relevant in future. MDAS, MDM etc are key components of smart metering systems (or AMI) and the specifications of these products vary from OEM to OEM. It is not wise to bind these products and solutions through a regulation which will seriously limit the innovation and further evolution of them.*

*3. In the Regulations issued by KERC (Chapter –IV, Section 3) there is a provision for utilities to submit Detailed Project Report (DPR) to the Commission for project approval (if the project cost is above Rs 10 crore). All the additional functionalities, products and solutions that are not covered in the Smart Grid Regulations may be included and defined in the DPRs that the Commission can review and approve.*

*In view of the above explanations, ISGF is of the opinion that the Smart Grid Regulations issued by KERC need not be amended to add the DEFINITIONS and PROCEDURES as requested by CESC. Any additional procedures to be implemented by a utility as part of new technologies implemented by them may be submitted to the Commission for review and approval as and when required.'*

6) We note that, the KERC (Smart Grid) Regulations, 2015 have been framed based on the model Regulations issued by the FoR and consider that any amendment or the modifications to the Regulations should generally originate from the FoR itself, so that there is uniformity in the Smart Grid Regulations in the country. The petition does not disclose the reasons/justifications for the amendments sought for; the 1<sup>st</sup> petitioner's Pilot project is yet to be operationalized; and the pros and cons of the implementation are yet to be established by CESC. Therefore, we are of the considered opinion that the petition is premature.

7) For the foregoing reasons, we pass the following:

**ORDER**

The petition is dismissed.

Sd/-	Sd/-	Sd/-
(M.K. SHANKARALINGE GOWDA)	(H.D. ARUN KUMAR)	(D.B. MANIVAL RAJU)
Chairman	Member	Member