REVISED SALES FORECAST FOR FY-19

No. of Installations:

As per Regulation No. 2.5.2, the ARR for Retail Supply Business shall be expected revenue from charges at the existing tariff. In order to estimate ERC, the accurate sale forecast is necessary. The energy sale for control period depends upon the population, policies of the Government, the various schemes under implementation, the No. of hours of supply available to consumers etc. These facts have an impact on growth of installations. Hence HESCOM has analyzed the growth of installations in the area of supply for the period from FY-13 to FY-17. Due to various reasons, some of the installations across the categories are being dismantled. This fact is also considered in estimation of sale forecast. In order to have accurate sale forecast, year-end number of installations and total energy sold across the categories during respective year is reviewed to ascertain the growth.

Projection for FY-18 and FY-19 based on 5 years CAGR from FY-13 to FY-17 No. of installations from FY-13 to FY-17:

| Tariff | FY-13 | FY-14 | FY-15 | FY-16 | FY-17 |
|--------------------|---------|---------|---------|---------|---------|
| LT1 - 18 units | 657949 | 641251 | 618729 | 594773 | 622737 |
| LT1 above 18 units | 106956 | 125014 | 142905 | 167789 | 140645 |
| Total BJ KJ | 764905 | 766265 | 761634 | 762562 | 763382 |
| LT-2a (i) | 981135 | 1021868 | 1065830 | 1130060 | 1204845 |
| LT-2a (ii) | 1072439 | 1117745 | 1165916 | 1193193 | 1221446 |
| LT-2(b)(i) | 2765 | 2985 | 3258 | 3650 | 4061 |
| LT-2(b)(ii) | 1731 | 1812 | 1941 | 2008 | 2148 |
| LT-3(i) | 185092 | 193809 | 204085 | 218641 | 233475 |
| LT-3(ii) | 89046 | 93477 | 99033 | 100194 | 103375 |
| LT-4(a) | 549616 | 568976 | 601939 | 637907 | 663011 |
| LT - 4b | 798 | 808 | 813 | 832 | 1276 |
| LT- 4c(i) | | 119 | 172 | 236 | 249 |
| LT-4c(ii) | 124 | 60 | 60 | 72 | 78 |
| LT-5 | 84870 | 91175 | 96255 | 101446 | 107801 |
| LT-6 | 25098 | 28191 | 31354 | 33051 | 38229 |
| LT-6 | 18472 | 19069 | 19665 | 20206 | 21545 |
| LT-7 | 26951 | 30040 | 35739 | 40371 | 43369 |
| LT Total | 3803042 | 3936399 | 4087694 | 4244429 | 4408290 |
| HT-1 | 179 | 202 | 224 | 245 | 275 |
| HT-2(a) | 1035 | 1103 | 1187 | 1287 | 1421 |
| HT - 2(b) | 478 | 458 | 464 | 486 | 514 |
| HT-2 (C)(i) | | 113 | 146 | 168 | 190 |
| HT-2 (C) (ii) | | 54 | 69 | 77 | 83 |
| HT - 3 (a)(i) | | 97 | 103 | 108 | 114 |
| HT - 3 (a)(ii) | | 57 | 71 | 92 | 100 |
| HT - 3 (a)(iii) | 134 | 14 | 12 | 10 | 10 |
| HT-3(b) | 0 | 0 | 2 | 2 | 2 |
| HT-4 | 61 | 36 | 33 | 31 | 30 |
| HT-5 | 27 | 37 | 47 | 55 | 52 |
| HT | 1914 | 2171 | 2358 | 2561 | 2791 |
| LT+HT | 3804956 | 3938570 | 4090052 | 4246990 | 4411081 |

The Hon'ble KERC has approved total No of installations of 4621912 for FY-18 vide Tariff Order Dtd 11-04-2017 and 4771526 vide MYT Order dtd : 30-03-2016.

Note:

- 1. BJ/KJ:
- 2. HT-2 C(i): Under this category 4 years CAGR is considered. Number of installations increased from 113 in FY-14 to 190 in FY-17. The CAGR works out to 18.91%.
- 3. HT-2 C(ii): Under this category 4 years CAGR is considered. Number of installations increased from 54 in FY-14 to 83 in FY-17. The CAGR works out to 15.41%.
- 4. HT-3a (i): Under this category 4 years CAGR is considered. Number of installations increased from 97 in FY-14 to 114 in FY-17. The CAGR works out to 5.53%.
- 5. HT-3a (ii): Under this category 4 years CAGR is considered. Number of installations increased from 57 in FY-14 to 100 in FY-17. The CAGR works out to 20.61%.
- 6. HT-3a (iii): Under this category 4 years CAGR is considered. Number of installations decreased from 14 in FY-14 to 10 in FY-17. The CAGR works out to -10.61%. Considering the trend it is projected that the number of installations may be 11 in FY-18 and 12 in FY-19. Hence, negative growth is ignored.
- 7. HT-4: Under this category 4 years CAGR is considered. Number of installations decreased from 36 in FY-14 to 30 in FY-17. The CAGR works out to -5.90%. Considering the trend it is projected that the number of installations may be 31 in FY-18 and 32 in FY-19. Hence, negative growth is ignored.

No of installations is worked out for FY-18 and FY-19 duly considering the compound annual growth rate for period from FY-13 to FY-17.

Normally, average of five year growth rates is indicated as CAGR. CAGR is calculated as under:

CAGR= $\{(Yn/Yi) ^(1/(n-1))-1\}*100$

For estimating CAGR for the period FY-13 to FY-17

Yn is the data pertaining to FY-17

Yi is the data pertaining to FY-13 and n=5

The details of Projection are as follows:

LT-1 Bhagya Jyothi/Kuteer Jyothi

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 764905 |
| 2 | No. of installations in FY-17 | 763382 |
| 3 | Increase in no of installations | -1523 |
| 4 | Increase in growth as per CAGR | -0.05% |
| 5 | No. of installations projected for FY-18 | 763002 |
| 6 | No. of installations projected for FY-19 | 762622 |

Note: The Hon'ble KERC has increased the subsidy quota of BJ /KJ Installations from 18 units to 40 units per month. Considering the September 2017 data the No. of installations have been worked out as noted below.

LT-1 Bhagya Jyothi/Kuteer Jyothi (Up to 40 unita):

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | Total No. of installations in FY-13 | 764905 |
| 2 | Total No. of installations in FY-17 | 763382 |
| 3 | Increase in no of installations | -1523 |
| 4 | No. of installations projected for FY-18 | 707457 |
| 5 | No. of installations projected for FY-19 | 707467 |

LT-1 Bhagya Jyothi/Kuteer Jyothi (Above 40 unita):

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | Total No. of installations in FY-13 | 764905 |
| 2 | Total No. of installations in FY-17 | 763382 |
| 3 | Increase in no of installations | -1523 |
| 4 | No. of installations projected for FY-18 | 55545 |
| 5 | No. of installations projected for FY-19 | 55155 |

The Hon'ble KERC has approved total No of installations of 600325 for FY-18 & 589421 for FY-19 vide Tariff Order Dtd 30.03.2016

LT-2(a) (i) Domestic installations (Urban):

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 981135 |
| 2 | No. of installations in FY-17 | 1204845 |
| 3 | Increase in no of installations | 223710 |
| 4 | Increase in growth as per CAGR | 5.27% |
| 5 | No. of installations projected for FY-18 | 1268329 |
| 6 | No. of installations projected for FY-19 | 1335157 |

LT-2(a) (ii) Domestic installations (Rural):

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 1072439 |
| 2 | No. of installations in FY-17 | 1221446 |
| 3 | Increase in no of installations | 149007 |
| 4 | Increase in growth as per CAGR | 3.31% |
| 5 | No. of installations projected for FY-18 | 1261827 |
| 6 | No. of installations projected for FY-19 | 1303542 |

The Hon'ble KERC has approved total No of installations of 2789253 under LT-2(a) for FY-18 vide Tariff Order Dtd 30.03.2016

LT-2(b)(i) Professional Educational Institutions (Urban):

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 2765 |
| 2 | No. of installations in FY-17 | 4061 |
| 3 | Increase in no of installations | 1296 |
| 4 | Increase in growth as per CAGR | 10.09% |
| 5 | No. of installations projected for FY-18 | 4471 |
| 6 | No. of installations projected for FY-19 | 4922 |

<u>LT-2(b)(ii) Professional Educational Institutions (Rural):</u>

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 1731 |
| 2 | No. of installations in FY-17 | 2148 |
| 3 | Increase in no of installations | 417 |
| 4 | Increase in growth as per CAGR | 5.54% |
| 5 | No. of installations projected for FY-18 | 2267 |
| 6 | No. of installations projected for FY-19 | 2393 |

The Hon'ble KERC has approved total No of installations of 7101 under LT-2(a) for FY-18 vide Tariff Order Dtd 30.03.2016

LT-3 (i) Commercial Installations (Urban):

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 185092 |
| 2 | No. of installations in FY-17 | 233475 |
| 3 | Increase in no of installations | 48383 |
| 4 | Increase in growth as per CAGR | 5.98% |
| 5 | No. of installations projected for FY-18 | 247431 |
| 6 | No. of installations projected for FY-19 | 262221 |

LT-3 (ii) Commercial Installations (Rural):

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 89046 |
| 2 | No. of installations in FY-17 | 103375 |
| 3 | Increase in no of installations | 14329 |
| 4 | Increase in growth as per CAGR | 3.80% |
| 5 | No. of installations projected for FY-18 | 107304 |
| 6 | No. of installations projected for FY-19 | 111382 |

The Hon'ble KERC has approved total No of installations of 365891 under LT-3 for FY-18 vide Tariff Order Dtd 30.03.2016

LT-4(a) IP Sets up to and inclusive of 10 HP:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 549616 |
| 2 | No. of installations in FY-17 | 663011 |
| 3 | Increase in no of installations | 113395 |
| 4 | Increase in growth as per CAGR | 4.80% |
| 5 | No. of installations projected for FY-18 | 694842 |
| 6 | No. of installations projected for FY-19 | 728201 |

The Hon'ble KERC has approved total No of installations of 734778 & 774703 under LT-4(a) for FY-18 & FY-19 respectively, vide Tariff Order Dtd 30.03.2016. Though the projections made by HESCOM is less than the Approved by KERC, Hescom desires to retain the No of installations as approved by KERC (762368 in FY-18 and 774703 in FY-19) in view of on-going works under NJY, creating infrastructure to Un authorised IP Sets and enumeration.

LT-4(b) IP Sets - Above 10 HP:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 798 |
| 2 | No. of installations in FY-17 | 1276 |
| 3 | Increase in no of installations | 478 |
| 4 | Increase in growth as per CAGR | 12.45% |
| 5 | No. of installations projected for FY-18 | 1435 |
| 6 | No. of installations projected for FY-19 | 1614 |

The Hon'ble KERC has approved total No of installations of 1393 under LT-4(b) for FY-18 vide Tariff Order Dtd 30.03.2016

LT-4(c) (i) IP Sets - Pvt Horticultural. Nurseries, Coffee & Tea plantations above 10HP:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-14 | 119 |
| 2 | No. of installations in FY-17 | 249 |
| 3 | Increase in no of installations | 130 |
| 4 | Increase in growth as per CAGR for 4 years | 27.90% |
| 5 | No. of installations projected for FY-18 | 318 |
| 6 | No. of installations projected for FY-19 | 407 |

Note: 4 Years CAGR is considered.

LT-4(c) (ii) IP Sets - Pvt Hortil. Nurseries, Coffee & Tea plantations above 10HP:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-14 | 60 |
| 2 | No. of installations in FY-16 | 87 |
| 3 | Increase in no of installations | 27 |
| 4 | Increase in growth as per CAGR for 4 years | 13.19% |
| 5 | No. of installations projected for FY-17 | 98 |

Note: 4 Years CAGR is considered.

The Hon'ble KERC has approved total No of installations of 538 under LT-4(c) for FY-18 vide Tariff Order Dtd 30.03.2016

LT-5 Heating & Motive Power

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 84870 |
| 2 | No. of installations in FY-17 | 107801 |
| 3 | Increase in no of installations | 22931 |
| 4 | Increase in growth as per CAGR | 6.16% |
| 5 | No. of installations projected for FY-18 | 114443 |
| 6 | No. of installations projected for FY-19 | 121495 |

The Hon'ble KERC has approved total No of installations of 120815 under LT-5 for FY-18 vide Tariff Order Dtd 30.03.2016

LT-6 Water Supply:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 25098 |
| 2 | No. of installations in FY-17 | 38229 |
| 3 | Increase in no of installations | 13131 |
| 4 | Increase in growth as per CAGR | 11.09% |
| 5 | No. of installations projected for FY-18 | 42470 |
| 6 | No. of installations projected for FY-19 | 47181 |

The Hon'ble KERC has approved total No of installations of 43248 under LT-6(a) for FY-18 vide Tariff Order Dtd 30.03.2016.

LT-6 Public Lighting:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 18472 |
| 2 | No. of installations in FY-17 | 21545 |
| 3 | Increase in no of installations | 3073 |
| 4 | Increase in growth as per CAGR | 3.92% |
| 5 | No. of installations projected for FY-18 | 22390 |
| 6 | No. of installations projected for FY-19 | 23268 |

The Hon'ble KERC has approved total No of installations of 22083 under LT-6(b) for FY-18 vide Tariff Order Dtd 30.03.2016.

LT-7 Temporary Supply:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 26951 |
| 2 | No. of installations in FY-17 | 43369 |
| 3 | Increase in no of installations | 16418 |
| 4 | Increase in growth as per CAGR | 12.63% |
| 5 | No. of installations projected for FY-18 | 48846 |
| 6 | No. of installations projected for FY-19 | 55015 |

The Hon'ble KERC has approved total No of installations of 53614 under LT-6(b) for FY-18 vide Tariff Order Dtd 30.03.2016.

HT-1 Water Supply, Sewerage Pumping:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 179 |
| 2 | No. of installations in FY-17 | 275 |
| 3 | Increase in no of installations | 96 |
| 4 | Increase in growth as per CAGR | 11.33% |
| 5 | No. of installations projected for FY-18 | 306 |
| 6 | No. of installations projected for FY-19 | 341 |

The Hon'ble KERC has approved total No of installations of 329 under HT-1 for FY-18 vide Tariff Order Dtd 30.03.2016.

HT-2 (a) Industrial:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 1035 |
| 2 | No. of installations in FY-17 | 1421 |
| 3 | Increase in no of installations | 386 |
| 4 | Increase in growth as per CAGR | 8.25% |
| 5 | No. of installations projected for FY-18 | 1538 |
| 6 | No. of installations projected for FY-19 | 1665 |

The Hon'ble KERC has approved total No of installations of 1727 under HT-2(a) for FY-18 vide Tariff Order Dtd 30.03.2016

HT-2 (b) Commercial:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 478 |
| 2 | No. of installations in FY-17 | 514 |
| 3 | Increase in no of installations | 36 |
| 4 | Increase in growth as per CAGR | 1.83% |
| 5 | No. of installations projected for FY-18 | 523 |
| 6 | No. of installations projected for FY-19 | 533 |

The Hon'ble KERC has approved total No of installations of 502 under HT-2(b) for FY-18 vide Tariff Order Dtd 30.03.2016.

HT-2 (c) (i) Hospitals.

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-14 | 113 |
| 2 | No. of installations in FY-17 | 190 |
| 3 | Increase in no of installations | 190 |
| 4 | Increase in growth as per CAGR | 18.91% |
| 5 | No. of installations projected for FY-18 | 226 |
| 6 | No. of installations projected for FY-19 | 269 |

Note: 4 Years CAGR is considered.

HT-2 (c) (ii) Hospitals.

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-14 | 54 |
| 2 | No. of installations in FY-17 | 83 |
| 3 | Increase in no of installations | 83 |
| 4 | Increase in growth as per CAGR | 15.41% |
| 5 | No. of installations projected for FY-18 | 96 |
| 6 | No. of installations projected for FY-19 | 111 |

Note: 4 Years CAGR is considered.

The Hon'ble KERC has approved total No of installations of 463 under HT-2(c) for FY-18 vide Tariff Order Dtd 30.03.2016.

HT-3 (a) (i) Irrigation.

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-14 | 97 |
| 2 | No. of installations in FY-17 | 114 |
| 3 | Increase in no of installations | 114 |
| 4 | Increase in growth as per CAGR | 5.53% |
| 5 | No. of installations projected for FY-18 | 120 |
| 6 | No. of installations projected for FY-19 | 127 |

Note: 4 Years CAGR is considered.

HT-3 (a) (ii) Irrigation

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-14 | 57 |
| 2 | No. of installations in FY-17 | 100 |
| 3 | Increase in no of installations | 100 |
| 4 | Increase in growth as per CAGR | 20.61% |
| 5 | No. of installations projected for FY-18 | 121 |
| 6 | No. of installations projected for FY-19 | 145 |

Note: 4 Years CAGR is considered.

