



**JOINT ELECTRICITY REGULATORY COMMISSION  
for the State of Goa and Union Territories**

**Case No.OP-1/ 2009**

Date of Order 5<sup>th</sup> February 2010

**Aggregate Revenue Requirement (ARR) and Retail Tariff for  
the Electricity Department, Government of Puducherry  
for the Financial Year 2009-10**

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**Before the**  
**Joint Electricity Regulatory Commission**  
for the State of Goa and Union Territories  
**Gurgaon-122 016**

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**Aggregate Revenue Requirement (ARR) and Retail Tariff for**  
**the Electricity Department, Puducherry**  
**for the Financial Year 2009-10**

**Date of Order 5<sup>th</sup> February 2010**

**CORAM**

**Dr. V.K. Garg (Chairperson)**  
**Shri. R.K. Sharma FIE (Member)**

**ORDER**

**1.1 INTRODUCTION**

1.1.1 In exercise of the powers conferred by the Electricity Act 2003 the Central Government constituted a Joint Electricity Regulatory Commission for all Union Territories except Delhi to be known as “Joint Electricity Regulatory Commission for Union Territories” as notified on 2<sup>nd</sup> May 2005. Later with the joining of the State of Goa, the Commission came to be known as “Joint Electricity Regulatory Commission for the State of Goa and Union Territories” as notified on 30<sup>th</sup> May 2008.

The Commission is a two-member body designated to function as an autonomous authority responsible for regulation of the power sector in the state of Goa and Union Territories of Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Laksha Dweep and Puducherry. The powers and the functions of the Commission are as prescribed in the Electricity Act, 2003. The Head Office of the Commission presently is located in the district town of Gurgaon, Haryana and falls in the National Capital Region.

The Joint Electricity Regulatory Commission for the State of Goa and Union Territories started to function with effect from August 2008 with the objectives and purposes for which the Commission has been established.

The Electricity Department of Government of Puducherry a deemed licensee under Section 14 of Electricity Act, 2003 is carrying on the business of distribution and retail supply of Electricity in Puducherry, Karaikal, Yanam and Mahe Regions of Union Territory of Puducherry.

Electricity Department, Puducherry (EDP) is a deemed licensee under the provisions of Electricity Act 2003.

- 1.1.2 Electricity Department, Puducherry had filed its petition for approval of Aggregate Revenue Requirement and determination of retail tariff for the year 2009-10 according to the Conduct of Business Regulations of JERC along with all the supporting data on 5<sup>th</sup> October 2009.

**1.2 ADMISSION OF PETITION AND PUBLIC HEARING PROCESS:**

The Commission has admitted the ARR petition of EDP for 2009-10 on 5<sup>th</sup> October 2009 (Case No. OP 1 of 2009) and directed EDP to publish its application for ARR in the abridged form and manner to ensure public participation in accordance with Section 64 of the Electricity Act, 2003.

1.2.1 The Public Notice was published by EDP in the following newspapers:

S.No	News Paper	Language	Date of Publication
1	The Hindu	English	12 <sup>th</sup> October 2009 (All the four Regions)
2	Dinamalar	Tamil	12 <sup>th</sup> October 2009 (Puducherry Region)
3	Dinamalar	Tamil	13 <sup>th</sup> October 2009 (Karaikal Region)
4	Visalandra	Telugu	13 <sup>th</sup> October 2009 (Yanam Region)
5	Kerala Kaumudi	Malayalam	24 <sup>th</sup> October 2009 (Mahe Region)

Through the public notice, the public were invited to forward their objections and suggestions on the petition upto 31<sup>st</sup> October 2009.

1.2.2 The Commission has received 36 objections within the due date on the petition filed by EDP. The Commission has considered the objections received and sent communication to the objectors and also issued a "Public Notice" inviting them to take part in the public hearing process for presenting their views on the petition before the Commission. The public hearing was scheduled to be held in "Mini Civil Station Conference Hall" at Yanam on 11<sup>th</sup> November 2009 and in "Cooperative Union Conference hall" at Puducherry on 13<sup>th</sup> November 2009. But in compliance to the Hon'ble Court of Judicature at Chennai order dated 11<sup>th</sup> November 2009 in the Writ Petition No. 23070, 23071 of 2009 filed by AKS Alloys Private Limited & 13 others and M/s National Oxygen Limited and 10 others 13 others versus (1) Union of India Ministry of Power, (2) Electricity Department, Government of Puducherry, (3) JERC for State of Goa and Union Territories, stayed the proceedings in the matter of the petition for tariff determination as filed by EDP and as a result thereof the public hearings scheduled for 11<sup>th</sup> November 2009 at Yanam region and for 13<sup>th</sup> November 2009 at Puducherry were deferred.

The stay was vacated by the Hon'ble Court of Judicature at Chennai on 14<sup>th</sup> December, 2009. As per the judgment of the Division Bench of the Hon'ble High Court of Madras at Chennai while vacating the stay:

- The Tariff has to be finalized by 5<sup>th</sup> of February 2010 in line with draft Tariff Regulations.
- The final Tariff Regulations of the Commission should be made available by 8<sup>th</sup> of February 2010.

- Although the tariff will be finalized by 5<sup>th</sup> of February 2010 it is subject to further objections, if any, which will be considered by the Commission in view of the final Tariff Regulations.
- The tariff finalized on 5<sup>th</sup> February 2010 will become operational two weeks thereafter.

In compliance and accord with the aforesaid order of the Division Bench of the Hon'ble High Court of Madras at Chennai, the JERC has already put on its website [www.jercuts.gov.in](http://www.jercuts.gov.in) the draft regulations called "Joint Electricity Regulatory Commission for State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations 2009" Under Section-61 read with Section 181 of the Electricity Act, 2003 on 18.12.2009. JERC has also issued the required public notice which has appeared in the newspapers on 19.12.2009 for inviting the objections / suggestions on draft regulations on terms and conditions for determination of tariff. The said public notice was also put on the Commission website [www.jercuts.gov.in](http://www.jercuts.gov.in)

Public notice was also issued on 19/12/2009, inviting objections / suggestions / additional objections on the tariff petition of EDP upto 28/12/2009 keeping in view the draft regulations of the Commission. The Commission has received 2 more objections within the above due date. For the public hearing deferred on 11/11/2009 revised dates for public hearings were notified in the same public notice i.e on 20<sup>th</sup> December 2009 stating that public hearing will be held on 8<sup>th</sup> January at Yanam & 11<sup>th</sup> January 2010 at Puducherry. The public hearings were held at Yanam on 8<sup>th</sup> January 2009 and on 11<sup>th</sup> January 2009 at Puducherry. Each objector was provided with a time slot on the days of public hearing i.e. on 8<sup>th</sup> January 2010 and 11<sup>th</sup> January 2010 for presenting his views on the petition of EDP before the Commission.

The details of organizations / individuals who filed their objections on the petition are given in Annexure-I. The names of objectors who presented their views in the public hearing are given in Annexure-II.

A short note on the main issues raised by the objectors at the public hearings in respect of the petition along with the responses of the EDP are briefly given in Chapter-4.



## 2. Summary of EDP's Petition for Annual Revenue Requirement

- 2.1 The Electricity Department in its petition has submitted the Aggregate Revenue Requirement (ARR) for the year 2009-10 for meeting its expenses and the estimated revenue with the existing tariff and the revenue gap as shown in Table-1 below:

Table-1

### **Aggregate Revenue Requirement and Gap projected by EDP for the year 2009-10**

(Rs. in lakhs)

S.No	Particulars	2007-08	2008-09	2009-10
1	Power Purchase Cost	43397	50257	61408
2	Operation & Maintenance Expenses			
	- Employee Cost	3231	4873	6684
	- Repair & Maintenance Expenses	738	606	683
	- Administrative & General Expenses	662	674	851
3	Depreciation	1251	1347	2108
4	Interest & Finance Charges	-	-	2359
5	Interest on working capital	1154	1167	1685
6	Provision for bad debts	132	132	142
<b>7</b>	<b>Sub Total</b>	<b>50571</b>	<b>59056</b>	<b>75920</b>
8	Return on Equity	-	-	3153
<b>9</b>	<b>Total Expenditure</b>	<b>50571</b>	<b>59056</b>	<b>79073</b>
10	Less non tariff income	269	300	325
<b>11</b>	<b>Aggregate Revenue Requirement</b>	<b>50302</b>	<b>58756</b>	<b>78748</b>
12	Revenue at Existing Tariff	52991	52804	56973
13	Surplus / (Gap)	2688	(5953)	(21775)

**2.2 The EDP has requested the Commission;**

- To permit the recovery of gap in the year 2009-10 by allowing tariff increase as requested by EDP.
- To allow part of the gap as regulatory asset as specified under National Tariff Policy (NTP) if the entire gap cannot be allowed to be recovered through increase in tariff.
- To revise the tariff to be charged to the consumer as proposed.

### **3. Power Sector in Union Territory of Puducherry – An Overview**

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- 3.1** The Electricity Department of Government of Puducherry (EDP) is responsible for distribution and supply of electricity in Puducherry, Karaikal, Mahe and Yanam regions of the Union Territory of Puducherry. EDP is the deemed licensee under the provisions of Electricity Act 2003 for distribution of electricity in the Union Territory of Puducherry. It operates in an area of 492 Sq. Km. The total population of the UT of Puducherry is 974375 as per the 2001 census.

The EDP informed that the Government of Puducherry is contemplating to corporatise the power sector in the Union Territory and transfer the assets and liabilities of the electricity department to the corporation. M/S KPMG Advisory Services Pvt. Ltd, Chennai have been appointed on 15/06/2009 as consultants for the power sector reforms and to draw the road map for converting the EDP into a corporate body. The above consultants have already commenced the process and the work is in progress.

#### **3.2 Generation**

EDP does not have its own generation. The Puducherry Power Corporation Limited (PPCL), wholly owned company of the Government of Puducherry owns and operates a combined cycle power plant of 32 MW capacity at Karaikal and supplies power to Karaikal region. The balance requirements of the Union Territory are met from the share from central generating stations of NTPC, NLC, MAPS, KAPS. EDP also draws power from Tamil Nadu Electricity Board (TNEB) and Kerala State Electricity Board (KSEB). KSEB supplies power to Mahe region. The shares of power from central generating stations, power available from TNEB and KSEB are as given in Table-2 below:

Table-2

**Sources of Power to Puducherry as on 31.03.2009**

	(MW)
NLC – TS – II, Stage I & II and TS-1 (Expansion)	109.37
NTPC – Ramagundam Stage I, II & III and Talcher Stage II	152.60
MAPS	6.12
KAPS	17.18
TNEB	76.00
KSEB	4.73
PPCL	32.00
<b>Total</b>	<b>398.00</b>

**3.3 Transmission and Distribution**

EDP operates transmission network of 110 kV and 230 kV and distribution network at 33 kV, 22 kV, 11 kV and LT. The network as on 31<sup>st</sup> March 2009 is as given in Table-3 below:

Table-3

**Transmission and Distribution Network**

<b>Voltage</b>	<b>Lines (C.Km)</b>	<b>Substation (Nos. &amp; capacity)</b>
<b>Transmission</b>		
230 kV	16.758	2 (360 MVA)
132 kV	1.5	1 (20 MVA)
110 kV	243.983	14 (535 MVA)
<b>Distribution</b>		
33 kV	10.00	1 (10 MVA)
22 kV	818.677	-
11 kV	354.523	-
11 kV (UG Cable)	19.623	-
LT	4286	
Distribution transformers		
22/0.400 kV	-	1542
11/0.400 kV	-	415

**3.4 Transmission and Distribution (T&D) Losses**

The transmission and distribution (T&D) loss of the system was 14.80% during 2007-08 and 14.41% during 2008-09. The technical and commercial losses are not segregated.

**3.5 Consumer Profile**

The number of consumers category wise and the energy sales during 2008-09 are as given in Table-4 below:

Table-4

**Consumer Profile and Energy Sales – 2008-09**

S.N	Category	No. of Consumers	Energy Sales (MU)
<b>1.</b>	<b>Domestic</b>		
	Single bulb / hut	39238	425.83
	Other consumers	217672	
2.	Commercial	38609	141.28
3.	Agricultural pumpsets	8960	53.54
4.	Industry	5770	131.93
5.	Public lighting – (No. of Street Lights)	46297	17.01
	<b>LT Total</b>	<b>356546</b>	<b>769.58</b>
	<b>HT consumers</b>		
6.	Industrial and Commercial	373	953.49
7.	Government Departments (Central and State)	40	26.22
8.	Industry (EHV)	5	249.13
	<b>HT Total</b>	<b>418</b>	<b>1228.84</b>
	<b>Total consumer (LT + HT)</b>	<b>356964</b>	<b>1998.43</b>

**3.6 Demand and Supply Position**

The UT is able to meet its demand from the allocation it has from central generating stations, and supply from Tamil Nadu Electricity Board, Kerala State Electricity Board and generation from Puducherry Power Corporation Limited, a State owned generation company. Whenever there is shortfall from the central generating stations due to any reason, the State faces shortage and imposes restrictions on power supply to consumers.

**3.6.1 Power Supply Position**

The power supply from various sources during 2007-08 and 2008-09 was as given in Table-5 below:

Table - 5  
**Power Supply Position**

Source	2007-08	2008-09
<b>NLC</b>		
TS – II Stage - I	439.15	351.48
TS – II Stage - II	135.80	117.30
TS – I Expansion	118.30	112.43
<b>NTPC</b>		
RTPS – I & II	490.05	515.69
RTPS – III	140.26	131.07
Talcher Stage II	512.76	439.70
MAPS	18.98	16.06
KAPS	52.86	57.97
<b>Total central stations</b>	<b>1908.68</b>	<b>1741.72</b>
TNEB	376.79	369.06
KSEB	26.64	25.46
PPCL	257.25	242.24
<b>Total (other sources)</b>	<b>660.68</b>	<b>636.76</b>
<b>Total</b>	<b>2569.36</b>	<b>2378.48</b>

### 3.6.2 Energy Balance

The supply and demand position during 2007-08 & 2008-09 are as given in Table-6 below:

Table-6  
Energy Balance

S.N	Energy sales	2007-08	2008-09
	Energy sales (MU)		
1.	LT	756.14	769.58
2.	HT	1315.83	1228.84
	<b>Total</b>	<b>2071.97</b>	<b>1998.42</b>
3.	T&D losses	360.00 (14.80%)	336.45 (14.41%)
<b>4.</b>	<b>Energy requirement</b>	<b>2431.97</b>	<b>2334.87</b>
5.	Power drawn from central stations	1908.68	1741.72
6.	Purchase from TNEB	376.79	369.06
7.	Purchase from KSEB	26.64	25.46
8.	Generation by PPCL	257.25	242.24
<b>9.</b>	<b>Total drawal</b>	<b>2569.36</b>	<b>2378.48</b>
<b>10.</b>	<b>UI sales</b>	<b>137.40</b>	<b>43.60</b>
<b>11.</b>	<b>Total purchase (9-10)</b>	<b>2431.96</b>	<b>2334.88</b>

### 3.7 Energy Sales and Revenue

The sales mix and revenue from the consumers during FY 2007-08 and 2008-09 are as given in Table-7 below:

Table-7  
Sales and Revenue

Details	2007-08 (actuals)		2008-09 (actuals)	
	Sales (MU)	Revenue (Rs. lakhs)	Sales (MU)	Revenue (Rs. lakhs)
LT category	756.14	11192.17	769.58	11985.02
HT category	1315.83	41798.44	1228.84	40818.57
<b>Total</b>	<b>2071.97</b>	<b>52990.61</b>	<b>1998.42</b>	<b>52803.59</b>

## **4. Brief Summary of Objections Raised, Response from EDP and Commission's Comments**

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### **4.1 Public Response to the Petition**

The objections received from the public in response to the public notice and public hearing at Yanam and Puducherry, the response of Electricity Department, Puducherry to the objections and the views of the Commission thereon:

Most of the observations are general and suggestive in nature and have been duly taking into account, considered / incorporated wherever appropriate. The replies as made by EDP thereon have also been noted. In a bid to address these observations, the Commission has issued many directives to EDP as are included in this order in a separate chapter. It is important to note that, that there has not been any revision of tariff for last about 7 years and this process of tariff fixation is the first experience of EDP and consumers under Electricity Act, 2003. While being guided by Electricity Act 2003, National Electricity Policy, National Tariff Policy and JERC's Draft Tariff Regulations and the suggestions of the stakeholders, the Commission has taken a pragmatic view in the direction of achieving the various goals of the Act and other policies there under.

It is observed that the objections / suggestions are by and large repetitive in nature. The objections raised by each objector are 10 to 15 in number. The Commission has therefore addressed objections wise.

