

## CHAPTER – 4

### ANNUAL PERFORMANCE REVIEW FOR FY16

#### 4.0 HESCOM's Application for APR for FY16:

HESCOM has filed its application for Annual Performance Review (APR) for FY16 and revision of Annual Revenue Requirement (ARR) along with revision of retail supply tariff for FY18 on 30<sup>th</sup> November, 2016. HESCOM has sought the Annual Performance Review (APR) for FY16 based on the Audited Accounts of FY16 and approval for consequent revision of ARR and retail supply tariff for FY18.

The Commission in its letter dated 21<sup>st</sup> December, 2016, had communicated its preliminary observations on the application of HESCOM. In its letter dated 30<sup>th</sup> December, 2016, HESCOM has furnished its replies to the preliminary observations of the Commission. The Commission had also issued rejoinders on the replies on 10<sup>th</sup> January, 2016, and HESCOM has furnished replies to the rejoinders vide its letter dated 16<sup>th</sup> January, 2016. HESCOM has also furnished additional information on IP sets consumption and RPO compliance in its subsequent letters.

The Commission in its Multi Year Tariff (MYT) Order dated 6<sup>th</sup> May, 2013 had approved HESCOM's Annual Revenue Requirement (ARR) for FY14 – FY16. Further, in its Tariff Order dated 2<sup>nd</sup> March, 2015, the Commission had approved the APR for FY14 and had revised the ARR along with Retail Supply Tariff for FY16. The Commission had issued rejoinders on the replies furnished by the HESCOM vide its letter date 10<sup>th</sup> January, 2017 and HESCOM has furnished replies to the rejoinders in its letter dated 16<sup>th</sup> January, 2017.

The Annual Performance Review of HESCOM for FY16 based on the audited accounts is discussed in this Chapter.

#### 4.1 HESCOM's Submission:

HESCOM has submitted its proposals for revision of ARR as per APR for FY16 based on the Audited Accounts as follows:

**TABLE – 4.1**  
**ARR for FY16 – HESCOM's Submission**

Amount in Rs. Crores		
Sl. No.	Particulars	As Filed
1	Energy at Gen Bus in MU	12410.91
2	Energy at Interface in MU	12143.43
3	Distribution Losses in %	16.89
	<b>Sales in MU</b>	
4	Sales to other than IP & BJ/KJ	4073.83
5	Sales to BJ/KJ	90.41
6	Sales to IP & BJ/KJ	5927.78
	<b>Total Sales</b>	<b>10092.02</b>
	<b>Revenue</b>	
7	Revenue from other than IP & BJ/KJ and Misc. Charges	2444.55
8	Tariff Subsidy to BJ/KJ	51.40
9	Tariff Subsidy to IP	3024.85
	<b>Total</b>	<b>5520.80</b>
	<b>Expenditure</b>	
10	Power Purchase Cost	4178.07
11	Transmission charges of KPTCL	541.80
12	SLDC Charges	2.28
	<b>Power Purchase Cost including cost of transmission</b>	<b>4722.15</b>
13	Employee Cost	483.13
14	Repairs & Maintenance	56.74
15	Administration & General Expenses	77.65
	<b>Total O&amp;M Expenses</b>	<b>617.52</b>
16	Depreciation	106.30
	<b>Interest &amp; Finance charges</b>	
17	Interest on Loans	245.74
18	Interest on Working capital	20.53
19	Interest on belated payment of PP Cost	88.63
17	Interest on consumer deposits	49.23
18	Other Interest & Finance charges	2.00
19	Less: interest & other expenses capitalised	0.00
	<b>Total Interest &amp; Finance charges</b>	<b>406.13</b>
20	Other Debits	10.74
21	Net Prior period Debit/Credit	19.11
22	Extraordinary Items	102.90
22	Return on Equity	0.00
23	Provision for taxation	0.00
24	Funds towards Consumer Relations/Consumer Education	0.13
25	Other Income	91.46
	<b>Net ARR</b>	<b>5893.52</b>

Considering the revenue of Rs.5520.80 Crores against a net ARR of Rs.5893.52 Crores, HESCOM has reported a gap in revenue of Rs.372.72 Crores for FY16.

#### 4.2 HESCOM's Financial Performance as per Audited Accounts for FY16:

An overview of the financial performance of HESCOM for FY16 as per its Audited Accounts is given below:

**TABLE – 4.2**  
**Financial Performance of HESCOM for FY16**

Amount in Rs. Crores		
Sl. No.	Particulars	FY16
	<b>Receipts</b>	
1	Revenue from Tariff and misc. charges	2444.55
2	Tariff Subsidy	3076.25
	<b>Total Revenue</b>	<b>5520.80</b>
	<b>Expenditure</b>	
3	Power Purchase Cost	4178.07
4	Transmission charges of KPTCL	541.80
5	SLDC Charges	2.28
	<b>Power Purchase Cost including cost of transmission</b>	<b>4722.15</b>
6	O&M Expenses	617.65
7	Depreciation	106.30
	<b>Interest &amp; Finance charges</b>	
8	Interest on Loans	117.93
9	Interest on Working capital	148.33
10	Interest on belated payment of power purchase	88.63
11	Interest on consumer deposits	49.23
12	Other Interest & Finance charges	2.00
	<b>Total Interest &amp; Finance charges</b>	<b>406.13</b>
13	Other Debits	10.74
14	Net Prior Period Debit/Credit	(46.08)
15	Other income	26.27
16	Exceptional Item	102.90
	<b>Total Expenditure</b>	<b>5893.53</b>

As per the Audited Accounts, HESCOM has incurred loss of Rs.372.73 Crores in FY16. The profits / losses reported by HESCOM in its audited accounts in the previous years including FY16 are as follows:

TABLE – 4.3

**HESCOM's Accumulated Profit / Losses**

Particulars	Amount in Rs. Crores
Accumulated losses as at the end of FY10	(659.08)
Losses incurred in FY11	(64.70)
Profits earned in FY12	39.75
Profits earned in FY13	40.69
Losses incurred in FY14	(576.25)
Profits earned in FY15	30.26
Losses incurred in FY16	(372.73)
<b>Accumulated losses as at the end of FY16</b>	<b>(1562.07)</b>

As seen from the above table, HESCOM has accumulated losses to an extent of Rs.1562.07 Crores as at the end of FY16 is.

**Commission's analysis and decisions:**

The Annual Performance Review for FY16 has been taken up duly considering the actual revenue and expenditure as per the Audited Accounts against the revenue and expenditure approved by the Commission in its Tariff Order dated 2<sup>nd</sup> March, 2015. The item-wise review of revenue and expenditure and the decisions of the Commission thereon are as discussed in the following paragraphs:

**4.2.1 Sales for FY16:****I. Sales other than IP sets for FY16:**

The Commission, in its Tariff Order 2015 dated 02.03.2015, had approved total sales to various consumer categories at 9219.66 MU as against the HESCOM's proposal of 9449.73 MU. The actual sales of HESCOM as per the current APR filing is 10092.02 MU indicating an increase in sales to the extent of 872.36 MU over the approved sales. The increase in sales is 894.64 MU in LT-categories and there is a reduction of 22.28 MU in HT-categories. It is noted that, as against approved sales [excluding HRECS sales and supply to AEQUS SEZ] of 4190.39 MU to categories other than BJ/KJ and IP sets, the actual sales achieved by HESCOM is 4073.83 MU, resulting in the reduction of sales to these categories by 116.56 MU. Further, HESCOM has sold

6018.19 MU to BJ/KJ and IP set categories as against approved sales of 5029.27 MU resulting in increased sales to these categories by 988.92 MU.

The category-wise sales approved by Commission in its Tariff Order 2015 dated 02.03.2015 and the actuals for FY 16 are indicated in the table below:

**TABLE-4.4**  
**Approved and Actual Sales for FY16**

Category	Sales in MU		
	Approved as per T.O dated 02.03.2015	Actuals as per APR filing	Difference between approved and actuals
LT-2a*	1476.70	1432.08	-44.62
LT-2b	15.48	14.60	-0.88
LT-3	406.23	413.68	7.45
LT-4b	18.30	16.47	-1.83
LT-4c	1.60	0.77	-0.83
LT-5	338.97	313.34	-25.63
LT-6	226.61	216.19	-10.42
LT-6	145.64	128.84	-16.80
LT-7	25.00	24.28	-0.72
HT-1	205.30	210.62	5.32
HT-2a	938.26	930.32	-7.94
HT-2b	110.11	119.56	9.45
HT-2c	30.00	57.97	27.97
HT-3a & b	196.84	163.90	-32.94
HT-4	14.35	14.63	0.28
HT-5	41.00	16.58	-24.42
<b>Sub total</b>	<b>4190.39</b>	<b>4073.83</b>	<b>-116.56</b>
BJ/KJ	87.28	90.41	3.13
IP	4941.99	5927.78	985.79
<b>Sub total</b>	<b>5029.27</b>	<b>6018.19</b>	<b>988.92</b>
<b>Grand total**</b>	<b>9219.66</b>	<b>10092.02</b>	<b>872.36</b>

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

\*\*Excludes sale to HRECS and AEQU, SEZ.

The Commission notes that the major consumer categories contributing to the increase in sales as compared with the approved figure are: IP sets (985.79 MU) and HT-2c (27.97 MU).

The Commission's preliminary observations with respect to sales of FY16 and the replies of HESCOM are discussed below:

- a. The Commission in its preliminary observations had directed HESCOM to analyze the reasons for increased sales to IP sets and the reduction in

sales to HT-3(32.94 MU), HT-5(24.42 MU), LT-2a (44.63 MU) and LT-5(25.63 MU).

HESCOM has attributed reduction in sales in LT-2a category to energy conservation through distribution of 3.18 Lakh LED bulbs. The Commission notes that use of about 3.18 lakh LED bulbs would approximately save about 14 MU annually.