HT-3 (a) (iii) Irrigation

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 134 |
| 2 | No. of installations in FY-17 | 10 |
| 3 | Increase in no of installations | -124 |
| 4 | Increase in growth as per CAGR | -10.61 |
| 5 | No. of installations projected for FY-18 | 11 |
| 6 | No. of installations projected for FY-19 | 12 |

Note: As CAGR is showing negative growth present trend considered.

HT-3 (b): Irrigation & agricultural farms, horticultural nurseries coffee tea plantations coconut & arecanut plantations..

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 0 |
| 2 | No. of installations in FY-17 | 2 |
| 3 | Increase in no of installations | 2 |
| 4 | Increase in growth as per CAGR | 0 |
| 5 | No. of installations projected for FY-18 | 2 |
| 6 | No. of installations projected for FY-19 | 2 |

Note: The present trend is considered.

The Hon'ble KERC has approved total No of installations of 310 under HT-3(a) & (b) for FY-18 vide Tariff Order Dtd 30.03.2016.

HT-4 Resident. Apartments:

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 61 |
| 2 | No. of installations in FY-17 | -31 |
| 3 | Increase in no of installations | 30 |
| 4 | Increase in growth as per CAGR | -31 |
| 5 | No. of installations projected for FY-18 | 31 |
| 6 | No. of installations projected for FY-19 | 32 |

Note: There is negative growth. Present trend considered.

The Hon'ble KERC has approved total No of installations of 34 under HT-4 for FY-18 vide Tariff Order Dtd 30.03.2016.

HT-5 Temporary Supply (above 67 HP):

| Sl No. | Particulars | No. of Installations |
|--------|--|----------------------|
| 1 | No. of installations in FY-13 | 27 |
| 2 | No. of installations in FY-17 | 52 |
| 3 | Increase in no of installations | 25 |
| 4 | Increase in growth as per CAGR | 17.80% |
| 5 | No. of installations projected for FY-18 | 61 |
| 6 | No. of installations projected for FY-19 | 72 |

The Hon'ble KERC has approved total No of installations of 101 under HT-5 for FY-18 vide Tariff Order Dtd 30.03.2016.

As per the above calculations 5 years CAGR is considered for all categories except LT-4(c.)(i) & (ii), HT-2(C) (ii), HT-3(a)(ii), HT-(a)(iii), where CAGR for 4 years considered and for HT-4 & HT-3(b) the present trend is considered.

Accordingly the No. of installations for FY-18 is as noted below.

Details of growth of Installations as per CAGR

| Tariff | FY-13 | FY-17 | Yn= FY-17 | Yi=FY- 13 | n=5 | CAGR | FY-18 | FY-19 |
|-----------------|---------|---------|--------------|--------------|--------------------|------------------------------|---------|---------|
| | | | 1/(n- 1) | Yn/Yi | Yn/Yi^ (1/(n-1) | [(Yn/Yi^(1/(n- 1))-1]*100 | | |
| ВЈ КЈ | 764905 | 763382 | 0.25 | 0.998 | 1.000 | -0.05 | 763002 | 762622 |
| LT-2a (i) | 981135 | 1204845 | 0.25 | 1.228 | 1.053 | 5.27 | 1268329 | 1335157 |
| LT-2a (ii) | 1072439 | 1221446 | 0.25 | 1.139 | 1.033 | 3.31 | 1261827 | 1303542 |
| LT-2(b)(i) | 2765 | 4061 | 0.25 | 1.469 | 1.101 | 10.09 | 4471 | 4922 |
| LT-2(b)(ii) | 1731 | 2148 | 0.25 | 1.241 | 1.055 | 5.54 | 2267 | 2393 |
| LT-3(i) | 185092 | 233475 | 0.25 | 1.261 | 1.060 | 5.98 | 247431 | 262221 |
| LT-3(ii) | 89046 | 103375 | 0.25 | 1.161 | 1.038 | 3.80 | 107304 | 111382 |
| LT-4(a) | 549616 | 663011 | 0.25 | 1.206 | 1.048 | 4.80 | 734778 | 774703 |
| LT - 4b | 798 | 1276 | 0.25 | 1.599 | 1.125 | 12.45 | 1435 | 1614 |
| LT- 4c(i) | | 249 | 0.33 | 2.092 | 1.279 | 27.90 | 318 | 407 |
| LT- 4c(ii) | 124 | 78 | 0.50 | 1.300 | 1.140 | 14.02 | 89 | 101 |
| LT-5 | 84870 | 107801 | 0.25 | 1.270 | 1.062 | 6.16 | 114443 | 121495 |
| LT-6 | 25098 | 38229 | 0.25 | 1.523 | 1.111 | 11.09 | 42470 | 47181 |
| LT-6 | 18472 | 21545 | 0.25 | 1.166 | 1.039 | 3.92 | 22390 | 23268 |
| LT-7 | 26951 | 43369 | 0.25 | 1.609 | 1.126 | 12.63 | 48846 | 55015 |
| LT Total | 3803042 | 4408290 | 0.25 | 1.159 | 1.038 | 3.76 | 4619399 | 4806023 |
| HT-1 | 179 | 275 | 0.25 | 1.536 | 1.113 | 11.33 | 306 | 341 |
| HT-2(a) | 1035 | 1421 | 0.25 | 1.373 | 1.082 | 8.25 | 1538 | 1665 |
| HT - 2(b) | 478 | 514 | 0.25 | 1.075 | 1.018 | 1.83 | 523 | 533 |
| HT-2 (C)(i) | | 190 | 0.33 | 1.681 | 1.189 | 18.91 | 226 | 269 |
| HT-2 (C) (ii) | | 83 | 0.33 | 1.537 | 1.154 | 15.41 | 96 | 111 |
| HT - 3 (a)(i) | | 114 | 0.33 | 1.175 | 1.055 | 5.53 | 120 | 127 |
| HT - 3 (a)(ii) | | 100 | 0.33 | 1.754 | 1.206 | 20.61 | 121 | 145 |
| HT - 3 (a)(iii) | 134 | 10 | 0.33 | 0.714 | 0.894 | -10.61 | 11 | 12 |
| HT-3(b) | 0 | 2 | 0.50 | 1.000 | 1.000 | 0.00 | 2 | 2 |
| HT-4 | 61 | 30 | 0.33 | 0.833 | 0.941 | -5.90 | 31 | 32 |
| HT-5 | 27 | 52 | 0.25 | 1.926 | 1.178 | 17.80 | 61 | 72 |
| НТ | 1914 | 2791 | 0.25 | 1.458 | 1.099 | 9.89 | 3036 | 3309 |
| LT+HT | 3804956 | 4411081 | 0.25 | 1.159 | 1.038 | 3.76 | 4622435 | 4809331 |

Note: No. of installations under LT-4(a) category as approved by Hon'ble Commission for FY-18 and FY-19 is considered by HESCOM for Tariff Filing for FY-19.

Details of mid year Installations for FY-19

| Tariff | FY-18 | FY-19 | FY-19 |
|-----------------|---------|---------|----------|
| | | | Mid-year |
| ВЈ КЈ | 763002 | 762622 | 762812 |
| LT-2a (i) | 1268329 | 1335157 | 1301743 |
| LT-2a (ii) | 1261827 | 1303542 | 1282684 |
| LT-2(b)(i) | 4471 | 4922 | 4696 |
| LT-2(b)(ii) | 2267 | 2393 | 2330 |
| LT-3(i) | 247431 | 262221 | 254826 |
| LT-3(ii) | 107304 | 111382 | 109343 |
| LT-4(a) | 734778 | 774703 | 754741 |
| LT - 4b | 1435 | 1614 | 1524 |
| LT- 4c(i) | 318 | 407 | 363 |
| LT-4c(ii) | 89 | 101 | 95 |
| LT-5 | 114443 | 121495 | 117969 |
| LT-6 | 42470 | 47181 | 44826 |
| LT-6 | 22390 | 23268 | 22829 |
| LT-7 | 48846 | 55015 | 51931 |
| LT Total | 4619399 | 4806023 | 4712711 |
| HT-1 | 306 | 341 | 324 |
| HT-2(a) | 1538 | 1665 | 1602 |
| HT - 2(b) | 523 | 533 | 528 |
| HT-2 (C)(i) | 226 | 269 | 247 |
| HT-2 (C) (ii) | 96 | 111 | 103 |
| HT - 3 (a)(i) | 120 | 127 | 124 |
| HT - 3 (a)(ii) | 121 | 145 | 133 |
| HT - 3 (a)(iii) | 11 | 12 | 12 |
| HT-3(b) | 2 | 2 | 2 |
| HT-4 | 31 | 32 | 32 |
| HT-5 | 61 | 72 | 67 |
| НТ | 3036 | 3309 | 3172 |
| LT+HT | 4622435 | 4809331 | 4715883 |

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The power supply during FY 16, FY-17 & FY-18 is generally arranged as noted below.

| | Hours of Power supply arranged in hrs | | | | | | | |
|----------|---------------------------------------|----------------|-----------|----------|----------|-------------|-----------------------------------|--|
| Feeder | Urban | NIV/comi urbon | Ru | Rural | | EIP | Industrial /HT /EHT /Maton Cumply | |
| Category | Urban | NJY/semi urban | 3ph | 1 ph | 3ph | open delta | Industrial/HT/EHT/Water Supply | |
| | | | | | | | | |
| FY-16 | 23-24 | 20-21 | 06-07. | 03-04. | 06-07. | 03-04. | 24 | |
| | | | | | | | | |
| | | Hours of | f Power s | upply as | sumed to | be arranged | in hrs | |
| | | | | | | | | |
| FY-17 | 23-24 | 20-21 | 06-07. | 05-06. | 06-07. | 03-04. | 24 | |
| | | | | | | | | |
| FY-18 | 24 | 22-24 | 07 | 04 | 07 | 04 | 24 | |
| | | | | | | | | |
| FY-19 | 24 | 24 | 07-09. | 04-08. | 07-09. | 04-08. | 24 | |

^{*} **Note:** By FY-19, due to increase in solar generation, hours of power supply is assumed more for rural and EIP feeders as per govt. norms.

Sales from FY-13 to FY-17.

| Tariff | FY-13 in MU Actual | FY-14 in MU Actual | FY-15 in MU Actual | FY-16 Actual | FY-17 Actual |
|-----------------|-----------------------|-----------------------|-----------------------|-----------------|-----------------|
| LT1 - 18 units | 88.07 | 93.38 | 91.92 | 90.41 | 87.01 |
| LT1> 18 units | 55.20 | 63.94 | 72.12 | 86.70 | 85.12 |
| Total BJ KJ | 143.27 | 157.32 | 164.04 | 177.11 | 172.13 |
| LT-2a (i) | 806.42 | 805.43 | 852.71 | 914.05 | 938.45 |
| LT-2a (ii) | 323.50 | 349.53 | 390.53 | 431.32 | 446.11 |
| LT-2(b) (i) | 4.46 | 8.60 | 10.66 | 11.22 | 13.23 |
| LT-2(b) (ii) | 2.60 | 2.90 | 3.02 | 3.384 | 3.578 |
| LT-3(i) | 251.340 | 248.10 | 265.74 | 291.408 | 303.299 |
| LT-3(ii) | 85.74 | 91.65 | 105.37 | 122.27 | 122.41 |
| LT4a | 4700.28 | 4958.50 | 5266.70 | 5927.78 | 5981.13 |
| LT4b | 14.99 | 18.41 | 17.02 | 16.47 | 16.01 |
| LT4c(i) | 0.41 | 0.38 | 0.88 | 0.65 | 0.60 |
| LT4c(ii) | 0.01 | 0.19 | 0.19 | 0.12 | 0.18 |
| LT-5 | 294.45 | 300.88 | 315.81 | 313.34 | 316.34 |
| LT6 W/s | 170.71 | 189.52 | 203.28 | 216.19 | 271.86 |
| LT6 P/l | 122.52 | 120.09 | 133.13 | 128.84 | 146.73 |
| LT7 | 16.13 | 20.60 | 22.61 | 24.28 | 26.03 |
| Total LT | 6936.82 | 7272.10 | 7751.68 | 8578.45 | 8758.09 |
| HT1 | 179.05 | 184.98 | 195.96 | 210.62 | 215.44 |
| HT2(a) | 991.04 | 888.71 | 926.07 | 930.32 | 843.88 |
| HT2(b) | 105.624 | 106.39 | 114.55 | 119.56 | 120.62 |
| HT 2 (C) (i) | | 14.69 | 23.19 | 28.39 | 47.51 |
| HT 2 (C)(ii) | | 16.76 | 24.18 | 29.58 | 18.81 |
| HT - 3 (a)(i) | | 137.48 | 120.65 | 107.52 | 141.15 |
| HT - 3 (a)(ii) | | 5.65 | 11.44 | 52.46 | 71.09 |
| HT - 3 (a)(iii) | 134.64 | 4.07 | 5.15 | 3.69 | 2.70 |
| HT-3b | 0.000 | 0.00 | 0.14 | 0.23 | 0.09 |
| HT-4 | 19.92 | 16.36 | 15.70 | 14.63 | 14.50 |
| HT-5 | 21.482 | 16.84 | 19.67 | 16.581 | 31.665 |
| Total HT | 1451.75 | 1391.94 | 1456.71 | 1513.58 | 1507.46 |
| Total LT+HT | 8388.57 | 8664.04 | 9208.39 | 10092.02 | 10265.54 |

Energy sales:

BJ KJ -LT-1:

| Sl No. | Particulars | No. of |
|--------|--------------------------------|---------------|
| | | Installations |
| 1 | Energy sold in FY-13 | 88.07 |
| 2 | Energy sold in FY-17 | 87.01 |
| 3 | Increase in the Sales | -1.06 |
| 4 | Increase in growth as per CAGR | -0.30 |
| 5 | Energy projected for FY-18 | 181.60 |
| 6 | Energy projected for FY-19 | 192.18 |

Note: The Hon'ble KERC has increased the subsidy quota of BJ /KJ Installations from 18 units to 40 units per month. Considering the September 2017 data the Energy has been worked out as noted below.

Energy sales to BJ KJ -LT-1 (Up to 40 Units):

| Sl No. | Particulars | No. of |
|--------|----------------------------|---------------|
| | | Installations |
| 1 | Energy sold in FY-13 | 88.07 |
| 2 | Energy sold in FY-17 | 87.01 |
| 3 | Increase in the Sales | -1.06 |
| 4 | Energy projected for FY-18 | 138.32 |
| 5 | Energy projected for FY-19 | 146.38 |

Energy sales to BJ KJ -LT-1 (Above 40 Units):

| Sl No. | Particulars | No. of |
|--------|----------------------------|---------------|
| | | Installations |
| 1 | Energy sold in FY-13 | 88.07 |
| 2 | Energy sold in FY-17 | 87.01 |
| 3 | Increase in the Sales | -1.06 |
| 4 | Energy projected for FY-18 | 43.28 |
| 5 | Energy projected for FY-19 | 45.80 |

Energy sales to BJ KJ-LT-1:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|-------------------------|
| 1 | Energy sold in FY-13 | 88.07 |
| 2 | Energy sold in FY-17 | 87.01 |
| 3 | Increase in the Sales | -1.06 |
| 4 | Increase in growth as per CAGR | -0.30 |
| 5 | Energy projected for FY-18 | 86.75 |
| 6 | Energy projected for FY-19 | 86.48 |

The Hon'ble KERC has approved total Energy sales of 87.57 MUs under LT-1 (Up to 18 units) for FY-19 vide Tariff Order Dtd 30.03.2016.

Energy sales to IP Sets 10 HP & below -LT-4(a):

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|-------------------------|
| 1 | Energy sold in FY-13 | 4700.28 |
| 2 | Energy sold in FY-17 | 5981.13 |
| 3 | Increase in the Sales | 1280.85 |
| 4 | Increase in growth as per CAGR | 6.21 |
| 5 | Energy projected for FY-18 | 6352.55 |
| 6 | Energy projected for FY-19 | 6747.03 |

The Hon'ble KERC has approved total Sales of 5974.38 MU & 6222.08 under LT-4(a) for FY-18 & FY-19 respectively, vide Tariff Order Dtd 30.03.2016. Though the projections made by HESCOM is more than the Approved by KERC, HESCOM desires to retain the No of installations as approved by KERC (5974.38 MU in FY-18 and 6222.08 MU in FY-19) in view of on-going works under NJY, creating infrastructure to Un authorised IP Sets and enumeration.

Actual Consumption:

| Tariff | FY-13 in MU Actual | FY-14 in MU Actual | FY-15 in MU actual | FY-16 in MU actual | FY-17 in MU actual | FY-18 in MU Projection as per CAGR | FY-19 in MU Projection as per CAGR |
|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|--|
| LT-4(a) | 4700.28 | 4958.50 | 5266.70 | 5927.78 | 5981.13 | 6352.55 | 6747.03 |

other than BJ KJ & IP Sets (10 HP & Below.)