### **4.2 The details of the organizations and individuals who filed their objections / suggestions are listed in Annexure-II.**

All the written objections were forwarded to the EDP by the Commission as and when they were received and EDP was asked to offer its response to the consumers / Commission in respect of the objections raised.

### **4.3 All objections except in S.No. 1-27 (which are being treated as one objector as the objections are identical) and other objections and Electricity Department, Puducherry response thereto and the views of the Commission are briefly discussed in the following paras.**

**4.3.1 Objectors 1 to 27: Pulkitt Steel Rolling Mills and 26 others** (Sl. No. 1 to 27 in the Annexure -I)

**Objections:**

- (a) Since no Regulations are framed by the Commission the filing for determination of the retail tariff in respect of the petitioner, the Commission has no jurisdiction to decide the tariff.
- (b) MYT tariff should have been adopted as per mandate of the National Tariff Policy (NTP).
- (c) The exorbitant increase of tariff proposed by the petitioner is opposed to the basic tenets of its character and constitution.
- (d) Despite specific directions from the Commission no commercial documentation has been placed on record by the petitioner.
- (e) The petitioner, a government department, cannot seek any commercial returns, much less, return on equity for discharging its statutory function.
- (f) The mandate of NTP in clause 8.2.1 regarding revenue requirement and costs is not complied with. By transgressing this aspect of the NTP, no tariff determination would be tenable and comprehensive.
- (g) The petitioner has not furnished any supporting document to substantiate the basic data / figures / claims made in the petition without which no analysis of the ARR is possible. The respondent herein could not make specific objections without there being any supporting data specifically explaining and substantiating the filing.
- (h) The petitioner candidly admitted that “ *In absence of annual audited accounts, the asset wise details are not available. The Hon’ble Commission is requested to approve the above depreciation. The EDP submits that the block wise details are being assimilated and will be made available in the future filings*”.

This shows that the filings are incomplete in every respect and cannot be considered for tariff determination.

The Government Departments also are subject to statutory audit and unless the audit report by Comptroller and Auditor General or transactional audit statements by the internal auditor are made available, the commercial statements made by the petitioner cannot form the basis for the tariff filing.



- (i) The efficiency improvisation over the years has not been shown by the petitioner. There is nothing to indicate as to what is the cost of supply of electricity and hence it is impossible to ascertain as to whether the tariff determination reflects the cost of supply.
- (j) The petitioner has not complied with the following provisions of the NTP.
- (i) Clause 5(h)(1) and (5) of the NTP has not been complied with and the MYT principles have not been followed for tariff determination.
  - (ii) Segregation of wires business from the supply business has not been undertaken.
  - (iii) The framework for revenue requirements and costs as contained under clause 8.2 of NTP has not been complied with.
  - (iv) Linkage of tariffs to cost of service has not been undertaken as required under the clause 8.3.2 of the NTP.
- (k) The petitioner has taken recourse to unscheduled load shedding due to which the petitioner has earned through UI sale, which should be passed on to the consumers.
- The rate of Rs. 1.71 at which the power is supplied by TNEB to Puducherry and Karaikal areas should be considered for determination of tariff to these regions.
- (l) O&M expenses have been projected to be doubled over two years. There is no basis for exorbitant increase in the employee cost from Rs. 3231 lakhs in FY 2008 to Rs. 6684 lakhs in FY 2010. The vague statement of arrears payment cannot be the basis for the increase in the tariff.
- (m) The expenditure under the head communication, computerization, SLDC, R&D, HRD under A&G expenses cannot be a basis for increase in tariff. The expenditure to be incurred under each head has to be explained specifically with details therein. The legal and consultancy charges etc are sought to be increased by 2100% which should be disallowed.
- (n)
  - o The Debt-Equity norm of 50:50 as claimed by the petitioner arise in the case of DVC and is not applicable to the petitioner.
  - o The Petitioner is seeking 16% of return on equity where as DVC claimed only 14%.
  - o The reserves presently available with the petitioner should neither be treated as the equity nor as debt because the same does not fall into any of the genres. The return should be calculated on the capital actually employed into creation of assets.
  - o The 70:30 Debt-Equity norm should be considered for the new investments.

- (o)
  - The petitioner on one hand contends that being a Government Department the entire capital employed till date has been funded thro' equity infusion by the Government of Puducherry thro' budgetary support without any external borrowings and on the other hand claims interest and finance charges, notionally considering the gross fixed asset as on 31/03/2009 as debt.
  - Government assets are neither to be treated as equity nor as debt as sought by petitioner.
  - If the Hon'ble Commission wishes to consider some components as administrative efficacy, the same can be considered at 70:30 as per the universally acknowledged tariff norms.
- (p) Capitalization of assets is impossible without there being audited accounts. Hence depreciation as computed by the petitioner is impressive under law and facts.
- (q) The bad debts cannot be allowed to be passed on to the consumers without providing the support documentation. The petitioner's projection of bad debts goes to show it is absolutely sure to incur bad debts in future too, which is untenable.
- (r) AT&C losses are at highest level compared to the load profile of the consumers. The AT&C losses has to be backed by the annual Demand Collection Balance (DCB) data. DCB data for the past 3 years may be summoned by the Hon'ble Commission in the interest of comprehensive adjudication of the matter.
- (s) The loss levels at HT are phenomenally lower in comparison to others. Hence, the tariff should reflect the distribution losses at the voltage level of consumer's installation. Cost to serve model mandated as per NTP 8.3.2 should be applied and the tariff should be  $\pm 20\%$  of the cost of supply.
- (t) The increase in energy charges from Rs. 2.80/unit to Rs. 3.55/unit (27% increase) and increase in demand charges from Rs. 140/kVA to Rs. 210/KVA (50% increase) which are proposed to be increased are highly exorbitant. The tariff shock of this nature will have devastating impact on the economy and very sustainability of the installations.

**Response of EDP:**

- (a) The objection that in the absence of tariff regulations, the Hon'ble Commission cannot exercise jurisdiction or power to determine the tariff is patently wrong and without any basis. Power to determine tariff can be exercised even if no regulations on determination of tariff are framed.

- (b) The Electricity Act, 2003 does not mandate the determination of Multi Year Tariff. The provisions of Section 61(f) of the Electricity Act providing for multi year tariff are an enabling provision.
- (c) In terms of provisions of Section 61 of the Electricity Act, 2003 the tariff has to be based on the principles contained in Section 61 read with the National Electricity Policy and National Tariff Policy, the basic principles of which is that the supply of electricity is to be conducted on commercial principle and while safe guarding the consumers interest, the cost of supply is recovered in a reasonable manner and further that the tariff progressively reflects the cost of supply of electricity. The tariff proposal is consistent with the above.
- (d) The petitioner has placed commercial documentation on record required by the Hon'ble Commission to decide on the tariff petition.
- (e) It is wrong and denied that the petitioner cannot seek commercial return for the service of the supply of electricity.
- (f) It is wrong and denied that the petitioner has not complied with the provisions of the National Tariff Policy. The Hon'ble Commission is in the process of verifying the base-line data given by the petitioner.
- (g) The requisite data has been submitted to the Hon'ble Commission for adjudication on the tariff applicable to the petitioner. The petitioner is ready and willing to submit such additional documents in the event of such directions being passed by the Hon'ble Commission.
- (h) Since the petitioner does not have the annual audited accounts separately for the power activities, the petitioner has submitted in the petition filed that the capital base has been based on the FRS submitted to the Planning Commission from time to time with the audited figure of the FY 1992-93. Thus, the petitioner has given the supporting documents to the extent available with the petitioner, the documents are authentic and can be a basis for the decision on the capital base and other related financials of the petitioner.  
Being a Government Department, the accounts of the Department are reconciled annually with Director of Accounts and Treasuries.
- (i) The revenue requirements, the average cost of supply and other details as per the requirements are given.
- (j) It is reiterated that the petitioner has filed the petition consistent with the provisions of the National Tariff Policy. The petitioner is authorized to undertake all the activities of the electricity in an integrated manner unlike other utilities by virtue of the petitioner being a Department of the Government and the third proviso to section 14 of the EA, 2003 empowers the Government to undertake

- such activities without the requirement to obtain a license under the Act. The petitioner has proposed the cost reflective tariff and the tariff design is consistent with the provisions of the National Tariff Policy. The petitioner has proposed a tariff increase to meet part of the revenue requirement gap.
- (k) The petitioner has taken into account the UI charges on both counts, namely, the UI charges paid and earned in the calculation of the ARR, and therefore, there is no extra benefit to the petitioner. The average power purchase cost from TNEB as per the interim orders of the Hon'ble High Court, Chennai is Rs. 1.91. The tariff cannot be discriminated based on the source of purchase of power. The power purchase cost worked out is the weighted average cost of all the power purchased based on the fixed and variable costs applicable to such generating companies supplying power to the petitioner.
- (l) The O&M costs inclusive of employees cost are as per actual amount expected to be incurred. The employees cost are standard cost and cannot be rejected.
- (m) The petitioner is seeking pass through of actual expenses on account of various aspects such as communication, computerization, SLDC, R&D, HRD etc. The legal and consultancy charges are also on actual basis. The consultancy charges payable for filing the tariff petition before the Hon'ble Joint Electricity Regulatory Commission and the payment of the petition fees and license fees to the Hon'ble Commission have to be met with by the petitioner only during the year 2009-10. This has resulted in increase of A & G expenses during the year 2009-10.
- (n) The apportionment of the value of gross fixed assets into equity and normative loan in the Debt-Equity ratio of 50:50 is consistent with the principle adopted in the Electricity Laws. Since the entire gross fixed assets has been funded through the Government support, the Debt-Equity ratio is to be 50:50 and not 70:30. It is relevant to mention that there were no borrowings from outside sources for funding the assets. Accordingly, 50% of the gross fixed assets is to be serviced as equity and the remaining 50% is to be serviced as normative loan.
- (o) The interest and finance charges are being claimed on 50% of the normative loan upon application of the Debt-Equity ratio of 50:50.
- (p) The depreciation on the assets is being claimed as per the FRS filed with the Planning Commission. The rate of depreciation applied is as per the Central Electricity Regulatory Commission's Tariff Regulations, 2009.
- (q) Writing off bad debts and the provision claimed for such bad debts are consistent with the normal principles of law in the electricity utilities. The amount claimed is only 0.25% of the sales revenue which is minimal.

- (r) AT&C losses, are based on actual sales made and actual revenue received. The T&D losses for the year 2007-08 were in the region of 14.80% without taking into account the UI sale. For the year 2009-10, T&D losses are estimated at 14%. The collection efficiency is in the order of about 95%.
- (s) Section 61(g) of Electricity Act, 2003 states that the tariff progressively reflects the efficient and prudent cost of supply of electricity. In line with the above provision, the National Tariff Policy also states that the tariffs should be within  $\pm$  20% of the average cost of supply. Based on the above, the tariff proposal has been formulated by EDP with an endeavour to progressively approach towards the average cost of supply for majority of consumer categories, with minimum impact on lower income domestic and agriculture consumers.
- (t) The petitioner has claimed tariff increase to cover the revenue gap partly to avoid tariff shock. The proposed tariff for the consumers including HT consumers are less when compared with the tariffs of neighboring States.

**Commission's Comments:**

*The Commission has taken careful note of tariff petition filed by the EDP, the objections / comments / suggestions of objectors over the ARR, and also the response by the EDP in reply there to. The Commission has addressed various issues while taking decisions on the ARR and determining the tariffs. The Commission has also given directions to EDP.*

*Directives are issued on the following:*

*The EDP is being directed to prepare a statement of account along with balance sheet, profit and loss account etc. separately for the electricity business which has come under regulation and submit them along with the next ARR & Tariff petition duly certified by an auditor.*

*EDP is being directed to build up MIS to submit proposals under MYT. The Commission would decide when the MYT has to be introduced.*

*EDP is directed to get transmission and distribution losses assessed by an independent agency and submit a road map for reduction of losses.*

*A directive is also issued to conduct energy audit to identify high losses areas and take effective steps to reduce the loss.*

#### 4.3.2 Objector 28: Sumangala Steels Private Limited

##### Objections:

Sumangala Steels Private Limited filed the following additional objections in addition to the objections already made in the above paras as one of the 27 objectors.

- (a) The respondent states that they are HT consumer availing supply at 110kV voltage. The line loss at this voltage is less than the consumer availing supply at voltage less than 110 kV. And so, higher the voltage at which power is drawn the tariff should be less. In other states, where tariff is related to drawal voltage, the tariffs are progressively reduced corresponding to the increased voltage of drawal. But, the respondent is charged at the highest tariff.
- (b) Every applicant is required to publish the application in such abridged form and manner as may be specified by the Commission. The petitioner has not made available the application in its entirety and has failed to make the application together with Annexures.
- (c) The Hon'ble Commission is yet to specify the terms and conditions for determination of tariff, the formats and guidelines as required under Regulation 28 of Conduct of Business Regulations, 2009. As stated in the petition, the petitioner has not adopted the formats and guidelines of any other Regulatory Commission.
- (d) The accounts of the petitioner have not been audited by the statutory auditors. It is seen from the documents made available for perusal that the proforma accounts of the petitioner for the year 1992-93 only was audited by the CAG and CAG has made the following observation:
  - (i) *Value of fixed assets, depreciation provisions etc. could not be verified in the absence of the fixed assets register, date of acquiring assets etc.*
  - (ii) *The above proforma accounts furnished by the department have not been supported by important documents such as General ledger, Debtors ledger, creditors ledgers and other subsidiary ledgers. The Department has not prepared any trail balance.*

The petitioner has not taken any measure to correct above deficiency for the past 16 years and has now adopted the uncertified fixed assets value of Rs. 6495 lakhs in 1992-93 as base figure and added the capital expenditure (works in progress) amounting to Rs. 32,135 lakhs during the years from 1992-93 to 2008-09, to arrive at the gross fixed assets and return on equity. The method of arriving

at the gross fixed assets value without actual capitalization and proper records need not be accepted.

- (e) The internal resources excluding security deposit collected from the consumers were more than sufficient to meet the capital expenditure incurred during the years upto 2005-06. Taking into account the security deposit, there was no necessity for the petitioner to go to external sources to finance capital expenditure. Under such situation the petitioner cannot recover the interest on notional loan from consumers.
- (f) Debt – Equity ratio shall be only 70:30 in accordance with clause 5(3) (b) of the National Tariff Policy.
- (g) The petitioner has not furnished working sheet for the depreciation and has adopted the depreciation rate of 5.28% on the gross value of assets for 2009-10. The petitioner has worked out depreciation on the 100% value of assets at the beginning of the year and 50% of projected capital expenditure for the year 2009-10. The asset value has been arrived at historically with reference to the capital expenditure and without reference to the date of acquisition or date of commencement of operation of the asset.  
The asset that would have been depreciated fully in 2009-10 has not been considered for exclusion for the purpose of calculating depreciation.
- (h) The petitioner has calculated the interest on working capital on normative basis for the years 2007-08, 2008-09 and 2009-10. The petitioner has taken two months receivables at the revised tariff for the entire year 2009-10 when the tariff can be ordered to take effect from the date of orders or from a subsequent date.
- (i) The petitioner has stated that the increase in O&M expenses is due to payment of arrears consequent to implementation of 6<sup>th</sup> Pay Commission and the adjustment of actual expenses will be undertaken at the time of truing up of expenses for the financial year 2009-10. However, truing up is possible only when tariff proposal is made under MYT Frame work.
- (j) The petitioner has proposed to consider the un-bridged gap as Regulatory Asset. The petitioner has not put forward any force majeure condition for the proposed gap as required under clause 8.2.2 of NTP. Hence the proposal of the petitioner for Regulatory asset need not be accepted.

**Response of EDP:**

- (a) The revenue requirement proposed by the petitioner is to meet the cost of supply of electricity to the consumers. The tariff proposal has been formulated with an

endeavor to progressively approach towards the average cost of supply for majority of consumer categories, with minimum impact on lower income domestic and agriculture consumers.

- (b) The application with entire documents is always available to such persons who wish to seek the same from the petitioner.
- (c) The petition has been filed for determination of the revenue requirements and tariff consistent with the practice adopted by the licensees in other State Commissions.
- (d) The value of gross fixed asset determination is consistent with the practice adopted in the electricity industry, particularly, in the context of those utilities which are funded by budgetary support of the Government.

As regards the note contained in the audit report of the CAG relating to the year 1992-93, it is submitted that the FRS given to the Planning Department in the subsequent year had clearly given the details of the fixed assets.

