

No. N/171/16

BEFORE THE KARNATAKA ELECTRICITY REGULATORY COMMISSION,

BENGALURU

Dated: 4th May 2017

Present:

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

OP No.89/2016

BETWEEN:

Bangalore Electricity Supply Company Ltd.,
K.R. circle, Bengaluru- 560 001.

PETITIONER

AND

Nil

RESPONDENT

ORDER

1. The Petitioner has filed this petition praying for considering specific consumption of 9797 units per installation per annum for IP sets in its jurisdiction for the purpose of approval of its Annual Revenue Requirement by the Commission.
2. During the course of hearing, the Federation of Karnataka Chambers of Commerce and Industry, (FKCCI), Bengaluru, stating to be an affected party had filed an application to intervene in the petition and sought time to file Objections. Further, the Counsel for the petitioner submitted that the matter in the petition is covered in the Tariff petition filed for FY-18. Considering such

submissions, while granting time to FKCCI to file its Objections, the Commission decided to consider this petition along with the Tariff petition of the petitioner.

3. In its Tariff Order dated 11.04.2017 issued in the case of BESCO, the Commission has passed the following Order, in respect of the issues raised in this petition, in Chapters 4 and 5, after considering the submissions of all the concerned:

“Chapter 4 of the Tariff Order:

XXXXXXXXXXXXXXXXXXXX

2. Sales to IP sets:

- i) The Commission in its Tariff Order dated 2nd March, 2015, had approved the specific consumption of IP-sets as 7,795 units/installation/annum for FY16, whereas as per the data of IP-set consumption reported by the BESCO in its tariff filing, the specific consumption works out to 7,846 units / installation / annum, which corresponds to an increase in the specific consumption by 51 units/installation / annum. The total IP-set consumption reported for the FY16 as per the Format D-2 filed by the BESCO is 6,189.80 MU, whereas the IP-set consumption approved by the Commission was 5,625.26 MU. The difference in consumption between the approved and reported for FY16 is 564.54 MU. Thus, the quantum of sales to the IP-sets' category has exceeded the approved quantum by 564.54 MU and the specific consumption has increased by 51 units / installation / annum for the FY16.
- ii) Further, the Commission had approved 7,29,150 as the number of IP-set installations for the FY16, but, the actual number of installations for which the electricity is being supplied, as reported by the BESCO, is 8,09,178. The difference in the number of installations being 80,028 which corresponds to 11 percent increase in the number of installations, as against the approved number of installations for the FY16. The BESCO has reported that the increase in the number of installations over the approved number of installations for the FY16 is

due to the fact that, it has regularized a large number of un-authorized IP-sets in the field under the Regularization Scheme.

- iii) The Commission, in its Tariff Order dated 2nd March, 2015, had directed the BESCOM to compute IP-set consumption on the basis of meter readings of agricultural feeders segregated under NJY scheme, for the reason that the energy consumed by the IP-sets could be accurately measured at 11 kV level at the substations after allowing the losses prevailing in the distribution system, and to report the same in the following format, prescribed by the Commission.

TABLE-4.5

Format for IP set Consumption as per feeder-wise data

Month	Name of Sub-division	No. Segregated Agricultural Feeders in the subdivision	Monthly Consumption in MU as recorded in all the agricultural feeders at the substations pertaining to the division	Distribution loss(11kV line, DTCs, & LT line) Plus sales to other consumers if any, in MU (losses in all the agricultural feeders only to be considered)	Net consumption duly deducting the Distribution loss (11kV & LT) & any other loads if any	No. of IP sets connected to the agricultural feeders in the subdivision	Average consumption of IP / month (specific cons in units /IP/month)	Total no of IP sets in the subdivision (as per DCB)	Total sales of IP sets in MU
1	2	3	4	5	6=(4-5)	7	8	9	10=8*9
April to March	Subdivision-1 Subdivision-2 Subdivision								

- iv) The Commission has been following this methodology since 2014 (Tariff Order dated 12th May, 2014, for FY15), considering the fact that the ESCOMs have bifurcated the 11 KV feeders into separate rural and agricultural feeders. Earlier to this, in the absence of meters to IP-set installations, the Commission had allowed the ESCOMs to assess the IP-set consumption, based on the readings of the sample meters fixed to the distribution transformer Centers (DTCs) predominantly feeding to IP-set loads. The sample was selected in such a manner that two to three DTCs feeding predominantly to IP-set loads per O&M section were covered so that in each subdivision about ten such DTCs were covered. As per this methodology, the overall IP-consumption for the Company was being assessed on the basis of metered consumption arrived at from such sample meters fixed to DTCs.