The reduction in LT-5 sales is attributed by HESCOM to the long-disconnected installations and disconnection of stone crusher units for a certain period as per the direction of DC/Pollution Control Board. The Commission notes that HESCOM has not quantified the impact of the above factors on sales.

The reduction in HT-3 consumption is attributed to drought and the reduction in HT-5 sales is attributed to seasonal usage by Sugarcane industries. The Commission has noted the replies of HESCOM.

The issue of increase in IP sets consumption, is discussed in subsequent paragraphs.

- b. In order to analyze the reduction in HT sales, HESCOM was directed to furnish the data of sales to HT2(a) and HT2(b) categories along with the consumption under open access / wheeling for the period 2011-12 to 2014-16 in a specified format.

In its replies to preliminary observations, HESCOM had furnished the combined data of HT-2a and HT-2b categories. Subsequently, in its replies to the rejoinders, HESCOM has furnished the category-wise break up.

- c. HESCOM was directed to furnish the number of installations shifted from HT2a, HT2b and HT-4 categories to HT-2c category and the corresponding sales figures for FY14, FY15 and FY16, in order to estimate the impact of shifting of these installations. HESCOM has furnished the required data.

- d. Break up of sales under LT-2 category [LT-2a and LT-2b break up]-for FY16 furnished at Page 30 of the filing adds to 1359.98 MU, whereas in D-2 Format it is indicated as 1345.37 MU. Further, the total sales for FY-16 indicated in Page-30 is 10092.02 MU, while the same is indicated as 10077.41 MU in D-2 format.

HESCOM was directed to reconcile the category-wise figures as well as the total numbers between D-2 Format and the table indicated at Page-30 of the filing.

HESCOM in response has furnished the revised D-2 Format. The Commission had observed that the number of installations with respect to BJ/KJ and LT-2a for FY17 and the category-wise sales for FY17 furnished in the revised D-2 Format did not tally with the earlier D-2 Format. HESCOM has submitted re-revised D-2 Format, which is now relied upon for approving the sales.

## II. Sale to IP sets FY16:

- i) The Commission in its Tariff Order dated 2<sup>nd</sup> March, 2015, had approved a specific consumption of IP-sets as 8,244 units/installation/annum for FY16, whereas as per the data of IP-sets' consumption reported by the HESCOM in its Tariff filing for APR of FY16, the specific consumption works out to 9,562 units / installation / annum, which corresponds to an increase in the specific consumption by 1,318 units/installation / annum. The total IP-set consumption reported for the FY16 as per the format D2 of its Tariff filing by the HESCOM is 5,927.78 MU, whereas the IP-set consumption approved by the Commission was 4,941.99 MU. The difference in consumption between the approved and reported for FY16 is 985.79 MU. Thus, the quantum of sales to the IP-sets' category has exceeded the approved quantum by 20 per cent and the specific consumption has also increased by 16 per cent for FY16.

- ii) Further, the Commission had approved 6,11,075 as the number of IP-set installations for the FY16, but, the actual number of installations serviced, as reported by the HESCOM is 6,37,907. The difference in number of installations is 26,832 and this corresponds to an increase in the number of installations by about 4.4 per cent as against the approved number of installations for the FY16. The HESCOM has reported that the increase in the number of installations over the approved number of installations for the FY16 was because of the fact that it has regularized and taken into account a large number of un-authorized IP-sets in the field under the Regularization Scheme.
- iii) The Commission in its Tariff Order dated 2nd March, 2015, had directed the HESCOM to furnish the month-wise IP-set consumption based on the specific consumption arrived at from the 11 kV feeders' energy meter data, to the Commission, in respect of exclusive agricultural feeders segregated under NJY scheme considering that the energy consumed by the IP-sets can be accurately measured at the 11 kV level at the substations after allowing the losses prevailing in the distribution system, as per the following format prescribed by the Commission:

**TABLE-4.5**  
**Format for submission of IP sets Data**

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

- iv) The Commission has been following this methodology since the issue of Tariff Order dated 12<sup>th</sup> May, 2014, for FY15, considering that the ESCOMs have bifurcated the 11 KV feeders into separate rural and agricultural feeders. Earlier, in the absence of universal metering of IP-



set installations, the Commission had allowed the ESCOMs to assess the IP-set consumption, based on the specific consumption arrived at from the readings of the sample meters fixed to the distribution transformer Centers (DTCs) feeding predominantly IP-set loads. The sample was selected on the basis of two to three DTCs feeding predominantly IP-set loads, per O&M section, so as to cover about ten such DTCs in each subdivision. As per this methodology, the overall IP-consumption for the Company was being assessed on the basis of specific consumption arrived at from the meter reading data of such sample meters fixed to DTCs.

- v) For instance, as per the IP-set data for FY13 submitted to the Commission by the HESCOM, totally 891 DTCs covering 4,458 IP-sets out of the total 4,98,787 IP-sets in its jurisdiction was considered for assessing the total IP-set consumption for the Company. It is noted that the sample IP-sets considered to arrive at the specific consumption and in-turn to assess the total IP-consumption for FY13, based on the sample DTCs meter readings constituted only 0.9 per cent of the total number. This led to a small number of IP-sets being considered while arriving at the total consumption as compared to a large sample (68% in March, 2016) being considered now after segregating the feeders under NJY. Therefore, this is a better representation of sample in terms of metered consumption for computing the overall IP-set consumption, when compared to the methodology followed earlier.
- vi) Accordingly, the HESCOM was directed to furnish month-wise 11 kV feeder-wise IP-set consumption based on energy meters' reading data in respect of agriculture feeders segregated under NJY scheme, duly deducting the distribution losses prevailing in 11 kV lines, distribution transformers and LT system, to the Commission. However, the HESCOM did not submit the IP-set consumption data based on the segregated agricultural feeders regularly, to the Commission.

- vii) The Commission, in its preliminary observations, had raised the issue of increase in both sales and number of installations as well as specific consumption of IP-set category and had also directed the HESCOM to furnish necessary month-wise IP consumption data as per the energy recorded in the segregated agricultural feeders, in support of its claims of IP-set consumption for the FY16.
- viii) The HESCOM, in its reply to the preliminary observations, has submitted the consolidated month-wise IP-set consumption data in respect of the exclusive agricultural feeders segregated under NJY but it has not indicated the basis for arriving at the energy losses in feeders while computing the IP-set consumption. Further, in its data of agricultural feeders for FY16, many inconsistencies were observed in the computation of subdivision-wise as well as company-wise IP-set consumption. For instance, the consumption reported on the basis of meter readings of segregated agricultural feeders was 4,837.28 MU, whereas the consumption reported as per the Format D-2 of the Tariff filing was 5,927.783 MU indicating a difference in consumption of 1,090.503 MU.

Further, HESCOM had stated that, the consumption of IP-sets has increased as compared to the approved quantum in view of servicing of a large number of IP-sets under Regularization Scheme during the FY16. The Commission notes that the increase in IP sales for the FY16 may be partly due to the fact that the HESCOM has serviced a large number of IP-sets under the Regularization Scheme.

- ix) Accordingly, the Commission's observations were communicated to the HESCOM in the form of rejoinders vide Commission's letter dated 10<sup>th</sup> January, 2016, directing HESCOM to rectify the discrepancies pointed out duly computing the IP-set consumption on the basis of specific consumption arrived at from the meter readings of segregated agricultural feeders by deducting the allowable losses in its distribution system. The HESCOM was directed to furnish the month-

wise, feeder-wise IP-set consumption in respect of segregated agricultural feeders.

- x) In response, the HESCOM has submitted the consolidated month-wise IP-set consumption data in respect of the exclusive agricultural feeders segregated under NJY. On verification of the IP-consumption data furnished in respect of agriculture feeders, it is observed that the distribution loss figures reckoned to compute the net IP-set consumption in the feeders, is not based on actual calculation considering the distribution network sketches.
- xi) Further, the HESCOM vide its communication No. HESCOM/GM(T)/EE-4/16-17/24323-25 dated 30<sup>th</sup> January 2017, has submitted the revised IP-set consumption for FY16 as 5,918.1 MU, based on segregated agricultural feeders duly revising the energy losses instead of 5,927.78 MU claimed in the format D2 of its Tariff filing. On verification of the month-wise IP-set consumption based on the segregated agricultural feeders meter readings submitted by the HESCOM, it is found that the overall IP consumption is 5,439.15 MU and not 5,918.1 MU as reported. The Commission observes that this results in a difference in consumption of 478.95 MU for which the HESCOM has not submitted its explanation. Hence, the Commission decides to disallow the consumption of 478.95 MU from out of 5,927.78 MU claimed by the HESCOM in its Tariff filing for APR of FY16.

**In view of the above discussion, the Commission decides to approve 5,439.15 MU towards sales to IP-sets on the basis of the revised meter reading data of the segregated agricultural feeders, furnished by the HESCOM for the FY16, as against 5,927.78 MU claimed by the HESCOM, in its Tariff application, after disallowing sales to an extent of 488.17 MU, in respect of sales to the IP sets.**

**In the light of the above discussion, the Commission approves total sales of 9603.39 MU for FY16 as per the category-wise sales indicated in the following table:**

**TABLE-4.6**  
**Approved energy Sales for FY16**

Category	Million Units	
	Approved as per T.O dated 02.03.2015	Approved in Revised ARR for FY16
LT-2a*	1476.70	1432.08
LT-2b	15.48	14.60
LT-3	406.23	413.68
LT-4b	18.3	16.47
LT-4c	1.6	0.77
LT-5	338.97	313.34
LT-6	226.61	216.19
LT-6	145.64	128.84
LT-7	25	24.28
HT-1	205.3	210.62
HT-2a	938.26	930.32
HT-2b	110.11	119.56
HT-2c	30	57.97
HT-3a & b	196.84	163.90
HT-4	14.35	14.63
HT-5	41	16.58
<b>Sub total</b>	<b>4190.39</b>	<b>4073.83</b>
BJ/KJ	87.28	90.41
IP	4941.99	5439.15
<b>Sub total</b>	<b>5029.27</b>	<b>5529.56</b>
<b>Grand total**</b>	<b>9219.66</b>	<b>9603.39</b>

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

\*\*Excludes sale to HRECS and AEQUS (SEZ).