- (e) It is incorrect to suggest that the capital expenditure incurred during the year upto 2005-06 was fully funded by the consumer contribution and that no capital expenditure was incurred by the Department.
- (f) The electricity activities in the State are being undertaken by the Electricity Department of the Government and, therefore, the entire funding is to be allocated between equity and notional loan in the ratio of 50:50 as had been applied to the Central Sector Generating Companies such as NTPC, NHPC etc as well as to entities such as Power Grid Corporation of India, Damodar Valley Corporation to the extent they are funded by the Government.
- (g) It is submitted that the value of the gross fixed assets is available, and, therefore the depreciation at the applicable rate need to be calculated with reference to the gross fixed assets. The depreciation has been calculated on the value of the gross fixed assets with the adjustments already taken in the part year.
- (h) The interest on working capital is admissible on normative basis as per the practice adopted in the electricity industry.
- (i) The O&M expenses admissible should include the effect of the implementation of the Sixth Pay Commission. The truing up for the FY 2009-10 will be undertaken after the close of the FY based on actuals.
- (j) The petitioner had claimed regulatory asset to avoid excessive tariff impact on the consumers. This is consistent with the National Tariff Policy. It is denied that the regulatory asset is to be given only in the event of force majeure condition.



**Commission's Comments:**

*Most of the objections / suggestions have been addressed under 4.3.1*

*A directive is being issued to EDP to maintain an asset register and depreciation register to arrive the value of fixed assets and the age of the plant and machinery and arrive at the depreciation.*

*The Commission has put the draft tariff regulations on website inviting comments. The Regulations would be notified shortly on attending the comments if any.*

**4.3.3 Objector 29: Chemfab Alkalies Limited**

**Objections:**

- (a) Lower tariff for HT supply offered by the Government prompted many of the large industries, to invest in the Union Territory of Pudducherry.
- (b) The State Electricity Boards (SEBs) are Body Corporates whereas EDP still continues to be a department of the Government. In the former case, cross subsidy is contributed by the respective States out of the consolidated and budgetary fund of the Government. The subsidy in the proposed ARR is integrated into the tariff proposals and has justified it as tariff rationalization.
- (c) If the State Government requires the grant or subsidy to any class of consumers, the State Government has to pay the amount, to compensate for implementing the subsidy. When this aspect is not being complied by the UT administration of EDP, the subsidy element cannot be integrated into the ARR for fixing up the tariff.
- (d) The average cost of supply is worked on the cost to supply which is determined at Rs. 3.47 per unit. The average cost of supply needs to be worked out on a rational basis in consonance with the norms applicable to the commercial units and laws of the land.
- (e) The conditions that, *"The tariff is subject to a minimum payment of three fourth times of the demand charges for the contracted load in kVA, the billing demand will be the maximum demand recorded during the month or 75% of contracted demand which ever is higher. and if in any month, the contracted maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand will be billed at double the normal rate"* is contradictory in intent and in contravention of the principles of natural justice.

- (f) The plant operations are under severe strain since March 2008 due to unscheduled power cuts and frequent power shedding / trippings. The plant employs the most energy efficient "Membrane cell" technology in the electrolysis process and the membranes are highly sensitive to thermal stress and quite expensive part of the plant and the frequent shutdowns / startups reduced the life of Membrane which increased the operation cost considerably.
- (g) The increase of energy charges by 75P per unit and demand charges by Rs. 70/- per kVA works to additional pay out of Rs. 84 lakhs per month to the industry and this unprecedented hike will severely impact the industry.
- (h) At a time, when Puducherry, reportedly is witnessing a mass scale closure of industries due to non-availability of power, any decision in favour of the proposed power tariff hike will affect the staggering industrial growth of Pudducherry even further.

**Response of EDP:**

- (a) Tariff proposal has been formulated with an endeavor to progressively approach towards the average cost of supply for majority of consumer categories, with minimum impact on lower income domestic consumers and agriculture.
- (b) For the purpose of application of Section 65 of the Electricity Act, 2003, i.e. 'Provision of subsidy by State Government' it is immaterial whether the distribution of electricity is undertaken by the State Electricity Board or other licensees independent of the Government or by the Government Departments itself.
- (c) The petitioner is seeking for determination of tariff for various classes of consumers independent of subsidy element and the decision on the subsidy need to be determined by the Government in its capacity as sovereign and not in its capacity as entity undertaking distribution and retail supply of electricity.
- (d) The average cost of supply worked out at Rs 3.47 of the petition is based on the revenue requirements of the petitioner, and total saleable units of electricity. The revenue requirement of the petitioner has been proposed based on the power purchase cost, employees cost and other O & M cost etc which are necessarily to be incurred by the petitioner.
- (e) The demand charges in the tariff petition are consistent with the industry practice. Under the two part tariff, the demand charges recovery is also to meet the revenue requirements of the petitioner. The investments made by the petitioner in the systems are to be recovered through tariff.

- (f) The Petitioner submits that substantial efforts have been made by the Department to improve the power situation. The Department had requested Ministry of Power to allocate additional power from Central Generating Stations for meeting the demand. The petitioner is mainly depending upon the power allocation made from the Central Generating Stations by the Government of India. As such, as and when the availability from these stations gets reduced, load shedding is resorted.
- (g) As regards additional financial impact, it is submitted that the tariff proposed is for recovery of the revenue requirement of the petitioner. In fact, the petitioner has sought for regulatory asset to avoid some part of the tariff increase to the consumers.
- (h) As per the provisions of the Electricity Act, 2003, the distribution and retail supply activities are to be conducted on commercial principles. Section 61 also provides the consumers should pay the cost to supply at reasonable level.

**Commission's Comments:**

*The objections and comments on the proposed tariff by EDP have been noted and accordingly appropriate decisions have been taken while determining the tariffs.*

**4.3.4 Objector 30: Cheslind Textiles Limited**

**Objections:**

- (a) T&D losses are mentioned as 14% which is very high for such a small area like Puducherry, ATC losses are mentioned as 18.54% which is not seen in any SEB / Department. By minimizing this, increase in energy charges can be reduced to considerable extent.
- (b) Most of the industries are started in Puducherry as per the assurance given by the Government to provide uninterrupted power supply with low tariff. Already uninterrupted power supply was not given during 2008-09 and now also. Due to interrupted power supply, the existing industries production is very much affected and incurred huge losses. If the tariff revision is implemented the existing industries will suffer very much.
- (c) In the ARR, provision for Interest & finance charges and interest on working capital are shown separately. In any organisation interest will be treated as one account head. By reducing this amount of interest, energy charges can be reduced.

- (d) In textile industry, power consumption is very high which constitutes about 70% of the manufacturing cost. Textile industry is the one which is very much affected due to recession in US & Europe. In this critical situation this kind of tariff revision will make the unit further sick which will lead to shifting or closing of unit.
- (e) In ARR, it is mentioned that the revenue short fall will be met by increasing the tariff. But due to increasing the tariff, there will be reduction in overall power consumption due to shut down of several industries.
- (f) Actual expenses incurred on hut & agricultural services should be borne by the Government as a subsidy and it should not be passed on to other consumers like us.
- (g) The EDP must take necessary steps to avoid bad debts, since bad debts affect not only department's performance but also consumers like us by the way of tariff revision.

**Response of EDP:**

- (a) The line loss in the system is 14% which is comparatively much lower than the line loss prevalent in the system of other States.  
AT & C loss level is 18.54% which is much better compared to other States. The petitioner is, however, endeavoring to reduce such loss to the maximum extent possible.
- (b) Substantial efforts have been made by the Department to improve the power situation. The petitioner is mainly depending upon the power allocation made from the Central Generating Stations by the Government of India. As such, as and when the availability from these stations gets reduced, load shedding is resorted to in order to maintain Grid Discipline.
- (c) The principle adopted by the department for determination of interest & finance charges and interest on working capital are consistent with the practice adopted by various other utilities.
- (d) The revenue requirement proposed by the petitioner is to meet the cost of supply of electricity to the consumers, the tariff proposal has been formulated by EDP with an endeavour to progressively approach towards the average cost of supply for majority of consumer categories, with minimum impact on lower income domestic and agriculture consumers.
- (e) The assumptions made by the objector are wrong and without any base, hence denied.
- (f) The petitioner is seeking for determination of tariff for various classes of consumers independent of subsidy element and the decision on the subsidy need

to be determined by the Government in its capacity as sovereign and not in its capacity as entity, undertaking distribution and retail supply of electricity.

- (g) Writing off bad debts and the provision claimed for such bad debts are consistent with the normal principles of law in the electricity utilities. The amount claimed is only 0.25% of the sale revenue which is minimal.

**Commission's Comments:**

*EDP depends for power supply from other sources viz central generating stations, TNEB, KSEB and PPCL.*

***EDP is being directed to minimize the interruptions of power supply to industries.***

*The other objections / comments have been addressed in the tariff order while examining the ARR and determining the tariffs.*

**4.3.5 Objector 31: The Southern India Mills Association**

**Objections:**

- (a) The main objective of establishing textile mills in Puducherry is to have competitive advantage of power cost.
- (b) Next to raw material, power is the second highest cost component in the manufacturing process of textile industry. The present proposal of hiking the demand and energy charges is against the interest of textile industry in the region.
- (c) The T&D loss at 14% and AT&C loss at 18.54% is against the standard norms and alarming. By reducing T&D loss and AT&C loss, the revenue gap can be minimized.
- (d) In the proposal of EDP, there are no details about the cost of power purchase and the initiative taken by EDP to reduce the cost of power purchase.
- There is no indication about how much revenue the EDP shall make based on revised tariff to meet out their expenditure.

**Response of EDP:**

- (a) At the outset, the petitioner wishes to submit that the revenue requirements proposed by the petitioner is to meet the cost of supply of electricity to the consumers.

- (b) The demand charges proposed are consistent with the electrical industry practice. The supply of electricity by the petitioner to the consumers is at a competitive price.
- (c) It is submitted that the T & D loss level at 14% and AT & C loss level at 18.54% proposed is much better compared to other States. The petitioner is, however, endeavouring to reduce such loss to the maximum extent possible. It is submitted that any reduction of T & D losses below 14% would require substantial capital investments.
- (d) The cost of power purchase has been fully set out in the petition. As mentioned in the petition, the petitioner purchases electricity from the Central Sector Generating stations and other legal entities. The cost of power purchase is as per the tariff determined by the Appropriate Commission for the sale of such electricity.

The projected revenue from the revised tariff has been given at para 3.5 of the petition.

***Commission's Comments:***

*The concept of the objector is taken note of while determining the tariffs for industry and other consumers.*

*The issue of T&D losses has been addressed in chapter-5, while examining T&D losses and by issuing appropriate directives in chapter-7.*

**4.3.6 Objector 32: The National Sewing Thread Company Limited**

**Objections:**

- (a) Due to global market recession all the industries particularly the textile sector is suffering very much. At this juncture the increase of demand and energy charges are not affordable to any type of industry.
- (b) The T&D and AT&C losses at 14% and 18.54% respectively projected are very high compared with TNEB ARR.
- (c) The proposed average annual increase of tariff is to be reduced from 4.4% to 0.5 or 1% without giving burden to the industries.

**Response of EDP:**

- (a) The energy and demand charges in the tariff petition are consistent with the industry practice. Under the two-part tariff, the energy and demand charges recovery is to meet the revenue requirements of the petitioner.
- (b) The line loss in the system which is comparatively much lower than the line loss prevalent in the system of other states. Further, the petitioner has proposed AT&C loss level at 18.54% which is much better compared to other states. The petitioner is, however, endeavouring to reduce such loss to the maximum extent possible.
- (c) The average annual increase of tariff 4.4% by the department is far lower in comparison with increase in annual tariff across other utilities.

**Commission's Comments:**

*The issues raised are addressed earlier under 4.3.1 & 4.3.2*

**4.3.7 Objector 33: Yanam Chamber of Commerce and Industry**

**Objections:**

- (a) T&D losses at 14% and AT&C losses at 18.54% projected in the ARR are very high. The losses presented by APTRANSCO are only 4% which is reasonable.
- (b) The high line losses may be due to;
  - (i) The conductor may not be taking full load as the materials are not as per specification
  - (ii) Excessive span lengths
  - (iii) Meters are not calibrated regularly and defective meters not replaced,
  - (iv) Adequate capacitors not provided at transformer and power stations and
  - (v) Earth connections not properly maintained regularly. Tree branches trimming not done regularly.
- (c) EDP is excessively over staffed which is one of the causes for the department's claim of excessive revision of tariff.

**Response of EDP**

- (a) It is submitted that the transmission and distribution loss is 14% (projected for the year 2009-10), comparatively much lower than the All India average 28.65% reported for the year 2006-07. The reported line loss of APTRANSCO as 4% is

- not directly comparable with that of the petitioner's system as the system of operation of APTRANSCO is limited only to the power transmission system.
- (b) (i) It is submitted that all the conductors generally are being procured by the department only through DGS&D, as such these conductors conform to the relevant ISI specifications. Further, all the materials are inspected for conformity to the ISI specifications by the DGS&D officials before despatch.
- (ii) The department is generally adopting span length as per the REC standards.
- (iii) As per the CEA Regulations, all the electro-mechanical type energy meters are to be replaced with the static type energy meters. The department has specifically provided Rs. 2.00 crores to replace the electromechanical energy meters with static meters during the year 2009-10. As far as the stuck up meters are concerned, the department will follow the standard of performance to be notified by the Hon'ble Commission.
- (iv) In all the 110kV substations, adequate shunt capacitors have been erected for providing reactive compensation.
- (v) All the electrical equipments have been effectively earthed as per the REC standards. Transmission and distribution line maintenance and tree clearance are being undertaken regularly in order to upkeep the system
- (c) The petitioner submits that it is equipped with optimal staff required for proper maintenance of the system. Rise in salary & other benefits are as per the latest implementation of Sixth Pay Commission etc and O&M expense, employee cost in particular are at reasonable level in comparison with other states of India.

***Commission's Comments:***

*The EDP has been directed to get the T&D losses assessed by an independent agency and also conduct energy audit and take steps to reduce the losses. Directive is being issued to install capacitor to improve the voltages and reduce the losses.*

**4.3.8 Objector 34: M/S AVR Zinc Products (P) Limited**

**Objections:**

- (a) The burden of power losses, misuse of power and inadequate monitoring of power distribution are responsible for the departments projected heavy losses.
- (b) The department is over staffed, thus very high overheads in the form of salaries and perks.
- (c) Delay in attending break downs due to long distance transportation of men and material.



**Response of EDP:**

- (a) The petitioner wishes to submit that the line loss in the system is 14% and has projected AT&C loss level at 18.54% which is comparatively much lower than the losses prevalent in the other states. The petitioner is, however, endeavoring to reduce such loss to the maximum extent possible by way of effective monitoring and implementing other precautionary measures.
- (b) The petitioner submits that it is equipped with optimal staff required for proper maintenance of the system. Employee cost in particular are at reasonable level in comparison with other States of India.
- (c) The engineers and staff of the Department are putting their best efforts in maintenance of the distribution system and also in attending the defects at the minimum possible time.

**Commission's Comments:**

*Issues raised by the objector has been addressed while taking decision on ARR and determining the tariffs.*

**4.3.9 Objector 35 : Sri Vasavi Pigments (P) Limited**

**Objections:**

- (a) Employee cost, provision for bad debts and return on equity are on higher side.
- (b) Revenue gap is within manageable limits which can be reduced by energy auditing, re-fixing of consumers in appropriate categories and by reducing cost of employees.
- (c) Whether the department has plans for decentralization of administration into zones and fixing targets for each zone for technical and commercial operations?
- (d) Tariff rates proposed for HT consumers are un-reasonable. If possible, the tariff rates have to be reduced, because many industries in the Union Territory are not getting 'Power subsidy' and the industries in the region are facing stiff competition from industries in the other states like Uttaranchal and Himachal Pradesh.

**Response of EDP:**

- (a) The employee cost, bad debts and return on equity proposed by the petitioner are very much comparable with those claimed by the other state utilities across the India. The claims made by the petitioner are consistent with the industry practice.

- (b) The revenue requirement proposed by the petitioner is to meet the cost of supply of electricity to the consumers and the petition has been filed in accordance with National Tariff Policy and the National Electricity Policy notified by the Government.
  
- (c) As of now, there is no proposal to decentralize the administration into zones.
- (d) The revenue requirement sought for by the petitioner and the tariff proposed are reasonable and consistent with the provisions of the EA, 2003. The provisions of the Section 61 (g) of the EA, 2003 state that the Appropriate Commission should be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity. In line with the above provision, the National Tariff Policy also states that the tariff should be within  $\pm 20\%$  of the average cost of supply. Based on the above, the tariff proposal has been formulated by ED, Puducherry with an endeavour to progressively approach towards the average cost of supply for majority of consumer categories, with minimum impact on lower income domestic consumers and agriculture.
- (e) The average annual increase of 4.4% proposed by the Department is far lower in comparison with increase in annual tariff across other utilities.