- v) As per the IP-set data for FY13 submitted to the Commission by the BESCO, 729 DTCs covering 7,825 IP-sets out of the total 6,52,054 IP-sets in its jurisdiction was considered for assessing the total IP-set consumption for the Company. It is noted that the sample IP-sets considered to assess the total IP-set consumption for FY13, based on the sample DTCs meter readings constituted only 1.2 per cent. This means a small sample of IP-sets was considered while arriving at the total consumption as compared to a large sample (55% in March, 2017) being considered now after segregating the feeders under NJY. Therefore, for computing the overall IP-set consumption the latter method (consumption recorded in the meters fixed to segregated feeders) is a better representation in terms of metered consumption, as compared to the methodology followed earlier.
- vi) Accordingly, the BESCO was directed to furnish 11 kV feeder-wise IP-set consumption based on energy meters' reading data in respect of agriculture feeders segregated under NJY scheme, duly deducting the distribution losses prevailing in 11 kV lines, distribution transformers, and LT system, to the Commission, every month. However, the BESCO has not been submitting the IP-set consumption data based on the segregated agricultural feeders regularly, to the Commission.
- vii) The Commission, in its preliminary observations, had raised the issue of increase in both sales and number of installations as well as specific consumption of IP-set category and had also directed the BESCO to furnish necessary month-wise feeder-wise data as per the energy recorded in the segregated agricultural feeders, in support of its claims of IP-set consumption for the FY16.
- viii) The BESCO, in its reply to the preliminary observations, had submitted the consolidated month-wise IP-set consumption data in respect of the exclusive agricultural feeders segregated under NJY by deducting the uniform energy losses of 10 per cent prevailing in its 11 kV distribution system, for FY16, to the Commission. Further, it had stated that, the consumption of IP-sets has increased

as compared to the approved quantum in view of servicing of a large number of IP-sets under the Regularization Scheme during the FY16. The Commission had observed that the data of IP-set consumption from the exclusive agricultural feeders considering a uniform loss at 10 per cent, had many inconsistencies in respect of total consumption, total number of IP-sets serviced and specific consumption arrived as compared with the data filed by the BESCO in the format D-2 of its Tariff filing and its replies to the Commission's observations. Further, the Commission had observed that the increase in IP sales for the FY16 may be partly due to the fact that the BESCO has serviced a larger number of IP-sets under regularization scheme, than it had projected earlier.

- ix) Accordingly, the Commission's observations were communicated to the BESCO in the form of rejoinders, directing it to rectify the discrepancies pointed out duly computing the IP-set consumption on the basis of segregated agricultural feeders, reworking the energy losses as per the BESCO's energy flow diagram.
- x) In response, the BESCO has submitted details of IP-set consumption and has sought some more time to compute the revised IP-set consumption based on the meter reading data of agricultural feeders segregated under NJY, reworking the energy losses prevailing in the 11 kV distribution system, as directed. On verification of the IP-consumption data furnished in respect of agriculture feeders, it was observed that the distribution loss figures reckoned to compute the net IP-set consumption in the feeders, is not based on actual calculation considering the distribution network sketches.
- xi) The BESCO vide its letter No. BESCO/BC-26/F-2411/2009-10/1315, dated 30th January, 2017, has submitted the revised IP-set consumption for FY16 as 5777.77 MU, as against 6,189.80 MU indicated earlier, based on the segregated agricultural feeders, duly revising the energy losses to 13.22 per cent (instead of 10 per cent losses considered earlier in the format D2 of its Tariff filing). The Commission notes that considering the revised consumption of 5777.77 MU would result in a difference in consumption to an extent of 412.03 MU. The

BESCOM has not submitted its justification in support of it. Hence, the Commission decides to disallow a consumption of 412.03 MU from 6189.80 MU considered by BESCOM in its tariff application.