#### 4.2.2 Distribution Losses for FY16:

##### HESCOM's Submission:

The Commission in its Tariff Order dated 2<sup>nd</sup> March,2015 had approved distribution losses for FY16 as shown in the table below:

Range	FY16
Upper limit	18.00%
<b>Average</b>	<b>17.50%</b>
Lower Limit	17.00%

HESCOM, in its annual accounts, has reported the distribution losses at 16.89% for FY16.

1	Energy at Interface Points in MU	12143.43
2	Total sales in MU including wheeled energy	10092.02
3	<b>Distribution losses as a percentage of input energy at IF points</b>	<b>16.89%</b>

### Commission's analysis and decisions:

The distribution loss of 16.89% reported by HESCOM is below the targeted losses fixed by the Commission for FY16 by 0.61% percentage points. However, as per the revised sales to IP sets as reported by HESCOM and as discussed in the preceding paragraphs of this Chapter, the distribution losses work out to 20.92% for FY16.

In the above context, the Commission notes that the actual overall distribution losses of 20.92% are far beyond the approved upper limit of losses of 18% for FY16. Hence, penalty for exceeding the targeted distribution loss levels has been factored in the APR for FY16 as detailed below:

**TABLE-4.7**  
**Penalty for exceeding targeted loss levels in FY16**

Particulars	FY16
Actual input at IF points as per audited accounts in MU	12143.42
Retail sales in MU	9603.39
Percentage distribution losses	20.92%
Upper limit target of distribution loss	18.00%
Increase in percentage point loss	2.92%
Input as per target loss for actual sales in MU	11711.45
Increase in input due to increase in distribution losses in MU	431.97
Average cost of power purchase in Rs. Per unit.	3.80
<b>Increase in power purchase cost due to increase in losses in Rs. Crores</b>	<b>164.35</b>

**Thus, the Commission decides to levy penalty of Rs.164.35 Crores for exceeding the distribution loss levels targeted for FY16.**

### 4.2.3 Power Purchase for FY16:

#### HESCOM Submission:

The Commission in its Tariff order dated 2<sup>nd</sup> March, 2015, had approved source-wise quantum and cost of power purchase for FY16. HESCOM, in its application has submitted the details of actual power purchase for FY16 for the purpose of Annual Performance Review. The details of power purchase are as detailed hereunder:

**TABLE – 4.8**  
**Power Purchases for FY16-Approved and Actuals**

Source of Generation	Actuals for FY16			Approved for FY16			Difference-between Actuals and Approved-for FY16			% increase (+)/decrease (-) over an approved figures	
	Energy in Mus	Cost in Rs Cr.	Rate in Rs per Unit	Energy in MUs	Cost in Rs Cr.	Rate in Rs per Unit	Energy in MUs	Cost in Rs Cr.	Rate in Rs per Unit	Energy	Cost
KPCL Hydel Stations	2471.43	225.19	0.91	4441.63	206.96	0.47	-1970.20	18.23	0.44	-44.36	8.81
KPCL-Thermal Stations	1511.11	527.07	3.49	2458.57	966.28	3.93	-947.46	-439.21	-0.44	-38.54	-45.45
CGS	2915.33	1087.90	3.73	2574.19	793.24	3.08	341.14	294.67	0.65	13.25	-6.58
Major IPPs	1068.11	500.78	4.69	1044.82	431.76	4.13	23.29	69.02	0.56	2.23	15.99
IPPs -Minor (NCE Projects)	947.62	352.45	3.72	1160.55	420.30	3.62	-212.93	-67.85	0.10	-18.35	-16.14
Other States Projects				36.42	6.56	1.80	-36.42	-6.56	-1.80	-100.00	-100.00
Short /Medium term	614.92	321.32	5.23	203.52	106.85	5.25	411.40	214.47	-0.02	202.14	200.72
Sec-11	596.42	303.38	5.09				113.28	38.54	3.40		
UI charges	113.28	40.83	3.40				596.42	303.38	5.09		
Transmission Charges (KPTCL & PGCIL)		541.80			650.75			-108.95		-16.74	
SLDC Charges (POSOOC & SLDC)		2.55			6.32			-4.04		-63.92	
Energy Balancing	2484.49	956.00	3.85				2484.49	956.00	3.85		
Others Charges											
<b>LESS HRECS</b>	<b>311.46</b>	<b>128.52</b>	<b>4.13</b>				311.46	128.52	4.13		
<b>REBATE</b>		<b>8.60</b>						8.60			
<b>TOTAL</b>	<b>12411.25</b>	<b>4722.15</b>	<b>3.80</b>	<b>11919.71</b>	<b>3589.03</b>	<b>3.01</b>	<b>491.54</b>	<b>1133.12</b>	<b>0.79</b>	<b>4.12</b>	<b>31.57</b>

\* Source : D1 format

**Commission's analysis and decisions;**

1. The actual power purchase for FY16 as filed by HESCOM for approval of revised ARR in the Annual Performance Review is 12411.25 MU amounting to Rs.4722.15 Crores, as against the approved quantum of 11919.71 MU amounting to Rs.3589.03 Crores. This represents an increase in the quantum of power purchase to an extent of 491.54 MU and increase in the cost by Rs.1133.12 Crores.
2. As against the approved quantum of 11919.7 MU, the actual power purchased by HESCOM is 12411.25 MU for FY16, which is about 4.12 % more than the approved quantum.
3. On an analysis of the source-wise approved and actual power purchases, the following deviations in the quantum of energy and its cost of purchase are observed:
  - i. There is a shortfall in supply from sources of power like KPCL Hydel, KPCL Thermal and IPP minor(RE/NCE) to an extent of:

**TABLE-4.9****Shortfall in supply from KPCL Stations/RE Sources**

Source of Generation	Energy Difference between actual and approved in MU	Cost Difference between actual and approved in Rs. Crores.
KPCL Hydel	-1970.20	18.23
KPCL Thermal	-947.46	-439.21
IPP Minor(RE/NCE )	-212.93	-67.85

To make good the shortfall from the conventional/RE sources, un-requisitioned surplus power from CGS and major IPPs was purchased apart from procurement through short-term / medium-term power and Section11 to an extent of 614.92 MU and 596.42 MU at a cost of Rs.321.32 Crores and Rs.303.38 Crores respectively. HESCOM has incurred an additional cost Rs.1133.12 Crores towards meeting the overall deficit in the availability of power, resulting in an increase in per unit cost by 79 Paise.

- ii. The change in the source-wise mix of supply, reconciliation of energy and its cost among ESCOMs have resulted in increased average power purchase cost of HESCOM at the rate of Rs.3.80 per KWh as against the approved rate of Rs.3.01 per KWh.
4. **To ensure proper accounting of energy and its cost, HESCOM is directed to reconcile the inter-ESCOM energy exchanges and its costs every month and it shall collect/pay the difference amounts out of the tariff subsidy received from the Government of Karnataka with a view to avoid accumulation of balances under Inter-ESCOM's dues.**
5. The Commission notes that, the ESCOMs and the SLDC have not implemented the intra-state ABT. As per the directions issued by the Government of Karnataka vide its letter dated 28th January, 2016, intra-state ABT has to be implemented immediately by the KPTCL and ESCOMs. **The Commission therefore directs the SLDC, KPCL and the HESCOM to take appropriate action immediately to implement intra-state ABT and to host the details thereof, on their respective websites.**
6. The power purchases made by the HESCOM during FY16 from different sources of generation also include the energy purchased under Section 11 of the Electricity Act, 2003, in pursuance of the Government Order dated 16.09.2015. The Government, in the said order, had fixed a provisional tariff of Rs.5.08 per unit subject to determination of final tariff by this Commission. The Commission in its order dated 18<sup>th</sup> August, 2016, has fixed the final tariff of Rs.4.79 per unit and has ordered recovery of the difference amount (Rs.5.08-4.79) from the generators. However, some of the generators have filed petitions before the Hon'ble ATE, and a few other generators have filed review petitions before this Commission. The Hon'ble ATE has ordered not to recover the difference amount pending disposal of the petitions. Hence the power purchase cost allowed in this order is subject to the decision of the Hon'ble ATE and also the orders of this Commission.



The Commission decides to approve the power purchase of 12411.25 MU at a cost of Rs.4722.15 Crores, for the purpose of Annual Performance Review of FY16.

#### 4.2.4 Renewable Purchase Obligation (RPO) compliance by HESCOM for FY16:

The HESCOM in its tariff application did not file the details of RPO compliance for solar and non-solar RPO for 2015-16. Therefore, for validating the RPO compliance, the Commission had directed the HESCOM to furnish the data as per the specified format, duly reconciling the data with the audited accounts.