LT-2a(i) Domestic installations:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|-------------------------|
| 1 | Energy sold in FY-13 | 806.42 |
| 2 | Energy sold in FY-17 | 938.45 |
| 3 | Increase in the Sales | 132.03 |
| 4 | Increase in growth as per CAGR | 3.86 % |
| 5 | Energy projected for FY-18 | 974.71 |
| 6 | Energy projected for FY-19 | 1012.36 |

LT-2a(ii) Domestic installations:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|-------------------------|
| 1 | Energy sold in FY-13 | 323.50 |
| 2 | Energy sold in FY-17 | 446.11 |
| 3 | Increase in the Sales | 122.61 |
| 4 | Increase in growth as per CAGR | 8.37 % |
| 5 | Energy projected for FY-18 | 483.43 |
| 6 | Energy projected for FY-19 | 523.87 |

The Hon'ble KERC has approved total Energy sales of 1667.49 MUs under LT-2(a)(ii) for 18 vide Tariff Order Dtd 30.03.2016.

LT-2b(i) Professional Educational Institutions:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 4.46 |
| 2 | Energy sold in FY-17 | 13.23 |
| 3 | Increase in the Sales | 8.77 |
| 4 | Increase in growth as per CAGR | 31.27% |
| 5 | Energy projected for FY-18 | 17.37 |
| 6 | Energy projected for FY-19 | 22.80 |

The Hon'ble KERC has approved total Energy sales of 17.90 MUs under LT-2(b)(i) for FY-18 vide Tariff Order Dtd 30.03.2016.

LT-2b(ii) Professional Educational Institutions:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 2.60 |
| 2 | Energy sold in FY-17 | 3.578 |
| 3 | Increase in the Sales | 0.98 |
| 4 | Increase in growth as per CAGR | 8.29% |
| 5 | Energy projected for FY-18 | 3.87 |
| 6 | Energy projected for FY-19 | 4.20 |

The Hon'ble KERC has approved total Energy sales of 509.02 MUs under LT-2(b)(ii) for FY-18 vide Tariff Order Dtd 30.03.2016.

LT-3(i) Commercial Installations (Urban):

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 251.34 |
| 2 | Energy sold in FY-17 | 303.29 |
| 3 | Increase in the Sales | 51.96 |
| 4 | Increase in growth as per CAGR | 4.81% |
| 5 | Energy projected for FY-18 | 317.89 |
| 6 | Energy projected for FY-19 | 333.18 |

LT-3(ii) Commercial Installations (Rural):

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 85.74 |
| 2 | Energy sold in FY-17 | 122.41 |
| 3 | Increase in the Sales | 36.68 |
| 4 | Increase in growth as per CAGR | 9.31% |
| 5 | Energy projected for FY-18 | 133.81 |
| 6 | Energy projected for FY-19 | 146.27 |

The Hon'ble KERC has approved total Energy sales of 509.02 MUs under LT-3(ii) for FY-18 vide Tariff Order Dtd 30.03.2016.

LT-4(b) IP Sets - Above 10 HP:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 14.99 |
| 2 | Energy sold in FY-17 | 5981.13 |
| 3 | Increase in the Sales | 1280.85 |
| 4 | Increase in growth as per CAGR | 6.21% |
| 5 | Energy projected for FY-18 | 6352.55 |
| 6 | Energy projected for FY-19 | 6747.03 |

The Hon'ble KERC has approved total Energy sales of 18.87MUs under LT-4(b) for FY-18 vide Tariff Order Dtd 30.03.2016.

LT-4c(i) IP Sets - Pvt Horticultural. Nurseries, Coffee & Tea plantations up to 10HP:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 0.41 |
| 2 | Energy sold in FY-17 | 0.60 |
| 3 | Increase in the Sales | 0.19 |
| 4 | Increase in growth as per CAGR | 10.21% |
| 5 | Energy projected for FY-18 | 0.67 |
| 6 | Energy projected for FY-19 | 0.73 |

LT-4c(ii) IP Sets - Pvt Horticultural. Nurseries, Coffee & Tea plantations above 10HP:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 0.01 |
| 2 | Energy sold in FY-17 | 0.18 |
| 3 | Increase in the Sales | 0.17 |
| 4 | Increase in growth as per CAGR | 104.54% |
| 5 | Energy projected for FY-18 | 0.36 |
| 6 | Energy projected for FY-19 | 0.73 |

The Hon'ble KERC has approved total Energy sales of 2.64 MUs under LT-4(c)(ii) for FY-18 vide Tariff Order Dtd 30.03.2016.

LT-5 Heating & Motive Power:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 294.45 |
| 2 | Energy sold in FY-17 | 316.34 |
| 3 | Increase in the Sales | 21.90 |
| 4 | Increase in growth as per CAGR | 1.81 % |
| 5 | Energy projected for FY-18 | 322.07 |
| 6 | Energy projected for FY-19 | 327.90 |

The Hon'ble KERC has approved total Energy sales of 333.10 MUs under LT-5 for FY-18 vide Tariff Order Dtd 30.03.2016.

LT-6 (a) Water Supply:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 170.71 |
| 2 | Energy sold in FY-17 | 271.86 |
| 3 | Increase in the Sales | 101.15 |
| 4 | Increase in growth as per CAGR | 12.34 % |
| 5 | Energy projected for FY-18 | 305.40 |
| 6 | Energy projected for FY-19 | 343.07 |

The Hon'ble KERC has approved total Energy sales of 274.76 MUs under LT-6(a) for FY-18 vide Tariff Order Dtd 30.03.2016.

LT-6 (b) Public Lighting:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 122.52 |
| 2 | Energy sold in FY-17 | 146.73 |
| 3 | Increase in the Sales | 24.21 |
| 4 | Increase in growth as per CAGR | 4.61 % |
| 5 | Energy projected for FY-18 | 153.49 |
| 6 | Energy projected for FY-19 | 160.57 |

The Hon'ble KERC has approved total Energy sales of 153.51 MUs under LT-6 (b) for FY-18 vide Tariff Order Dtd 30.03.2016.

LT-7 Temporary Supply:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 122.52 |
| 2 | Energy sold in FY-17 | 146.73 |
| 3 | Increase in the Sales | 24.21 |
| 4 | Increase in growth as per CAGR | 4.61 % |
| 5 | Energy projected for FY-18 | 153.49 |
| 6 | Energy projected for FY-19 | 160.57 |

The Hon'ble KERC has approved total Energy sales of 14.90 MUs under LT-7 for FY-18 vide Tariff Order Dtd 30.03.2016

HT-1 Water Supply, Sewerage Pumping:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 179.05 |
| 2 | Energy sold in FY-17 | 215.44 |
| 3 | Increase in the Sales | 36.39 |
| 4 | Increase in growth as per CAGR | 4.73% |
| 5 | Energy projected for FY-18 | 225.64 |
| 6 | Energy projected for FY-19 | 236.33 |

The Hon'ble KERC has approved total Energy sales of 264.11 MUs under HT-1 for FY-18 vide Tariff Order Dtd 30.03.2016.

HT-2 (a) Industrial:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 991.04 |
| 2 | Energy sold in FY-17 | 843.88 |
| 3 | Increase in the Sales | -147.16 |
| 4 | Increase in growth as per CAGR | -3.94% |
| 5 | Energy projected for FY-18 | 810.64 |
| 6 | Energy projected for FY-19 | 778.71 |

As per the above the Energy sales at 5.57% would be as noted below.

The Hon'ble KERC has approved total Energy sales of 1071.60 MUs under HT-2(a) for FY-18 vide Tariff Order Dtd 30.03.2016

HT-2 (b) Commercial:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 105.62 |
| 2 | Energy sold in FY-17 | 120.62 |
| 3 | Increase in the Sales | 15.00 |
| 4 | Increase in growth as per CAGR | 3.38% |
| 5 | Energy projected for FY-18 | 124.70 |
| 6 | Energy projected for FY-19 | 128.91 |

The Hon'ble KERC has approved total Energy sales of 150.91 MUs under HT-2(b) for FY-18 vide Tariff Order Dtd 30.03.2016

HT-2 c(i) Hospitals.

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-14 | 14.69 |
| 2 | Energy sold in FY-17 | 47.51 |
| 3 | Increase in the Sales | 47.51 |
| 4 | Increase in growth as per CAGR | 47.89% |
| 5 | Energy projected for FY-18 | 70.27 |
| 6 | Energy projected for FY-19 | 103.91 |

HT-2c(ii) Hospitals.

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-14 | 16.76 |
| 2 | Energy sold in FY-17 | 18.81 |
| 3 | Increase in the Sales | 18.81 |
| 4 | Increase in growth as per CAGR | 3.92% |
| 5 | Energy projected for FY-18 | 19.55 |
| 6 | Energy projected for FY-19 | 20.31 |

The Hon'ble KERC has approved total Energy sales of 159.04 MUs under HT-2(c) (ii) for FY-18 vide Tariff Order Dtd 30.03.2016

HT-3 a(i) Lift Irrigation:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-14 | 137.48 |
| 2 | Energy sold in FY-17 | 141.15 |
| 3 | Increase in the Sales | 141.15 |
| 4 | Increase in growth as per CAGR | 0.88% |
| 5 | Energy projected for FY-18 | 142.39 |
| 6 | Energy projected for FY-19 | 143.65 |

HT-3 a(ii) Lift Irrigation:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-14 | 5.65 |
| 2 | Energy sold in FY-17 | 71.09 |
| 3 | Increase in the Sales | 71.09 |
| 4 | Increase in growth as per CAGR | 132.54 |
| 5 | Energy projected for FY-18 | 165.30 |
| 6 | Energy projected for FY-19 | 384.39 |

HT-3 a(iii) Lift Irrigation:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 134.64 |
| 2 | Energy sold in FY-17 | 2.70 |
| 3 | Increase in the Sales | -131.95 |
| 4 | Increase in growth as per CAGR | -62.38 |
| 5 | Energy projected for FY-18 | 1.01 |
| 6 | Energy projected for FY-19 | 0.38 |

HT-3 (b) Farms Nurseries:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 0.00 |
| 2 | Energy sold in FY-17 | 0.09 |
| 3 | Increase in the Sales | 0.09 |
| 4 | Increase in growth as per CAGR | -20.91 |
| 5 | Energy projected for FY-18 | 0.07 |
| 6 | Energy projected for FY-19 | 0.06 |

The Hon'ble KERC has approved total Energy sales of 262.52 MUs under HT-3(b) for FY-18 vide Tariff Order Dtd 30.03.2016

HT-4Resident. Apartments:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 19.92 |
| 2 | Energy sold in FY-17 | 14.50 |
| 3 | Increase in the Sales | -5.42 |
| 4 | Increase in growth as per CAGR | -7.36 |
| 5 | Energy projected for FY-18 | 13.40 |
| 6 | Energy projected for FY-19 | 12.37 |

The Hon'ble KERC has approved total Energy sales of 14.29 MUs under HT-4 for FY-18 vide Tariff Order Dtd 30.03.2016.

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HT-5 Temporary:

| Sl No. | Particulars | No. of Installations |
|--------|--------------------------------|----------------------|
| 1 | Energy sold in FY-13 | 21.48 |
| 2 | Energy sold in FY-17 | 31.66 |
| 3 | Increase in the Sales | 10.18 |
| 4 | Increase in growth as per CAGR | 10.19 |
| 5 | Energy projected for FY-18 | 34.89 |
| 6 | Energy projected for FY-19 | 38.44 |

The Hon'ble KERC has approved total Energy sales of 18.52 MUs under HT-5 for FY-18 vide Tariff Order Dtd 30.03.2016

The Hon'ble KERC has approved total Energy sales of 10063.36 MUs under all categories for FY-18 vide Tariff Order Dtd 30.03.2016.

For LT Category 5 years CAGR is considered. Under HT Category, 5 years CAGR is considered except HT-2 (c.)(i), HT-2 (c.) (ii), HT-3(a)(i), HT-3 (a)(ii), HT-3 (a)(iii) where 4 years CAGR is considered. For HT-3 (b) 3 years CAGR is considered. The consumption in LT-1,LT-4(a),LT-4(b),HT-2(a), HT-3(b), is registered less than the consumption recorded in FY-16.

Details of growth of Sales for FY-19 as per CAGR

| Tariff | FY-13 in MU Actual | FY-17 Actual | Yn= FY- 17 | Yi= FY-13 | n=5 | CAGR | FY-18 | FY-19 |
|-----------------|--------------------------|-----------------|---------------|-----------|--------------------|------------------------------|----------|----------|
| | | | 1/(n-1) | Yn/Yi | Yn/Yi^(1/(n- 1) | [(Yn/Yi^(1/(n- 1))-1]*100 | | |
| LT1 - 18 units | 88.07 | 87.01 | 0.25 | 0.99 | 0.997 | -0.30 | 86.75 | 86.48 |
| LT1> 18 units | 55.20 | 85.12 | 0.25 | 1.54 | 1.114 | 11.44 | 94.85 | 105.70 |
| Total BJ KJ | 143.27 | 172.13 | 0.25 | 1.20 | 1.047 | 4.69 | 180.21 | 188.67 |
| LT-2a (i) | 806.42 | 938.45 | 0.25 | 1.16 | 1.039 | 3.86 | 974.71 | 1012.36 |
| LT-2a (ii) | 323.50 | 446.11 | 0.25 | 1.38 | 1.084 | 8.37 | 483.43 | 523.87 |
| LT-2(b) (i) | 4.46 | 13.23 | 0.25 | 2.97 | 1.313 | 31.27 | 17.37 | 22.80 |
| LT-2(b) (ii) | 2.60 | 3.578 | 0.25 | 1.37 | 1.083 | 8.29 | 3.87 | 4.20 |
| LT-3(i) | 251.340 | 303.299 | 0.25 | 1.21 | 1.048 | 4.81 | 317.89 | 333.18 |
| LT-3(ii) | 85.74 | 122.41 | 0.25 | 1.43 | 1.093 | 9.31 | 133.81 | 146.27 |
| LT4a | 4700.28 | 5981.13 | 0.25 | 1.27 | 1.062 | 6.21 | 5974.38 | 6222.08 |
| LT4b | 14.99 | 16.01 | 0.25 | 1.07 | 1.017 | 1.66 | 16.28 | 16.55 |
| LT4c(i) | 0.41 | 0.60 | 0.25 | 1.48 | 1.102 | 10.21 | 0.67 | 0.73 |
| LT4c(ii) | 0.01 | 0.18 | 0.25 | 17.50 | 2.045 | 104.54 | 0.36 | 0.73 |
| LT-5 | 294.45 | 316.34 | 0.25 | 1.07 | 1.018 | 1.81 | 322.07 | 327.90 |
| LT6 W/s | 170.71 | 271.86 | 0.25 | 1.59 | 1.123 | 12.34 | 305.40 | 343.07 |
| LT6 P/l | 122.52 | 146.73 | 0.25 | 1.20 | 1.046 | 4.61 | 153.49 | 160.57 |
| LT7 | 16.13 | 26.03 | 0.25 | 1.61 | 1.127 | 12.71 | 29.34 | 33.07 |
| Total LT | 6936.82 | 8758.09 | 0.25 | 1.26 | 1.060 | 6.00 | 9283.71 | 9840.88 |
| HT1 | 179.05 | 215.44 | 0.25 | 1.20 | 1.047 | 4.73 | 225.64 | 236.33 |
| HT2(a) | 991.04 | 843.88 | 0.25 | 0.85 | 0.961 | -3.94 | 810.64 | 778.71 |
| HT2(b) | 105.624 | 120.62 | 0.25 | 1.14 | 1.034 | 3.38 | 124.70 | 128.91 |
| HT 2 (C) (i) | | 47.51 | 0.33 | 3.23 | 1.479 | 47.89 | 70.27 | 103.91 |
| HT 2 (C)(ii) | | 18.81 | 0.33 | 1.12 | 1.039 | 3.92 | 19.55 | 20.31 |
| HT - 3 (a)(i) | | 141.15 | 0.33 | 1.03 | 1.009 | 0.88 | 142.39 | 143.65 |
| HT - 3 (a)(ii) | | 71.09 | 0.33 | 12.57 | 2.325 | 132.54 | 165.30 | 384.39 |
| HT - 3 (a)(iii) | 134.64 | 2.70 | 0.25 | 0.02 | 0.376 | -62.38 | 1.01 | 0.38 |
| HT-3b | 0.000 | 0.09 | 0.50 | 0.63 | 0.791 | -20.91 | 0.07 | 0.06 |
| HT-4 | 19.92 | 14.50 | 0.25 | 0.73 | 0.924 | -7.63 | 13.40 | 12.37 |
| HT-5 | 21.482 | 31.665 | 0.25 | 1.47 | 1.102 | 10.19 | 34.89 | 38.44 |
| Total HT | 1451.75 | 1507.46 | 0.25 | 1.04 | 1.009 | 0.95 | 1521.71 | 1536.11 |
| Total LT+HT | 8388.57 | 10265.54 | 0.25 | 1.22 | 1.052 | 5.18 | 10797.06 | 11356.09 |

Note: Sales under LT-4(a) category as approved by Hon'ble Commission for FY-18 and FY-19 is considered by HESCOM for Tariff Filing of FY-19.

