#### BEFORE THE KERALA STATE ELECTRICITY REGULATORY COMMISSION THIRUVANANTHAPURAM

Present: Shri. T.M.Manoharan, Chairman Shri. P. Parameswaran, Member Shri. Mathew George, Member

In the matter of: The necessity of power connection up to 150 KVA Contract Demand in LT IVA Tariff for LT Industrial Consumers, having 160 KVA transformer.

AND

Petition to take action against KSEB as per Sec.142 of the Electricity Act 2003, for noncompliance of Supply Code clause 4(5) (b).

- Petitioner : Sri.Shaji Sebastian,Chairman,Industrial Electricity Consumers Consortium, Manakkat Building, 21/67/A1, University Road, Kochi University P.O, Kochi- 682022.
- **Respondents :**1. Kerala State Electricity Board, Vydyuthi Bhavanam, Pattom,Thiruvananthapuram, Pin No. 695 004, Represented by Secretary.
  - The Chairman, Kerala State Electricity Board, VydyuthiBhavanam, Pattom, Thiruvanathapuram, Pin: 695 004.

## O.P. No. 39/13 DATED 24/06/2014

### Background of the Case:

- New electric connection under low tension is given only up to a connected load of 100 kVA. But consumers existing as on date of implementation of Kerala Electricity Supply Code, 2005, i.e 02-03-2005, were permitted to operate in low tension up to a load of 150 kVA, in compliance with the fourth amendment of Supply Code in 2008.
- The Commission vide its order dated 15-03-2011 in DP 84/2010, directed KSEB to make appropriate changes in Clause 51 of the KSEB terms &

conditions of supply,2005 to remove penalization of unauthorized additional load of LT Industrial consumers and commercial consumers who opt for maximum demand based tariff.

- **3.** It was also ordered that extending the capacity limit to 150 kVA for LT consumers having maximum demand tariff could not be allowed as the capacity limit for LT supply is fixed as 100kVA.
- 4. After the implementation of demand based tariff for LT consumers, a lot of consumers in KSEB have opted for the same and availed the contract demand of 150 kVA. The section authorities are reported to have sanctioned this request without any statutory backing.
- 5. Now, with the enactment of Kerala Electricity Supply Code, 2014 on 31<sup>st</sup> January, 2014 the maximum contract demand permissible for low tension consumer who avails power under demand based metering is fixed as 100 kVA, irrespective of his connected load as specified in sub regulation (2) of Regulation 11. Hence, KSEB started issuing notices to the above category of consumers to avail supply at High Tension.

## Prayer of the Petitioner:

- 6. The main submission and arguments submitted by the petitioner on various issues are quoted as follows:
- (1) All LT IV Industrial Consumers who got LT connection before 2/3/05 were eligible for LT IV Industrial connection up to a load of 150 KVA. This facility which was lost with Supply Code, 2005, was reinstalled with the Fourth Amendment of the Supply Code No. KSERC/ III/ Supply Code Fourth Amendment/2008, dated October 24, 2008, Thiruvananthapuram. Availing the above facility, a lot of Consumers have gone for expansion and got connection in LT IV Tariff. After the implementation of the TOD for LT consumers as optional from 1/11/10, a lot of Consumers all over Kerala have opted for TOD Tariff and executed Agreement for availing TOD Tariff up to 150 KVA.
- (2) The facility of Connected Load up to 150 KVA is as per Supply Code Fourth Amendment and is a Regulation implemented complying with Electricity (Procedure for Previous Publication) Rules, 2005 .Further changes especially the changes affecting the facility and benefit of a consumer can be implemented only after having a Previous Publication

and conducting all the proceedings and procedures as per the Previous Publication Rules including public hearing and the General Clause Act 1897.