The HESCOM in its replies has furnished the details indicating non-solar RPO compliance of 10.69% against the target of 7% and solar RPO compliance of 0.42 % against the target of 0.25%. Subsequently, HESCOM has also submitted the following details regarding RPO compliance for FY16:

**TABLE-4.10**  
**Compliance of Non-solar RPO by HESCOM**

No.	Particulars	Quantum in MU	Cost-Rs.Crores.
1	Total Power Purchase quantum from all sources	12722.37	4859.26
2	Non-solar Renewable energy purchased under PPA route at Generic tariff including Non-solar RE purchased from KPCL	894.16	328.73
3	Non-solar Short-Term purchase from RE sources, excluding sec-11 purchase	165.93	83.80
4	Non-solar Short-Term purchase from RE sources under sec-11	223.28	113.51
5	Non-solar RE purchased at APPC	142.06	43.51
6	Non-solar RE pertaining to green energy sold to consumers under green tariff	0	0
7	Non-solar RE purchased from other ESCOMs	0	0
8	Non-solar RE sold to other ESCOMs	0	0
9	Non-solar RE purchased from any other source like banked energy purchased at 85% of Generic tariff	0	0
10	Total Non-Solar RE Energy Purchased [No. 2+ No.3+No.4+No.5 +No.7+No.9]	1283.37	526.04
11	Non-Solar RE accounted for the purpose of RPO [ No.10- No.5-No.6-No.8]	1141.31	482.53
12	Non-solar RPO complied in % [No.11/No1]*100	8.97	

**TABLE-4.11**  
**Compliance of Solar RPO by HESCOM**

No.	Particulars	Quantum in MU	Cost-Rs.Crores.
1	Total Power Purchase quantum from all sources	12722.37	4859.26
2	Solar energy purchased under PPA route at Generic tariff including solar energy purchased from KPCL	30.30	23.58
3	Solar energy purchased under Short-Term, excluding sec-11 purchase	0	0
4	Solar Short-Term purchase from RE under sec-11	0	0
5	Solar energy purchased under APPC	0	0
6	Solar energy pertaining to green energy sold to consumers under green tariff	0	0
7	Solar energy purchased from other ESCOMs	0	0
8	Solar energy sold to other ESCOMs	0	0
9	Solar energy purchased from NTPC (or others) as bundled power	22.96	0*
10	Solar energy purchased from any other source like banked energy purchased at 85% of Generic tariff	0	0
11	Total Solar Energy Purchased [No.2+ No.3+No.4+No.5+No.7+No.9+No.10]	53.26	23.58
12	Solar energy accounted for the purpose of RPO [ No.11- No.5-No.6-No.8]	53.26	23.58
13	Solar RPO complied in % [No.12/No.1]*100	0.42	

\*The Commission notes that HESCOM has not indicated any cost for solar energy procured under NTPC bundled power. Further, HESCOM has not considered SRTP energy of 0.15 MU. The Commission has reckoned this 0.15 MU of SRTP also.

The Commission has perused the data furnished and the explanation submitted by HESCOM. The Commission has approved total input energy of 12722.71 MU for FY16 in its APR including the HRECS power purchase quantum. Thus, HESCOM was required to purchase 890.59 MU of Non-solar energy and 31.81 MU of solar energy to meet its RPO targets. **Based on the information furnished, the Commission notes that HESCOM has achieved 8.97% of Non-Solar and 0.42% of the Solar RPO for FY16. Thus, HESCOM has over-achieved its non-solar and solar RPO targets by 1.97 percentage points and 0.17 percentage points respectively.**

#### 4.2.5 Operation and Maintenance Expenses:

##### HESCOM's Submission:

In its application, HESCOM, as per its audited accounts has sought approval of O&M expenditure of Rs.617.52 Crores for FY16. The break-up of O&M expenses are as follows:

**TABLE – 4.12**

##### O & M Expenses – HESCOM's submission

Amount in Rs. Crores	
Particulars	FY16
Employee cost	483.13
Administrative & General Expenses	77.65
Repairs and Maintenance	56.74
<b>Total O &amp; M Expenses</b>	<b>617.52</b>

##### Commission's analysis and decisions:

The Commission in its Tariff Order dated 2<sup>nd</sup> March, 2015 had approved O&M expenses for FY16 as detailed below:

**TABLE – 4.13**

##### Approved O&M Expenses as per Tariff Order dated 02.03.2015

Particulars	FY16
No. of installations as per actuals as per Audited Accts	4232538
Weighted Inflation Index	6.69%
CGI based on 3 Year CAGR	3.61%
Actual O&M expenses for FY13 - in Rs. Crores.	467.68
<b>Total approved O&amp;M Expenses for FY16 – in Rs. Crores.</b>	<b>635.76</b>

The Commission, in its preliminary observations, made on the APR filing, had sought the details of the certain expenses booked under A & G expenses during FY16 and has taken note of the replies furnished. It is noted that the actual O&M expenses reported by HESCOM are more than the approved O&M expenses by Rs.18.24 Crores.

The Commission, in accordance with the methodology adopted while approving the ARR for FY14-16 and subsequent APR, proceeds with the determination of normative O&M expenses based on the 12 Year data of WPI

and CPI besides considering 3 year compounded annual growth rate (CAGR) of consumers. Considering the Wholesale Price Index (WPI) 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 the CERC with CPI and WPI in a ratio of 80:20, the allowable rate of inflation for FY16 is computed as follows:

**TABLE – 4.14**  
**Computation of Rate of Inflation**

Year	WPI	CPI	Composite Series	Yt/Y 1=Rt	Ln Rt	Year (t-1)	Product [(t-1)* (LnRt)]
2004	98.72	111.1	108.624				
2005	103.37	115.8	113.314	1.04	0.04	1	0.04
2006	109.59	122.9	120.238	1.11	0.10	2	0.20
2007	114.94	130.8	127.628	1.17	0.16	3	0.48
2008	124.92	141.7	138.344	1.27	0.24	4	0.97
2009	127.86	157.1	151.252	1.39	0.33	5	1.66
2010	140.08	175.9	168.736	1.55	0.44	6	2.64
2011	153.35	191.5	183.87	1.69	0.53	7	3.68
2012	164.93	209.3	200.426	1.85	0.61	8	4.90
2013	175.35	232.2	220.83	2.03	0.71	9	6.39
2014	182.00	246.90	233.92	2.15	0.77	10	7.67
2015	177.03	261.42	244.542	2.25	0.81	11	8.93
A= Sum of the product column							37.56
B= 6 Times of A							225.37
C= (n-1)*n*(2n-1) where n= No of years of data=12							3036.00
D=B/C							0.07
g(Exponential factor)= Exponential (D)-1							0.0771
e=Annual Escalation Rate (%)=g*100							<b>7.71</b>

For the purpose of determining the normative O & M expenses for FY16, the Commission has considered the following:

- The actual O & M expenses allowed for FY13 excluding contribution to the Pension and Gratuity Trust.
- The three year compounded annual growth rate (CAGR) of the number of installations at 3.73%, considering the actual number of installations as per the audited accounts up to FY16.
- The weighted inflation index (WII) at 7.71% as computed above.
- Efficiency factor at 2 % as considered in the earlier two control periods.

Thus, the normative O & M expenses for FY16 are computed as follows:

**TABLE-4.15**  
**Computation of O & M Expenses based on inflation**

Particulars	FY16
No. of Installations As per actuals as per Audited Accts	4246990
Weighted Inflation Index	7.71%
Consumer Growth Index (CGI) based on 3 Year CAGR	3.73%
Base year O & M expenses for FY13 excluding P&G contribution - Rs. Crores	400.19
<b>O&amp;M Index= O&amp;M (t-1)*(1+WII+CGI-X)- Rs. Crores.</b>	<b>515.03</b>

The above normative O & M expenses have been computed without considering the contribution to the Pension and Gratuity Trust for FY 16.

The Commission has treated the employee costs on account of contribution to the P&G Trust as uncontrollable O&M expenses. This component has been allowed beyond the normative O&M expenses to enable the ESCOMs to meet their actual employee costs.

HESCOM, as per the audited accounts has incurred an amount of Rs.84.36 Crores towards contribution to the Pension and Gratuity Trust for FY 16. Considering the provisions under the prevailing MYT Regulations and the request of HESCOM to treat the pension and gratuity contribution as uncontrollable O & M expenses, the Commission computes the allowable O & M expenses for FY16 as follows:

**TABLE – 4.16**  
**Allowable O & M Expenses for FY16**

		Amount in Rs. Crores
Sl. No.	Particulars	FY16
1	Normative O & M expenses	515.03
2	Additional employee cost (uncontrollable O & M expenses)	84.36
	<b>Allowable O &amp; M expenses for FY16</b>	<b>599.39</b>

**Thus, the Commission decides to allow an amount of Rs.599.39 Crores as O&M expenses for FY16.**

#### 4.2.6 Depreciation:

##### HESCOM's Submission:

HESCOM in its application as per the audited accounts has claimed an amount of Rs.106.30 Crores as net depreciation after deducting the depreciation on account of assets created out of consumers' contributions / grants as per Accounting Standards (AS) – 12 for FY16.

As per the audited accounts for FY 16, the asset-wise depreciation is as follows:

**TABLE – 4.17**

#### Depreciation for FY16

Amount in Rs. Crores

Particulars	Opening Balance of Asset as on 01.04.2015	Closing Balance of Asset as on 31.03.2016	Depreciation for FY16
Buildings	73.77	76.20	2.46
Civil	2.85	3.08	0.15
Other Civil	2.55	2.72	0.09
Plant & M/c	672.25	759.75	37.70
Line, Cable Network	2588.06	3009.09	128.72
Vehicles	5.65	5.65	0.10
Furniture	3.61	4.00	0.14
Office Equipment	3.21	4.68	0.13
<b>Sub Total</b>	<b>3351.95</b>	<b>3865.18</b>	<b>169.49</b>
Less: Depreciation on Assets created out of Consumer's contribution / grants			63.19
<b>Net Depreciation</b>			<b>106.30</b>

##### Commission's analysis and decisions:

In accordance with the provisions of the KERC (Terms and Conditions for Determination of Tariff for Distribution and Retail sale of electricity) Regulations, 2006 and amendments thereon, the depreciation for FY16 has

been determined by the Commission. Based on the opening and closing balances of gross blocks of fixed assets for FY16 and the depreciation as per the audited accounts, the weighted average rate of depreciation works out to 4.70%.