Distribution Loss:

HESCOM proposes the Distribution Loss for FY19 as noted below.

| Particulars | FY18 |
|---|----------|
| Energy Sales (Mus) | 11187.02 |
| Distribution Loss (%) | 15.00 |
| Energy at Interface Point (Mus) | 13161.20 |
| Transmission Loss (%) | 3.27 |
| Energy Required to meet the sales of HESCOM | 13606.12 |
| HRECS Hukkeri (As approved by KERC) | 325.60 |
| AEQUS (As approved by KERC) | 26.83 |
| TOTAL | 13958.55 |

The Hon'ble KERC has approved distribution loss of 15.00% for FY-19 vide Tariff Order Dtd: 30.03.2016.

I. Revised Capital Expenditure Proposal of HESCOM for FY 19:

(Rs in Crores)

| S1. No. | Scheme | KERC Approved for FY -19 | Revised proposal for FY-19 |
|---------------|---|--------------------------------|----------------------------------|
| 1 | Mandatory works, Social obligation and other works | | |
| а | Gangakalyan IP sets | 25 | 50 |
| b | Special Development Plan for backward talukas under Nanjundappa scheme(SDP) | 20 | 20 |
| С | Electification of Hamlets(Not covered under RGGVY) | 1 | 10 |
| d | Electification of HB/DB/JC/AC (Habitations) under SCP (Not covered | 0.5 | 20 |
| u | under RGGVY) | 0.3 | 20 |
| e | Electification of TC(Habitations) under TSP (Not covered under RGGVY) | 0.5 | 10 |
| | Electification of BPL Households | _ | _ |
| f | (Not covered under RGGVY) | 1 | 2 |
| g | Water works | 5 | 25 |
| h | RGGVY | 3 | 6 |
| <u>i</u> | DDGUVY | 100 | 100 |
| | Maadari Grama Sub - total | 156 | 65 |
| 2 | Expansion of network and system improvement works. | 156 | 308 |
| <u>2</u> а | E & I works. | 25 | 85 |
| b | Energisation of IP sets under general. | 20 | 8 |
| С | Energisation of IP sets as per GOK | 125 | 100 |
| d | Service connections other than IP/BJ/KJ/Water works. | 30 | 20 |
| е | Construction of new 33 KV stations and lines. | 4 | 30 |
| f | Augmentation of 33 KV stations. | 3 | 20 |
| g | Construction of 11 KV lines for 33 KV / 110 KV sub-stations. | 5 | 25 |
| h | Nirantar Jyoti Yojana. | 40 | 10 |
| i | Providing prepaid meters to temporary installations | 30 | 70 5.4 |
| i | Providing numerical relays to provide power supply to farm houses | | 7.3 |
| | Providing 16KVA Transformers for A/P/S to farm houses in Chikodi | | |
| k | Division | | 6.2 |
| 1 | R- APDRP. | 20 | 5 |
| m | R-APDRP exclusively for Modem and meters | 1 | 2 |
| n | IPDS IT initative Phase II | | 10 |
| o ii | IPDS Sub total | 50 333 | 60.01 463.91 |
| 3 | Sub - total Reduction of T & D and ATC loss | 333 | 463.91 |
| a | Providing meters to un-metered IP sets. | 0.05 | 0.25 |
| b | Providing meters to un-metered BJ/KJ installations. | | 2 |
| С | Replacement of faulty / MNR energy meters by static meters. | 5 | 10 |
| d | Replacement of more than 10 year old electromechanical energy | 50 | 25 |
| | meters by static meters. | 00 | |
| | Fixing of boxes to Single Phase Meters | 0.5 | 25 |
| e f | DTC's metering (Other than APDRP) Replacement of 33 KV lines Rabbit conductor by Coyote conductor. | 25 5 | 35 15 |
| g | Replacement of 35 KV lines Weasel conductor by Rabbit conductor. | 10 | 25 |
| h | Replacement of age old LT conductor by Rabbit conductor. | 6 | 20 |
| i | HVDS (Pilot project for 1 district/year) | 1 | 20 |
| j | NEF (REC) for replacing 11 KV OH feeders by UG Cables in Hubli and | 100 | 70 |
| | Belgaum cities. | | |
| iii | Sub - total | 202.05 | 247.25 |
| 4 | New initiatives works IT initiatives, automation and call centre | 1 | 6 |
| <u>a</u> b | Installation of energy efficient motors | 1 | 0 |
| С | Smart grid/sprinklar/drip irrigation system | 0.5 | 5 |
| d | Providing solar roof tops to HESCOM office buildings | 2 | 20 |
| e | Establishing ALDC & SCADA. | 1 | 3 |
| f | Thermal Imaging and GIS Mapping of DTCs | 5 | |
| g | Special pilot project for Statergic Business Centre at Shiggaon sub- Division | 1 | |
| h | Special pilot project for Statergic Business | 4 | 1 |
| | Centre at Gadag Division | | |
| <u>i</u> | Smart City /Smart Meters | | 50 |
| iv | DSM Projects Sub - total | 10.5 | 1 86 |
| | Replacement and other miscellaneous works | 10.5 | 80 |
| a | Replacement of failed distribution transformers. | 5 | 10 |
| b | Replacement of Power Transformers. | 2 | 8 |
| | | | |

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| С | Replacement of old and failed equipments and other works of existing 33 KV stations and lines. | 3 | 10 |
|---|--|--------|---------|
| d | Preventive measures to reduce the accidents. (Providing intermediate poles replacement of detoriated conductor, DTC earthing etc.) | 5 | 25 |
| е | T&P materials. | 1 | 5 |
| f | Creating infrastructre to UAIP Sets | 10 | 15 |
| g | Civil Engineering works. | 5 | 35 |
| | Refurbishing works on HT/LT/DTC in O & M Divisions | | 85 |
| v | Sub - total | 31 | 193 |
| | Total (i+ii+iii+iv+v) | 732.55 | 1298.16 |

HESCOM has retained the capex in all other categories as per MYT approved level since HESCOM has intended to propose a restricted Capex so that there is no huge gap between the approved figure and expenditure booked. If any additional Capex is required in any category then it will be re-appropriated by MD, HESCOM from the unutilized capex.

HESCOM has prepared capex in par with the "Capital expenditure Guidelines for ESCOMs" in which the capital investment planning process, prioritization and post commissioning analysis are adopted.

- Then provision made in a particular year may not result in full expenditure as the works completion period and tendering processing period will vary from 6 months to 24 months normally. Hence the capex shall likely to be spilled over.
- As regards to categorization of assets, the expenditure will be after completion of the works and commissioning with all payments made. This also results in expenditure booking and asset categorization difference.
- The works which are taken up by HESCOM departmentally are targeted to complete with a financial year. But the projects which have to be tendered or are financed by Financial institutions or GOK have a time period of 1 to 3 years from the date of commencement. There is also some delay in commencement due to finalization and tendering process.

The GoK has announced the scheme called Model Electricity Village (MEV) as per the Government order EN-70 VSC-2017 Dt: 24.05.2017. The scheme mainly focuses on development / strengthening of distribution network in the selected villages for which huge capex is required for which HEESCOM has proposed capex of Rs.65 crores for FY-19.

Projects such as IPDS, DDUGJY, RGGVY, Replacement of OH lines by UG cables, providing additional transformer works are envisaged for which a huge amount of capex is proposed. These projects, based on the completion period are spilt accordingly over 1 to 3 years.

Works such as reconductoring of 33/11/LT lines, Construction of 33 KV stations, providing new feeders/Link lines/express lines from the newly commissioned substations, Agumentation of stations, NJY Phase I, II & III, Construction of 11 KV link lines for load bifurcation etc. are included in capex. Stress is emphasized to priortize these works which result in impoved power supply reliability.

For reduction of AT&C losses, several initiatives like providing meters to unmetered BJ/KJ & IP set installations, DTCs metering, replacement of faulty and MNR meters and replacing age old electromechanical meters by new static meters etc. have been envisaged. These programmes will increase metered consumption thereby reducing unaccounted energy. This will automatically improve the efficiency parameters of the Company.

Segregation of accounts in to distribution business and retail supply business.

As per Regulation 2.2, the accounts of licensee shall be segregated between Distribution and Retail Supply Business. It is provided in the regulation that till such time there is complete segregation, the ARR of the licensee shall be apportioned between the distribution business and retail supply business by appropriate methodology.

Considering the above, as per the Tariff Order Dtd: 30.03.2016, the expenditure is segregated between DB and RSB as furnished below.

| Particulars | Distribution Business | Retail Supply Business |
|-------------------------------|--------------------------|---------------------------|
| O &M | 63% | 37% |
| Depreciation | 84% | 16% |
| Interest on Loans | 100% | 0% |
| Interest on consumer Deposits | 0% | 100% |
| RoE | 82% | 18% |
| GFA | 84% | 16% |
| Non-Tariff Income | 0% | 100% |

The main business of HESCOM is distribution of power in 7 districts of North Karnataka. As per Regulation, HESCOM has to forecast the annual revenue requirement for control period and furnish in application under MYT Framework. The details of estimation of ARR for control period are explained in the following Paras.

PROJECTED ENERGY AVAILABILITY & COST FOR FINANCIAL YEAR 2018-19

1.0 The energy required by ESCOMs of Karnataka for the Financial Year 2018-19 is 66655.40 MUs considering STU transmission losses of 3.37%. The ESCOM wise energy requirement is shown in as **Table-1**.

| ESCOMs | Energy requirement in MUs |
|---|---------------------------|
| BESCOM | 33073.82 |
| GESCOM | 8891.35 |
| HESCOM including Hukkeri Society & AEQUS | 13958.55 |

Table-1

2.0 Energy being purchased by ESCOMs from different sources viz., KPCL Hydel, KPCL Thermal, Central Generating Stations, IPPs, NCE projects and other purchases through short term purchases to meet the deficit.

5966.22

7991.81

69881.75

2.1 Hydro and Thermal Stations of KPCL

MESCOM

CESC, Mysore

Total

The Energy availability of Hydel and Thermal stations of State Owned Power plants are considered as per the details furnished by KPCL through email dated 21.11.2017 except YTPS, BTPS Unit -III, Yelahanka Combined Cycle, Sharavathy Valley project and Kali valley Projects. The energy projected by KPCL in respect of hydro stations is based on anticipated inflows of moving average of ten years less by 1% auxiliary consumption as per PPA. Energy availability in respect of Thermal Stations is as per the targeted availability defined in the PPA/regulations wherever applicable and less by applicable auxiliary consumption of each station. The KPCL has projected the Energy from Yermarus Thermal Station I & II, BTPS Unit III and Yelahanka Combined Cycle. Since YTPS declared commercial operation during April-2016, thereafter there is minimal generation from power plant. Therefore, energy from Yarmarus projects is not considered. Similarly, energy from Yelahanka Combined Cycle is also not considered. BTPS Unit -3 require time for stabilization of the plant.

2.2 The availability of Energy from Hydel & Thermal Power Station's details furnished by KPCL is shown in **Table 2 & 3**.

Table-2
HYDEL ENERGY

| S1. No. | Generating Source | Energy in MUs |
|------------|--|------------------|
| 1 | Sharavathy valley project (Sharavathy, Linganamakki & Chakra Projects) | 4041.24 |
| 2 | Kali Valley projects (Nagajari & Supa Projects) | 2288.08 |
| 3 | Varahi Valley projects (Varahi & Mani Projects) | 1034.12 |
| 4 | Bhadra & Bhadra Right Bank | 52.32 |
| 5 | Ghataprabha (GDPH) | 75.37 |
| 6 | Mallapur & Others | |
| 7 | Kadra Dam | 247.58 |
| 8 | Kodasalli Dam | 282.41 |
| 9 | Gerusoppa/STRP | 513.83 |
| 10 | Almatti Dam Power House | 459.29 |
| 12 | Shiva & Shimsa | 290.56 |
| 13 | Munirabad | 97.96 |
| 14 | MGHE-Jog | 258.11 |
| | Total KPCL Hydel | 9640.87 |

Table-3
THERMAL POWER STATIONS

| S1. No. | Stations | Installed Capacity in MW | Net generation in MUs |
|---------|---------------|--------------------------|-----------------------|
| 1 | RTPS I &7 | 1470 | 8437.14 |
| 2 | RTPS Unit 8 | 250 | 1515.24 |
| 3 | BTPS Unit I | 500 | 3240.28 |
| 4 | BTPS Unit II | 500 | 3292.82 |
| 5 | BTPS UNIT-III | | 1177.09 |
| | Total | 17662.57 | |

2.3 Total Hydel generation would be 9640.87 MUs and Thermal is around 17662.57 MUs for 2018-19, totaling to 27303.44 MUs from KPCL Station.

3.0 Projection of cost - KPCL Hydel and Thermal Stations:

Hydel Stations:

The tariff rates worked out by KPCL based on KERC order dated 03.08.2009 for hydel stations except for Shivasamudram, Shimsha, Munirabad & MGHE. The tariff for the hydel stations is based on the design

energy, over and above the design energy paid at 15 paise per kwh or 3% of the ROE whichever is less. The tariff for the Hydel station of Shiva and Shimsha, Munirabad & MGHE is based on the KERC tariff order dated 25.02.2015. The Capacity charges and primary energy rate details furnished by the KPCL is as shown in Table-4.

Table-4

| S1. No. | Source | Design energy in MUs | Paise per Unit |
|------------|--|----------------------------|-------------------|
| A | KPCL - Hydel | | |
| 1 | Sharavathy valley project (Sharavathy, Linganamakki & Chakra Projects) | 3737.95 | 48.97 |
| 2 | Kali Valley projects | 2058.77 | 85.27 |
| 3 | Varahi Valley projects (Varahi & Mani Projects) | 848.69 | 121.31 |
| 4 | Varahi 3 & 4 | 848.69 | 38.27 |
| 5 | Bhadra & Bhadra Right Bank | 50.49 | 432.17 |
| 6 | Ghataprabha (GDPH) | 84.97 | 201.27 |
| 7 | Mallapur & Others | | |
| 8 | Kadra Dam | 419.90 | 228.25 |
| 9 | Kodasalli Dam | 372.48 | 159.48 |
| 11 | Gerusoppa/STRP | 442.62 | 162.34 |
| 12 | Almatti | 384.00 | 160.25 |
| 13 | Shiva & Shimsa | 252.00 | 103.78 |
| 14 | Munirabad | 65.00 | 67.77 |
| 15 | MGHE-Jog | 119.00 | 65.65 |

Note: Paise 4 as royalty charges is considered for the actual generation

KPCL Thermal Stations:

The tariff rates worked out by KPCL based on various parameters of tariff orders in respect of thermal stations RTPS units 1 to 7, BTPS unit-1, is considered. The capacity charges determined by KERC in respect of following units are considered.

| Sl. No. | Stations | Date of order | Capacity charges applicable for 2018-19 (Amount in Rs. crore | | |
|---------|-------------|---------------|--|--|--|
| 1 | BTPS Unit-2 | 25.02.2015 | 474.58 | | |
| 2 | RTPS Unit-8 | 25.02.2015 | 230.66 | | |

The average variable cost for the month of July -2017, Aug-2017 and Sep-2017 is considered for energy charges for FY 2018-19.

Table-5

| | | 2018-19 | | | | | | |
|---------|------------------|------------------------|---------------|--|--|--|--|--|
| Sl. no. | Stations | Stations Fixed cost Rs | | | | | | |
| | | in Crores | Paise per Kwh | | | | | |
| 1 | RTPS unit 1 to 7 | 858.05 | 299.57 | | | | | |
| 2 | RTPS unit-8 | 230.66 | 293.37 | | | | | |
| 3 | BTPS unit-1 | 310.09 | 327.71 | | | | | |
| 4 | BTPS unit-II | 474.58 | 292.47 | | | | | |
| 5 | BTPS Unit-III | 254.25 | 285.27 | | | | | |

The average cost of hydel stations works out to 94.91paise per unit and thermal units is around 422.38 paise per unit. The Income tax is included in the capacity charges component in respect of RTPS and BTPS Units. In case of hydel stations, tax component included in the primary energy charges component.

4.0 Central Generating Stations:

- **4.1** ESCOMs have a share in Central Generating station of NTPC, Neyveli Lignite Corporation(NLC), Nuclear power stations and other Joint Venture Projects. The allocation of capacity entitlement from these stations includes both firm and unallocated share. The unallocated share is vary depending upon the allocation issued by Ministry of Power, GoI.
- 4.2. The energy available to ESCOMs depends on the scheduled generation and share in a month and other parameters such as availability and outages (forced and planned). The net energy available at ex-bus generation details furnished by Central Generating Stations to CEA for preparation of LGBR for the year 2017-18 is considered for energy available for 2018-19. Out of the total month wise energy available at Ex-bus, the share of Karnataka including unallocated share for the month of October 2017 is taken to arrive the energy available to Karnataka for FY 2018-19. In order to arrive energy available at Karnataka Periphery, POC losses of injection (State/Power station wise) and losses of withdrawal of the state for the week 13.11.2017 to 19.11.2017 as notified by the NLDC is taken. The scheduled energy available at ex-bus and share of Karnataka is shown in Table-6 and net energy available at KPTCL periphery after considering the POC losses is shown in Table-7.