- (3) Now arbitrarily KSEB has dispensed with the execution of LT agreement up to 150KVA even for LT IV Industrial Consumer who obtained Service Connection before 2/3/05.
- (4) With the Order on 'OP No.6/12 and 7/12' of the Commission, the era of MG agreement was over and at present the Consumer is getting the Power Supply after paying the full cost of the respective Transformer and other works, if the load requirement is above 50KVA. For loads above 50 KVA and up to 80KVA, 100 KVA Transformer is generally provided and for loads above 80KVA and up to 150KVA, 160KVA Transformer is provided. A Transformer can be comfortably loaded up to 90% to 95% of the full load capacity in KVA Maximum Demand, where half an hour average value is taken as the maximum demand. 100 KVA Transformer is generally loaded up to 90 to 95 KVA leaving a margin of safety 10 to 5 KVA while 160KVA Transformer is generally loaded up to 140KVA to 152KVA.
- (5) As per the present Tariff Order, the permissible load capacity that can be utilized in the third zone is 30%. For an LT consumer, the 30% given is too much on higher side and it can be limited to '10-20%'. The capacity requirement of 100KVA Transformer for 90KVA loading and 160KVA Transformer for 150KVA loading will match comfortably with the above excess load requirement in third zone.
- (6) For an ideal healthy distribution system the HT to LT ratio of line length is 1:1. It does not have any implication upon the capacity and loading of the Transformer. In Kerala it is a common practice to have 'HT/LT' two tier distribution arrangement system in which 11KV line is drawn over '415V, LT, 3 Phase line'. The sanctity of the HT to LT ratio will become significant only when there is extra-long distribution network in LT, catering numerous Consumers spread over a vast area. Since Transformer is a requirement for every connection above 50KVA and Consumer is providing his Meter very close to the Transformer Terminal, there is no LT extension and hence all LT connections above 50KVA is only contributing and facilitating KSEB to have a better 'LT/HT' ratio.

- (7) By limiting the capacity of the LT Consumer up to 100KVA there is no contribution towards reduction in energy losses. In fact the loss will only increase because of the unutilized capacity remaining in a Transformer. The unutilized capacity is 60KVA in 160KVA Transformer. This balance capacity 60KVA remaining as unutilized is in fact a 'National Waste' and will be contributing to the energy wastage and losses, because the Transformer is more efficient towards its full load region.
- (8) For installing and maintaining a Transformer of capacity 160KVA, huge investment is a requirement. After investing heavily for 160 KVA Transformer, keeping idle the 60KVA capacity constitutes to unhealthy and uneconomical investment for a consumer with which the Industry will become sick.
- (9) The typical distribution pattern is in such a way that above 50KVA requirement, a separate Transformer is provided to a Consumer by KSEB. Consumer is spending entire money for the required 11 KV line extension and towards the cost of the Transformer with its protection devices. Once entire cost is spent by a consumer for the Transformer and line, it can be considered only as the property of that particular Consumer to address his requirement. No other Consumers are permitted to share the spare capacity of the Transformer even if it exists. After the huge investment towards an exclusive Transformer, it is not fair and just to prevent a Consumer from using its full capacity.
- (10) As per the proposed classification, a small consumer requiring 101KVA connection will have to spend initial capital expenditure equivalent to 3000 KVA, i.e., for 1KVA increase above 100KVA, the burden of the Consumer towards initial investment is very huge. Formality and maintenance is heavy and uneconomical.
- (11) If we insist for 11KV connection above 100KVA, the initial investment for the substation itself including 11KV Metering, HTSFU, Earthing, Transformer etc., will be more than Rs.10,00,000/-(Rs. Ten Lakh) and technical formalities are also heavy and cumbersome, requiring 'Electrical Inspectorate approval, Inspection, sanction for energization, etc., and periodical Inspection with formidable heavy fees and formalities'.
- (12) In the original Supply Code, which came into force on 2/3/05, the maximum 'Contract Demand/Connected Load' allotted for

415V/11KV/22KV/33KV/66KV are subsequently enhanced in fourth amendment which came in to force from 24/10/08, and are as follows:-

Supply voltage	Maximum 'Connected Load/ Contract Demand' as per Supply Code	Maximum 'Connected Load/ Contract Demand' as per Amended Supply
	2/3/05	Code24/10/08
415V	100KVA	150KVA
11KV	3000KVA	3000KVA
22KV	6000KVA	6000KVA
33KV	6000KVA	12,000KVA
66KV	8000KVA	20,000KVA
110KV	20,000KVA	40,000KVA
220KV	>20,000KVA	>40,000KVA