Further, as per the Accounting Standards (AS) – 12, an amount of Rs.63.19 Crores of depreciation on assets created out of consumer contribution / grants as per audited accounts has been considered in allowing depreciation for FY16.

**Based on the above, the Commission decides to allow the net depreciation of Rs.106.30 Crores for FY16.**

#### 4.2.7 Capital Expenditure for FY16:

##### a) Capital expenditure of HESCOM:

###### HESCOM's submission:

HESCOM has indicated actual capital expenditure of Rs.704.21 Crores as against the approved capex of Rs.683.50 Crores for FY16. The details of category-wise capital expenditure indicated by HESCOM for FY16 are as follows:

**Table-4.18**  
**Capital expenditure of HESCOM for FY16**

Amount in Rs. Crores			
Sl No	Scheme	Approved Capex for FY16	Actual Expenditure for FY16
1	<b>Mandatory works, Social obligation and other works</b>		
a	Gangakalyan IP sets	50	69.46
b	Special Development Plan for backward talukas under Nanjundappa scheme (SDP)	-	13.69
c	Electrification of Hamlets (Not covered under RGGVY)	1	4.29
d	Electrification of HB/DB/JC/AC (Habitations) under SCP (Not covered under RGGVY)	0.5	4.23
e	Electrification of TC (Habitations) under TSP (Not covered under RGGVY)	0.5	0.4
f	Electrification of BPL Households (Not covered under RGGVY)	1	0.01
g	Water works	30	0.37

h	RGGVY	-	-
i	DDG (Phase-1 & Phase-2)	-	-
j	Rehabilitation of flood affected villages (special programme).	10	0.21
<b>2</b>	<b>Expansion of network and system improvement works.</b>		
a	E & I works.	40	42.89
b	Energization of IP sets under general.	45	13.18
c	Service connections other than IP/BJ/KJ/Water works.	35	20.08
d	Construction of new 33 KV stations and lines.	0	2.61
e	Augmentation of 33 KV stations.	5	5.58
f	Construction of 11 KV lines for 33 KV / 110 KV sub-stations.	30	17.23
g	Nirantara Jyoti Yojana.	0	73.88
h	R- APDRP.	0	27.22
i	R-APDRP exclusively for Modem and meters	-	-
<b>3</b>	<b>Reduction of T &amp; D and ATC loss</b>		
a	Providing meters to un-metered IP sets.	7.5	-
b	Providing meters to un-metered BJ/KJ installations.	0	1.5
c	Replacement of faulty / MNR energy meters by static meters.	10	4.4
d	Replacement of more than 10 year old electromechanical energy meters by static meters.	15	
e	DTC's metering ( Other than APDRP)	10	56.29
f	Replacement of 33 KV lines Rabbit conductor by Coyote conductor.		10.94
g	Replacement of 11 KV lines Weasel conductor by Rabbit conductor.	5	15.94
h	Replacement of age old LT conductor by Rabbit conductor.	20	9.08
i	HVDS (Pilot project for 1 district/year)	200	-
j	NEF (REC) for replacing 11 KV OH feeders by UG Cables in Hubballi and Belgaum cities.	-	83.16
<b>4</b>	<b>New initiatives works</b>		
a	IT initiatives, automation and call center	10	-
b	Installation of energy efficient motors	1	-
c	Smart grid/sprinkler/drip irrigation system	1	-
d	Providing solar roof tops to HESCOM office buildings	-	-
e	Establishing ALDC & SCADA.	-	0.64
f	Thermal Imaging and GIS Mapping of DTCs		
g	Special pilot project for Strategic Business Centre at Shiggaon sub-Division	-	-
<b>5</b>	<b>Replacement and other miscellaneous works</b>		
a	Replacement of failed distribution transformers.	70	125.38
b	Replacement of Power Transformers.	5	7.42
c	Replacement of old and failed equipment and other works of existing 33 KV stations and lines.	3	4



d	Preventive measures to reduce the accidents. (Providing intermediate poles replacement of deteriorated conductor, DTC earthing etc.)	10	9.04
e	T&P materials.	3	1.92
f	Creating infrastructure to UAIP Sets	45	55.14
g	Civil Engineering works.	20	2.53
	Others		21.5
<b>Total</b>		<b>683.5</b>	<b>704.21</b>

### Commission's analysis and decisions:

The Commission in the tariff order dated 2<sup>nd</sup> March, 2015, while considering the submissions of HESCOM and its capability to incur only Rs.500 Crores as expenditure, had retained the capex of Rs.683.50 Crores for FY16. The HESCOM however, has incurred an overall capital expenditure of Rs.704.21 Crores for FY16, thus exceeding the approved capex of Rs.683.50 Crores by Rs.20.71 Crores. In respect of a few categories of works, HESCOM has exceeded its approved capex limit as observed in the following paras:

- a) In respect of the "**Gangakalyan works**", HESCOM has incurred a capex of Rs.69.46 Crores as against the approved capex of Rs.50 Crores. HESCOM in its replies to the preliminary observations has stated that, the increased capex achievement is due to the new applications registered and the spill over works of the previous year. It is also stated that, the additional Capital budget was allotted by re-appropriating the un-utilized Capital budget from different categories during FY16.
- b) In respect of "**Special Development Plan for backward taluks under Nanjundappa scheme (SDP)**", HESCOM has incurred a capex of Rs.13.69 Crores, for which no provision was made in FY16. HESCOM in its replies to the preliminary observations has furnished the number of taluks covered under this scheme, but, has not furnished the reasons for incurring the capex. This scheme being a social obligatory work, HESCOM should have made adequate provisions for this work in its application for ARR for FY16.
- c) In case of "**Electrification of Hamlets (Not covered under RGGVY) and Electrification of HB/DB/JC/AC (Habitations) under SCP (Not covered**

**under RGGVY)** “, HESCOM has incurred a capex of Rs.4.29 Crore and Rs.4.23 Crores respectively as against the approved capex of Rs.0.50 Crores under each category. HESCOM in its replies to the preliminary observations has stated that, all the hamlets were covered under RGGVY and later the same was subsumed in DDUGJY due to which capex of Rs.1 Crores was allotted to Electrification of Hamlets (Not covered under RGGVY) head. Further, HESCOM has stated that, the excess Capital budget was met by re-appropriation.

d) In the case of “**Niranthara Jyothi Yojana (NJY)**”, HESCOM has incurred a capex of Rs.73.88 Crores. HESCOM in its replies to the preliminary observations on the benefits achieved, has stated that:

- i. After implementation of NJY and supplying 24X7 Power to Villages, the consumers of villages, especially, students and small scale industries are much happier to receive continuous quality power supply for longer duration. The power supply is also extended during morning and evening peak hours.
- ii. As per the data available, the metered energy consumption has increased by 26.67% after implementation of NJY.
- iii. There is an increase in revenue by 30% after implementing NJY and there is further scope for increasing the metered consumption.
- iv. After implementation of NJY scheme, it is observed that the transformer failure rate has reduced from 23% to 15%.

e) In respect of DTC metering, HESCOM has achieved capex of Rs.56.29 Crores as against the approved capex of Rs.10 Crores. The Commission has been directing HESCOM to complete the DTC metering and energy audit, so as to take necessary corrective action for reduction of distribution losses. But, HESCOM has not achieved its own target under this category of work. HESCOM in its replies to the preliminary observations has stated that, 20996 numbers of DTCs out of 22693 are metered under

Phase-I work and the Phase –II is in tendering stage for all the Non-RAPDRP Town Areas and Rural Areas, in all O & M Divisions of HESCOM Jurisdiction.

- f) In respect of “**National Electricity Fund (NEF)** (REC)” for replacing 11 kV OH feeders by UG Cables in Hubballi and Belgaum cities, HESCOM has incurred a capex of Rs.83.16 Crores. HESCOM in its replies to the preliminary observations has justified the execution of works by citing the following reasons:
- i. As a part of modernization of distribution network in cities such as Belagavi & Hubballi where the aesthetic look of the city is getting prominence, replacement of overhead conductor distribution system to UG cable was proposed;
  - ii. To reduce the interruptions and increase consumers' satisfaction;
  - iii. Under Distribution Automation System (DAS) activities in Corporation areas, other than Bangalore city, Energy Department had made provision of Rs.12.5 Crores as surety to raise the loan from financial institutions for the work of replacing 11kV OH feeders by UG cable,
  - iv. Token capital budget provision of Rs.50 Crores was proposed for FY 2016, whereas the total project cost for laying UG cable in these two cities is Rs.475 Crores and the funds to the tune of Rs.345.38 Crores were tied up under NEF Scheme.

**However, the Commission is of the opinion that, any huge capex spent on individual scheme should be taken up only after detailed studies in order to realize the benefits of the project, well before its implementation, as it has a huge impact on the tariff. HESCOM should have taken prior approval of such schemes before their implementation the project.**

- g) In the case of Replacement of failed DTCs by new ones, the HESCOM has shown a capex of Rs.125.38 Crores whose correctness is doubtful. In the previous year also, the Commission had pointed out the discrepancy in

the accounting practice of the works and all the ESCOMs had agreed to set right the same. However, HESCOM seems to have not rectified the anomaly pointed out in the accounting of repairs and Replacement of transformers. The HESCOM should note that, only the failed burnt/scraped transformers should be replaced by new transformers and can be accounted as capex. The HESCOM, in its replies to the preliminary observations, has furnished the breakup of the failed, repaired and new transformers used for replacing the failed transformers, but, it has not mentioned anything about rectifying the anomaly in accounting of the repairs and replacement of failed transformers. HESCOM has stated that, 861 new transformers at a cost of Rs.8.67 Crores have been used for replacement of failed transformers and this amount is eligible to be considered as capex out against the capex of Rs.125.38 indicated. Hence, HESCOM should rectify the mistake and set right its accounts accordingly.