- xii) **In view of the above discussion, the Commission decides to approve IP set consumption of 5777.77 MU based on the revised meter reading data of the segregated agricultural feeders for the FY16, as against 6,189.80 MU shown by the BESCOM, in its Tariff filing, by disallowing sales to an extent of 412.03 MU.**

Accordingly, the Commission approves total sales of BESCOM as per actuals except in respect of IP sets for the reasons discussed above. The abstract of approved sales after APR of FY16 is as follows:

TABLE- 4.6

Approved sales for FY16 under APR

Category	Energy in MU's		
	Approved as per Tariff Order dated 02.03.2015	As filed by BESCOM	Approved as per APR
LT-2a*	5824.79	6056.05	6056.05
LT-2b	43.07	42.59	42.59
LT-3	1712.49	1754.07	1754.07
LT-4b	3.71	3.44	3.44
LT-4c	6.11	4.61	4.61
LT-5	1167.20	1150.39	1150.39
LT-6	474.54	404.68	404.68
LT-6	449.53	366.26	366.26
LT-7	167.43	167.52	167.52
HT-1	743.65	672.75	672.75
HT-2a	5804.90	4593.21	4593.21
HT-2b	2969.56	2614.90	2614.90
HT-2c	89.68	232.53	232.53
HT-3a & b	18.98	57.11	57.11
HT-4	116.07	96.59	96.59
HT-5	66.30	74.22	74.22
Sub total	19658.00	18290.92	18290.92
BJ/KJ	58.64	57.45	57.45
IP	5625.26	6189.80	5777.77
Sub total	5683.90	6247.25	5835.22
Grand total	25341.90	24538.17	24126.14

***Including BJ/KJ installations consuming more than 18 units/month**

Thus, the Commission approves total sales of 24126.14 MU for FY16 after APR.

Relevant extract of Chapter 5:

b) IP set sales projections for ARR of FY18

The Commission, in its Tariff Order dated 30th March, 2016, had approved specific consumption of IP sets as 8,037 units / installation / annum for the control period FY17 to FY19. However, based on the actual data of sales to IP sets as reported by the BESCO in its Tariff application, the Commission had approved the specific consumption as 7,795 units / installation / annum, for the FY16.

Further, the IP sales reported as per Format D-2 is 6,189.80 MU as against the approved sales of 5,625.26 MU, for FY16, that is an increase of 564.54 MU. However, the BESCO in its subsequent communication dated 30th January, 2017, to the Commission has submitted the revised sales of IP sets, based on the specific consumption arrived at from the meter readings of segregated agricultural feeders, as 5,777.77 MU, for FY16. This indicates an increase in sales to an extent of 152.51 MU which can be partly attributed to servicing of a large number of IP sets under Regularization Scheme. It is noted that the BESCO has already segregated substantial number of feeders under NJY as exclusive agricultural feeders and rural feeders, which means that power supply to IP sets could be regulated resulting in reduction in the agricultural consumption during the FY16.

The specific consumption works out to 7,324 units/installation/annum on the basis of the revised sales quantum of 5,777.77 MU reported by the BESCO for FY16. It is observed that the specific consumption of 7,324 units / installation / annum for FY16 is less than the approved specific consumption of 7,795 units / installation / annum by 471 units /installation/annum. Hence, it is appropriate to consider the specific consumption of 7,324 units / installation / annum for the ARR of FY18 also, considering the fact that this specific consumption is arrived at on the basis of metered consumption in respect of agricultural feeders

segregated under NJY. **In view of this, the Commission decides to approve the specific consumption of 7,324 units/installation /annum for the ARR of FY18.”**

4. Thus, the prayer in the petition is answered in the Tariff order dated 11.4.2017, as at above, and nothing survives for further consideration. Hence, this petition stands disposed of, in terms of the Tariff Order dated 11.4.2017.

Sd/-

(M.K.Shankaralinge Gowda)
Chairman

Sd/-

(H.D.Arun Kumar)
Member

Sd/-

(D.B.Manival Raju)
Member