From above it is seen that during the time of Amendment the 'Connected Load/ Contract Demand' of Voltage Bands has been amended only for 415V, 33KV, 66KV, 110KV and 220KV. Now there is no requirement for an amendment exclusively for LT consumers i.e. consumers of 415 Voltage. If the KVA demand of LT IV Small Industrial Consumers is reduced it will be a great discrimination towards the Small Industries who are heavily contributing to the 'better Load Factor' of KSEB and towards infrastructure building of the Nation.

- (13) The Amendment made on 4/10/08 was done after public hearing complying with General Clause Act 1897 and as per Electricity Procedure of previous publication Rules 2005.
- (14) Small Industries are generally 'run and managed' by individuals and most of the formalities, procedures and requirements of Statutory Bodies and Departments like 'Sales Tax, Service Tax, Income Tax, Pollution Control Board, Factories and Boilers, Health, Legal, Metrology, Food, Fire and Safety, Labour, Local body, ESI and PF along with Electricity Board' are done by a single person. The management of Small Scale Industries are generally done as a 'one-man-show'. Appointment of a Technical person exclusive for maintenance of Electrical Systems as Supervisor, with a minimum qualification of 'Electrical Engineering Diploma' is a statutory requirement for availing HT Supply. By getting converted into HT the poor Small Industrial Consumer is again burdened by appointing the Supervisor.

- (15) More than 300 Consumers exist between 100KVA and160KVA and they are already exempted from restricting their contract demand up to 100KVA, but their usage is limited up to the present executed value of Contract Demand and they will not be permitted to enhance their capacity. In fact the consumers who are having connection above 100KVA have been categorized separately without a locus standi among LT Consumer and HT Consumers. In Tariff order 2013 -14 a new category is introduced along with HT Tariff as clause (9), with which, 'the consumers above 100 KVA are going to be heavily burdened with HT Fixed Charges, i.e. 300/- per KVA and LT Energy Charges i.e. 4.70/- per KWH'. It looks awkward that both the fixed charges and energy charges are highest. This clause was not even demanded in ARR ERC petition filed by KSEB.
  - 7. Relief Sought: The following reliefs were sought for by the petitioner.
    - (1) Hon. Commission may direct KSEB to comply with Amended Supply Code 'No. KSERC/ III/ Supply Code Fourth Amendment/2008/ Dated October 24, 2008', Thiruvananthapuram, and allow Consumers to have load up to 150KVA.
    - (2) The Commission may Amend Supply Code Clause 4(5) in such a way that all LT IV Industrial Consumer will be eligible for 150KVA load in LT Category.
    - (3) The Commission may punish KSEB suitably for noncompliance of the directives causing heavy damage and delay to the Industrial Consumers in availing connection in LT IV category above 150 KVA.
    - (4) An interim direction may be given by the Commission, not to disconnect the supply of the Consumers having Contract Demand between 100KVA and 150KVA in general and above the enhancement request of 67 individual consumers above 100 KVA.

### Summary of written statement submitted by respondents:

- 8. This petition is prima facie not maintainable in law for several reasons as cited under.
  - (1) The petitioner has no locus standi to file this petition. A petition under Clause 22(d) of the KSERC (Conduct of Business) Regulations, 2003 lies

before this Hon'ble Commission only if the matter agitated is filed by an affected party. The petitioner does not have a case that he is an affected party as envisaged in Clause 22(d) of the above regulation. The Petitioner in the present petition has not claimed that he is an affected party or can be stated to be an affected party in the matter. The apex court as well as Hon'ble Appellate Tribunal for Electricity in a plethora of cases has clearly spelt out who all can claim to be an affected party in a proceeding.