***Commission's Comments:***

*The issues raised are being taken into consideration while determining the tariffs.*

**4.3.10 Objector 36: Association of Small Industries of the Union Territory of Puducherry**

**Objections:**

- (a) The cost of power purchase, as admitted by Electricity Department itself, is not known precisely before hand and the availability of power since 2008 is not quantifiable which makes the estimation of cost of purchase of power more intrigued. This has placed the department in a disadvantageous position in arriving at tariff rates for supply of power. Therefore, the department jacked up the cost of all the inputs imaginatively and notionally which has resulted in tariff being jacked up to a huge extent in one stroke.
- (b) The subsidy component in respect of electricity supply to hut, domestic and agriculture categories has to be reimbursed by the Government to the EDP so that EDP is not burdened with the loss on that account. If the cross-subsidization

- is dispensed with, there may not be any need for upward revision of the existing tariff for priority sector i.e., industries.
- (c) The average annual growth of consumption is 4.3%, as seen from the consumption pattern of earlier 6 years. Applying this annual growth of 4.3% on 2007-08 consumption for 2 years, it will be 2260 MU for 2009-10. This realistic sales of 2260 MU shall be adopted for arriving power purchase cost and while fixing tariff. Any additional demand, when met from the additional optimistic supply position envisaged by EDP is going to be met from the proportional additional revenue from the consumers ergo, which should not affect the cost – workings.
- (d) All the costs – notional in the case of old assets and actual in the case of new infrastructure primarily needed to improve the quality of power supply and efficiency of operation – shall be to the account of government, since these are basic requirements even to the existing consumers who have been paying the tariff all along even in the absence or deficiency of such requirements.

**Response of EDP:**

- (a) The details of the power purchase cost which constitute 78% of the total cost of supply are given in the petition. The power purchase costs are determined by the Appropriate Commissions dealing with the generating companies from whom the petitioner purchases electricity. As regards the supply of electricity is concerned the petitioner submits that substantial efforts have been made by the department to improve the power situation. The petitioner is mainly depending upon the power allocation made from the central generating stations by the Government of India.
- The proposed increase in tariff is consistent with the principles contained in the National Tariff Policy and the National Electricity Policy notified by the central Government.
- (b) The petitioner is seeking for determination of tariff for various classes of consumers independent of subsidy element and the decision on the subsidy need to be determined by the Government in its capacity as sovereign and not in its capacity as entity undertaking distribution and retail supply of electricity. Further, the department has arrived at the revenue requirement, based on methodology, consistent with provisions under Electricity Act, National Tariff Policy and National Electricity Policy.
- (c) The petitioner has adopted CAGR method for computation of energy consumption for various categories. The reason for reduced consumption during

the year 2008-09 is due to load restrictions to the industries, which has been eased out in the current year 2009-10. The methodology adopted by the objector in arriving to power purchase quantum is wrong and not acceptable to the petitioner.

(d) Depreciation has been worked out as per the rules in force from time to time.

**Commission's Comments:**

*The issues raised by the objector have been addressed while examining the ARR and determining the tariffs.*

**4.3.11 Objector 37: Yanam Civil Rights Society**

**Objections:**

- (a) The present tariff may be maintained to LT domestic category as many of them are poor.
- (b) The proposed tariff under commercial category may be reduced from 350 paise / unit to 250 paise / unit since many small traders are facing lot of troubles due to imposing of VAT and other taxes.
- (c) A vigilance wing may be set up at Yanam to control large-scale theft of energy and misuse of power in industries.
- (d) Since industrialists and electricity top officers are hand-in-glove, more than Rs. 10 crores are pending payment and power is continuously supplied to those industrial units.
- (e) Street lights are indiscriminately used without any regulatory mechanism. Tariff may be regulated for street lights.

**Response of EDP:**

- (a) The tariff proposal has been formulated by EDP with an endeavor to progressively approach towards the average cost of supply for majority of consumer categories, with minimum impact on lower income domestic consumers and agriculture.
- (b) The tariff proposed is for recovery of the revenue requirements of the petitioner. As regards issues of introduction of VAT is concerned, the decision taken by the Puducherry Government is independent of any tariff proceedings under EA. In fact, the petitioner has sought for regulatory assets to avoid some part of the tariff increase to the consumers.

- (c) The department is taking all necessary steps for monitoring and controlling power theft at all areas under its purview. As regards creation of vigilance wing is concerned, an Anti Power Theft Squad headed by an AE has already been formed and is conducting frequent surprise inspection in various consumers.
- (d) The petitioner strongly opposes the allegations made by the objector in para (d). The allegations are wrong and denied.
- (e) The petitioner has proposed increase in street light tariff under regulatory regime. Further, this proposed increase is consistent with the principles contained in the National Tariff Policy and the National Electricity Policy notified by the central government.

**Commission's Comment:**

*Directives in chapter-7 have been issued to curb theft of energy to reduce loss.*

**4.3.12 Objector 38: Ajanta Sea view Hotel, Puducherry**

**Objections:**

- (a) The proposed increase of commercial tariff will badly affect the hotel industry and the tourism industry in Pondicherry.

**Response of EDP:**

- (a) The objector has himself admitted that the electricity tariff in Puducherry is much lower as compared to other States. Moreover, the last tariff revision was effected in the year 2002 and since then cost of supply of electricity has increased manifold. It is worth mentioning that the tariff of the hospitality industry has also significantly increased during this period. The present tariff for the commercial category is even below the average cost of supply and is unsustainable.

**Commission's Comments:**

*The Commission has addressed the issues while examining the ARR and determining the tariffs.*

**4.3.13 Objector 39: Sri K. Ravindran, Puducherry**

**Objections:**

- (a) Consumers having consumption charges above Rs. 500/ PM may be permitted to deposit Rs.10,000 or more so that the monthly interest on the same can be adjusted against the monthly charges.

**Response of EDP:**

- (a) The Petitioner submits that there is no such proposal for accepting anything above the security deposit as specified and simultaneously allowing discount on the energy charges in the monthly bill of that consumer. In any case, since the inception of the regulatory framework, the Petitioner shall be bound by the rules/regulations being framed by the Hon'ble Commission.

**Commission's Comments:**

*The suggestion is noted and the EDP will be advised at appropriate time to see whether the suggestions could be implemented.*

**4.3.14 Objector 40: M/S Kaveri Alloy Castings Pvt. Ltd.**

**Objections:**

- (a) Due to frequent power shut down the objector is forced to consume about 100 to 200 units more per ton.

**Response of EDP:**

- (a) The petitioner is mainly depending upon the allocation of power from various Central Generating Stations made by Government of India. As and when the power availability is reduced from the Central Generating Stations the petitioner has resorted to load shedding in order to maintain the grid discipline.

**Commission's Comments:**

*The issue of interruptions is commented earlier and EDP has been directed to maintain un-interrupted power supply to the industry to the extent possible (chapter-7).*

**4.3.15 Objector 41: Sri R.P. Paneerselvan, President, Physically Handicapped Youth Association, Puducherry**

**Objections:**

- (a) The objector requested to furnish any break up / statistics of maximum electricity consuming categories.
- (b) The common public should not be asked to share the burden of revised tariff. In case of agriculture, the existing tariff should not be disturbed.
- (c) All houses / establishments using A/C can be billed according to revised tariff or special tariff should be levied.

- (d) Physically handicapped persons and Registered Members of the unorganized sectors should be given concessional tariff. It should be similar to 'Hut Connection' scheme. All shops and Registered SSI / Medium scale units started by Physically handicapped person should be charged at 25% of the normal tariff charges.
- (e) Certain HT industries in Pondicherry have provided the transformer inside their premises giving scope for indulging in manipulation.
- (f) After revising the tariff, The Electricity Department should guarantee uninterrupted supply at the stipulated voltage after revision of tariff
- (g) Illegal supply of electricity for political meetings should be stopped. Pilferage and theft of energy should be curbed. Criminal action should be taken on such persons indulging in theft of energy.
- (h) Many industries have defaulted in payments and left Pondicherry. Steps should be taken to recover the arrears?

**Response of EDP:**

- (a) The details of the consumer category-wise consumption have been provided in the Tariff Petition.
- (b) The tariff proposed by the petitioner is consistent with the principles laid down in the National Tariff Policy and the National Electricity Policy, whereby the tariff progressively reflects the cost of supply of electricity.
- (c) The consumers using air conditioners have high electricity consumption level and typically falls in the highest slab of tariff which has already been proposed at a relatively higher rate.
- (d) Regarding concessional tariff to physically handicapped and members of unorganized sector similar to Hut-Connection Scheme, the Petitioner submits that this Scheme has been introduced by the Government and decision of extending the benefit of this scheme and mode of its implementation including matters related to grant of subsidy are to be determined by the Government in terms of Section 65 of the Electricity Act, 2003.
- (e) As per the existing Terms and Conditions, the HT consumer has to erect the transformer and its associated equipments within their premises itself. However, the department is having adequate sealing system wherever required so as to prevent the consumer for indulging in any manipulation.
- (f) The Petitioner is continuously endeavouring to provide uninterrupted and quality power supply to its consumers. Uninterrupted supply cannot be guaranteed due

- to its reliance upon power generating sources existing outside the UT and due to the possibility of system related and local faults which may occur.
- (g) Sufficient corrective measures to curb the theft of electricity are being taken. Action is also being taken as per the provisions of Electricity Act, 2003.
- (h) Strenuous efforts are being taken to collect arrears from various categories of consumers. Besides, in case of industries, which have pending arrears and have since left Puducherry, necessary action as per the Revenue Recovery Act has already been initiated by the Petitioner.

**Commission's Comments:**

*Consumers who come under low income group are given the lowest tariff and the other issues raised by the objectors have been addressed while examining the ARR.*

**Objector 42: Additional objections filed by M/s. Pulkitt Steel Rolling Mills & Others.**

**Objections:**

- (a) The Hon'ble High Court of Judicature, Madras in its order dated 14/12/2009 in W.A No. 1822/09 and in MP 01/2009 has directed that the tariff to be finalized by 5<sup>th</sup> February 2010 shall be based on the draft regulations now proposed by Hon'ble Commission. Therefore, the draft regulations are to be deemed as the final regulations for the purpose.
- (b) The licensee has filed audited certificate for the year 1992-93. Neither, the audited accounts nor the audit certificates for any of the years have been filed before the Hon'ble Commission as required under Chapter 3 of the regulations.
- (c) The petitioner has not made available the 2<sup>nd</sup> volume of the supportive documents filed along with the tariff application. The filings are in total deviation with the draft Terms and Conditions of Tariff Regulations, 2009, announced by the Hon'ble Commission.
- (d) Under the regulations, there is no provision to fix a combined tariff for transmission and distribution of electricity. Therefore, the petitioner cannot combine the Aggregate Revenue Requirement (ARR) of distribution and transmission.
- (e) The audit certificate for the year 1992-93 states that the value of the fixed assets could not be verified. The audited balance sheet has not been produced for any of the years including 1992-93. The petitioner has produced only the financial



resource statements for the FY2007-10, which had not stood the test of auditor's scrutiny. Hence, they cannot be basis for the tariff filing.

- (f) The petitioner has not paid any interest on the Meter Security Deposit (MSD) and Monthly Security Deposit. The same is not shown in the tariff filings. As per regulation 15 of the draft tariff regulations, the petitioner has to pay the interest charges on security deposits, if any, made by the consumer with a generating company / licensee, which shall be equivalent to the bank rate. Not showing the security deposit under the correct head and filing tariff petition without adhering to the regulations is gross anomaly.

It is gathered from the auditor's certificate for the year 1992-93 that security deposits received from and deposited by the consumers have been wrongly included under the head "Contribution from consumers for service line". Contribution from the consumer for the year 1992-93 was not provided. Even in the present filing there is not utterance about the consumer contribution. The meter security deposit (MSD) and the Monthly Security Deposit (MSD) is categorized as current liabilities and the contributions received as per section 45 of the Act, are categorized as capital receipts. In the absence of clear segregation of the consumer contribution, it is not possible to proceed with the tariff determination.

- (g) Various aspects of the National Tariff Policy (NTP) have been violated by the petitioner. No baseline study has been conducted by the Hon'ble Commission nor any of the provisions such as Multi Year Tariff principles contained in the National Tariff Policy have been applied to the tariff determination process.
- (h) Since the licensee has not got the receivables audited, provision for bad debts can not be allowed.
- (i) The UI charges and any charges for the infirm power paid should not be allowed.
- (j) In case of the extra high tension consumer, the Aggregate Technical and Commercial (AT&C) losses are very meager. Hence, pro-rata discount / rebate (on the energy charges) should be offered on the power tariff to the EHT consumers, commensurate with their AT&C losses, which is not more than 4% in aggregate.
- (k) The petitioner has projected the gross fixed assets (GFA) for FY 2009-10 taking audited figure of 1992-93 as base and capital additions as capital expenditure

during the respective years as per financial resource statements (FRS) submitted to Planning Commission.

The audit certificate for the year 1992-93 states,  
*“value of fixed assets depreciation provided etc, could not be verified, in the absence of fixed assets register, depreciation register, date of acquiring the assets etc. the correctness could not be verified. The above pro-forma Accounts furnished in the department are not supported by the important records such as General ledger. Debtors & Creditors Ledger and other subsidiary ledgers. The Department has not prepared any trail balance.*

This being the case, in the absence of vital documentation and registers, the depreciation cannot be ascertained and in turn no meaningful conclusion can be reached as to the tariff determination.

- (l) Clause 5.3(h) (1) of the National Tariff Policy reads as under:

*“The MYT framework is to be adopted for any tariffs to be determined from April 1, 2006”.*

The petitioner may be advised to file a fresh petition under MYT Framework with complete validated data.

- (m) The petitioner has proposed to consider the proposed un-bridged gap as Regulatory Asset. The petitioner has not but forward any force majeure condition for the proposed gap. Hence, the proposal of the petitioner for Regulatory Asset should not be accepted.
- (n) In the summary statement of annual plan discussion papers, loans from institutional creditors are furnished as ‘NIL’. Taking into account the internal resources and the security deposit, there was no necessity for the petitioner to go to external sources to finance capital expenditure. The petitioner cannot recover the interest on notional loan from consumers as tariff.
- (o) The investment, if any, by Government has not been disclosed in the proposal. The Debt-Equity Ratio shall be only 70:30 in accordance with Clause 5(3)(b) of the National Tariff Policy.

The petitioner has not maintained function wise asset classification. The petitioner has not furnished working sheet for the depreciation and has adopted the depreciation rate of 5.28% on the gross value of assets for 2009-10. it is

- seen that the petitioner has worked out depreciation on the 100% value of assets at the beginning of the year and 50% of the projected capital expenditure for the year 2009-10.
- (p) The petitioner has calculated the interest on working capital on normative basis for the years 2007-08, 2008-09 and 2009-10. There were no actuals for the previous years. The petitioner has taken the two months receivables at the revised tariff for the entire year 2009-10 when the tariff can be ordered to take effect from the date of orders or from a subsequent date.
- (q) The increase in O&M expenses is due to payment of arrears consequent to implementation of 6<sup>th</sup> Pay Commission and also due to proposed payment of fees and consultancy charges. The petitioner has stated that the adjustment of actual expenses will be undertaken at the time of truing of expenses for the FY 2009-10. However, the truing up is possible only when tariff proposal is made under MYT Framework.
- (r) The requisite fee is not paid as per conduct of business regulations as per Schedule to JERC (Conduct of Business) Regulations, 2009.
- (s) The demand charges are capital cost which is conducive to recover, whereas the energy charges which is specific or variable cost is to be recovered as revenue expenditure. The EDP has already recovered substantial amount by way of demand charges.
- (t) The regulations provide for the detailed formats in which the information is to be furnished. The petitioner has not furnished any adequate data, much less the data in mandated formats.
- (u) The petitioner has taken recourse to indiscriminate load shedding. The petitioner has not obtained any permission from the Hon'ble Commission under Section 23 of the Electricity Act 2003.

**Response of EDP:**

- (a) It is not correct to state that the draft Regulations framed by the Hon'ble Commission are to be treated as the final regulations for the purpose of consideration of the tariff filing. The draft regulations at this stage are only of guiding nature.