Table-6

| S1. No. | Stations | Total Energy scheduled at EX-bus in MUs | Share of Karnataka in % | Karnataka Share in MUs |
|------------|--------------------------------|---|-------------------------------|------------------------------|
| 1 | RSTP-I&II | 14620.00 | 17.86 | 2610.55 |
| 2 | RSTP-III | 3517.00 | 18.74 | 659.02 |
| 3 | RSTP-Talcher | 14139.00 | 18.34 | 2593.09 |
| 4 | Simhadri station II | 6663.00 | 20.74 | 1382.04 |
| 5 | Vallur unit-I & II | 8634.00 | 11.65 | 1005.95 |
| 6 | NLC II Stage-1 | 3364.00 | 24.03 | 808.40 |
| 7 | NLC II Stage-2 | 4606.00 | 24.35 | 1121.42 |
| 8 | NLC expansion I | 2691.00 | 25.92 | 697.51 |
| 9 | NLC expansion Stage II(Unit-1) | 2759.00 | 25.91 | 714.88 |
| 10 | NTPL-2X 500 MW | 6233.00 | 22.07 | 1375.56 |
| 11 | MAPS | 2433.00 | 7.47 | 181.75 |
| 12 | Kaiga Unit-1& 2 | 2978.00 | 31.25 | 930.63 |
| 13 | Kaiga Unit-3&4 | 2738.00 | 33.76 | 924.35 |
| 14 | Kudamkulam Unit-1 | 5804.00 | 23.41 | 1106.72 |
| 15 | Kudigi Station(3X800 MW) | 3723.77 | 52.09 | 1939.71 |
| 16 | DVC- Maija (unit 7 &8) | 1000 | 20 | 1489.20 |
| 17 | DVC- Koderma (unit 1 & 2)) | 1000 | 25 | 1861.50 |

Table-7

| Stations | Energy scheduled @ generators Ex-bus in MUs | Injection loss in % | With drawl loss in % | Injection state POC loss in MUs | Energy scheduled after Injection state loss | withdrawal state POC loss in MUs | Energy @ KPTCL periphery |
|--|---|------------------------|-------------------------------|--|---|---|--------------------------------|
| N.T.P.C-RSTP-I&II | 2610.55 | 0.86 | 1.61 | 22.45 | 2588.10 | 41.67 | 2546.43 |
| NTPC-III | 659.02 | 0.86 | 1.61 | 5.67 | 653.35 | 10.52 | 642.83 |
| NTPC-Talcher | 2593.09 | 1.88 | 1.61 | 48.75 | 2544.34 | 40.96 | 2503.38 |
| NLC TPS2-Stage 1 | 808.40 | 1.11 | 1.61 | 8.97 | 799.43 | 12.87 | 786.56 |
| NLC TPS2-Stage 2 | 1121.42 | 1.11 | 1.61 | 12.45 | 1108.98 | 17.85 | 1091.12 |
| NLC TPS1-Expn | 697.51 | 1.11 | 1.61 | 7.74 | 689.76 | 11.11 | 678.66 |
| NLC II expansion I | 714.88 | 1.11 | 1.61 | 7.94 | 706.95 | 11.38 | 695.57 |
| MAPS | 181.75 | 0.61 | 1.61 | 1.11 | 180.64 | 2.91 | 177.73 |
| Kaiga Unit 1&2 | 930.63 | 1.11 | 1.61 | 10.33 | 920.30 | 14.82 | 905.48 |
| Kaiga Unit 3 &4 | 924.35 | 1.11 | 1.61 | 10.26 | 914.09 | 14.72 | 899.37 |
| Simhadri Unit -1 &2 | 1382.04 | 0.86 | 1.61 | 11.89 | 1370.15 | 22.06 | 1348.09 |
| NTPLUnit-2X 500 MW | 1375.56 | 1.36 | 1.61 | 18.71 | 1356.85 | 21.85 | 1335.01 |
| KudamKulam | 1106.72 | 1.36 | 1.61 | 15.05 | 1091.67 | 17.58 | 1074.09 |
| Vallur TPS Sg I ,2 &3 | 1005.95 | 0.61 | 1.61 | 6.14 | 999.81 | 16.10 | 983.71 |
| Kudigi(3X800 MW) | 1939.71 | 0.86 | 1.61 | 16.68 | 1923.03 | 30.96 | 1892.07 |
| DVC - Mejja thermal Power Station | 1489.20 | 0.63 | 1.61 | 9.38 | 1479.82 | 23.83 | 1455.99 |
| DVC - Koderma Thermal Power Station | 1861.50 | 0.63 | 1.61 | 11.73 | 1849.77 | 29.78 | 1819.99 |
| Total | 21402.27 | | | | | | 20836.08 |

- 4.3. The power drawl from the Central Sector Generating Stations either through the PGCIL lines or any lines constructed by developer selected through competitive bidding route from the generating plants. ESCOMs will pay POC (Transmission charges) to PGCIL for Transmitting the CGS power and other states power. The POC charges as per RTA for the month of October-2017 is considered for FY 2018-19, which includes POC, Reliability support Charges and HVDC Charges. Considering the POC of October2017, the total POC payable by ESCOMs for the year 2018-19 is Rs.1770.12 crore. The CERC determined the charges for POSOCO-SRLDC for the control period vide order dated 29.12.2016. Out of the charges receivable by SRLDC, the share of Karnataka works out to Rs. 2.27 crore
- 4.4 The CERC has determined the tariff for the generating station like, NTPC and NLC station for the control period 2014 to 2019. The capacity charge considered based on various orders are as detailed below:

| S1. No. | Stations | Date of order | Capacity charges applicable for 2018-19(Amount in | | |
|------------|------------------------|---------------|---|--|--|
| | | | Rs. crore | | |
| 1 | RSTP-I&II | 24.1.2017 | 1061.23 | | |
| 2 | RSTP-III | 8.11.2016 | 270.49 | | |
| 3 | RSTP-Talcher | 16.02.2017 | 1007.23 | | |
| 4 | Simhadri station II | 29.7.2016 | 1069.77 | | |
| 5 | Vallur unit-I & II | 11.7.1017 | 1847.69 | | |
| 6 | NLC II Stage-1 | 12.6.2017 | 299.80 | | |
| 7 | NLC II Stage-2 | 12.06.2017 | 414.29 | | |
| 8 | NLC expansion I | 18.10.2016 | 276.18 | | |
| | NLC expansion Stage II | | | | |
| 9 | (Unit-1) | 24.7.2017 | 728.05 | | |
| 10 | NTPL-2X 500 MW | 11.7.2017 | 1090.16 | | |
| 11 | Kudigi | As per the | Rs. 1.86 per unit | | |
| | | petition | | | |
| 12 | DVC-Mejia | 3.10.2016 | 1019.20 | | |
| 13 | DVC-Koderma | 28.2.17 | 1175.74 | | |

The average variable cost for the month of Aug-2017, Sep-2017 and Oct-2017 is considered for energy charges for FY 2018-19. In case of MAPS, Kaiga, and Kundamkulam, rate per unit for the month of Oct-2017 is considered.

| Particulars | MAPS | Kaiga Units 1 to 4 | Kudamkulam |
|--------------------------------------|--------|-----------------------|------------|
| Base Price | 1.9797 | 2.9837 | 3.5448 |
| Fuel adjustment charges | 0.0003 | | 0.4275 |
| Heavy Water adjustment charges | 0.0382 | 0.0060 | |
| Heavy Water lease adjustment charges | | 0.0128 | |
| Insurance | 0.0885 | 0.1381 | 0.0397 |
| Decommissioning Reserve | 0.0200 | | 0.0200 |
| Nuclear Liability & Forex adjustment | 0.0500 | | 0.0597 |
| Total tariff | 2.1767 | 3.1406 | 4.0916 |

4.5 The capacity charges (Fixed Cost) and variable cost considered for 2018-19 is shown in Table-9.

Table-9

| Central Projects | FC Rs in Cr | VC Paise per Kwh |
|-----------------------------------|----------------|---------------------|
| N.T.P.C-Ramagundam | 189.49 | 227.93 |
| NTPC-VII | 50.68 | 222.07 |
| NTPC-Talcher | 184.73 | 215.70 |
| NLC TPS2-Stage 1 | 72.04 | 274.30 |
| NLC TPS2-Stage 2 | 100.87 | 274.30 |
| NLC TPS1-Expn | 71.59 | 255.10 |
| NLC II Expansion-1 | 188.65 | 251.50 |
| MAPS | | 217.67 |
| Kaiga unit I &II | | 314.06 |
| Kaiga Unit 3 &4 | | 314.06 |
| Simhadri Unit -1 &2 | 221.89 | 275.47 |
| Vallur TPS Stage I &2 &3 | 215.27 | 278.53 |
| NTPL | 240.59 | 316.03 |
| KudamKulam | | 409.16 |
| Kudigi | 360.79 | 351.17 |
| DVC- Mejia thermal Power Station | 203.84 | 228.60 |
| DVC Kodemma thermal Power Station | 293.93 | 185.23 |

4.6 Income tax for the CGS station included in the capacity charges payment on normative basis by grossing up of ROE with effective tax rate of the respective financial year of the generating company. Income tax is already part of capacity charges and not payable separately and hence not considered.

5.0 Independent Power Producers

5.1. The generation of 1200 MW of UPCL Unit -1 & Unit-2 taken at 85% of 90% installed capacity as per PPA/ approval given by Government. The auxiliary consumption of 5.25% as per CERC Regulation 2014 and additional auxiliary consumption 1.2% allowed by CERC vide order dated 20.02.2014 and 10.07.2015 is taken. The capacity charges determined by CERC in the truing up order dated 24.03.2017 for FY 2013-14 excluding cost of secondary fuel is considered for FY 2018-19. The average variable cost for the month from August-2017 to October-2017 is considered for projected energy scheduled at 85% of 90% of the 1200 MW. The energy and cost details are shown in Table-10.

Table-10

| Stations | Energy in Mus Fixed cost Rs in Cr | | Variable cost Paise per Kwh | | |
|----------|-----------------------------------|---------|-----------------------------|--|--|
| UPCL | 7462.68 | 1198.02 | 302.67 | | |

6.0 Non conventional Energy Source (NCE source)

- 6.1 The actual generation of NCE projects for the year 2016-17 has been considered for 2018-19 including Solar, Co-generation, Bio-mass, Wind Mills and Mini Hydel projects.
- 6.2 Project which are expected to be commissioned during 2018-19 is based scheduled COD of the projects in respect of 1 to 3 Farmer scheme, Talukwise solar and Bidding by KREDL. The rate is are per the revised order issued by Commission in respect of 1 to 3 farmer scheme. The rats for other projects are as per the bidding rates.
- 6.3. The PLF is based on KERC order dated 30.7.2015 is considered to arrive energy for FY 2018-19.
- 6.4. The energy generated from Solar park in respect of 600 MW developed by NTPC for the FY 2018-19 is as below:

| | Open Category | | CUF in | Tariff | Energy | Amount |
|---|---|-----------------|--------|----------|---------|--------|
| | | Capaci ty in | % | per unit | in Mus | in RS |
| 1 | M/s Yarrow Infrasture | 50 | 27.00 | 4.79 | 118.26 | 56.65 |
| 2 | M/s Tata Power Renewable Energy Private limit | ed 100 | 24.70 | 4.79 | 216.37 | 103.64 |
| 3 | M/s Parampujya Solar Energy private limited | 100 | 27.25 | 4.79 | 238.71 | 114.34 |
| 4 | M/s Fortum FinnSurya Energy private Ltd | 100 | 25.80 | 4.79 | 226.01 | 108.26 |
| 5 | M/s ACME Reneri Solar Power private Itd | 50 | 27.50 | 4.79 | 120.45 | 57.70 |
| 6 | M/s ACME KuruKshetra Solar Energy Private Ltd | 50 | 27.50 | 4.79 | 120.45 | 57.70 |
| 7 | M/s Renew wind Energy Private Ltd | 50 | 25.00 | 4.8 | 109.50 | 52.56 |
| | DCR category | | | | | |
| 8 | M/s Tata Power Renewable Energy Private limit | ed 50 | 26.35 | 4.84 | 115.41 | 55.86 |
| 9 | M/s Parampujya Solar Energy private limited | 50 | 26.40 | 4.86 | 115.63 | 56.20 |
| | | 600 | | · | 1380.80 | 662.90 |

- 6.5 Ministry of power for allocation of power for allocation of un allocated power of coal based NTPC stations for bundling with solar power in ratio of 1.2(unallocated power : Solar power) as envisaged under National Solar Mission Phase –II, Batch-II Tranche-I. Accordingly, Ministry of Power, GOI, allocated 300 MW to Karnataka from unallocated power of coal based NTPC stations of Eastern Region and Western Region. The expected energy from bundled power of coal is around 2233.80 MUs (300 MW @85% PLF)
- 6.6 ESCOM wise NCE energy projected for FY 2018-19 is shown in **Table 11.**

Table-11 (Energy in MUs)

| Minor IPPs | BESCOM | GESCOM | HESCOM | MESCOM | CESC |
|------------------------------|---------|--------|---------|--------|--------|
| Existing NCE projects | • | | | 1 | |
| Co-generation | | 18.37 | 201.08 | | 28.61 |
| Biomass | 64.62 | 48.04 | | | 7.33 |
| Mini Hydel | 290.71 | 102.26 | 80.95 | 227.80 | 145.71 |
| Wind mill | 2356.83 | 193.55 | 844.35 | 284.20 | 223.56 |
| KPCL wind mill | 7.76 | | | | |
| Solar | 265.21 | 45.12 | 43.27 | 74.91 | 46.64 |
| KPCL Solar | 4.15 | 2.71 | 3.53 | | |
| NTPC Bundled power - Coal | 236.04 | 67.59 | 96.11 | 39.60 | 54.60 |
| NTPC Bundled Power- Solar | 57.31 | 16.41 | 23.33 | 9.62 | 13.26 |
| Captive/Wind MOA | | 3.04 | 150.71 | | |
| Total of existing NCE | 3282.63 | 497.09 | 1443.33 | 636.13 | 519.71 |
| New NCE Projects | | | | 1 | |

| Co-generation | | | | | |
|------------------------------|---------|---------|---------|--------|---------|
| Biomass | | | | | |
| Mini Hydel | | | | | |
| Wind mill | | | | | |
| Solar | 892.12 | 396.13 | 259.00 | 28.30 | 341.20 |
| Farmer 1 to 3 MW | 139.81 | 23.30 | 84.88 | 4.99 | 24.96 |
| NTPC Bundled power - Coal | 1036.26 | 337.75 | 424.42 | 176.25 | 259.12 |
| NTPC Bundled Power- Solar | 640.55 | 208.78 | 262.35 | 108.94 | 160.17 |
| Total of New NCE projects | 2708.74 | 965.95 | 1030.65 | 318.48 | 785.46 |
| Total | 5991.37 | 1463.04 | 2473.98 | 954.61 | 1305.16 |

- 6.5 The average cost of the year 2016-17 is considered for existing Hydro and Wind projects.
- 6.6 In respect of new Bio-mass, Co-generation, Wind Mill and Mini Hydel the tariff considered is as per the KERC order dated 1.1.2015.
- 6.7 The rate as per KERC order dated 24.02.2015 is considered for existing Bio Mass and Co-generation projects.
- 6.8 In respect of Solar Power Projects, the rate obtained through tender is considered.

7.0 Jurala Project

The ESCOMs having a share of 50% from Jurala Priyadarshni Hydro Electric Projects ie 117 MW. The net energy exported to Karnataka from Jural Priyadarshni Hydro Electric Projects for the year 2016-17 is considered for 2018-19 as energy excepted to receive during the year 2018-19. The TSERC vide tariff order dated 6.7.2017 determined the capacity charges for the project for the control period from 1.4.2014 to 31.3.2019. The 50% of the capacity charges applicable for the financial year 2018-19 is considered.

Table-13

| | Apr- 18 | May- 18 | Jun- 18 | Jul- 18 | Aug- 18 | Sep- 18 | Oct- 18 | Nov- 18 | Dec- 18 | Jan- 19 | Feb- 19 | Mar- 19 | Total |
|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---------|
| Energy in Mus | 0 | 0.016 | 0 | 16.48 | 24.75 | 56.99 | 20.90 | 0 | 0 | 0 | 0 | 0 | 119.104 |
| Amount in Rs Cr | 4.89 | 4.89 | 4.89 | 4.89 | 4.89 | 4.89 | 4.89 | 4.89 | 4.89 | 4.89 | 4.89 | 4.89 | 48.88 |

8.0 The energy from T. B. Dam power is shared between AP/Telangana and Karnataka. The 1/5th share of revenue expenditure and energy has been shared between two states. The actual cost and energy supplied for the FY 2016-17 is considered for 2018-19. The power purchase cost and energy from T. B. Dam has been estimated to 13.25 MUs and Rs. 1.36 crore.