- (2) Since the Petitioner is well aware that he is not an affected party consequent to any orders of the Hon'ble Commission, the Petitioner has tried to rope in certain consumers as affected party. For this purpose, the Petitioner has submitted nominations from some consumers. However, the Business Regulations notified by the Hon'ble Commission does not allow such proceedings. The petitions can be filed only by an affected party as per Clause 22 (d) of the Regulations and not by a nominated representative. Also, during the proceedings before the Hon'ble Commission, the petition can be represented only through an authorized employee or an authorized professional. The Petitioner does not come under any of these categories and thus, the petition is not in accordance with the provisions in the Business Regulations. Further, a verification of the Connected Load of the consumers listed in the petition reveal that almost all the consumers has a Connected Load less than 100kW and their recorded maximum demand as well as Contract Demand is very below 100kVA. Connected Load of some consumers are even less than 20kW and thus does not come under the purview of Demand Based Billing Tariff. Thus the consumers listed cannot be termed as an affected party in respect of the ceiling specified by the Hon'ble Commission for availing LT Supply.
- (3) The Petition can be admitted only if the reliefs sought could be provided as part of the proceedings. However, the reliefs sought under the petition is that of amending the Supply Code which is a regulation notified by the Hon'ble Commission after due process. A Regulation cannot be framed nor amended through a petition filed by any person. The rules for framing regulations and amendments thereof is notified by Government of India in exercise of powers conferred by sub-Section (1) and Clause (z) of sub-Section (2) of Section 176 of the Electricity Act, 2003. Accordingly, the draft of the regulations has to go through the process of previous publication and the Commission shall consider all the objections and suggestions on the draft received from all stake holders and finalise the regulations and notify the same in the official gazette. Clearly no regulation can be framed nor amended based on petitions filed and thus the present petition is not maintainable under law.

- (4) To enable the intervention of the Hon'ble Commission, the Petitioner has preferred a relief to take action against KSEB Ltd. under Section 142 of the Act, without any basis or any documentary evidence. The Petitioner has claimed that KSEB Ltd. is insisting for availing HT supply whenever the consumer request for enhancement of Contract Demand above 100kVA. The Petitioner suggests that this action is in contravention of the provisions of the Supply Code. It is submitted that the Hon'ble Commission while introducing Optional Demand Based Billing has determined the upper ceiling for continuing under LT category as 100kVA. The Hon'ble Commission in DP No. 84/2010 has specified the upper ceiling for availing supply under LT shall be 100kVA for all consumers availing supply under Demand Based Billing. In connection with the implementation of Optional ToD Metering and Billing, the Petitioner had submitted the same plea before the Hon'ble Commission and the request was denied by the Hon'ble Commission upholding its earlier decision. The KSEB Ltd. as a licensee follows the direction in respect of the maximum Contract Demand allowble for providing LT supply connection. KSEB Ltd. has never violated the provisions stipulated in the Supply Code Regulations. Thus, the Petitioner is well aware that the Hon'ble Commission has already decided the upper ceiling for availing LT supply and that KSEB Ltd. is only following the directions of the Hon'ble Commission in the matter. Thus, the plea for action against KSEB Ltd. under Section 142 is a deliberate attempt to drag the Hon'ble Commission into a matter which has already been decided by the Hon'ble Commission.
- (5) At the time of mandatory implementation of ToD metering and billing as per the tariff order dated 25-07-2012, the Hon'ble Commission has given a clear direction vide letter No. 507/CT/2012/KSERC/1148 dated 21-12-201 in the matter of Contract Demand of LT consumers connected to the system prior to the implementation of the Supply Code Regulations, 2005. One time relaxation was given to those consumers genuinely requiring a contract demand exceeding 100kVA for continuing under LT connection, subject to the condition that contract demand declared shall not exceed their present connected load. (i.e., the load based on which billing was done during November 2012) and that such consumer had connected load above 100 kVA prior to 02-03-2005.
- (6) It is humbly submitted that the new Supply Code Regulations, 2014 notified by the Hon'ble Commission after conducting the public hearing also limits the maximum connected load and contract demand for LT supply as 100 kVA. The model Supply Code put forwarded by the Forum of Regulators suggested to provide LT supply up to a contracted demand of 50kW only.In most of the other States, the limit prescribed for providing LT supply is

much lower than 100 kVA to ensure a lower distribution loss. If the limit prescribed by the Commission in the Supply Code Regulations is further enhanced, the distribution losses in Kerala system will increase due to meter reading and billing at LT level which in turn will increase the average cost of supply of all consumers. Thus the plea is against public interest and may be disallowed.