- (b) The auditors certificate for the year 1992-93 was considered to arrive at the Gross Fixed Assets as stated in Page No.21 of the Tariff petition.
- (c) The present petition was filed by the petitioner prior to the circulation of the draft Regulations. The Annexures to the petition have been supplied to the buyers of the Tariff Petition subsequently.
- (d) The petitioner is presently functioning as an integrated entity undertaking the functions of transmission and distribution of electricity. The transmission system of the petitioner forms an essential part of the distribution system. In such circumstances, there can be no question of any separate tariffs determined for transmission and distribution of electricity.
- (e) The petitioner is a Department of the Government and as such the financials available with the petitioner are only the Government records. In such circumstances, there can be no question of the petitioner not providing any available data or the data not being authentic.
- (f) As per the system consistently maintained in the department, both the security deposits received from the consumer and the consumer contribution towards erection of service lines and security deposits towards meter provided are being maintained in one Head of Account. The major portion of the Security Deposit is in the form of Fixed Deposit Receipts pledged in the name of the President of India through the Superintending Engineer-I, Electricity Department, Puducherry for which the interest is being claimed by the consumers directly. Incidentally, all the High Tension consumers including the Objectors have paid the Security Deposit only in the form of Fixed Deposit Receipt / Bank Guarantee. The contribution received from the consumers towards service line are for laying down electricity lines for supply of electricity. Such costs paid by the consumers towards electricity lines shall not bear any interest.
- (g) It is denied that the petitioner has violated any provisions of the National Tariff Policy. The present petition is the first tariff fixation exercise for the petitioner undertaken by the Hon'ble Commission and as such the norms and parameters applicable to other licensees whose tariffs have been determined by Regulatory Commission including the MYT for the past period cannot be applied to the petitioner.
- (h) The bad debts claimed by the petitioner in the petition is as per the normal industry practice and as such provisions for bad debts ought to be allowed in the tariff.

- (i) UI charges are statutorily levied under the Regulations framed by the CERC as applicable for drawal and injection of electricity and as such the same is applicable to be paid by the petitioner.
- (j) The tariff design is to be determined by the Hon'ble Commission. The Petitioner has proposed the tariff design in consonance with the principles laid down in the National Tariff Policy.
- (k) The Audited figure of the year 1992-93 has been considered as a base for arriving the Gross Fixed Assets. The financials as available and filed by the petitioner are as per the records of the Government. The petitioner is functioning as a department of the Sovereign Government and as such tariff filings of the petitioner is as per Government records available.
- (l) The present petition is the first tariff petition filed by the petitioner and also the first tariff determination exercise undertaken by the Hon'ble Commission. The multi year tariff fixation exercise can be effectively carried out only after the initial years of regulatory regime and tariff fixation by the Hon'ble Commission.
- (m) The Regulatory Asset as proposed by the petitioner is in the interest of the other consumers to avoid a tariff shock. In case the Regulatory Asset is not allowed by the Hon'ble Commission, the tariff of the consumers is likely to increase substantially.
- (n) The funding for the capital expenditure was as per the Government policies and as such the same cannot be retrospectively altered or denied.
- (o) The details with regard to debt equity ratio and also the depreciation calculation is based on the records of the Government as available and made available to the Hon'ble Commission. Furthermore, the petitioner was not required to maintain the function-wise asset classification and the same shall be addressed in the transfer scheme of assets currently under process. The rates of depreciation are in line with CERC Regulations.
- (p) The interest on working capital has been made in lines with tariff regulations of other SERC's.
- (q) It is denied that there cannot be any truing up in the absence of MYT framework. It is stated that truing up can be conducted in yearly tariff determination exercise.
- (r) The required fees for filing of Tariff Petition has already been paid to the Hon'ble Commission. The payment of Licence fees is under process and it has to be paid within this year 2009-10.
- (s) The contention that demand charges are for the purpose of recovering capital cost only and these have already been recovered substantially by the petitioner are totally misplaced. The tariff, which includes both demand charges and also

energy charges serve as mode of recovery of expenses incurred by the petitioner to serve its consumers.

- (t) The present petition filed by the petitioner is with all the relevant and necessary data for determination of tariff.
- (u) The petitioner is mainly depending upon the allocation of power from various Central Generating Stations made by Government of India. As and when the power availability is reduced from the Central Generating Stations, the petitioner has resorted to load shedding in order to maintain the grid discipline. The petitioner has been taking efforts to get more share of power from the Central Generating Stations. The load shedding is carried out only when the same is necessary and not in an indiscriminate manner.

**Commission's Comments:**

*The issues raised by the objector under "Additional Objections" have already been commented above.*

*In regard to separate ARR for transmission, EDP has only a small transmission system of 110kV and 220kV as an integral part of the distribution system. Under section 2(72) of the Electricity Act 2003, "transmission lines" are defined as all high pressure cables and overhead lines (not being an essential part of the distribution system of a licensee). Since the transmission system of EDP is an integral part of the distribution as of now no separate ARR is required.*

***Directive to maintain separate accounts for consumer security deposit and consumer contribution for service lines etc. have been given to the EDP in chapter-7.***

**4.3.17 Objector 43: Additional objections filed by the Southern India Mills' Association**

**Objections:**

- (a) Textile mill sector is the only sector consuming constant power in all the 24hrs on a week and throughout a year. No loss to the Electricity Board on account of transmission and distribution.
- (b) The existing distribution loss is 14% and AT&C losses is 18.5% - which are very high.
- (c) The proposed tariff revision for HT industries (HT I(a) is very high. 10% increase in energy and demand tariff is considered to be reasonable.

- (d) The collection efficiency has been shown around 95%. This should be increased to 99% so as to reduce the AT&C losses.
- (e) The employee cost has been projected at Rs.6684 lakhs for the year 2009-10 as compared to Rs. 4873 lakhs for the year 2008-09. This is very high (37.2% increase). In the same way, the administration and general expenses have been proposed to be Rs. 851 lakhs for 2009-10 which are very high.
- (f) Interest and financial charges have been shown as Rs. 2359 lakhs at 12.25% interest rate.
- (g) Having not revised the tariff since 2002-03 cannot be the justification for this high revision. We, the Association, are not against the revision of tariff but it should be within the permissible limit and should be in a phased manner and the textile mills should not be burdened with one time drastic hike.

**Response of EDP:**

- (a) Though continuous processing industry like textile industry, having a constant load contributes towards improvement of load factor, the contention that there is no transmission or distribution loss on account of consumption by such industry is not correct. Even in case of HT supply some technical distribution losses are inevitable.
- (b) The T & D loss level at 14% and AT & C loss level at 18.54% is much better compared to other States.
- (c) The revenue requirements sought for and the tariff proposed are reasonable and consistent with the provisions of the Electricity Act, 2003. As the last tariff revision was being implemented approx. 7 years ago, the average increase per annum is lower than 10%.
- (d) The collection efficiency at 95% level is also attributable to the legacy of the system and the petitioner is continuously showing improvement on this front and shall continue its endeavour to increase it to the desired level of collection efficiency in lines with the best performing electricity utilities in the Country.
- (e) The O & M costs inclusive of employees cost are as per actual amount expected to be incurred. The 37.2% increase is an aberration, which is on account of payment of arrears of 6th Pay Commission. The A & G Expenses are on account of various aspects such as communication, computerization, SLDC, R & D, HRD etc which are actual expenses to be incurred. The legal and consultancy charges are also on actual basis. The consultancy charges payable for filing the tariff petition before the Hon'ble Joint Electricity Regulatory Commission and the payment of the Petition fees and License fees to the Hon'ble Commission have to

be met with by the petitioner only during the year 2009-10 and had not been in existence during the past years. This has resulted in increase of the A&G expenses during the year 2009-10.

(f) The interest rate has been taken as the Prime Lending Rate of State Bank of India, a standard adopted in common practice.

(g) In order to avoid tariff shock, the petitioner has proposed that part of the tariff increase required for making the cost reflective tariff be deferred and the same may be recognized as regulatory asset to be passed on in the tariff of future years.

***Commission's Comments:***

*The issues raised are addressed earlier under 4.3.1 and 4.3.4. As mentioned earlier the issues raised by the objector are addressed while examining the ARR and determining the tariffs.*



## **5. Revenue Requirement-2009-10 - Submission of EDP - Commission's Analysis and Decisions**

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### **5.1 Energy Sales**

Proper projection of category-wise energy sales is essential to determine the quantum of Power Purchase and the likely revenue. This section examines in detail the customer category wise sales projected by the Electricity Department, Puducherry (EDP) in its petition for approval of the ARR.

### **5.2 Consumer Categories**

EDP serves over 3.56 lakh consumers as on 31/03/2009 in its area of operation and consumers are categorized as under.

#### **LT Category**

- Domestic
- Commercial
- Agriculture
- Street Lighting
- Industrial

#### **HT Category**

- HT – I (Industrial & Commercial)
- HT – II (State and Central Government Departments (Non-industrial or Non-commercial))
- HT – III Industrial consumers supplied power at 110 kV and above)

EDP serves the consumers at different voltages at which the consumers avail supply.

All the consumers except domestic consumers under one hut one bulb and Agricultural consumers are metered. The consumption of these two categories is assessed only assessed by EDP.

### 5.3 Overall Approach to Sales Projection

EDP has projected the category wise sales for the year 2009-10 based on the past sales over the last 7 years (2002-03 to 2008-09). It has considered CAGR over 7 year, 6 year, 5 year and 3 year periods (i.e CAGR of 6 years, 5 years and 2 years) and average of the CAGR is considered to arrive at growth rate and applied the growth rate over the consumption of the year 2007-08 rather than 2008-09 as the consumption during 2008-09 was restricted consumption due to power shortage and EDP was forced to curtail the consumption of all consumers particularly the consumption of industrial consumers.

### 5.4 Projected Energy Sales – 2009-10

EDP has furnished the category wise past sales along with projected sales for the year 2009-10 and the under lying CAGR (6,5,4 & 2 years) in Tables-8 and 9 below:

Table-8

#### Historical Trend in Category-wise Sales

Sales	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10 (Projected)
<b>Low Tension Consumers</b>								
Domestic	244.37	264.68	286.46	324.21	357.00	392.81	425.83	475.30
Commercial	70.76	76.84	87.39	112.27	129.56	132.29	141.28	160.07
Agriculture	97.63	117.73	118.36	88.73	101.05	81.63	53.54	81.63
Public Lighting	12.42	15.13	15.56	12.61	15.65	16.17	17.01	17.83
LT Industrial	66.51	80.98	100.00	114.34	126.18	133.24	131.93	146.89
<b>LT Total</b>	<b>491.69</b>	<b>555.36</b>	<b>607.77</b>	<b>652.15</b>	<b>729.44</b>	<b>756.14</b>	<b>769.58</b>	<b>881.72</b>
<b>High Tension Consumers</b>								
HT I	840.94	876.28	944.75	952.51	998.24	1019.74	953.49	1071.37
HT II	20.21	21.99	23.79	25.38	26.11	26.10	26.22	27.42
HT III	194.37	227.93	242.77	237.98	271.20	269.98	249.13	286.42
<b>HT Total</b>	<b>1055.52</b>	<b>1126.20</b>	<b>1211.32</b>	<b>1215.88</b>	<b>1295.55</b>	<b>1315.83</b>	<b>1228.84</b>	<b>1385.21</b>
<b>Total</b>	<b>1547.21</b>	<b>1681.56</b>	<b>1819.09</b>	<b>1868.03</b>	<b>2024.99</b>	<b>2071.97</b>	<b>1998.43</b>	<b>2266.93</b>

MUs

Table-9

## Category-wise Growth Rate of Energy Sold

Consumer Category	Growth Rates CAGR (%)							Growth Rate Considered by EDP for arriving sales FY 2009-10
	6 Years FY 08-09 over FY 02-03	5 Years FY 07-08 over FY 02-03	4 years FY 07-08 over FY 03-04	2 Years FY 07-08 over FY 05-06	FY 06-07 over FY 05-06	FY 07-08 over FY 06-07	FY 08-09 over FY 07-08	
<b>Low Tension Consumers</b>								
Domestic	9.70%	9.96%	10.37%	10.07%	10.11%	10.03%	8.41%	10.00%
Commercial	12.21%	13.33%	14.55%	8.55%	15.40%	2.11%	6.80%	10.00%
Agriculture	-9.53%	-3.52%	-8.75%	-4.08%	13.89%	-19.22%	-34.42%	0.00%
Public Lighting	5.38%	5.42%	1.68%	13.23%	24.08%	3.33%	5.17%	5.00%
LT Industrial	12.09%	14.91%	13.26%	7.95%	10.36%	5.59%	-0.98%	5.00%
<b>LT Total</b>	<b>7.75%</b>	<b>8.99%</b>	<b>8.02%</b>	<b>7.68%</b>	<b>11.85%</b>	<b>3.66%</b>	<b>1.78%</b>	
<b>High Tension Consumers</b>								
HT I	2.12%	3.93%	3.86%	3.47%	4.80%	2.15%	-6.50%	2.50%
HT II	4.44%	5.25%	4.38%	1.40%	2.86%	-0.04%	0.48%	2.50%
HT III	4.22%	6.79%	4.32%	6.51%	13.96%	-0.45%	-7.73%	3.00%
<b>HT Total</b>	<b>2.57%</b>	<b>4.51%</b>	<b>3.97%</b>	<b>4.03%</b>	<b>6.55%</b>	<b>1.56%</b>	<b>-6.61%</b>	
<b>Total</b>	<b>4.36%</b>	<b>6.01%</b>	<b>5.36%</b>	<b>5.32%</b>	<b>8.40%</b>	<b>2.32%</b>	<b>-3.55%</b>	

**Note:**

HT I (High Tension-I)-Industry and Commercial, supplied power upto 5000 kVA at 11kV to 33kV.

HT II (High Tension-II)-State and Central Government establishments.

HT III (High Tension-III)-Industries supplied power at 110kV and above.

Based on the above growth rates of the energy sold, EDP has projected the category wise energy sales for the year 2009-10 as given in Table-10 below:

Table-10

## Projected Energy Sales for 2009-10

Sl. No.	Consumer category	Energy Sales (2009-10) (Projected) (MU)	Growth Rate Considered (%)
	<b>Low Tension Consumers (LT)</b>		
1.	Domestic	475.30	10
2.	Commercial	160.07	10
3.	Agriculture	81.63	0
4.	Public Lighting	17.83	5
5.	Industries (LT)	146.89	5
	<b>LT Total</b>	<b>881.72</b>	
	<b>High Tension Consumers (HT)</b>		
6.	HT-I (Industrial and Commercial)	1071.37	2.5
7.	HT-II (State and Central Government Depts.	27.42	2.5
8.	HT-III Industrial consumers supplied power at 110 kV and above)	286.42	3.0
	<b>HT Total</b>	<b>1385.21</b>	
	<b>Total (LT+HT)</b>	<b>2266.93</b>	

## 5.5 Projected Consumer Growth

EDP has projected the category wise consumer growth considering the CAGR for different periods (7 years, 6 years, 5 years, 3 years, and year to year) and projected the number of consumers for the year 2009-10 over the consumers in 2008-09 applying the projected growth rate as given in Tables 11 & 12 below:

Table-11

### Historical Trend of Category-wise Number of Consumers

No. of Consumers	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10 (Projected)
<b>Low Tension Consumers</b>								
Domestic	192856	202958	213423	222914	234734	245822	256910	269756
Commercial	30517	31973	33428	34824	36205	37407	38609	40539
Agriculture	10418	8662	8715	8772	8834	8897	8960	8960
Public Lighting	36656	38389	40033	41880	43421	44859	46297	47686
LT Industrial	4888	5064	5227	5383	5516	5643	5770	5885
<b>LT Total</b>	<b>275335</b>	<b>287046</b>	<b>300826</b>	<b>313773</b>	<b>328710</b>	<b>342628</b>	<b>356546</b>	<b>372826</b>
<b>High Tension Consumers</b>								
HT I	302	324	342	354	402	408	373	379
HT II	31	32	32	32	32	32	40	40
HT III	4	4	4	5	5	5	5	5
<b>HT Total</b>	<b>337</b>	<b>360</b>	<b>378</b>	<b>391</b>	<b>439</b>	<b>445</b>	<b>418</b>	<b>424</b>
<b>Total</b>	<b>275672</b>	<b>287406</b>	<b>301204</b>	<b>314164</b>	<b>329149</b>	<b>343073</b>	<b>356964</b>	<b>373250</b>

Table-12

### Category-wise Growth Rate of Number of Consumers

Consumer Category	Growth Rates CAGR (%)							Growth Rate Considered
	6 Years FY 08-09 over FY 02-03	5 Years FY 07-08 over FY 02-03	4 years FY 07-08 over FY 03-04	2 Years FY 07-08 over FY 05-06	FY 06-07 over FY 05-06	FY 07-08 over FY 06-07	FY 08-09 over FY 07-08	
<b>Low Tension Consumers</b>								
Domestic	4.90%	4.97%	4.91%	5.01%	5.30%	4.72%	4.51%	<b>5.00%</b>
Commercial	4.00%	4.16%	4.00%	3.64%	3.97%	3.32%	3.21%	<b>5.00%</b>
Agriculture	-2.48%	-3.11%	0.67%	0.71%	0.71%	0.71%	0.71%	<b>0.00%</b>
Public Lighting	3.97%	4.12%	3.97%	3.50%	3.68%	3.31%	3.21%	<b>3.00%</b>
LT Industrial	2.80%	2.91%	2.74%	2.39%	2.47%	2.30%	2.25%	<b>2.00%</b>
<b>LT Total</b>	<b>4.40%</b>	<b>4.47%</b>	<b>4.52%</b>	<b>4.50%</b>	<b>4.76%</b>	<b>4.23%</b>	<b>4.06%</b>	
<b>High Tension Consumers</b>								
HT I	3.58%	6.20%	5.93%	7.36%	13.56%	1.49%	-8.58%	<b>1.50%</b>
HT II	4.34%	0.64%	0.00%	0.00%	0.00%	0.00%	25.00%	<b>0.00%</b>
HT III	3.79%	4.56%	5.74%	0.00%	0.00%	0.00%	0.00%	<b>0.00%</b>
<b>HT Total</b>	<b>3.66%</b>	<b>5.72%</b>	<b>5.44%</b>	<b>6.68%</b>	<b>12.28%</b>	<b>1.37%</b>	<b>-6.07%</b>	
<b>Total</b>	<b>4.40%</b>	<b>4.47%</b>	<b>4.53%</b>	<b>4.50%</b>	<b>4.77%</b>	<b>4.23%</b>	<b>4.05%</b>	

## 5.6 Commission's View

EDP has projected the energy sales for different categories of consumers at 2266.93 MU for the year 2009-10 as given in Table-10 above. The projected sales are based on past trends and the average of CAGR of 3 to 6 years, (2002-03 to 2007-08). The growth of consumption during 2008-09 is however not considered as the consumption was low due to restrictions on power supply to all consumers, particularly to industry. The consumption under each category of consumers is discussed below:

### (a) Domestic

EDP has projected energy sales of 475.30 MU to this category at a growth of 10%. The growth had been 10% over the last six years upto 2007-08. The growth during the year 2008-09 over 2007-08 was however, 8.41% due to restrictions on power supply during the 2008-09. The growth of 10% is applied to the consumption of 2007-08 again 10% to the resultant figure to arrive at normal consumption for 2009-10. The consumption arrived at for the year 2008-09 is about 432.09 MU and projected sales demand for 2009-10 is 475.30 MU.