Table-14

| | Apr-18 | May- | Jun- | Jul- | Aug- | Sep- | Oct- | Nov- | Dec- | Jan- | Feb- | Mar- | |
|--------------------------|--------|-------|-------|------|------|------|------|------|------|-------|-------|-------|-------|
| | | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 19 | 19 | 19 | Total |
| Energy in Mus | -0.28 | -0.31 | -0.12 | 1.95 | 2.77 | 3.53 | 3.95 | 2.21 | 0.03 | -0.11 | -0.28 | -0.09 | 13.25 |
| Amount in Rs crore | 0.06 | 0.08 | 0.08 | 0.07 | 0.08 | 0.12 | 0.14 | 0.08 | 0.10 | 0.11 | 0.12 | 0.32 | 1.36 |

9.0 Medium Term Power Purchase – Co generation power plant for a period of 5 years

GoK vide Order EN 16 PPT 2016 dated 11.11.2016 accorded approval to purchase power from Bagasse Based Co-generation Units of 28 Sugar factories with an exportable capacity of 501 MW during the season only in the State with the approval of KERC for a period of 5 (FIVE) years commencing from 2016-17 at the tariff determined by KERC

KERC vide order dated 11th April 2017 has determined the final tariff for the cogeneration units for the financial year 2016-17 to 2020-21. As per the KERC order, the tariff payable per unit for the energy supplied from the co-generation plants commissioned in different years during the period from 2005 or earlier to 2014 are as detailed below:

| Year of | FY17 | FY18 | FY19 | FY20 | FY21 |
|------------------|------|-----------|-----------|-----------|-----------|
| Commissioning | (Rs. | (Rs. Ps.) | (Rs. Ps.) | (Rs. Ps.) | (Rs. Ps.) |
| | Ps.) | | | | |
| Variable Charges | 3.14 | 3.32 | 3.51 | 3.71 | 3.92 |
| 2005 and Earlier | 3.98 | 4.16 | 4.35 | 4.55 | 4.76 |
| 2006 | 3.96 | 4.14 | 4.33 | 4.53 | 4.74 |
| 2007 | 3.95 | 4.13 | 4.32 | 4.52 | 4.73 |
| 2008 | 4.01 | 4.19 | 4.38 | 4.58 | 4.79 |
| 2009 | 4.08 | 4.26 | 4.45 | 4.65 | 4.86 |
| 2010 | 4.58 | 4.76 | 4.95 | 5.15 | 5.36 |
| 2011 | 4.71 | 4.89 | 5.08 | 5.28 | 5.49 |
| 2012 | 4.85 | 5.03 | 5.22 | 5.42 | 5.63 |
| 2013 | 4.91 | 5.09 | 5.28 | 5.48 | 5.69 |
| 2014 | 4.96 | 5.14 | 5.33 | 5.53 | 5.74 |

The rate applicable for FY 2018-19 as per the above table is considered with 60% of the energy generated from the exported capacity for a period of 140 days. The above rates are subject to final outcome of the review petition

filed by ESCOMs before KERC. The details are indicated in **Table-15**

Table-15

| S1. No. | NAME OF THE SELLER | Rate as per KERC order dated 11.4.2017 (Rs/kwh) | Energy @ 60% PLF in Mus | Amount in Rs crore |
|---------|--|--|-------------------------------|-----------------------|
| 1 | GODAVARI BIOREFINERIES LTD. | 4.35 | 56.45 | 24.55 |
| 2 | JAMAKHANDI SUGARS LTDI | 4.35 | 28.22 | 12.28 |
| 3 | JAMAKHANDI SUGARS LTDII | 5.33 | 28.22 | 15.04 |
| 4 | NIRANI SUGARS LTD | 4.95 | 54.43 | 26.94 |
| 5 | NSL SUGARS LTD., KOPPA, | 4.35 | 21.57 | 9.38 |
| 6 | NSL SUGARS LTD., KO THUNGABHADRA | 5.08 | 33.87 | 17.21 |
| 7 | NSL SUGARS LTD.,Aland | 5.22 | 38.30 | 19.99 |
| 8 | PARRY SUGAR INDUSTRIES LTD., HALIYAL | 4.38 | 39.31 | 17.22 |
| 9 | PARRY SUGAR INDUSTRIES LTD., SADASHIVA UNITS | 4.38 | 18.14 | 7.95 |
| 10 | SRI CHAMUNDESHWARI SUGARS LTD. | 4.38 | 36.29 | 15.89 |
| 11 | SRI PRABULINGESHWAR SUGARS & CHEMICALS | 4.35 | 50.40 | 21.92 |
| 12 | COREGREEN SUGAR & FUELS PVT.LTD | 5.08 | 30.24 | 15.36 |
| 13 | MANALI SUGARS LTD., MALAGHAN, BIJAPUR | 5.33 | 20.16 | 10.75 |
| 14 | VIJAYANAGARA SUGAR PVT. LTD., | 4.95 | 30.24 | 14.97 |
| 15 | BHALKESHWARA SUGARS LTD | 5.33 | 18.14 | 9.67 |
| 16 | G M SUGARS LTD. | 4.45 | 20.16 | 8.97 |
| 17 | GEM SUGARS LTD., | 4.35 | 24.19 | 10.52 |
| 18 | SHREE RENUKA SUGARS LTD, BURLATTI | 4.32 | 50.40 | 21.77 |
| 19 | SHREE RENUKA SUGARS LTD, HAVALGA | 4.95 | 40.32 | 19.96 |
| 20 | SHREE RENUKA SUGARS LTD, MUNOLI | 4.35 | 30.24 | 13.15 |
| 21 | KPR SUGARS LTD | 5.22 | 36.29 | 18.94 |
| 22 | SHIVASHAKTHI SUGARS LTD | 5.22 | 48.38 | 25.26 |
| 23 | SHIRAGUPPI SUGARS LTD | 5.28 | 24.19 | 12.77 |
| 24 | SOUBHAGYA LAXMI SUGARS LTD | 5.28 | 33.38 | 17.63 |
| 25 | DAVANAGERE SUGARS | 4.35 | 22.18 | 9.65 |
| 26 | INDIAN CANE POWER LTD | 5.33 | 108.86 | 58.02 |
| 27 | VISWARAJ SUGARS | 4.45 | 28.22 | 12.56 |
| | Total | 482.42 | 970.82 | 468.34 |

10.0 ESCOMs have signed Power Purchase agreement with Generators/Trader for procurement of power on short term basis from November-2017 to 31.5.2018. The quantum of energy @75% PLF of the contracted Capacity in respect of short term procurement and ate arrived as per e-reverse

action for the months of April-2018 & May-2018 is considered.. The details are indicated in the Table-16

Table-16

| | Short term power procurement | | | | | | | | |
|---|--------------------------------------|----------|----------------------------|------------|-------------------------------|------------------------|--|--|--|
| | Name of the company | Capacity | Rate per unit Rs/kwh | No of days | Energy in Mus @ 75% PLF | Amount in Rs Crores | | | |
| | | Southe | rn Region | | | | | | |
| 1 | M/s JSW Energy Private Limited | 200 | 4.08 | 61 | 219.6 | 89.60 | | | |
| 2 | M/s Global Energy Private Limited | 300 | 4.08 | 61 | 329.4 | 134.40 | | | |
| | | A11 | India | | | | | | |
| 1 | M/s Global Energy Private Limited | 200 | 4.08 | 61 | 219.6 | 89.60 | | | |
| 2 | Shree Cements | 100 | 4.08 | 61 | 109.8 | 44.80 | | | |
| 3 | M/s PTC India Limited | 100 | 4.08 | 61 | 109.8 | 44.80 | | | |
| | Total | 900 | 4.08 | | 988.20 | 403.19 | | | |

11.0 The projected energy and cost allocated among the ESCOMs is as per GoK order dated 31.3.2017 and allocation of bundled power of NTPC Solar Park is as per PPA

Transmission Cost:

KPTCL Transmission and SLDC & PGCIL, POSOCO charges for FY-19 as approved by KERC vide Tariff Order 2016 is Rs.655.29 Crs.

Operation and Maintenance Expenses:

The Hon'ble commission considered FY-16 as Base Year for estimating the O & M cost for FY-18. The Commission considered the wholesale price index (WIPI) as per the data available from the Ministry of Commerce & Industry, Government of India and Consumer price Index (CPI) as per the data available from the labour bureau. Government of India and adopting the methodology/ followed by CERC with CPI and WPI in the ratio of 80:20, the allowable inflation for FY-18 was computed & weighted inflation index was fixed at 7.71%.

For the purpose of determining the normative 0 & M expenses for FY-19. HESCOM has considered the same weighted inflation index of 7.71%.

HESCOM has calculated the O &M expenses as noted below.

- a) The actual O & M expenses for FY-17 inclusive of contribution to pension and Gratuity Trust.—
 Rs.685.64.Crs
- b) The Five year compounded annual growth rate (CAGR) of the number of installations considering the actual number of installations as per audited accounts up to FY-17 (Using actual of FY-13 to FY-17.--- 3.76%
- c) The WII at 7.71% (as per Tariff Order 11.04.2017)
- d) Efficiency factor at 2% as considered in the earlier three control periods.

0 & M expenses for FY-19 are calculated as follows.

| Particulars | FY-15 | FY-16 | FY-17 | FY-18 | FY-19 |
|---|---------|---------|---------|---------|---------|
| No of installations as per audited accounts | 4090052 | 4264566 | 4427071 | 4597682 | 4776864 |
| Weighted Inflation Index as per Tariff Order 02.03.2015 (IN %) | 6.69 | 6.69 | | 7.71 | 7.71 |
| CGI based on 3 year CAGR (Using actual of FY-12 to FY-15) (IN %) | 3.52 | 3.52 | | 3.76 | 3.76 |
| Actual O &M expenses for FY-15. Rs. Crs | 580.95 | | | | |
| 0 & M expenses : 0 & M (t-1)* (1+Wii+CGI-X) | | 628.65 | 686.10 | 751.07 | 822.20 |

Based on the above the O & M Expenses are segregated as noted below on pro-rata basis considering the actual O & M Expenses of FY-19.

(HESCOM is not proposing any modification for FY-18 in this filing.)

Details of Normative 0 & M expenses

| Particulars | FY-17 | FY-18 | FY-19 |
|----------------|--------|--------|--------|
| R&M cost | 62.51 | 67.07 | 72.57 |
| Employee cost | 525.44 | 563.74 | 610.02 |
| A&G expenses | 98.15 | 105.30 | 113.95 |
| Total O&M cost | 686.10 | 736.11 | 796.54 |

Additional Employee Cost

HESCOM is proposing Additional Employee Cost due to recruitment as noted below.

| Sl. No | Name of the Post | 2017-18 Year Expenditure [In Rupees in CRS] | Number of Posts | 2018-19 Year Expenditure [In Rupees in CRS] | Number of Posts |
|-----------|----------------------------|---|--------------------|---|--------------------|
| 1 | Assistant Ex Engineer[Ele] | 0.37 | 9 | 0.28 | 0 |
| 2 | Assistant Engineer[Ele] | _ | 0 | 1.08 | 17 |
| 3 | Assistant Engineer[C] | 0.11 | 3 | 0.08 | 0 |
| 4 | Assistant Accounts Officer | - | 0 | 5.7 | 90 |
| 5 | Junior Engineer[Ele] | - | 0 | 1.3 | 32 |
| 6 | Assistants | - | 0 | 4.2 | 119 |
| 7 | Junior Assistants | - | 0 | 2.18 | 70 |
| 8 | Assistant Lineman | - | 0 | 29.62 | 1081 |
| 9 | Junior Lineman | 18.25 | 1385 | 3.29 | 0 |
| | | 18.73 | 1397 | 47.73 | 1409 |
| | Add previous year cost | | | 18.73 | |
| | Total | 18.73 | | 66.46 | |

The Details are annexed in the formats along with Format of Employee Cost-D6.

Total O & M Cost:

Rs.in Crs Sl. No FY-17 FY-18 FY-19 **Particulars** 1 Normative O & M Cost 686.10 736.11 796.54 Additional Employee Cost 2 18.73 66.46 754.84 3 Total O & M Cost 686.10 863.00

HESCOM is proposing Rs. 863.00.Crs as 0 & M expenses for FY-19

The Hon'ble KERC has approved O & M Expenses of Rs. 825.79 Crs for FY-19 vide Tariff Order Dtd 30.03.2016.

Depreciation: Depreciation is calculated as per the CERC Regulations with effect from 01.04.2009.

Growth of fixed Assets:

The projected growth in the fixed assets is worked out on the basis of creation of assets out of the Capex proposed for the control period i.e. FY-19. 70% of the Capex is considered as the assets of the particular year. Accordingly the closing balance is worked out as noted below.

| Particulars | FY-17 (Actual) | FY-18 (Proposed) | FY-19 (Proposed) |
|---|-------------------|---------------------|---------------------|
| Capex(Rs. in Crs) | 820.48 | 1199.71 | 1298.16 |
| 70% of Capex | 0.00 | 839.80 | 908.71 |
| Previous year closing balance of assets | 4695.78 | 4460.51 | 5032.68 |
| Total closing balance of Assets worked on Capex | 4695.78 | 5300.31 | 5941.39 |
| Less retirement of Assets | 235.27 | 267.63 | 301.96 |
| Balance of Assets | 4460.51 | 5032.68 | 5639.43 |

Error! Not a valid link. The individual group wise assets are calculated on pro rata basis on the figures of FY-17

Rs. In Crores

| SI. | | FY-17 (Projected) FY-18 (Projected) | | FY-1 | | | | | | | |
|---------|--|-------------------------------------|--|---|----------|--|---|----------|--|---|----------|
| N o. | Particulars | ОВ | Additi ons during the year | Retire ment of Assets during the | СВ | Additio ns during the year | Retire ment of Assets during the | СВ | Additio ns during the year | Retire ment of Assets during the | СВ |
| 1 | Land and rights | 10.29 | 0.63 | year 0.12 | 10.81 | - | year - | 10.81 | - | year - | 10.81 |
| 2 | Buildings | 76.20 | 7.74 | 0.69 | 83.26 | 2.96 | - | 86.22 | 3.21 | - | 89.43 |
| 3 | Hdraulic Works | 3.08 | 0.52 | 0.07 | 3.53 | 0.28 | - | 3.81 | 0.30 | - | 4.11 |
| 4 | Other Civil Works | 2.71 | 0.37 | 0.13 | 2.95 | 0.24 | 0.06 | 3.13 | 0.26 | 0.07 | 3.33 |
| 5 | Plant & Machinery | 759.76 | 242.59 | 148.44 | 853.91 | 278.14 | 214.44 | 917.61 | 300.97 | 241.94 | 976.64 |
| 6 | Lines, Cables, Networks | 3,009.08 | 563.65 | 83.27 | 3,489.46 | 553.34 | 49.96 | 3,992.84 | 598.75 | 56.37 | 4,535.22 |
| 7 | Vehicles | 5.65 | 0.64 | 0.15 | 6.14 | - | - | 6.14 | - | 1 | 6.14 |
| 8 | Furniture Fixtures | 4.01 | 3.07 | 0.14 | 6.94 | 0.54 | 0.06 | 7.42 | 0.58 | 0.07 | 7.93 |
| 9 | Office Equipments | 4.68 | 2.29 | 2.26 | 4.71 | 4.29 | 3.11 | 5.89 | 4.64 | 3.51 | 7.03 |
| | TOTAL | 3,875.46 | 821.50 | 235.27 | 4,461.71 | 839.80 | 267.63 | 5,033.88 | 908.71 | 301.96 | 5,640.63 |
| | Less:Contributi ons,Grants towards Capital assets | 1196.91 | | | 1370.01 | | | 1606.26 | | | 1886.17 |

In respect of assets created out of grants and contributions, the 3 year CAGR from FY-12 to FY-15 is considered for the growth of assets created out of grants and contribution for the period FY-17 to FY-19.

Rs. In Crores

| Particulars | FY-17 | FY-18 | FY-19 |
|-----------------------|---------|---------|---------|
| Consumer contribution | 967.10 | 1162.70 | 1397.86 |
| Grants | 402.91 | 443.56 | 488.30 |
| Total | 1370.01 | 1606.26 | 1886.17 |

Based on the above closing balance of the assets, the depreciation is calculated as noted below.