- (7) In the light of the above submissions, it is humbly prayed that the petition filed against KSEB Ltd. in this regard may be dismissed with cost.
- 9. As directed in the daily order dated 19-02-2014, the petitioner has submitted the amended petition in O.P.No.39/2013.

### **Amended Petition:**

- 10. The submission and arguments submitted by the petitioner on the issue is quoted as follows:
  - (1) Subsequent to the filing of the Petition and before hearing, the new Supply Code 2014 with effect from 1-4-2014 was published. The Contract Demand of LT connections were reduced to 100 KVA (Clause 8 and 11), and exemptions were given for the consumers who had a sanctioned load above 100 KVA, subject to the realization of low voltage Supply Surcharge until an upward revision of Connected Load is sought by the consumer.
  - (2) The new Supply Code permits Contract Demand above 100 KVA for applicants occupying multi storied building, having 'bus duct or cable along with own Transformer Station'. This is, at par with the LT Industrial consumers who are remitting the 'cost of the Transformer and line extension' with KSEB and providing LT meter very close to the Transformer. Hence that specific exemption can be extended also to Small Industrial Consumers or else it will be a grave discrimination.
  - (3) The Maximum Contract Demand of HT and EHT consumers coming under the category of 33kV, 66kV, 110kV and 220kV were doubled in the amendment of Supply Code on 24.10.2008 while the LT Consumers Contract Demand was increased from 100kVA to 150kVA. Reducing only the increased Contract Demand of the LT Industrial consumers is again discrimination.
  - (4) Even though KSEB will be extending LT connection up to 100kVA without Transformers, due to the 'limitation of starting current up to 1.5 times and Harmonics', most of the industries will not be able to utilize this facility. Hence the KSEB will be forced to provide exclusive Transformer for an

Industrial Consumer, and Sec.46 of the Electricity Act mandates the payment of the cost of Transformer by the consumer. For consumption above 85kVA, 160 kVA Transformer is a requirement. Once consumer is paying for 160kVA Transformer, he should be eligible to consume its full capacity and denial of the same is unjust. Once utility is restricted to 100kVA the energy loss will increase because the Transformers are most efficient towards the Full Load Region. Once meter is connected close to the 160kVA Transformer, there will not be LT line contributing to the better HT/LT ratio and also reducing the distribution losses.

- (5) The consumers who have executed the agreement above 100kVA before 2005 is categorized as deemed HT. They will be forced to pay the fixed charges of HT and energy charges of LT with which the running of the factory will become unviable. Similar to the above if they were subjected to the Low Voltage Surcharge they will be forced to close down the Industry due to this heavy burden.
- (6) Since the input raw material cost of all Ice Factories are much less than the electricity cost and all Plastic Manufacturing units are having the heating load more than 20% of the connected load, they will become power intensive if converted to HT, leading to the closure of the industry.Lack of land and space are a major hindrance for large industries in Kerala. Hence only small industries are possible and they seem to be the sole consumers to help KSEB by consuming Energy during Off Peak Hours. We are also planning to acknowledge and appreciate industries shifting their usage from Peak Hours to Off Peak Hours in public functions, in association with KSEB. A few Ice Factories and Rubber Factories have shifted their operation from peak hours to off peak hours. In order to have the shifting and to have a better Load Factor for KSEB Grid, permitting LT IV consumers up to 150kVA is very essential.
- (7) The tiresome procedures and huge investment for HT connection will adversely affect the existing industries leading to the closure and new entrepreneurs will be discouraged. The existing units are trying to have a division of the industry with two building numbers, in two different names for availing two separate connections leading to heavy losses and complications. In order to avoid this KSEB should permit up to 150kVA in LT for those consumers who are ready to pay for the cost of the Transformer and line extension.
- (8) For a 160 KVA Transformer the fault current calculated is 2.5 kA where as for a 500 KVA Transformer the fault current is 13.1 kA. The Electrical Inspectorate mandates entire Earthing calculation, Cable selection, Switch