**In the light of the above discussions and considering the fact that HESCOM has incurred capital expenditure of Rs.704.21 Crores, against the approved capex of Rs.683.50 Crores for FY16, the excess amount being Rs.20.71 Crores, which is well within 10% of the approved capex and also, considering the reasons furnished by HESCOM, the Commission decides to approve the capital expenditure of Rs.704.21 Crores as indicated by HESCOM for APR of FY16. This is subject to disallowance if any, as per the prudence check conducted for FY16, indicated in the following para.**

**b) The prudence check of capital expenditure and material procurement of HESCOM for FY16:**

The Commission has got the Prudence check of capital expenditure for FY16, done through third party verification of the capital works categorized and also the material procurement of HESCOM during FY16. This was taken up in two parts:

- i. Prudence check of execution of the capital works of FY16:
- ii. Prudence check of material Procurement process of FY16:

**i. Prudence check of execution of the capital works of FY16:**

The Commission is allowing the capex of HESCOM as proposed every year subject to prudence check. Accordingly, the prudence check of the capital expenditure incurred by HESCOM for FY16 was got done by the Commission by engaging the services of **M/s. Deloitte Touche Tohmatsu India Private Limited, (M/s. Deloitte)** as consultant, being the lowest bidder for the said job, through a transparent process of e-tendering to evaluate the capital expenditure of FY16 pertaining to categorized works.

M/s. Deloitte has collected the list of works carried out in HESCOM for FY16, containing 7167 No. of capital works amounting to a total cost of Rs.33593 Lakhs. The summary of the works and the cost is as shown below:

**TABLE – 4.19**  
**Summary of the total category of works for FY16**

<b>Type of work</b>	<b>Number of works</b>	<b>Cost of works Rs. Lakh</b>
Ganga Kalyan	1397	2,869
E&I Works	1368	6,839
NJY	128	6,435
RAPDRP	98	3,230
Civil Works	75	308
Metering	144	576
UNIP	1457	6,018
DTC Metering	455	2,937
RGGVY	4	11
Emergency	85	97
Others	1956	4,274
<b>Total</b>	<b>7167</b>	<b>33,593</b>

From the above table, the works are classified into three categories based on their cost (a) works costing above Rs.6 Lakh, (b) works costing Rs.3 to 6 Lakh and (c) works below Rs.3 Lakhs as follows:

**TABLE – 4.20**  
**categories of works based on the cost**

Category	Number of works	Cost of works Rs. Lakh
Works above Rs.6 Lakh	798	20,326
Works costing between Rs.3 –6 Lakh	1,709	6,809
Works costing less than Rs.3 Lakh	4,660	6,458
<b>Total</b>	<b>7,167</b>	<b>33,593</b>

M/s Deloitte has considered a sample of 130 numbers of works with a cost of Rs.12635 Lakh in Rs.6 Lakh and above category, 57 numbers of works with a cost of Rs.326 Lakh in Rs.3 Lakh to Rs.6 Lakhs category and 33 numbers of works from 11 divisions with a total cost of Rs.68 Lakh in the works below Rs.3 Lakh category. The summary of sampling process is indicated below:

**TABLE – 4.21**  
**Statement showing the samples as against the total works**

Category	Master List		Sample List	
	Number of works	Cost of works Rs.Lakh	Number of works	Cost of works Rs.Lakh
Works above Rs.6 Lakh	798	20,326	130	12,635
Works costing between Rs.6 –3 Lakh	1,709	6,809	57	326
Works below Rs. 3 Lakh	4,660	6,458	33	68
<b>Total</b>	<b>7,167</b>	<b>33,593</b>	<b>220</b>	<b>13,029</b>

The category wise details of the works selected for conducting prudence check is shown below:

**TABLE – 4.22**  
**Category wise details of the works in the selected sample**

Type of work	Master List of Works		Sample List of Works	
	Number of works	Cost of works Rs.Lakh	Number of works	Cost of works Rs.Lakh
Ganga Kalyan	1397	2,869	5	33
E&I Works	1368	6,839	50	1,590
NJY	128	6,435	55	5,606
RAPDRP	98	3,230	26	2,961

Civil Works	75	308	4	44
Metering	144	576	4	57
UNIP	1457	6,018	23	1,179
DTC Metering	455	2,937	21	178
RGGVY	4	11	2	7
Emergency	85	97	4	28
Others	1956	4,274	26	1,347
<b>Total</b>	<b>7167</b>	<b>33,593</b>	<b>220</b>	<b>13,029</b>

Further, as per the report of the consultant, the following are the salient features of the prudence check conducted:

**TABLE – 4.23**  
**Gist of Prudence check findings for FY16**

Particulars		Numbers	Amount in Rs. Lakhs
Works costing Rs.6 Lakhs and above considered as samples for validation		130	12635
Works costing between than Rs.6 Lakhs and Rs.3 Lakhs considered as samples		57	326
Works costing below Rs.3 Lakhs considered as samples		33	68
Works not meeting the norms of prudence	Rs.6 Lakhs and above	01	131.20
	Rs.6 Lakhs and Rs.3 Lakhs	Nil	-
	below Rs.3 Lakhs	Nil	-
Total works not meeting the norms of prudence		01	131.20

The details of the works which are not meeting the prudent norms are as follows:

**TABLE – 4.24**  
**Details of non-prudent project**

No	Division	Work	Category	Actual Cost Rs. Lakh	Actual Completion	Categorization
1	Bailhongal	33 KV Chunchunur Link Line from 110 KV Katakol Substation	E&I	131.20	07-07-15	31-03-16

**M/s Deloitte** has stated that, the construction of this 33kV link line was completed on 7<sup>th</sup> July, 2015. A corresponding amount of Rs.131.20 Lakh was categorized in the end of FY16. It was observed during the field visit that, the line constructed from Katakol to Chunchunur has not been commissioned for want of 20 MVA transformer at Katakol Substation and the line was kept idle.

Therefore, the cost may be treated as a non-prudent expenditure for the period from 7<sup>th</sup> July, 2015 to till March 2017. **However, as the situation seems to have been arisen from no fault of HESCOM, but that of KPTCL, the corresponding disallowance is to be made to KPTCL account.**

Some of the other findings of the prudence check are summarized in the following Table:

**TABLE – 4.25**  
**Summary of Works having cost overrun**

Type of Work	No cost overrun	Cost overrun up to 10%	Cost overrun of 10-25%	Cost overrun of 25-50%	Cost overrun beyond 50%
Ganga Kalyan	3	-	-	-	-
E&I	20	4	2	1	-
NJY	12	16	-	-	-
RAPDRP	11	-	-	-	-
Civil	4	-	-	-	-
Meter	2	-	-	-	1
UNIP	4	-	-	-	-
DTC Metering	11	-	-	1	-
RGGVY	2	-	-	-	-
Emergency	4	-	-	-	-
Others	15	1	2	-	-
Total	88	21	4	2	1
% Share in Total	76%	18%	3%	2%	1%

**TABLE – 4.26**  
**Summary of time over-run of projects**

Type of work	No time overrun	Time overrun up to 3 months	Time overrun of 3-6 months	Time overrun beyond 6 months
Ganga Kalyan	5	-	-	-
E&I	36	3	4	3
NJY	31	-	-	7
RAPDRP	15	-	-	4
Civil	4	-	-	-



Meter	2	1	1	-
UNIP	11	11	-	-
DTC Metering	13	1	2	3
RGGVY	-	-	-	-
Emergency	4	-	-	-
Others	22	1	-	-
Total	143	17	7	17
% Share in Total	78%	9%	4%	9%

The Commission had forwarded the copy of the Report on the Prudence check seeking HESCOM's comments thereon. The HESCOM has stated that, the 20MVA transformer at Katakol substation is installed recently and the load of chunchanur 33/11kV substation is taken on the line termed as not meeting prudence norms. HESCOM has also stated that, non-commissioning of the 33 kV line from Katakol substation to Chunchanur is due to delay in installation of 20MVA transformer by KPTCL. Further, in respect of the conditionally prudent works, HESCOM has stated that, it will be taking necessary action to make them meet the norms of prudence.

**The Commission noting the above points has taken a view that, the disallowance of the cost of the work not meeting the prudence norms at Rs.1.312 Crore needs to be attributed to KPTCL and the same will be factored in the APR of FY16 of KPTCL.**

**ii. Prudence check of Material Procurement process of FY16:**

The HESCOM has been executing capital works both on turnkey as well as partial turnkey contracts. In the process, the HESCOM procures major materials like, distribution transformers, poles and conductor etc. and issues them to the partial turnkey contractor for carrying out the labour contract work as per award. The contractor would also invest on some of the smaller materials associated with the works viz., cross arm, bolt & nuts, earthing materials etc.

In view of the fact that, a large quantity of major materials is being procured by the HESCOM, the Commission decided to review material procurement process of major materials as a part of prudence check with a view ensure

that procurement is carried out in a cost-effective manner without compromising on the operational needs.