Rs. In Crores

| | FY-17 (As per audited A/c) FY-18 (pro | | -18 (projected) | | FY-19 (projected) | | | | | | |
|---------------|---------------------------------------|----------|-------------------------------------|--|-------------------|--|--|----------|-------------------------------------|--|----------|
| Sl. N o | Particulars | ОВ | Additio ns during the year | Elimin ated on dispos al of Assets | СВ | Additio ns during the year | Elimina ted on disposa l of Assets | СВ | Additio ns during the year | Eliminat ed on disposal of Assets | СВ |
| 1 | Land and rights | - | - | - | • | - | - | • | • | - | - |
| 2 | Buildings | 22.38 | 2.85 | -0.35 | 24.88 | 2.78 | -0.36 | 27.31 | 2.88 | -0.37 | 29.82 |
| 3 | Hidraulic Works | 1.2 | 0.22 | -0.03 | 1.39 | 0.12 | -0.03 | 1.48 | 0.13 | -0.03 | 1.57 |
| 4 | Other Civil Works | 0.72 | 0.13 | -0.04 | 0.81 | 0.1 | -0.04 | 0.87 | 0.1 | -0.04 | 0.93 |
| 5 | Plant & Machinery | 217.58 | 48.71 | -36.17 | 230.12 | 45.09 | -36.98 | 238.22 | 48.45 | -38.2 | 248.47 |
| 6 | Lines, Cables, Networks | 828.75 | 105.35 | -53.12 | 880.98 | 184.24 | -54.31 | 1,010.91 | 210.82 | -56.11 | 1,165.63 |
| 7 | Vehicles | 4.72 | 0.15 | -0.15 | 4.72 | 0.58 | -0.15 | 5.15 | 0.58 | -0.16 | 5.58 |
| 8 | Furniture Fixtures | 2.38 | 0.35 | -0.1 | 2.63 | 0.44 | -0.1 | 2.97 | 0.47 | -0.11 | 3.33 |
| 9 | Office Equipments | 0.79 | 0.13 | -0.06 | 0.86 | 0.3 | -0.06 | 1.09 | 0.37 | -0.06 | 1.4 |
| | TOTAL | 1,078.52 | 157.89 | -90.02 | 1,146.39 | 233.65 | -92.04 | 1,288.00 | 263.81 | -95.08 | 1,456.73 |
| Les | s assets (DCW & grants) | | | | | 72.34 | | | 84.81 | | |
| N | et Depreciation | | | | | 161.31 | | | 179 | | |

Note : Average of 5.28% of Value of Assets created out of grants is deducted in total depreciation in FY-18 & FY-19

Note: The Capital Grants received from Government contribution towards cost of capital assets is reduced from Gross Block. The Consumer contribution and Government grants towards cost of capital assets cannot be identified to relevant fixed assets. Hence, the same is treated as related to the Lines, Cables and Networks Assets group and deducted directly from the total Gross Fixed Assets. The corresponding depreciation on these assets provided at respective Accounting Units has been reduced from depreciation for the year FY-19 @5.28% which works out to Rs. 179.00 Crs.

(HESCOM is not proposing any modification for FY-18 in this filing.) HESCOM is proposing Rs. 179.00 Crs as depreciation for FY-19,

The Hon'ble KERC has approved depreciation of Rs.130.11 Crs for FY-19 vide Tariff Order Dtd 30.03.2016.

Interest and Finance Charges:

HESCOM proposes to draw loan and make the repayments and interest charges. The source wise details are furnished in D-9 statements. HESCOM has drawn Rs. 1554.56 Crs during FY-17 and desires to draw loan of about Rs. 1058.28 Crs in FY-18 and Rs.1279.55 Crs in FY-19 respectively towards Capex.

HESCOM is proposing the interest on loan capital on the basis of average loan as noted below.

| Particulars | FY-18 | FY-19 |
|-----------------------|---------|---------|
| Opening balance | 1554.53 | 2456.56 |
| Add new loans | 1058.28 | 1279.55 |
| Less repayment | 156.25 | 270.70 |
| Closing balance loans | 2456.56 | 3465.41 |
| Average loans | 2005.55 | 2960.99 |
| Rate of interest in % | 11.59 | 11.59 |
| Interest on loans | 232.44 | 343.18 |

The interest calculated is on average loan basis considering the weighted average rate of interest but HESCOM has worked out individual source wise loan and interest which are indicated in D-9 & desires to consider the same for interest on loan capital for FY-19.

HESCOM is not proposing any modification for FY-18 in this filing.) HESCOM is proposing Rs. 337.90 Crs, as interest on loan capital for FY-19.

The Hon'ble KERC has approved interest on loan capital of Rs. 180.23 Crs for FY-19 vide Tariff Order Dtd 30.03.2016.

Interest on working capital: As per Regulation 3.1 the interest on working Capital is one of the Components for estimation of ARR of the Distribution Licensee. As per regulation 3.11.1, working capital comprises 0 & M expenses for one month, maintenance spares at 1% of the cost of the asset at the beginning of the year and two months average revenue. The details of calculation are as noted below.

| Particulars | FY-18 | FY-19 |
|---|---------|---------|
| One -twelfth of the amount of O & M Exp | 62.90 | 71.92 |
| Opening GFA | 4461.69 | 5033.86 |
| Stores, materials and supplies 1% of opening balance of GFA | 44.62 | 50.34 |
| One-Sixth of the Revenue | 1148.44 | 1189.83 |
| Total Working Capital | 1255.96 | 1312.09 |
| Rate of Interest (% p.a) BPLR | 11.00% | 11.00% |
| Approved Interest on Working Capital | 138.16 | 144.33 |

(HESCOM is not proposing any modification for FY-18 in this filing.)
HESCOM is proposing Rs. 144.33 Crs, as interest on working capital for FY-19.

The Hon'ble KERC has approved interest on working capital of Rs. 136.94 Crs for FY-19 vide Tariff Order Dtd 30.03.2016.

Interest on security Deposit: As per KERC (Interest on Security Deposit) regulation 2005, the licensee has to pay interest on security deposit of the consumer at the bank rate every year.

The audited accounts for FY-17 are available. Considering the closing balance of security deposit held HESCOM proposes the interest on the security deposit of consumers as noted below.

HESCOM is considering 3 years CAGR (from FY-15 to FY-17) for calculating the consumer deposits and accordingly, the interest on consumer deposit is calculated as noted below.

| Particulars | FY-17 (Actual) | FY-18 (Proposed) | FY-19 (Proposed) |
|--|-------------------|---------------------|---------------------|
| Consumer deposits calculated on CAGR basis | 576.40 | 688.63 | 750.83 |
| Rate of Interest | 8.75% | 8.75% | 8.75% |
| Interest payable to Consumer | 44.25 | 60.26 | 65.70 |

(HESCOM is not proposing any modification for FY-18 in this filing.)

HESCOM is proposing Rs. 65.70 Crs, as interest on consumer security deposit for FY-19,. The Hon'ble KERC has approved interest on Consumer Security Deposits of Rs. 75.35 Crs for FY-19 vide Tariff Order Dtd 30.03.2016.

Other Expenses:

Other expenses consist of asset decommissioning cost, value written of, loss relating to fixed assets, bad and doubtful debts written off, material Cost variance etc. HESCOM has continued the process of decommissioning of old assets and to identify old and obsolete materials /assets, scrap materials, which are not useful. Such assets/materials will be sold at accost less than written down value maintained in the book of accounts. There is a provision for payment of compensation payable to consumer for damages, injury caused etc, and also in pursuance with standard performance regulations. HESCOM has considered actual expenses for previous years and estimated for FY-17. The details filed are as fallows.

Details of other expenses:-

Rs. in Crs.

| | | FY-16 | FY-17 | FY-18 | FY-19 |
|------------|---|---------------------------------|---------------------------------|-------------|-------------|
| Sl. No. | Particulars | (As per Audited Accounts) | (As per Audited Accounts) | (Projected) | (Projected) |
| 1 | Asset Decommissioning cost | 0.47 | 0.53 | 0.59 | 0.64 |
| 2 | Small & Low value Items written off | | | - | - |
| 3 | Losses relating to fixed Assets | 0.49 | 1.05 | 1.16 | 1.28 |
| 4 | Gain on sale of assets | 0.01 | (0.01) | (0.01) | (0.01) |
| 5 | Material Cost Variance | 0.01 | 1.12 | 1.24 | 1.36 |
| 6 | Bad & Doubtful Debts written off/provided for | 2.81 | (0.61) | (0.67) | (0.74) |
| 7 | Miscellaneous losses and Write offs | 6.98 | 6.98 | 7.71 | 8.49 |
| 8 | Prior Period Expenses | 19.11 | 17.50 | | |
| | Grand Total | 29.87 | 26.56 | 10.00 | 11.02 |

Prior Period Charges: As per accounting principles, HESCOM has to take in to account both the income and expenses relating to the prior period. The Prior period income comprises interest, income tax, excess provision for depreciation, excess provision for interest and finance charges, receipt from consumer etc. The prior period expenses comprises power purchase cost, operating employee cost, depreciation, interest and finance charges, material related cost variance etc. HESCOM has not estimated prior period charges for FY-18, FY-19. However, the honorable commission is requested to allow such prior charges as pass through in case such charges accounted during relevant year.

The Hon'ble KERC has not approved any Prior Period Charges for FY-19 vide Tariff Order Dtd 30.03.2016, but will consider on actual basis at the time of truing up in Annual Performance Review of FY-19.

HESCOM is not proposing prior period expenses for FY-19.

Prior period expenses:

| Sl. | | FY-16 | FY-17 | FY-18 | FY-19 |
|------|---|---------------------------------|---------------------------------|------------------|------------------|
| No | Particulars - | (As per Audited Accounts) | (As per Audited Accounts) | (Projectio n) | (Projecti on) |
| Inco | me relating to previous years: | | | | |
| 1 | Receipts from consumers | (12.09) | - | - | - |
| 2 | Excess Provision for Depreciation | (4.08) | (11.42) | - | 1 |
| 3 | Income Tax prior period | - | 1 | - | |
| 4 | Excess Provision for Interest and Fin. Charges | (0.18) | (0.29) | - | • |
| 5 | Other Excess Provision | (18.16) | (75.44) | - | |
| 6 | Others Income | (0.17) | (3.06) | - | - |
| 7 | Prior period tariff / RE subsidy | - | - | - | - |
| 8 | Other Misclenouse from trading | (30.51) | - | - | - |
| | TOTAL | (65.19) | (90.21) | • | • |
| | Expenditure relating to previous years | | | | |
| 1 | Power Purchase | - | - | - | - |
| 2 | Operating Expenses | 0.04 | 0.12 | - | - |
| 3 | Excise Duty on generation | - | - | - | - |
| 4 | Employee Cost | 0.01 | 0.09 | - | - |
| 5 | Depreciation | 5.09 | 9.35 | - | - |
| 6 | Interest and Finance Charges | 1.00 | 2.30 | - | - |
| 7 | Provision for Deferred tax liability / Income Tax | - | - | - | - |
| 8 | Admn. Expenses | 0.05 | - | - | - |
| 9 | Other | 12.92 | 5.64 | - | - |
| | TOTAL | 19.11 | 17.50 | | - |
| | Grand Total | (46.08) | (72.71) | • | - |

(HESCOM is not proposing any modification for FY-18 in this filing.) HESCOM is not proposing prior period expenses for FY-19.

The Hon'ble KERC has not approved other expenses for FY-19 vide Tariff Order Dtd 30.03.2016, but will consider on actual basis at the time of truing up in Annual Performance Review of FY-19.

Return on Equity: Return on Equity (RoE) is considered as a component of ARR of distribution Licensee. As per regulation 3.9, RoE only is considered as component of ARR of Distribution licensee. As per the said regulation, RoE will be computed at 15.5% per annum on share capital, Share Deposit, reserves and surplus held by the company. Accordingly RoE, is claimed for FY-17, FY-18 & FY-19, in view of huge negative reserves and surplus as noted below as per the audited accounts for FY-17.

Rs. in Crs

| Particulars | As at 31st March 2017 |
|--|--------------------------|
| Reserve for material cost variance -closing balance | 43.74 |
| Proposed adjustment to net worth reserve- closing balance | (-)86.47 |
| Surplus / deficit in statement of profit and loss- opening balance | (-)1562.06 |
| Add profit / loss for the year | (-)874.12 |
| Closing balance of reserves and surplus. | (-) 2478.92 |

Details of ROE

Rs. in Crs

| Particulars | FY-17 | FY-18 | FY-19 |
|--|------------|-----------|-----------|
| Paid Up Share Capital | 934.49 | 1211.06 | 1211.06 |
| Equity received | 0 | 200 | 400 |
| Reserves and surplus | (-)2473.28 | -2,298.60 | -2,427.16 |
| Equity, Reserve and surplus at the beginning of the year | (-)1538.79 | -1,087.54 | -1,216.10 |
| RoE (15.5%),MAT @19.377% | | | |

(HESCOM is not proposing any modification for FY-18 in this filing.) HESCOM is not proposing ROE for FY-19,

The Hon'ble KERC has not approved any Return on Equity (RoE) for FY-19 vide Tariff Order Dtd 30.03.2016, in view of negative net worth.

Provision for Taxation: As per regulation 3.1.2, taxes on income payable by Distribution Business is considered as one of the components of ARR. As HESCOM has huge amount accumulated loss of Rs. 2478.92 Crs. and depreciation, HESCOM is not proposing taxes for FY-19. The Honorable Commission is requested to approve the same.

The Hon'ble KERC has not approved any Provision for Taxation for FY-19 vide Tariff Order Dtd 30.03.2016, in view of accumulated loss.

Application for Approval of APR for FY-17 and Approval of Revised ARR & ERC for FY-19 & Tariff Filing for FY-19

Exceptional Item: (Adjustment of Excess Grant)

The amount represents Rs.102.90 Crores towards adjustment of excess subsidy claimed pertaining to FY-2010-11, 2011-12 & 2014-15, as per the GOK Order No: EN38 PSR 2015 Dtd: 31.03.2016. The entire subsidy amounting to Rs.514.49 Crores has to be adjusted in FY- 2015-16. However, the Company has accounted only Rs. 102.90 Crores on equal 5 installments as per Hon'ble KERC order Dtd: 23.04.2015, in the annual accounts of HESCOM for FY-17.

In view of the same HESCOM is proposing Rs.102.90 Crores as adjustment of excess grants in the ARR for FY-19.

Other Income: The other income component shall be deducted in total expenditure to arrive net ARR of HESCOM. Other income comprises interest on bank deposits and loan provided to employee societies, income from trading such as sale of stores/scrap, miscellaneous receipts such as rentals from staff quarters and miscellaneous recoveries made etc. HESCOM is proposing revised "other Income" as noted below based on 3 years CAGR FY-15.

(i) Other Income:

| Cl | | FY-16 | FY-17 | FY-18 | FY-19 | |
|-----------|---|--------------------|--------------------|------------------|------------------|--|
| Sl. No | Particulars | (As per Audited | (As per Audited | (Projectio n) | (Projectio n) | |
| • | | Accounts) | Accounts) | - | - | |
| 1 | Interest on staff loans and advances | - | - | - | - | |
| 2 | Income from Investments: | | | - | - | |
| a | Interest on securities | - | - | - | - | |
| b | Interest on Bank fixed deposits & Others (62.222, 62.360) | 1.56 | 2.61 | 3.38 | 4.37 | |
| c | Income on other investments | | | - | - | |
| d | Interest on loans/advances to suppliers/ Contractors | | | - | • | |
| e | Interest from Banks | | | - | • | |
| f | Interest on loans to Societies | | | - | - | |
| | Sub Total-2 | 1.56 | 2.61 | 3.38 | 4.37 | |
| 3 | Income from Trading: | | | | | |
| a | Profit on sale of fixed assets, hire etc of apparatus | | | - | - | |
| b | Hire charges from Contractors | | | - | - | |
| С | Profit on sale of stores (62.330) | 0.21 | 0.03 | 0.04 | 0.05 | |
| d | Sale of Scrap (62.340) | 0.09 | 1.13 | 1.46 | 1.89 | |
| e | Meter Readings and Calibration of Meter-Charges of Wind Mill Project (62.363) | 0.65 | 0.81 | 1.05 | 1.35 | |
| f | Income relating to reactive energy charges (62.364) | 0.41 | 0.00 | - | - | |
| g | Reactive energy charges demanded on IPPs (62.361) | 0.16 | 0.78 | 1.01 | 1.30 | |
| h | Processing fees (62.625) | 1.70 | 3.32 | 4.29 | 5.55 | |
| i | Other Misc Receipts from trading (62.360) | 30.51 | 4.72 | 6.10 | 7.89 | |
| | Sub Total-3 | 33.73 | 10.79 | 13.95 | 18.05 | |
| 4 | Income/Fees collections against staff welfare activities: | | | | | |
| a | Recoveries for transport facilities | - | - | - | - | |

Application for Approval of APR for FY-17 and Approval of Revised ARR & ERC for FY-19 & Tariff Filing for FY-19

| 5 | Miscellaneous Receipts: | | | - | - |
|---|--|-------|--------|-------|-------|
| a | Income due to right of way granted for laying fibre optic cables/co-axial cables on T&D system | | | - | - |
| b | Rental from Staff Quarters (62.901, 62.902) | 1.00 | 0.82 | 1.06 | 1.37 |
| С | Rental from others (62.903) | 0.06 | 0.05 | 0.06 | 0.08 |
| d | Leave contribution | | | - | - |
| e | Excess found on physical verification of cash | - | | - | - |
| f | Excess found on physical verification of stock (62.905) | - | 0.13 | 0.17 | 0.22 |
| g | Sundry Credit balance written back (62.912) | - | 94.71 | - | - |
| h | Excess found on physical verification of Assets | - | | - | - |
| I | Recovery from transport & vehicle expenses | | | - | - |
| j | Commission for collection of electricity duty (62.916) | 0.58 | 0.77 | 1.00 | 1.29 |
| k | Misc. recoveries (62.917) | 19.85 | 29.30 | 37.89 | 49.00 |
| l | Prior Period items (Note -27(ii)) | 34.68 | 94.39 | | |
| | Sub Total-5 | 56.17 | 220.17 | 40.18 | 51.96 |
| | GRAND TOTAL: | 91.46 | 233.57 | 57.51 | 74.37 |

Prior period Income:

| S. | Particulars | FY-16 | FY-17 | FY-18 | FY-19 |
|------|---|---------------------------------|---------------------------------|--------------|--------------|
| No | | (As per Audited Accounts) | (As per Audited Accounts) | (Projection) | (Projection) |
| Inco | me relating to previous years: | | | | |
| 1 | Receipts from consumers | (12.09) | - | - | - |
| 2 | Excess Provision for Depreciation | (4.08) | (11.42) | - | - |
| 3 | Income Tax prior period | - | - | - | - |
| 4 | Excess Provision for Interest and Fin. Charges | (0.18) | (0.29) | - | - |
| 5 | Other Excess Provision | (18.16) | (75.44) | - | - |
| 6 | Others Income | (0.17) | (3.06) | - | - |
| 7 | Prior period tariff / RE subsidy | - | - | - | - |
| 8 | Other Misclenouse from trading | (30.51) | = | - | - |
| | TOTAL | (65.19) | (90.21) | - | - |

(iii) Income from sale of power to HRECS & AEQUS:

The Hon'ble Commission has included the power purchase cost paid by HRECS, Hukkeri & AEQUS in the other income in MYT Filing for the period FY-17 to FY-19. Accordingly, HESCOM proposes the other income for FY-19 as noted below.