Gear Selection etc. based on 13.1kA fault current with which the consumer is getting subjected to heavy burden. The HT metering is very expensive and complicated not affordable for a small consumer. Hence the consumer paying for a 160 KVA Transformer shall be permitted to have LT metering and LT connection as there is no loss for KSEB.

- 11. **Prayer.** The prayers in the amended petition are the following:
  - (1) Direct KSEB to provide LT connection up to 150 kVA for Industrial Consumers who are paying the cost of the Transformer '100/160 kVA' and installing the LT meter very close to the Transformer reducing the Distribution Loss.
  - (2) We also humbly request the Hon. Commission to give us further 15 days time for submitting the registration certificate.

# Hearing of Petition:

12. Hearing of the petition was conducted on19-02-2014 and 29-04-2014 at Court Room of the Kerala State Electricity Regulatory Commission, Thiruvanathapuram. The petitioner presented the case in detail. The respondents challenged the locus-standi of the petion.

## Analysis and decision of the Commission:

13.Clause 22 of KSERC (Conduct of Business) Regulations, 2003 clearly states that

"22. Initiation of proceedings.- Proceedings may be initiated under

these Regulations in one of the following manners:-

- (a) Suo motu by the Commission,
- (b) Upon a petition filed by the Board or a licensee,
- (c) Upon a petition filed by the Government of Kerala,
- (d) Upon a petition filed by an affected party. "

The Petitioner in the present petition has not claimed that he is an affected party or can be stated to be an affected party in the matter. The petition can be filed only by an affected party as per Clause 22 (d) of the Regulations and not by a nominated representative.

**14.** Sub regulation (1) of regulation 30 of the KSERC(Conduct of business) Regulations,2003 states as follows:

"A party to any proceedings under this chapter may be represented before the Commission in one of the following manners, namely:-

(a) In person

(b) Through an authorized employee

(c) Through an authorized professional who may be an advocate or a chartered accountant or a cost and works accountant or a company secretary or a graduate chartered engineer holding a certificate of practice."

The petition OP 39/2013 was filed by Sri. Shaji Sebastian on 1.1.2014 in his capacity as Chairman, Industrial Electricity Consumers Consortium, Kochi, as 'authorised / nominated' representative of 12 non-consumer association and 70 non individual consumers. The Petitioner is not an affected party. He claims that he is only an 'authorised / nominated' representative of consumers. Commission cannot initiate proceedings under Regulation 22 of Conduct of Business Regulation based upon such a petition.

15. Sri. Shaji Sebastian cannot represent any party as per Clause (e) of sub regulation (1) of Regulation 30 of the KSERC (Conduct of Business) Regulations, 2003. Since he does not validly claim to be an authorised employee or advocate or chartered accountant or cost and works accountant or company secretary or graduate chartered engineer holding certificate of practice.

16. The petitioner was allowed to submit documents, if any, in support of his locusstandi to file the petition and he has submitted explanations and arguments to establish his locus-standi in support of Clause 31(1) of the KSERC (Conduct of business) Regulations, 2003. The Petitioner submitted the additional statement to establish locus-standi on 29.05.2014.

Commission carefully examined all the arguments raised by the Petitioner in the additional statement submitted by him on 29.5.2014 and came to the conclusion that he has failed to establish the locus–standi in the matter. Hence Commission concludes that Sri. Shaji Sebastian has no locus- standi to submit this petition and agitate the issues therein, before the Commission. 17. In view of the facts, circumstances and legal provisions explained above, the Commission decides not to admit the petition.

Sd/-P.Parameswaran Member (Engg) Sd/-Mathew George Member (Fin)

Sd/-T.M. Manoharan Chairman

Approved for issue

Secretary