It is considered appropriate to apply 6 years CAGR of 9.70% (FY 2002-03 to FY 2008-09) over the consumption of 2008-09, the projected sales demand for 2009-10 estimated to be 467.14 MU.

**The Commission approves the energy sales to the Domestic category at 467 MU for the year 2009-10.**

### (b) Commercial

EDP has projected the energy sales of this category at 160.07 MU for the year 2009-10 at a growth of 10.00%. The growth of energy sales to the commercial category had been over 13 to 15% during the earlier years, but had drastically come down to 2.11% during 2007-08 and 6.80% during 2008-09 bringing down the 2 year CAGR (2005-06 to 2007-08) to 8.55%. This might be due to recession affecting tourism etc., However EDP expects a growth of about 10% during 2009-10. The actual sales during 2007-08 were 132.29MU. Applying 10% growth over 2007-08 to arrive at the normal sales during 2008-09 (145.52 MU) and again applying 10% growth to the resultant figure the sales demand is arrived at 160.07MU for the year 2009-10.

It is considered appropriate to apply the 6 years CAGR of 12.21% (FY 2002-03 to FY 2008-09) over the consumption of 2008-09, the projected sales demand for 2009-10 estimated to be 158.53 MU.

**The Commission approves the energy sales to commercial category at 159 MU for the year 2009-10.**

**(c) Industrial (LT)**

EDP has projected energy sales of 146.89 MU for the year 2009-10 at a growth of 5.0%. The growth of energy sales over six and five year periods (2002-03 to 2007-08 and 2003-04 to 2007-08) was in the order of 13 to 15%. But the growth over later years has come down, during the year 2007-08 over 2006-07 it was 5.59% and during the year 2008-09 over 2007-08 it was (-) 0.98%. The growth over later years 2007-08 and 2008-09 has drastically come down due to recession and restriction on power supply during 2008-09. EDP has assumed a growth of 5% over 2007-08 consumption to arrive at the normal consumption for 2008-09 and again applied 5% growth to the resultant figure to arrive at the consumption for 2009-10. Though the growth during 2008-09 is negative (-0.98%), a positive growth could be assumed during the year 2009-10 as the Industrial growth is picking up and also power supply position is normal

It is considered appropriate to apply the 6 years CAGR of 12.09% (FY 2002-03 to FY 2008-09) over the consumption of 2008-09, the projected sales demand for 2009-10 estimated to be 147.88 MU.

**The Commission approves the energy sales to Industry (LT) at 148 MU for 2009-10.**

**(d) Public Lighting**

EDP has projected the energy sales of 17.83 MU for public lighting during 2009-10 at a growth of 5%. The growth of sales for this category had not been consistent, the growth was varying from 1.68% to 24.08%, however, the growth during 2008-09 had been 5.17% over 2007-08. A growth rate of 5% was assumed by EDP to arrive at the normal consumption for 2008-09 and 5% growth has been applied to the resultant figure to arrive at the normal demand for 2009-10.

It is considered appropriate to apply the 6 years CAGR of 5.38% (FY 2002-03 to FY 2008-09) over the consumption of 2008-09, the projected sales demand for 2009-10 estimated to be 17.93 MU.

**Considering the above, the Commission approves the energy sales for public lighting at 18.0 MU for 2009-10.**

**(e) Agriculture**

EDP has projected energy sales of 81.63 MU for Agriculture during 2009-10 at a growth of 0.0% over the consumption of 2007-08.

The consumption of this category registered negative growth over the last six years except during the year 2006-07 over 2005-06. The growth of 2008-09 over 2007-08 was (-) 34.42%. EDP does not propose to add any additional connections during 2008-09 and hence assumed same consumption as that of 2007-08.

EDP has 8960 Agricultural pump sets, and the pump sets are not metered, the estimated consumption per pump set per annum works out to about 9110 kWh. The basis is not furnished. Considering an average connected load of each pump set at 5 HP, the consumption works out to 1822 kWh/HP/year. This is high compared to the consumption norms adopted in neighbouring States i.e. Andhra Pradesh-905 and Tamil Nadu-1051 kWh/HP/year.

It is considered appropriate to apply the 6 years CAGR of (-) 9.53% (FY 2002-03 to FY 2008-09) over the consumption of 2008-09 the projected sales demand for 2009-10 estimated to 48.44 MU.

**The Commission approves the sales for Agriculture pump sets at 48 MU for 2009-10.**

**(f) High Tension**

**HT-1:** This category is applicable to Industrial and Commercial consumers who avail supply at 11 kV and 33 kV. EDP has projected the sales of HT-1 category at 1071.37 MU for the year 2009-10 at a growth rate of 2.5%. The growth had been in the order of 3 to 5% during the earlier years 2002-03 to 2006-07, but it has declined to 2.15% during 2007-08 and registered a negative growth (-6.5%) during 2008-09. Lower consumption might be due to recession in industry and restrictions on power supply.

EDP has assumed a growth of 2.5% over the consumption of 2007-08 to arrive at normal sales for 2008-09 and applied 2.5 % for the resultant consumption to arrive at the demand for 2009-10.

It is considered appropriate to apply the 6 years CAGR of 2.12 % (FY 2002-03 to FY 2008-09) over the consumption of 2008-09, the projected sales demand for 2009-10 estimated to be 973.70 MU.

**Considering the above the Commission approves sales to HT-I at 974 MU for the year 2009-10.**

**HT-II:** This category is applicable to State and Central Government Departments for consumption of Non-Industrial and Non-Commercial nature. EDP projected energy sales of 27.42 MU for HT-II category during year 2009-10 at a growth of 2.5%. The sales to this category registered a growth of 1.40 to 5.25% CAGR over the earlier years, (2002-03 to 2007-08), but the growth during 2007-08 was (-) 0.04% over 2006-07 and 0.48% during 2008-09 over 2007-08. Since this category applies only to State and Central Government Departments, there should not be such wide variation in the consumption level over years except during 2008-09 when there were restrictions on power supply.

As in the case of HT-I the 6 years CAGR of 4.44% (FY 2002-03 to FY 2008-09) is applied over the consumption of 2008-09, the projected sales demand for 2009-10 estimated to be 27.38 MU.

**Considering the above, the Commission approves sales to HT-II at 27 MU for the year 2009-10.**

**HT-III:** This category is applicable to industrial consumers who avail supply at 110 kV and above. There are only 5 consumers under this category.

EDP has projected the sales to HT-III category of consumers at 286.42 MU for the year 2009-10 at a growth rate of 3%. The CAGR has been in the order of 4.22 to 6.79 % during the earlier years up to the year 2007-08, but during the years 2007-08 and 2008-09 the growth was negative at (-0.45%) during 2007-08 and (-7.73%) during 2008-09. EDP has applied a growth rate of 3% over the consumption of 2007-



08 to arrive at the normal sales for 2008-09 and applied 3 % growth to the resultant figure to arrive at the consumption for the year 2009-10.

As in the case of other consumer categories the 6 years CAGR of 4.22% (FY 2002-03 to FY 2008-09) is applied over the consumption of 2008-09, the projected sales demand for 2009-10 estimated to be 259.64 MU.

**Considering the above, the Commission approves sales to HT-III at 260 MU for 2009.10.**

### 5.7 Category-wise Energy Sales

The category-wise energy sales for 2009-10 as discussed above and the energy sales approved by the Commission as against the sales projected by EDP are given in Table-13 below:

Table-13  
**Category-wise Energy Sales – 2009-10**

Sl. No.	Consumer Category	Energy Sales Projected by EDP	Energy Sales Approved by the Commission
	<b>LT Consumers</b>		
1	Domestic	475.30	467
2	Commercial	160.07	159
3	Industry (LT)	146.89	148
4	Public Lighting	17.83	18
5	Agriculture	81.63	48
	<b>Total LT</b>	<b>881.72</b>	<b>840</b>
	<b>HT Consumers</b>		
6	HT-I	1071.37	974
7	HT-II	27.42	27
8	HT-III	286.42	260
	<b>Total HT</b>	<b>1385.21</b>	<b>1261</b>
	<b>Total LT+HT</b>	<b>2266.93</b>	<b>2101</b>

**The Commission approves the energy sales for the year 2009-10 at 2101 MU as against 2266.93 MU projected by EDP.**

### 5.8 Transmission and Distribution Losses

EDP has submitted that the transmission and distribution (T&D) losses for the system and the AT&C losses during the years 2007-08, 2008-09 and 2009-10 are as given in Table-14 below: EDP informed that the UI sales which did not come into their distribution system are not considered.

Table-14

**Transmission and Distribution Losses Trajectory**

Particulars	FY 2007-08 (Actual)	2008-09 (Actual)	2009-10 (Projected)
T&D Losses	14.80	14.41	14.00
AT&C Losses	18.96	18.61	18.54

(%)

EDP stated that the collection efficiency is of the order of around 95%. The EDP has submitted the data in the formats wherein the AT & C losses were given at 20.13 % for 2007-08, 20.39 % for 2008-09 and 18.86 % for 2009-10. The collection efficiency is revised to 94 % in 2007-08, 93 % in 2008-09 and 94 % for 2009-10.

The loss of 14% projected by EDP compares well with some of the other utilities managing urban areas with some rural areas. The losses have been arrived at based on the energy input to EDP system and energy sales by EDP (input energy – energy sales to consumers).

The energy sales to One Hut One Bulb (OHOB) and agriculture categories, which are unmetered, are estimated sales only.

Since EDP operates small areas, it is possible to reduce T&D losses further during 2010-11. However, since it is the first tariff petition filed before the Commission, the Commission approves the T&D loss of 14% for the year 2009-10. This will be reviewed later after a study of the distribution system loss of EDP is got conducted by an independent reputed agency with the approval of the Commission. Accordingly, appropriate T&D loss reduction trajectory will be decided.

### 5.9 Energy Requirement

The total energy requirement to meet the demand of the system would be the sum of estimated energy sales and the system losses (Transmission and Distribution loss) as approved by the Commission. The estimated energy sales, the transmission and distribution losses and estimated energy requirement for the year 2009-10 would be as given in Table-15 below:

Table-15

**Energy Requirement – 2009-10**

Sl. No.	Particulars	As projected by EDP	As approved by the Commission
1	Estimated Energy Sales	2266.93	2101
2	Distribution loss in MU and loss (%)	369.04 (14%)	342 (14%)
3	Energy input required to the system	2635.97	2443

(MU)

**5.10 Allocation of Power from CGS and other utilities and Energy availability to EDP**

5.10.1 There is no major power generation plant in the Union Territory of Puducherry, except a 32.5 MW combined cycle power plant in Karaikal owned by the Puducherry Power Corporation Limited. The entire power requirement of Puducherry is met from the power allocated from Central generating stations, Tamil Nadu Electricity Board, Kerala State Electricity Board and from the Puducherry Power Corporation Limited.

5.10.2 EDP has been allocated power from various central generating stations and it has arrangement for drawal of power from TNEB, KSEB and Puducherry Power Corporation Ltd (PPCL). EDP was getting a share of 398 MW of power as shown in Table-16. On the request of EDP additional power of 25 MW was allocated vide SRPC/SE-1/54/VA/2009 dated 27-07-2009. Again vide SRPC/SE-1/54/VA 2009 dated 28-08-2009 further power of 25 MW to be utilized only between 12.00 to 23.00 hours was allocated.

EDP has Power Purchase Agreements with NTPC, NCL, MAPS, KAPS and PPCL and MOU with PGCIL regarding transmission of energy and charges. EDP does not have any agreement for power purchase from TNEB and KSEB.

Allocation of power to EDP from central generating stations and availability from other SEBs and PPCL is as given in the Table – 16 below:

Table-16

**Allocation of Power from CGS & availability from other Sources**

Sl No.	Name of Station / SEB	Station Capacity (MW)	Percentage Allocation (%) Upto July'09	Allocation to Puducherry (MU)	Percentage Allocation (%) w.e.f. Aug'09	Allocation to Puducherry (MW)
<b>A NLC</b>						
1	NLC TPS - II Stage I	630	11.14	70.18	11.44	72.07
2	NLC TPS - II Stage II	840	2.6	21.84	2.89	24.28
3	NLC TPS - I Expansion	420	4.13	17.35	4.23	17.77
<b>B NTPC</b>						
1	NTPC, RMG ST I & II	2100	3.3	69.3	3.77	79.17
2	NTPC, RMG ST III	500	3.54	17.7	4.02	20.1
3	NTPC, Talcher ST II	2000	3.28	65.6	3.49	69.8
<b>C OTHER CGS</b>						
1	MAPS, Kalpakam	440	1.39	6.12	1.52	6.69
2	KAPS, Units I&II	440	2.75	12.12	3.24	14.26
3	KAPS, Units III	220	2.3	5.06	2.78	6.12
<b>D Other Utilities</b>						
1	PPCL	32	100	32	100	32
2	TNEB			76		76
3	KSEB			4.73		4.73
<b>E Eastern Region CGS</b>						
1	Farakka	1600			0.7	11.2
2	Kahalgaon	840			0.7	5.88
3	Talchar - 1	1000			0.8	8
<b>Total</b>				<b>398.00</b>		<b>447.98</b>

5.10.3 To work out for availability from allocation of power in terms of energy from central generating stations, the EDP has adopted the following methodology

- Considered three years average Plant Availability Factor;
- Considered three year average or maximum gross generation, as the case may be;  
For the projection of gross generation for the FY 2009-10, the EDP has analyzed the last three year trend and taken average of three year except for NLC station and NTPC Talcher STPS, where maximum gross generation during past three years has been less than the capacity in these plants in FY 2008-09
- The share of gross generation has been arrived based on actual percentage allocation to the EDP.
- Auxiliary consumption has been taken based on the latest CERC norms
- Southern region central pooled losses of 5% has been considered for power from CGS while losses of 4% is considered for power from TNEB

Based on the above methodology, EDP has estimated 2755.68 MU the power entitled from CGS and other utilities during 2009-10 as given in Table – 17 below:

Table-17

**Energy Available**

S.No	Name of Station / SEB	3 Years Avg/Max. Gross Generation (MU)	EDP Share of Gross Generation (MU)	Aux. Consumption (%)	Net Power available to EDP (MU)	Losses (MU)	Net Power available at state periphery (MU)
<b>A NLC</b>							
1	NLC TPS - II Stage I	4533.62	514.11	12	452.42	22.62	429.8
2	NLC TPS - II Stage II	5984.65	167.17	10	150.45	7.52	142.93
3	NLC TPS - I Expansion	3266.4	137.08	9.5	124.06	6.2	117.85
<b>B NTPC</b>							
1	NTPC, RMG ST I & II	16777.85	606.24	7.25	562.29	28.11	534.17
2	NTPC, RMG ST III	4004.86	154.59	6	145.31	7.27	138.05
3	NTPC, Talcher ST II	16928.97	578.97	6	544.23	27.21	517.02
<b>C OTHER CGS</b>							
1	MAPS, Kalpakam	1962.67	30.29	12	26.66	1.33	25.32
2	KAPS, Units I&II	2286.85	70.36	12	61.92	3.1	58.82
3	KAPS, Units III	452.5	11.86	12	10.43	0.52	9.91
<b>D Other Utilities</b>							
1	PPCL	266.45	266.45	6	250.47		250.47
2	TNEB	378.75	395.55		395.55	15.82	379.73
3	KSEB	26.64	32.01		31.89		31.89
	<b>Total</b>		<b>2964.68</b>		<b>2755.68</b>	<b>119.71</b>	<b>2635.97</b>

EDP has not considered the additional power allocated w.e.f. August 2009 from Farakka, Kahalgaon and Talcher while estimating the above power availability for FY 2009-10

## Commission's Analysis:

### 5.10.4 Entitlement of Energy to EDP

#### a) Method-1

The generation from Central generating stations and from PPCL for the period from April 2009 to December 2009 as obtained from "CEA – Energy wise performance status all India – Region wise" report are as given below in Table –18

Table – 18

#### Energy Available for CGS & PPCL (April 2009 to December 2009)

(MU)				
S.No	Name of Station / SEB	Gross generation from 04/2009 to 12/2009 (Actual)	Projected Generation from 01/2010 to 03/2010	Generation from 04/2009 to 03/2010
<b>A</b>	<b>NLC</b>			
1	NLC TPS - II Stage I	3342.38	1114.13	4456.51
2	NLC TPS - II Stage II	4457.5	1485.83	5943.33
3	NLC TPS - I Expansion	2300.47	766.82	3067.29
<b>B</b>	<b>NTPC</b>			
1	NTPC, RMG ST I & II	12842.48	4280.83	17123.31
2	NTPC, RMG ST III	3057.74	1019.25	4076.99
3	NTPC, Talcher ST II	11781.26	3927.09	15708.35
<b>C</b>	<b>OTHER CGS</b>			
1	MAPS, Kalpakam	1511.92	503.97	2015.89
2	KAPS, Units I&II	1629.01	543.00	2172.01
3	KAPS, Units III	814.51	271.50	1086.01
D	PPCL	175.40	58.47	233.87
	<b>Total</b>	<b>41912.67</b>	<b>13970.89</b>	<b>55883.56</b>

Considering the above actual generation for the period from 04/2009 to 12/2009 and assessment based on average of the nine months, the quantity for the period from 12/2009 to 03/2010 i.e., the gross generation for 12 months for 2009-10, and the entitlement of power availability to EDP as per the allocation is arrived as shown in Table-18 (A) below:

For Talcher, generation for Stage-I and Stage-II separately is not given in the CEA report. For entire 3000 MW capacity (Stage I & Stage II) generation is given. Hence the actual scheduled generation upto December 2009 as given in the monthly REA or SRPC reports for Talcher Stage – II (2000 MW) is considered and by adding the Auxiliary consumption (@6.5%) the actual gross generation from 04/2009 to 11/2009 is arrived.

For TNEB, KSEB the same generation as projected by EDP is considered.

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For Farakka, Kahalgaon and Talcher – 1 (additional allocation), the 5 months actual drawal (08/2009 to 12/2009) only is considered as this a temporary allocation and can be withdrawn at any time.

The auxiliary consumption of the Central generating stations as given in the REA monthly report is adopted for arriving net generation at Bus Bar and the central pool losses of 4% is considered for arriving at power available at state periphery. For MAPS and KAPS stations the auxiliary consumption is calculated from the gross generation and auxiliary consumption furnished in Annexure – VI of SRPC annual report of 2008-09.

Table - 18 (A)

**Entitlement of Power to EDP during 2009-10  
(Based on Energy Generation from 04/2009 to 12/2009)**

S. No	Name of Station / SEB	Gross Generation (MU)	% Share upto 07/2009	% Share WEF 08/2009	EDP Share of Gross Generation (MU)	Aux. Consumption (%)	Power available to Puducherry (MU)	% Losses	Losses (MU)	Net Power available at State Periphery (MU)
<b>A NLC</b>										
1	NLC TPS - II Stage I	4456.5	11.14	11.44	505	10	454.83	4.0	18.19	436.64
2	NLC TPS - II Stage II	5942	2.6	2.89	166	10	149.38	4.0	5.98	143.41
3	NLC TPS - I Expansion	3067.29	4.13	4.23	129	9.50	116.50	4.0	4.66	111.84
<b>B NTPC</b>										
1	NTPC, RMG ST I & II	17123.31	3.3	3.77	619	7.21	574.11	4.0	22.96	551.15
2	NTPC, RMG ST III	4076.98	3.54	4.02	157	6.50	147.14	4.0	5.89	141.26
3	NTPC, Talcher ST II	15708.34	3.28	3.49	537	6.50	502.31	4.0	20.09	482.21
<b>C OTHER CGS</b>										
1	MAPS, Kalpakam	2015.89	1.39	1.52	30	14.1	25.57	4.0	1.02	24.55
2	KAPS, Units I&II	2172	2.75	3.24	67	12.87	58.22	4.0	2.33	55.90
3	KAPS, Units III	1086	2.3	2.78	28	17	23.62	4.0	0.94	22.67
<b>D Other Utilities</b>										
1	PPCL	233.87	100	100	233.87	6.00	219.83			219.83
2	TNEB	395.55			395.55		395.55	4.00	15.82	379.73
3	KSEB	32			32		32.0			32.00
	<b>Sub Total</b>						<b>2699.1</b>		<b>97.9</b>	<b>2601.2</b>
<b>E Eastern Region CGS</b>										
1	Farakka						11.01	4	0.55	10.46
2	Kahalgaon						5.01	4	0.20	4.81
3	Talchar - 1						9.89	4	0.39	9.50
	<b>Sub Total</b>						<b>25.91</b>		<b>1.14</b>	<b>24.77</b>
	<b>Total</b>	<b>56309.73</b>			<b>2900</b>		<b>2724.98</b>		<b>99.03</b>	<b>2625.95</b>

**b) Method – 2**

The month wise energy scheduled to the beneficiaries from central generating stations and the month wise energy drawn by Puducherry EDP from April 2009 to December 2009 as obtained from monthly REA reports of SRPC are as furnished below:

**ENERGY SCHEDULED TO THE BENEFICIARIES FROM CENTRAL GENERATING STATIONS  
(as per REA monthly reports) - April 2009 to December 2009**

MONTH	SCHEDULED ENERGY FROM STATIONS UNDER ABT						ENERGY DRAWL FROM STATIONS NOT UNDER ABT			TOTAL
	NTPC			NLC TPS - II		NLC TPS - I	NPC			
	RSTPS		TALCHER STPS	STAGE - I 630 MW	STAGE - II 840 MW	EXPN. 420 MW	MAPS 440 MW	KGS		
	STAGE- I & II 2100 MW	STAGE-III 500 MW	STAGE-II 2000 MW					Unit 1&2 440 MW	Unit 3 220 MW	
Apr-09	1,447.01	327.01	1,390.76	354.35	438.73	276.40	155.28	173.33	64.56	4,627.42
May-09	1,406.10	307.93	1,355.92	351.45	482.35	281.30	160.66	176.32	59.94	4,581.97
Jun-09	1,229.61	347.20	1,230.01	357.30	507.18	252.81	137.59	172.33	55.27	4,289.30
Jul-09	1,075.07	359.48	999.15	252.39	372.91	277.92	163.48	169.26	80.37	3,750.03
Aug-09	1,166.76	358.79	1,092.07	237.52	389.92	254.06	163.37	180.09	85.99	3,928.57
Sep-09	1,090.99	338.27	1,119.54	342.33	421.52	274.19	154.89	173.53	89.12	4,004.40
<b>TOTAL</b>	<b>7,415.54</b>	<b>2,038.68</b>	<b>7,187.46</b>	<b>1,895.33</b>	<b>2,612.60</b>	<b>1,616.68</b>	<b>935.27</b>	<b>1,044.86</b>	<b>435.25</b>	<b>25,181.69</b>
Oct-09	1,448.08	352.30	1,208.68	286.13	461.68	164.90	129.67	134.56	97.70	4,283.70
Nov-09	1,423.53	345.97	1,214.78	201.22	319.26	121.05	72.62	79.18	97.77	3,875.37
Dec-09	1,464.18	358.30	1,404.57	247.15	424.73	186.11	102.22	128.92	91.31	4,407.48
<b>TOTAL</b>	<b>11,751.33</b>	<b>3,095.26</b>	<b>11,015.49</b>	<b>2,629.82</b>	<b>3,818.27</b>	<b>2,088.74</b>	<b>1,239.77</b>	<b>1,387.52</b>	<b>722.04</b>	<b>37,748.24</b>

**ENERGY DRAWN BY PUDUCHERRY (as per REA monthly reports) - April 2009 to December 2009**

MONTH	SCHEDULED ENERGY FROM STATIONS UNDER ABT						ENERGY DRAWL FROM STATIONS NOT UNDER ABT			TOTAL
	NTPC			NLC TPS - II		NLC TPS - I	NPC			
	RSTPS		TALCHER STPS	STAGE - I 630 MW	STAGE - II 840 MW	EXPN. 420 MW	MAPS 440 MW	KGS		
	STAGE- I & II 2100 MW	STAGE-III 500 MW	STAGE-II 2000 MW					Unit 1&2 440 MW	Unit 3 220 MW	
Apr-09	48.02	11.64	45.84	42.94	12.22	11.46	2.17	4.80	1.11	180.20
May-09	48.56	11.10	45.86	43.37	13.60	11.90	2.23	4.84	1.19	182.66
Jun-09	41.04	12.36	41.07	43.36	14.15	10.50	1.92	4.77	0.95	170.12
Jul-09	36.28	12.96	33.19	30.69	10.51	11.55	2.31	4.76	1.47	143.72
Aug-09	44.17	14.44	38.12	29.54	11.99	10.75	2.48	5.83	2.39	159.72
Sep-09	42.84	13.83	39.73	42.83	13.31	11.71	2.35	5.62	2.48	174.71
<b>TOTAL</b>	<b>260.92</b>	<b>76.33</b>	<b>243.82</b>	<b>232.72</b>	<b>75.77</b>	<b>67.88</b>	<b>13.47</b>	<b>30.62</b>	<b>9.59</b>	<b>1011.12</b>
Oct-09	55.50	14.33	42.50	35.81	14.28	7.01	1.97	4.36	2.72	178.47
Nov-09	53.73	13.93	42.40	25.01	9.80	5.12	1.10	2.57	2.72	156.38
Dec-09	55.39	14.42	49.00	30.74	13.04	7.87	1.55	4.18	2.54	178.73
<b>TOTAL</b>	<b>425.54</b>	<b>119.01</b>	<b>377.71</b>	<b>324.28</b>	<b>112.90</b>	<b>87.88</b>	<b>18.10</b>	<b>41.73</b>	<b>17.56</b>	<b>1524.71</b>

The entitlement of energy to Puducherry for the year 2009-10 (12 months) as per the above is likely to be as given in Table-19 below:

Table-19  
**Entitlement of power to EDP during 2009-10**  
**(Based on Energy Generation from 04/2009 to 12/2009)**

S. No	Name of the Station / SEB	Net Power available to Puducherry (MU)	% Losses	Losses (MU)	Net Power available at State Periphery (MU)
<b>A</b>	<b>NLC</b>				
	NLC TPS - II Stage I	432.37	4.0	17.29	415.08
	NLC TPS - II Stage II	150.53	4.0	6.02	144.51
	NLC TPS - I Expansion	117.17	4.0	4.69	112.48
<b>B</b>	<b>NTPC</b>				
1	NTPC, RMG ST I & II	567.38	4.0	22.70	544.68
2	NTPC, RMG ST III	158.68	4.0	6.35	152.33
3	NTPC, Talcher ST II	503.61	4.0	20.14	483.47
<b>C</b>	<b>OTHER CGS</b>				
1	MAPS, Kalpakam	24.13	4.0	0.97	23.16
2	KAPS, Units I&II	55.63	4.0	2.23	53.40
3	KAPS, Units III	23.41	4.0	0.94	22.47
<b>D</b>	<b>Other Utilities</b>				
1	PPCL	219.83			219.83
2	TNEB	395.55	4.00	15.82	379.73
3	KSEB	32.0			32.00
	<b>Sub-total</b>	<b>2680.3</b>		<b>97.1</b>	<b>2583.2</b>
<b>E</b>	<b>Eastern Region</b>				
1	Farakka	11.01	4	0.55	10.46
2	Kahalgaon	5.01	4	0.20	4.81
3	Talchar - 1	9.89	4	0.39	9.50
	<b>Sub-total</b>	<b>25.91</b>		<b>1.14</b>	<b>24.77</b>
	<b>Total</b>	<b>2706.20</b>		<b>98.28</b>	<b>2607.92</b>

5.10.5 As verified from the power purchase bills of EDP from various generating stations the gross energy drawn for the period from April 2009 to September 2009 (for six months) is as given in Table-20 below:



Table-20

**EDP - Monthly Energy Billed for various Power Stations**

S.No	Name of Station/ SEB	Monthly Gross Energy Billed						Total for Six Months
		9-Apr	9-May	9-Jun	9-Jul	9-Aug	9-Sep	
1	NLC TS-II Stage I&II	55.16	56.97	57.51	41.2	41.52	56.13	308.49
2	NLC TS-I (Expansion)	11.46	11.85	10.5	11.55	10.75	11.71	67.83
3	RSTPS Stage I&II	48.02	48.56	41.04	36.28	44.17	42.84	260.92
4	RSTPS Stage III	11.64	11.09	12.36	12.96	14.44	13.83	76.33
5	Talchere Stage II	45.84	45.86	41.07	33.19	38.12	39.73	243.82
6	MAPS	2.17	2.03	1.93	2.31	2.48	2.36	13.27
7	KAPS	5.9	5.4	5.71	6.2	8.18	8.09	39.48
8	PPCL	20.79	21.69	21.06	17.99	* 2.80	18.44	102.77
9	TNEB	35.03	31.01	36.25	34.29	41.64	36.69	214.92
10	KSEB	2.47	2.58	2.53	2.24	2.32	2.72	14.87
11	Kahalhaon					0.64	0.95	
12	Talchere Stage I					1.15	2.16	
13	Farakka					2.35	1.74	
	<b>Total</b>	<b>238.5</b>	<b>237.05</b>	<b>229.95</b>	<b>198.01</b>	<b>210.57</b>	<b>237.4</b>	<b>1342.7</b>

\* - Less generation due to strike in PPCL

EDP has drawn 1342.70 MU i.e. 49.36% during 1<sup>st</sup> half year against their entitlement of 2706.20 for the full year

5.10.6 The Commission approves the purchase of power as per the allocation from various central generating stations and other utilities as given in Table-21 below:

Table-21

**Power purchases approved by the Commission 2009-10**

S.No	Name of Station / SEB	Net Power available to Puducherry (MU) *
<b>A</b>	<b>NLC</b>	
1	NLC TPS - II Stage I	432.37
2	NLC TPS - II Stage II	150.53
3	NLC TPS - I Expansion	117.17
<b>B</b>	<b>NTPC</b>	
1	NTPC, RMG ST I & II	567.38
2	NTPC, RMG ST III	158.68
3	NTPC, Talcher ST II	503.61
<b>C</b>	<b>OTHER CGS</b>	
1	MAPS, Kalpakkam	24.13
2	KAPS, Units I&II	55.63
3	KAPS, Units III	23.41
<b>D</b>	<b>Other Utilities</b>	
1	PPCL	219.83
2	TNEB	395.55
3	KSEB	32.0
<b>E</b>	<b>Eastern Region CGS</b>	
1	Farakka	11.01
2	Kahalgaon	5.01
3	Talcher - 1	9.89
	<b>Total</b>	<b>2706.20</b>

\* - Refer to Table-19.

**5.11 Energy Balance**

5.11.1 The summary of energy balance which EDP projected and which the Commission approved are given in Table – 22 below:

Table - 22  
**Summary of Energy Balance**

(MU)			
S.No	Particulars	Projected by EDP	Approved by the Commission
1	Energy Demand (Sales)	2266.93	2101
2	Distribution Loss	369.04 (14%)	342 (14%)
3	Energy Requirement at state periphery (Energy input to EDP system)	2635.97	2443
4	Pool losses in PGCIL and TNEB systems	119.71	98.28*
5	Sales outside the state	0.00	164.92**
6	Total Energy Requirement (3+4+5)	2755.68	2706.20

\* Refer table-19.