**M/s Deloitte has reviewed the material procurement and stated about the Prudence check of inventory levels as follows:**

Analysis of procurements done by HESCOM in FY 16 revealed that a considerably higher level of inventory with respect to actual requirement seems to have been maintained in the case of 1.1 KV Pin Insulators and No. 8 strain insulators. Some of the other materials with higher inventory as a percentage of utilization is shown below:

**TABLE – 4.27**  
**Inventory levels and utilization**

Material	Unit	Average Inventory	Utilization	Inventory as % of utilization
BEE 3 Star 63 KVA DTC	No.	202	763	26%
BEE 3 Star 100 KVA DTC	No.	203	775	26%
ACSR Conductor – Weasel	KM	337	1,543	22%
ACSR Conductor – Rabbit	KM	263	1,288	20%
Insulators - 11KV pin type	No.	1,555	3,109	50%
<b>Insulators - 1.1KV Pin Insulator</b>	<b>No.</b>	<b>47,115</b>	<b>43,898</b>	<b>107%</b>
<b>Insulators - No.8 Strain Insulator</b>	<b>No.</b>	<b>28,788</b>	<b>34,066</b>	<b>85%</b>
Insulators - No.15 Strain Insulator	No.	2,494	11,871	21%
11KV GOS 200A Single Break	Set	373	2,657	14%

Further, M/s Deloitte has stated that, the critical items may have to be overstocked if their order lead time is higher, so as to avoid delay in work execution, affecting the continuity of supply. Therefore, mere existence of higher stock of some of the items may not by itself be treated as a proof of inefficiency.

**M/s Deloitte has also commented on the Prudence of procurement costs as follows:**

The study of purchase costs in FY 16 reveals that on an overall basis, the purchases were at an average of 6.87% above the Schedule of Rates. However, it has to be noted that the HESCOM is still using the Schedule of Rates prepared in December 2014 as the reference, which has not been updated further in the last two years. HESCOM has started open tendering under e-procurement mode for all the purchases, except in the case of the orders placed with Government owned firms, for which KTPP exemption is

granted. This may be the reason for excess rate paid over the schedule rate for purchase of distribution transformers.

**Some of the Key recommendations made by the consultant on the execution of works and material procurement process are as follows:**

**i. Need for accelerating the pace of IT and ERP implementation:**

It has been observed that HESCOM is lacking in IT implementation in comparison to some of the progressive utilities in the country. Lack of centralized systems for financial accounting, project monitoring etc., results in a situation wherein the corporate office is continuously dependent on division offices for furnishing of most of the data, which results in considerable delays and inconsistencies. However, it is also noted that implementation of ERP is in pilot stage in Haveri and Ranebennur divisions.

**ii. Post commissioning analysis of E&I works:**

It has been noticed that there is no institutionalized system for conducting post commissioning analysis of extension and improvement works. It is recommended that a procedure be put into place, where there shall be a post commissioning analysis of newly commissioned E&I works at division level on a quarterly basis.

**The Commission based on the above discussions on the prudence check of HESCOM:**

- a) Directs HESCOM to adhere to the capital expenditure guidelines for proper planning of its capex and monitor the works, so as to complete and categorize the project within the target time,**
- b) Directs HESCOM to take the suggestions of the consultant in bringing out a full pledged ERP solution,**
- c) Directs HESCOM to mandatorily conduct post commissioning analysis and**
- d) Directs HESCOM to monitor the material procurement, deployment to the field and track the stock position to see that, no idle stock of materials is kept for a longer period.**

## 4.2.8 Interest and Finance Charges:

### Interest on Capital loan:

#### HESCOM's Submission:

HESCOM in its application has claimed an amount of Rs.245.74 Crores towards interest on capital loans drawn from Banks/Financial Institutions for FY16. The claims of HESCOM also includes the interest on short-term loans/overdrafts.

#### Commission's analysis and decisions:

The Commission has noted the status of opening and closing balances of capital loans as per the audited accounts for FY16 and the data in format D9 of the filings and the replies furnished by HESCOM to the preliminary observations as shown below:

**TABLE – 4.28**

#### Allowable Interest on Loans – FY16

Amount in Rs. Crores	
Particulars	FY16
<b>Opening balance of capital loans</b>	<b>827.02</b>
Add: New Loans	290.20
Less: Repayments	89.39
Total loan at the end of the year	1027.83
Average Loan	927.43
<b>Allowable Interest on Capital Loans</b>	<b>117.93</b>

As per the audited accounts of HESCOM for FY16, the actual interest on capital loans is Rs.117.93 Crores. Considering the average loan of Rs.927.43 Crores and an amount of Rs.117.93 Crores incurred towards interest on capital loans, the weighted average of interest works out to 12.72%. The actual weighted average rate of interest is comparable with the prevailing rate of interest for long term loans.

**Thus, the Commission decides to allow an amount of Rs.117.93 Crores towards interest on capital loans for FY16.**

#### 4.2.9 Interest on Working Capital:

##### HESCOM's Submission:

HESCOM in its application has stated that it has raised short term loans and overdrafts to meet its day to day expenditure (working capital) and claimed Rs.20.53 Crores as the interest on working capital for FY16.

##### Commission's analysis and decisions:

As per the audited accounts, HESCOM has incurred Rs.135.79 Crores as interest on short term loans/over drafts for FY16. The commission notes that HESCOM has wrongly considered the interest on working capital under interest on capital loan head. As decided in the Tariff Order dated 2<sup>nd</sup> March, 2015 while approving the revised ARR for FY16, the Commission decides to allow working capital loans at a normative interest rate of 11.75% for FY16.

As per the KERC (Terms and Conditions for Determination of Tariff for Distribution and Retail sale of electricity) Regulations, 2006 and amendments thereto the Commission has computed the allowable interest on working capital for FY16 as follows:

**TABLE – 4.29**  
**Allowable Interest on Working Capital for FY16**

Amount in Rs. Crores	
Particulars	FY16
One-twelfth of the amount of O&M Expenses	49.95
Opening GFA	3875.46
Stores, materials and supplies- 1% of Opening balance of GFA	38.75
One-sixth of the Revenue	878.76
Total Working Capital	967.46
Rate of Interest (% p.a.)	11.75%
Normative Interest on Working Capital	113.68
Actual interest on WC as per audited accounts for FY16	135.79
<b>Allowable Interest on Working Capital</b>	<b>113.68</b>

**It is observed that, the actual amount of interest on working capital loans is more than the interest on working capital as computed on normative basis. Therefore, in accordance with the provisions of the MYT Regulations and**

**amendments thereto the Commission decides to limit the allowable interest on working capital to the normative amount of Rs.113.68 Crores for FY16.**

#### **4.2.10 Interest on Consumer Deposits:**

##### **HESCOM's Submission:**

HESCOM in its application as per the audited accounts has claimed an amount of Rs.49.23 Crores towards payment of interest on consumers' security deposits for FY16.

##### **Commission's analysis and decisions:**

The Commission notes that, based on the average amount of consumer security deposits, the interest on consumer security deposits amounting to Rs.49.23 Crores claimed by HESCOM as per the audited accounts for FY16 works out to a weighted average rate of interest of 8.20%. As per the KERC (Interest on Security Deposit) Regulations, 2005, the interest on consumer deposits is to be allowed as per the bank rate prevailing on the 1<sup>st</sup> of April of the relevant year. The bank rate as on 1<sup>st</sup> April, 2015 was 8.50%. The weighted average rate of interest claimed by HESCOM as per the audited accounts is within the applicable bank rate.

**Hence, the Commission decides to allow an amount of Rs.49.23 Crores towards interest on consumer security deposits for FY16.**

#### **4.2.11 Other Interest and Finance charges:**

HESCOM, as per its audited accounts, has claimed an amount of Rs.2.00 Crores towards other interest and finance charges for FY16, paid to banks / financial institutions. **The claim being acceptable, the Commission decides to allow the same for FY16.**

#### **4.2.12 Interest on belated payment of Power Purchase Cost:**

HESCOM in its application has claimed an amount of Rs.88.63 Crores towards Interest on belated payment of Power Purchase Cost for FY16. As per the audited accounts, an amount of Rs.88.63 Crores is indicated as interest on power purchase dues. The Commission has been consistently allowing the

interest on working capital as per the norms under MYT Regulations to meet the day to day expenses of the ESCOMs. Thus, there is no justification for claiming interest on power purchase dues separately. Hence, the Commission decides not to allow any interest on power purchase dues in the APR for FY16.

Accordingly, the allowable interest and finance charges for FY16 are as follows:

**TABLE – 4.30**  
**Allowable Interest and Finance Charges**

Amount in Rs. Crores		
Sl. No.	Particulars	FY16
1.	Interest on capital Loans	117.93
2.	Interest on working capital	113.68
3.	Interest on consumer deposits	49.23
4.	Interest on Power Purchase dues	0.00
5.	Other interest and finance charges	2.00
<b>Total interest and finance charges</b>		<b>282.83</b>

#### 4.2.13 Other Debits:

##### HESCOM's Submission:

HESCOM, in its application as per its audited accounts, has claimed an amount of Rs.10.74 Crores towards other debits for FY16.

##### Commission's analysis and decisions:

The Commission notes that as per the audited accounts, the allowable other debits excluding the provision for bad and doubtful debts for FY16 are as detailed below:

**TABLE – 4.31**  
**Allowable Other Debits**

Amount in Rs. Crores		
Sl No	Particulars	FY16
1	Gain/Losses relating to fixed assets	0.48
2	Assets decommissioning cost	0.46
3	Miscellaneous losses and write offs	6.98
4	Material cost variance	0.01
5	Bad debts written off excluding provisions	0.02
<b>Total</b>		<b>7.95</b>

Thus, the Commission decides to consider an amount of Rs.7.95 Crores as other debits for FY16.

#### 4.2.14 Net Prior Period Charges:

##### HESCOM's Submission:

HESCOM in its application has claimed Prior Period charges of Rs.19.11 Crores for FY16.

##### Commission's analysis and decisions:

As per the Audited Accounts for FY16, the prior period expenses (debit) is Rs.19.11 Crores on account of employee costs, depreciation under provided in previous years, A&G expenses, interest and finance charges and expenses relating to earlier years. However, as per the audit accounts there is a prior period credit of Rs.65.19 Crores which is on account of excess provision for depreciation, interest and finance charges, other miscellaneous receipts from trading and other income relating to prior period.