HESCOM proposes 342.77 MU for FY-18 & 352.43 for FY-19 (including transmission loss) to be supplied to HRECS Hukkeri & AEQUS at the rate of power purchase cost of Rs.4.246 per unit.

Application for Approval of APR for FY-17 and Approval of Revised ARR & ERC for FY-19 & Tariff Filing for FY-19

| | _ | FY-17 | FY-18 | FY-19 |
|---------|--------------------------------|----------|-------------|-------------|
| Sl No : | Particulars | (Actual) | (Projected) | (Projected) |
| (a) | Sale of Power to HRECS & AEQUS | 141.23 | 145.55 | 149.65 |

(iv) Total other income:

| Sl No: | Particulars | FY-17 | FY-18 | FY-19 |
|--------|---|--------|--------|--------|
| (a) | Other income from other items (including prior period income) | 226.73 | 57.51 | 74.37 |
| (c) | Sale of Power to HRECS & AEQUS | 141.23 | 145.55 | 149.65 |
| | Total other income | 367.96 | 203.06 | 224.02 |

(HESCOM is not proposing any modification for FY-18 in this filing.)

HESCOM is proposing Rs. 224.02Crs, as other income for FY-19 and no proposals towards prior period income.

The Hon'ble KERC has approved other income of Rs. 163.70 Crs for FY-19 vide Tariff Order Dtd 30.03.2016, in view of accumulated loss.

Regulatory Asset:

The Hon'ble Commission in its Tariff Order for HESCOM Dtd: 30.03.2016 has passed on the Regulatory Asset of Rs,197.69 Crs and there is no balance of Regulatory Asset to be passed on to consumers.

Expected Revenue from Charges: HESCOM has been earning revenue as per tariff determined by the Honorable Commission from time to time. The tariff order 2005 was in force till 30/11/2009. The new Tariff order came in to effect from 01.04.2017 .HESCOM has estimated expected revenue charges for FY-19 on the basis of the new Tariff Order 2017 Dtd: 11.04.2017.

The Format D-21 is prepared as per the actual consumption and load pattern available as on September 2017. The Projections for FY-18 & FY-19 are made on the basis of CAGR from FY-13 to FY-17. Wherever the clear CAGR is not available, the trend is considered. The energy availability at generation point as provided by PCKL, transmission loss as approved by Commission and the proposed distribution loss are considered for estimating the sales and thereby expected revenue from charges at existing rates as per tariff order 2017 Dtd: 11.04.2017.

Expected Revenue from charges at existing tariff:

| | | | FV 40 | | | | | | | |
|-------|-----------------------|--|-------------|--------------------|------------------|-------------|--------------------|------------------|--|--|
| | Tariff | | | FY-18 Projected | | | FY-19 Projected | | | |
| Sl. | Categor | Category | Instal. | Energy | Revenue | Instal. | Energy | Revenue | | |
| No. | y | Discription | (No.s) | Sales | (Crs) | (No.s) | Sales | (Crs) | | |
| | J | | (No.5) | (Mus) | Pr Act | (110.0) | (Mus) | Pr Act | | |
| | | BJ/KJ: =<40 units | | 138.32 | 88.94 | | 146.38 | 94.12 | | |
| 1 | LT-1 | BJ/KJ: >40 units | 763002 | 43.28 | 24.37 | 762622 | 45.80 | 28.44 | | |
| 2 | LT-2 (a) | Domastic / AEII | 2530155 | 1458.14 | 888.65 | 2638699 | 1536.23 | 934.92 | | |
| 3 | LT-2 (b) | Domestic / AEH | 6738 | 21.23 | 17.30 | 7314 | 26.99 | 21.69 | | |
| 4 | LT-3 | Commercial | 354735 | 451.71 | 408.43 | 373603 | 479.45 | 432.86 | | |
| 5 | LT-4 (a) | IP sets - Less than 10 HP - General | 734778 | 5974.38 | 3608.53 | 774703 | 6222.08 | 3758.14 | | |
| 6 | LT-4 (b) | Irrigation Pump sets - More than 10 HP | 1435 | 16.28 | 6.35 | 1614 | 16.55 | 7.55 | | |
| 7 | LT-4 (c) | Private Horticulture Nurseries, Coffee & Tea Plantations | 407 | 1.03 | 0.43 | 509 | 1.46 | 0.57 | | |
| 8 | LT-5 | Industries | 114443 | 322.07 | 261.71 | 121495 | 327.91 | 269.37 | | |
| 9 | LT-6 | Water Supply | 42470 | 305.40 | 144.36 | 47181 | 343.07 | 161.80 | | |
| 10 | LT-6 | Street Lights | 22390 | 153.49 | 95.02 | 23268 | 160.57 | 99.27 | | |
| 11 | LT-7 | Temporary Power Supply | 48846 | 29.34 | 29.41 | 55015 | 33.07 | 33.12 | | |
| 1 | IIT 1 | LT Total | 4619399 | 8914.67 | 5573.50 | 4806023 | 9339.56 | 5841.86 | | |
| 2 | HT-1 HT-2 (a) | Water Supply Industries | 306 1538 | 225.64 810.64 | 122.48 643.71 | 341 1665 | 236.33 778.72 | 129.14 625.47 | | |
| 3 | HT-2 (a) | Commercial | 523 | 124.71 | 118.58 | 533 | 128.91 | 120.42 | | |
| 4 | HT-2 (c) | Hospitals | 322 | 89.83 | 68.42 | 379 | 124.21 | 92.68 | | |
| 5 | HT-3(a) | Irrigation & LI Societies | 252 | 308.70 | 74.72 | 284 | 528.42 | 124.89 | | |
| 6 | HT-3 (b) | Irrigation & LI Societies | 2 | 0.07 | 0.03 | 2 | 0.06 | 0.03 | | |
| | | • | 31 | | | 32 | 12.37 | | | |
| 7 | HT-4 | Residential Apartments | | 13.40 | 9.25 | | | 8.67 | | |
| 8 | HT-5 | Temporary Power Supply | 61 | 34.89 | 54.45 | 72 | 38.44 | 66.33 | | |
| | | HT Total | 3036 | 1607.88 | 1091.64 | 3309 | 1847.46 | 1167.62 | | |
| | | Total | 4622435 | 10522.55 | 6665.14 | 4809331 | 11187.02 | 7009.48 | | |
| | | Grand Total | 4622435 | 10522.55 | 6665.14 | 4809331 | 11187.02 | 7009.48 | | |
| I | | ion fee (D&R) | | | 0.00 | | | 0.00 | | |
| II | Charges) | nnection (Supervision | | | 2.40 | | | 2.50 | | |
| III | consumers | | | | 0.00 | | | 0.00 | | |
| IV | Other Rece | eipts from consumers | | | 18.50 | | | 19.00 | | |
| V | | on fee towards SRTPV | | | 204.93 | | | 108.60 | | |
| VI | | n fee towards SRTPV | | | 3.20 | | | 3.40 | | |
| VII | works | n Charges for Self Execution | | | | | | | | |
| VII | created by | ce charges for the layouts the Developers | | | | | | | | |
| VII | to VII) | enue from Sale of Power (I | 4622435 | 10522.55 | 6894.17 | 4809331 | 11187.02 | 7142.98 | | |
| LESS: | | | | | 0.00 | | | 0.00 | | |
| | | te and Incentives | | | | | | | | |
| VIII | | te allowed to consumers | | | 0.00 | | | 0.00 | | |
| IX | | for prompt payment | | | 3.50 | | | 4.00 | | |
| | | y (TOD) Tariff Incentive | | | 0.00 | | | 0.00 | | |
| | Provision f Demand | for withdrawal of Revenue | | | | | | | | |
| | G | RAND TOTAL | 4622435 | 10522.55 | 6890.67 | 4809331 | 11187.02 | 7138.98 | | |

Revenue from Miscellaneous Charges: The income from reconnection fee, service connection charges, delayed payment charges and other receipts are shown under this Head. HESCOM has accounted miscellaneous charges of Rs. 259.50 Crs, for FY-18. The details are furnished below.

Details of from Miscellaneous Charges

Rs. In Crs

| Particulars | FY-18 | FY-19 |
|---|--------|--------|
| Reconnection fee (D&R) | 0.00 | 0.00 |
| Service Connection (Supervision Charges) | 2.40 | 2.50 |
| Delayed payment charges from consumers | 0.00 | 0.00 |
| Other Receipts from consumers | 18.50 | 19.00 |
| Registration fee towards SRTPV | 204.93 | 108.60 |
| Facilitation fee towards SRTPV | 3.20 | 3.40 |
| Supervision Charges for Self Execution works | | |
| Maintenance charges for the layouts created by the Developers | | |
| Total | 229.03 | 133.50 |
| LESS: | 0.00 | 0.00 |
| Solar Rebate allowed to consumers | 0.00 | 0.00 |
| Incentives for prompt payment | 3.50 | 4.00 |
| Time of day (TOD) Tariff Incentive | 0.00 | 0.00 |
| Provision for withdrawal of Revenue Demand | | |
| Total | 3.50 | 4.00 |
| Net total | 225.53 | 129.50 |

HESCOM is not proposing any modification for FY-18.

Net Revenue Expected: Considering the revenue from existing Tariff Order 2016 across the categories and revenue from miscellaneous charges duly deducting rebate to be allowed, the net revenue expected for FY-18 is furnished below.

Details of Net Revenue at existing Tariff

| Sl. No | Particulars | FY-18 | FY-19 |
|--------|--|---------|---------|
| 1 | Revenue at existing tariff from all categories | 6665.14 | 7009.48 |
| 2 | Miscellaneous Charges | 225.53 | 129.50 |
| 3 | Net Revenue Expected | 6890.67 | 7138.98 |

HESCOM is not proposing any modification for FY-18.

| ANNUAL REVENUE REQUIREMENT | | |
|--|-----------------|------------|
| Particulars | FY-19. 1 | Rs in Crs |
| | MYT Order | Revised |
| | 2016 | Projection |
| Energy at Generation Point (Mus) | 14014.91 | 13958.55 |
| Transmission Loss (units) | 458.29 | 456.44 |
| Transmission Loss (%) | 3.27% | 3.27% |
| Energy at Interface Point (Mus) | 13226.87 | 13161.20 |
| Energy Sales (Mus) | 11242.84 | 11187.02 |
| Distribution Loss (%) | 15.00% | 15.00% |
| INCOME: | | |
| Revenue from sale of power | | 3286.72 |
| Revenue subsidies & grants | | 3852.26 |
| Other Income | 163.72 | 224.02 |
| TOTAL INCOME | 163.72 | 7,363.00 |
| EXPENDITURE: | | , |
| Purchase of Power | 5214.91 | 5431.49 |
| Tr. Charges (KPTCL & PGCIL) | 650.08 | 650.08 |
| SLDC Charges | 5.21 | 5.21 |
| Total Power Purchase Cost | 5,870.20 | 6,086.78 |
| Repairs & maintenance | , | 72.57 |
| Employee Costs | 825.79 | 676.48 |
| Administrative & General expenses | | 113.95 |
| Total O&M expenses | 825.79 | 863.00 |
| Deprecition & related debits | 130.11 | 179.00 |
| Interest & Fiance charges | | |
| Interest on loan capital | 212.24 | 337.90 |
| Interest on working capital | 136.94 | 144.33 |
| Interest on consumer deposit | 63.67 | 65.70 |
| Other interest and finance chargees | 0 | |
| Interest on belated payments of IPPs | - | |
| LESS: Int. & Fin.charges capitalized | | |
| Total Interest and Finance Charges | 412.85 | 547.93 |
| Other debits (incl. Bad debts) | 0.00 | 11.02 |
| Extraordinary Items (Exeptional Items : Adjustment of Excess Subsidy paid) | 0.00 | 102.90 |
| Net prior period (credits) / charges | - | - |
| Provision for Taxes | 0 | |
| Funds towards consumer Relations | 0.50 | 0.50 |
| Return on Equity | | |
| Pension and Gratuity Trust arrears | | |
| LESS:Excess RoE | | |
| ARR | 7,239.45 | 7,791.13 |
| Previous years'surplus/deficit carried forward FY-16 | ,, | 943.37 |
| Net ARR | 7,075.73 | 8,510.48 |
| REVENUE (DEFICIT): | · | 1,371.50 |

ARR for Distribution Business and Retails Supply Business. FY-19

| EXPENDITURE / ARR | Distribution Business | Retails Supply Business |
|--|--------------------------|----------------------------|
| Power purchase cost | 0 | 5431.49 |
| Power purchase related cost | 0 | 650.08 |
| Transmission cost | 0 | 5.21 |
| Total Power purchase Cost | 0 | 6086.78 |
| Operation and Maintenance Cost: | 0 | |
| a) Repairs and Maintenance cost | 45.72 | 26.85 |
| b) Employee cost | 426.18 | 250.30 |
| c) Administration and General expenses | 71.79 | 42.16 |
| O & M Total | 543.69 | 319.31 |
| Depreciation | 150.36 | 28.64 |
| Interest on loan | 337.9 | 0.00 |
| other interest and finance charges | 0 | 0.00 |
| Less Interest & Other expenses capitalised | 0 | 0.00 |
| Interest on security deposit | 0 | 65.70 |
| Interest on working capital | 36.08 | 108.25 |
| Interest on belated payment of PPC | 0 | 0.00 |
| Pension and Gratuity Trust arrears | 0 | 0.00 |
| Other expenses, if any | 11.02 | 0.00 |
| Extraordinary Items (Exeptional Items : Adjustment of Excess Subsidy paid) | 102.90 | 0.00 |
| funds towards consumer education | 0 | 0.50 |
| Prior Period Charges | 0 | 0.00 |
| Return on equity | 0 | 0.00 |
| Provision for Taxation | 0 | 0.00 |
| TOTAL | 1181.95 | 6609.18 |
| LESS: Non-Tariff income | 42.56 | 181.46 |
| ARR | 1139.39 | 6427.72 |
| Add Regulatory Asset & Carrying Cost | 0.00 | 0.00 |
| Previous years' deficit carried forward | 943.37 | 0.00 |
| Net ARR | 2082.76 | 6427.72 |

Cost of Supply for FY-19:

a) Net ARR for FY-19 - Rs. 8510.48.Crs.

b) Sales for FY-19 - 11187.02. Mu

c) Cost of Supply for FY-19 - Rs. 7.607/unit.

Revenue Gap for FY-19

Rs. in Crores

| Sl No | Particulars | Amount | |
|-------|--------------------------------|---------|--|
| 1 | ARR for FY-19 | 7791.13 | |
| 2 | Add deficit for FY-17 | 943.37 | |
| 3 | Net ARR for FY-19 | 8510.48 | |
| 4 | ERC for FY-19 @ Current Tariff | 7138.98 | |
| 5 | Other income | 224.02 | |
| 6 | Gap for FY-19 | 1371.50 | |

BRIDGING THE REVENUE GAP:

HESCOM proposes to bridge the Gap by Tariff revision for FY-19 as noted below and requests the Hon'ble Commission to consider the same.

Hike requirement for all categories:

a. Total Gap - Rs. 1371.50. Crs.

b. Sales - Total sales of 11187.02 (Mu)

c. Hike required - Rs.1.23/unit on total sales of 11187.02 Mu.