Thus, the Commission decides to allow a net prior period credit of Rs.46.08 Crores for FY16.

#### 4.2.15 Return on Equity:

##### HESCOM's Submission:

HESCOM in its application has not claimed any Return on Equity for FY16.

##### Commission's analysis and decisions:

The closing balances of gross fixed assets along with break-up of equity and loan component and the details of GFA, debt and equity (net-worth) for FY16 as per actual data as per the audited accounts are indicated as follows:

**TABLE – 4.32**  
**Status of Debt Equity Ratio for FY16**

Amount in Rs. Crores						
GFA (Closing Balance)	Debt (Closing Balance)	Equity (Net-worth) (Closing Balance)	Normative Debt @ 70% of GFA	Normative Equity @ 30% of GFA	%age of actual debt on GFA	%age of actual equity on GFA
3875.47	1027.73	(-)614.17	2712.83	1162.64	26.52%	0.00



From the above table it is evident that the amounts of debt & equity lie within the normative amounts as per the debt equity ratio of 70: 30 on the closing balances of GFA for FY16.

As per the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereto, the Commission has computed the allowable Return on Equity at 15.5% on equity plus the accumulated balance of profit/loss as per audited accounts as at the beginning of the year and also factoring recapitalization of security deposit of Rs.34.00 Crores in compliance with the Orders of the Hon'ble ATE in appeal No.46/2014. The allowable RoE for FY16 is determined as follows:

**TABLE – 4.33**  
**Allowable Return on Equity**

Particulars	Amount in Rs. Crores	
	FY16	
Paid Up Share Capital	707.53	
Share deposit	204.40	
Reserves and Surplus as on 01.04.2015	(1189.33)	
Recapitalization of Consumers' security deposit	(34.00)	
Total Equity	(311.40)	
<b>Allowable RoE @ 15.50%</b>	<b>0.00</b>	

Further, as per the audited accounts and as reported by the HESCOM, an additional equity of Rs.69.97 Crores has been received during the year from Government of Karnataka. Even after considering this additional equity infused during FY16, the negative net worth remains and hence the Commission is unable to allow any return on equity for FY16.

#### **4.2.16 Other Income:**

##### **HESCOM's Submission:**

HESCOM in its application has claimed an amount of Rs.91.46 Crores as Other Income for FY16.

##### **Commission's analysis and decisions:**

As per the audited accounts, the other income is Rs.91.46 Crores for FY16. This includes income from sale of scrap, income from rent and miscellaneous recoveries. An amount of Rs.65.19 Crores relating to prior period which is included in the audited accounts as other income has been factored under

prior period debit/credit. Further, as decided in the earlier Tariff Orders, to encourage and bring in financial discipline in timely payment of monthly power purchase bills, the Commission continues to allow 10% of the total incentive amounting to Rs.0.86 Crores on account of timely payment of power purchase bills, to be retained by HESCOM for FY16.

**Thus, the Commission decides to allow an amount of Rs.25.41 Crores as other income for FY16.**

#### **4.2.17 Fund towards Consumer Relations / Consumer Education:**

The Commission has been allowing an amount of Rs.0.50 Crore per year towards consumer relations / consumer education. HESCOM in its filing has claimed an amount of Rs.0.13 Crores towards Consumer Relations / Consumer Education for FY16. The Commission has considered the same in the APR for FY16.

#### **4.2.18 Carrying Cost on Regulatory Asset:**

HESCOM in its application has not claimed any amount of carrying cost on the Regulatory Assets kept by the Commission in its earlier Tariff Orders. The Commission in its Tariff Order dated 12.05.2014 had kept the unmet gap in revenue of Rs.214.58 Crores as Regulatory asset to be recovered in FY16 and FY17 and also decided to allow carrying cost at 12% per annum on the Regulatory Asset to be assessed at the time of APR of FY16 and FY17.

Accordingly, the Commission had factored Rs.107.29 Crores being the 50% of Regulatory Asset in the ARR of FY16 and allowed it to be recovered in the revised retail supply tariff.

The Commission in computation of revised ARR as per APR of HESCOM for FY16, allows the Carrying cost of Rs.12.87 Crores at 12% per annum on the Regulatory Asset of Rs.107.29 Crores kept for FY16 and allows to be recovered in the retail supply tariff for FY18.

#### 4.2.19 Revenue for FY16:

HESCOM, in its application has considered Rs.5520.80 Crores as revenue from sale of power from consumers and miscellaneous charges.

As per the audited accounts for FY16, the revenue from sale of power is also Rs.5520.80 Crores. However, as discussed earlier, the sale to IP sets is reckoned as 5439.15 MU instead of 5927.78 MU, i.e. a reduction of 488.63 MU. Based on the approved CDT of Rs.5.08 per unit, revenue of Rs.248.22 Crores is deducted from revenue from sale to IP Sets.

Accordingly, the Commission decides to consider Rs.5272.56 Crores as revenue from sale of power to consumers in the approval of revised ARR as per APR of HESCOM for FY16.

#### 4.2.20 Revenue and Subsidy for FY16:

The Commission in its tariff order dated 2<sup>nd</sup> March, 2016 has approved tariff subsidy of Rs.2444.70 Crores towards sale of power to BJ/KJ and IP sets for FY 16 in accordance with the prevailing Government Order. The Commission in computation of APR for FY16 has approved the revised tariff subsidy of Rs.2828.02 Crores towards sale of power to BJ/KJ and IP sets for FY 16.

#### 4.3 Abstract of Approved Revised ARR for FY16:

As per the above item-wise decisions of the Commission, the consolidated Statement of revised ARR for FY16 is as follows:

**TABLE – 4.34**

**Approved revised ARR for FY16 as per APR**

Sl. No	Particulars	Amount in Rs. Crores		
		FY16		
		As Approved 02.03.2015	As Filed 30.11.2016	As per APR
1	Energy at Gen Bus	11919.71	12410.91	12411.25
2	Transmission Losses in %	3.80%	2.16%	2.16%
3	Energy at Interface in MU	11466.77	12143.43	12143.42
4	Distribution Losses in %	17.50%	16.89%	20.92%
	<b>Sales in MU</b>			
5	Sales to other than IP & BJ/KJ	4190.39	4073.83	4073.83
6	Sales to BJ/KJ	87.28	90.41	90.41

7	Sales to IP	4941.99	5927.78	5439.15
	<b>Total Sales</b>	<b>9219.66</b>	<b>10092.02</b>	<b>9603.39</b>
	<b>Revenue from tariff in Rs. Crores</b>			
8	Revenue from tariff and Misc. Charges	2612.41	2444.55	2444.55
9	Tariff Subsidy for BJ/KJ	47.83	51.40	51.39
10	Tariff Subsidy for IP	2396.87	3024.85	2776.63
	<b>Total Existing Revenue</b>	<b>5057.11</b>	<b>5520.80</b>	<b>5272.56</b>
	<b>Expenditure in Rs. Crores</b>			
11	Power Purchase Cost	3045.41	4178.07	4178.07
12	Transmission charges of KPTCL	537.85	541.80	541.80
13	SLDC Charges	5.78	2.28	2.28
	<b>Power Purchase Cost including cost of transmission</b>	<b>3589.04</b>	<b>4722.15</b>	<b>4722.15</b>
14	Employee Cost		483.13	
15	Repairs & Maintenance		56.74	
16	Admin & General Expenses		77.65	
	<b>Total O&amp;M Expenses</b>	<b>635.76</b>	<b>617.52</b>	<b>599.39</b>
17	Depreciation	107.34	106.30	106.30
	<b>Interest &amp; Finance charges</b>			
18	Interest on Loans	169.63	245.74	117.93
19	Interest on Working capital	109.28	20.53	113.68
20	Interest on belated payment on PP Cost	0.00	88.63	0.00
21	Interest on consumer deposits	49.54	49.23	49.23
22	Other Interest & Finance charges	0.00	2.00	2.00
23	Less interest capitalised	0.00	0.00	0.00
	<b>Total Interest &amp; Finance charges</b>	<b>328.45</b>	<b>406.13</b>	<b>282.83</b>
24	Other Debits	0.00	10.74	7.95
25	Net Prior Period Debit/Credit	0.00	19.11	-46.08
26	Extraordinary Items		102.90	0.00
27	Return on Equity	0.00	0.00	0.00
28	Provision for taxation	0.00	0.00	0.00
29	Funds towards Consumer Relations/Consumer Education	0.50	0.13	0.13
30	Other Income	46.00	91.46	25.41
	<b>ARR</b>	<b>4615.09</b>	<b>5893.52</b>	<b>5647.27</b>
31	Deficit for FY14 carried forward	597.00	0.00	0.00

32	Add Carrying Cost on Regulatory asset of FY13	214.58	0.00	12.87
33	Regulatory asset to be recovered in FY17	197.69	0.00	0.00
34	Disallowance of Interest and Finance charges and Depreciation on imprudent investments of FY10-12	5.42	0.00	0.00
35	Less: Penalty on excess losses beyond targeted losses			164.35
	<b>Net ARR with RA and penalty for losses</b>	<b>5223.56</b>	<b>5893.51</b>	<b>5495.79</b>

#### 4.3.1 Gap in Revenue for FY16:

As against an approved ARR of Rs.5223.56 Crores, for FY16, the Commission, after the Annual Performance Review of HESCOM, decides to allow a revised ARR of Rs.5495.79 Crores for FY16. Considering the revenue of Rs.5272.56 Crores, the deficit in revenue of Rs.223.23 Crores is determined for the year FY16.

**The Commission decides to carry forward the deficit of Rs.223.23 Crores of FY16 to the proposed ARR for FY18 as discussed in the subsequent Chapter of this Order.**