\*\* EDP has not projected any sales outside the state.

5.11.1 The EDP shall draw its entire share from Central Generating Station & other sources. The energy available is slightly more than the energy sales. This can be utilized to meet the unrestricted demand fully.

**5.12 Revenue Requirement – 2009-10**

EDP has projected a total expenditure of Rs. 75,920 Lakhs and a return on equity of Rs.3153 lakh for the year 2009-10. The summary of expenses under each head are given in Table – 23 below:

Table - 23  
**Expenses Projected for 2009-10**

(Rs. Lakhs)		
Sl. No	Particulars	Expenses Projected (2009-10)
1	Power purchase cost	61408
2	Operation and Maintenance expenses	
	- Employees cost	6684
	- Repairs and Maintenance expenses	683
	- Administration and General Expenses	851
3	Depreciation	2108
4	Interest and Finance charges	2359
5	Interest on working capital	1685
6	Provision for bad debts	142
7	<b>Total Expenses</b>	<b>75920</b>
8	Return on Equity (ROE)	3153
9	<b>Total (7+8)</b>	<b>79073</b>

**5.13. The Expenses Projected by EDP and Commission's Analysis and Decisions**

The expenses projected by EDP and Commission's analysis and decisions are discussed below.

**5.14 Gross Fixed Assets and accumulated depreciation**

**5.14.1 Gross Fixed Assets**

The EDP has projected the Gross Fixed Assets at Rs. 38630 lakhs to end of March 2009 and at Rs.41226 lakhs to end of March 2010. The EDP has taken into consideration the Gross Fixed Assets as on 31/03/1993 as per audited proforma accounts as base and the year wise additions from 1993-94 to 2008-09 and arrived at the Gross Fixed Assets at Rs.38630 lakhs as on 31/03/2009. The EDP has projected the capital additions during 2009-10 at Rs. 2596 lakhs and thus arrived at the Gross Fixed Assets at Rs. 41226 lakhs to end of March 2010.

**5.14.2 Depreciation**

The EDP has projected the accumulated depreciation at Rs. 20319 lakhs to end of March 2009 and at Rs. 22428 lakhs to end of March 2010.

The EDP has taken the accumulated depreciation as on 31/03/1993 at Rs. 1350 lakhs as per the audited proforma accounts and the addition of year wise depreciation as per the Financial Resources Statements submitted to the Planning Commission and arrived at the accumulated depreciation at Rs. 20319 lakhs at the end of March 2009 and at Rs. 22428 lakhs to end of March 2010. The average rate of depreciation was about 4.50% during the years 1993-94 to 1995-96, 7.84% from 1996-97 to 2003-04, 3.6% from 2004-05 to 2008-09 and 5.28% (Projection) for 2009-10.

5.14.3 The Gross Fixed Assets and accumulated depreciation as on 31/03/1993 and the year wise additions and the rate of depreciation and the net fixed assets as submitted by EDP are given in the Table 24 below:

Table - 24

**Gross Fixed Assets and Accumulated Depreciation Projected by EDP****(Rs. Lakhs)**

Particulars	Capex as per FRS	GFA based on audited accounts of FY 1992-93	Depreciation as per FRS	Accumulated depreciation	NFA	Wt. Avg. depreciation rate as per FRS
GFA as on 31/03/1993		6495		1350	5145	
Add: CWIP		2040			2040	
Closing GFA for FY 1992-93		8535			7185	
FY 1993-94	978	9513	383	1733	7780	4.49%
FY 1994-95	1581	11094	445	2178	8916	4.53%
FY 1995-96	2177	13271	536	2714	10557	4.58%
FY 1996-97	2121	15392	1085	3799	11593	7.84%
FY 1997-98	1141	16533	1213	5012	11521	7.84%
FY 1998-99	1077	17610	1300	6312	11298	7.84%
FY 1999-00	1222	18832	1390	7702	11130	7.84%
FY 2000-01	1518	20350	1498	9200	11150	7.84%
FY 2001-02	2210	22560	1644	10844	11716	7.84%
FY 2002-03	1742	24302	1798	12642	11660	7.84%
FY 2003-04	1821	26123	1938	14580	11543	7.84%
FY 2004-05	2168	28291	962	15542	12749	3.60%
FY 2005-06	2425	30716	1044	16586	14130	3.60%
FY 2006-07	2588	33304	1135	17721	15583	3.60%
FY 2007-08	2902	36206	1251	18972	17234	3.60%
FY 2008-09	2424	38630	1347	20319	18311	3.60%
FY 2009-10	2596	41226	2108	22428	18799	5.28%

**5.14.4 Commission's Analysis and Decision**

The Commission has analyzed the Gross fixed assets and the accumulated depreciation furnished by the EDP. The EDP has not prepared any asset register. The audited proforma accounts were available for the year 1992-93 only. Thereafter the proforma accounts were not prepared. The addition of assets and depreciation thereon are given by the EDP based on the figures furnished in the Financial Resources Statements submitted to Planning Commission. The Commission has asked for the records maintained to validate the Gross Fixed Assets and depreciation. The Electricity Department has not prepared the statements of accounts viz., profit and loss account, balance sheet etc. It is stated that the territory of Puducherry was merged with the Indian Union with effect from 01/11/1954 and since then Puducherry has been one of the Union Territories and the Government of Puducherry through the Electricity Department has under taken the distribution and retail supply of electricity and the present Gross Block of fixed assets has been constructed / acquired over the decades. Many of the assets must have completed

their normal life and fully depreciated. Assets which are completely depreciated and those in service even after serving their useful life are not known. For a proper appraisal of the Gross Block which is useful, usable and in use is needed the asset registers and depreciation registers are essential for a proper and meaningful analysis. In view of this the Electricity Department was requested to furnish the data relating to Gross Block of assets as on 31/03/2009 with the details of the name of the asset, value and date of acquisition, date of putting the asset to use whether depreciated or written off etc. The EDP has not furnished the details.

In the absence of the Asset Register, the Depreciation Registers and the audited accounts the gross block of assets and accumulated depreciation projected by the EDP in the ARR cannot be considered for the purpose of arriving at the capital base and allowing depreciation and return on capital base.

The Commission directs the EDP to prepare and maintain the assets register with all the details function wise and asset classification wise and submit the same to the Commission along with the ARR for the next year.

#### 5.15 Capital Expenditure Plan for 2009-10

The EDP has projected Rs. 8991 lakhs towards capital investment for the year 2009-10 as detailed in the Table 25 below:

Table-25

#### Capital Expenditure Proposed by EDP for 2009-10

		(Rs. lakhs)
S.N	Particulars	
I	A. Transmission scheme	3202
	B. New works	3279
	<b>Total transmission scheme</b>	<b>6481</b>
II	<b>Normal development scheme</b>	
1	Expansion of power supply to various categories of services and street lights	752
2	Improvement of HT / LT distribution network	578
3	Cable conversion works	692
4	General schemes	287
5	Replacement of existing meters by static meters	200
	<b>Total normal development schemes</b>	<b>2509</b>
	<b>Total power sector (I+II)</b>	<b>8991</b>

The EDP has mentioned that it has envisaged capital expenditure for strengthening existing electricity network and augment the network for ensuring reliable power supply to its consumers. EDP has proposed to invest on the following activities:

1. Rationalization and improvement of distribution in urban areas
2. Conversion of HT overhead lines into UG cable system
3. System improvement for reduction of transmission and distribution losses
4. Extension and development of power supply to industries
5. Extension and development of power supply to agricultural, domestic and commercial services
6. Extension and development of power supply to EWS and street lights
7. Upgradation of existing primary SS and EHT lines in the UT of Puducherry
8. Rural electrification (BNP)
9. Establishment of third 230 kV SS at Puducherry
10. Erection of 230 kV lines from Villianur 230kV SS to the proposed 230kV SS
11. Creating of infrastructure facilities to Tsunami affected areas

The EDP has stated that it has initiated the process of availing the funds from Central Government through Power Finance Corporation under R-APDRP scheme. EDP has approached Rural Electrification Corporation (REC) for loans required for ongoing and future development schemes and it is stated that the REC has agreed to provide rupee term loan upto Rs. 7093 lakhs. The EDP requested to approve the capital expenditure of Rs. 8991 lakhs as projected for 2009-10.

EDP has estimated to capitalize Rs. 2596 lakhs against the proposed capital investment of Rs. 8991 lakhs during the year.

It is mentioned that Thondamanadham 230/110kV station is likely to be commissioned during March 2010 and about Rs. 2.36 lakhs has been spent to end of September 2009. In respect of the new work at Vengatta Nagar 110/11kV SS land has been acquired and REC sanction is available. The work may start after execution of agreement / surety by Government of Puducherry.

**Commission approves the proposed capitalization of Rs.2596 lakhs during 2009-10.**

The EDP is directed to furnish details of physical parameters achieved such as new services released lines extended, meters replaced, cables converted after capitalization of the proposed capital expenditure in accordance with the Regulation 21 of the proposed draft regulations at the time of truing up.

**5.16 Cost of Power Purchase**

The EDP has estimated the power purchase cost at Rs. 61408 lakhs for the year 2009-10 on the gross power purchase of 2755.68MUs.

The quantum of power purchase and the cost of power purchase estimated by EDP station wise are given in the Table 26 below:

Table - 26  
**Power Purchase Projected by EDP for 2009-10**

S. N	Station	Gross power available (MU)	Losses (MU)	Net power drawal (MU)	Fixed cost (Rs. in lakhs)	Variable cost (Rs. in lakhs)	Per unit variable cost (Rs./kWh)	Other cost (Rs. in lakhs)	Total power purchase cost (Rs. in lakhs)	Total per unit cost (Rs./ kWh)
<b>A</b>	<b>NLC</b>									
1	NLC TS II Stage I	452.42	22.62	429.80	1500	6103	1.35	958	8561	1.89
2	NLC TS II Stage II	150.45	7.52	142.93	531	2030	1.35	311	2872	1.91
3	NLC TS I Expn	124.06	6.20	117.85	1149	1548	1.25	255	2952	2.38
	<b>Total (A)</b>	<b>726.93</b>	<b>36.35</b>	<b>690.58</b>	<b>3179</b>	<b>9681</b>	<b>1.33</b>	<b>1525</b>	<b>14384</b>	<b>1.98</b>
<b>B</b>	<b>NTPC</b>									
1	NTPC, Ramgundam ST- I + II	562.29	28.11	534.17	1866	7474	1.33	500	9840	1.75
2	NTPC, Ramgundam ST-III	145.31	7.27	138.05	1196	1775	1.22	127	3098	2.13
3	NTPC, Talcher	544.23	27.21	517.02	3189	7972	1.46	477	11639	2.14
	<b>Total (B)</b>	<b>1251.83</b>	<b>62.59</b>	<b>1189.24</b>	<b>6251</b>	<b>17222</b>	<b>1.38</b>	<b>1104</b>	<b>24577</b>	<b>1.96</b>
<b>C</b>	<b>Other CGS</b>									
1	MAPS	26.66	1.33	25.32	-	509	1.91	-	509	1.91
2	KAPS Stage 1&2	61.92	3.10	58.82	-	1880	3.04	-	1880	3.04
3	KAPS Stage 3&4	10.43	0.52	9.91	-	317	3.04	-	317	3.04
	<b>Total (C)</b>	<b>99.00</b>	<b>4.95</b>	<b>94.05</b>	<b>-</b>	<b>2707</b>	<b>2.73</b>	<b>-</b>	<b>2707</b>	<b>2.73</b>
<b>D</b>	<b>Other utilities</b>									
1	PPCL	250.47	-	250.47	-	5031	2.01	-	5031	2.01
2	TNEB (Pondy & KKL)	395.55	15.82	379.73	-	7555	1.91	-	7555	1.91
3	KSEB	31.89	-	31.89	156	885	2.78	-	1041	3.26
	<b>Total (D)</b>	<b>677.91</b>	<b>15.82</b>	<b>662.09</b>	<b>156</b>	<b>13471</b>	<b>1.99</b>	<b>-</b>	<b>13627</b>	<b>2.01</b>
<b>E</b>	<b>Other charges</b>									
1	PGCIL charges				6113			-	6113	
	<b>Total (F)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6113</b>				<b>6113</b>	
	<b>Grand total (A+B+C+D+E)</b>	<b>2755.68</b>	<b>119.71</b>	<b>2635.97</b>	<b>15700</b>	<b>43080</b>	<b>1.56</b>	<b>2629</b>	<b>61408</b>	<b>2.23</b>

The EDP has submitted that it has taken into consideration:

1. Actual fixed cost for central sector generating stations and others as per the latest available bills.
2. Actual energy charges and fuel and power purchase adjustment charges as per latest available bills.
3. An escalation of 24.84% on PGCIL's Transmission charges as per PGCIL's letter No. Commercial 2009-10/953 dated 18/06/2009. the escalation has been applied to the values from last five months actual PGCIL charges taken from the latest bills.
4. Other costs comprise of income tax and other charges.

In respect of purchase of power from TNEB the EDP has submitted that initially the power availed from TNEB was charged at the rate paid by TNEB to NLC plus wheeling charges. The TNEB has revised the tariff to Rs. 3.00 per kWh with effect from 01/12/2001 treating EDP as a HT consumer. The EDP has challenged this decision by filing a petition before Hon'ble TNERC. The Hon'ble TNERC concluded that the sale of power between EDP and TNEB was in the nature of interstate sale of power and EDP cannot be treated as a HT consumer and ordered to maintain statusquo. The EDP has challenged this in the Hon'ble High Court of Judicature, at Madras and stay was granted and the Hon' High Court directed payment to TNEB at the rate charged by NLC plus wheeling charges. The EDP made the payment accordingly. The main issue is yet to be decided.

The EDP has submitted that the power purchase during 2008-09 was less because of shortage of supply of power from various central generating stations due to shortage of coal and the power purchase cost recorded during 2007-08 and 2008-09 is on lower side as the EDP has recorded the power purchase cost on cash basis. The EDP has however, projected the power purchase cost on accrual basis for the year 2009-10.

- 5.16.1 The Commission has obtained the actuals of power purchase for the years 2007-08 and 2008-09. The station / source wise power purchase, total cost and average cost per unit for the years 2007-08 and 2008-09 are detailed in the Table-27 below:



Table-27

**Power Purchase Cost actuals for 2007-08 and 2008-09**

Sl. No	Name of the Central Generating Station / Utility	2007-2008			2008-2009		
		Power Purchase (In MU)	Total cost of purchase (In Lakhs)	Cost per unit at Station end (In PPU)	Power Purchase (In MU)	Total cost of purchase (In Lakhs)	Cost per unit at Station end (In PPU)
1	NLC TS II Stage I	458.65			367.911		
2	NLC TS II Stage II	141.829			122.788		
3	NLC TS I Expn	124.107			117.684		
<b>NLC TOTAL</b>		<b>724.586</b>	<b>13,642.42</b>	<b>188.28</b>	<b>608.383</b>	<b>12,518.79</b>	<b>205.77</b>
4	NTPC, Ramagundam Stage-I & II	511.817			539.797		
5	NTPC, Ramagundam Stage-III	146.489			137.197		
6	NTPC, Talcher Stage-II	535.537			460.25		
<b>NTPC Total</b>		<b>1193.843</b>	<b>17,379.29</b>	<b>145.57</b>	<b>1137.244</b>	<b>18,948.95</b>	<b>166.62</b>
7	Madras Atomic Power Station	19.818	385.89	194.72	16.82	317.48	188.75
8	Kaiga Atomic Power Station	55.203	1,745.40	316.18	60.684	1,708.39	281.52
<b>Total CGS (Share) "A"</b>		<b>1,993.45</b>	<b>33,152.99</b>	<b>166.31</b>	<b>1,823.13</b>	<b>33,493.60</b>	<b>183.71</b>
9	Unscheduled Interchange over drawal	44.647	884.82	198.18	84.457	4,548.27	538.53
10	PTC	0	0	0	0	0	0
<b>Total CGS (Share) "B"</b>		<b>44.647</b>	<b>884.82</b>	<b>198.18</b>	<b>84.457</b>	<b>4,548.27</b>	<b>538.53</b>
<b>Total CGS (A + B)</b>		<b>2,038.097</b>	<b>34,037.81</b>	<b>167.01</b>	<b>1,907.59</b>	<b>38,041.87</b>	<b>199.42</b>
11	TNEB (Pondy)	106.46	1,817.53	170.72	88.967	3,840.87	431.72
12	TNEB (Karaikal)	286.03	4,822.06	168.59	283.648	9,501.56	334.98
13	Pondicherry Power Corpn. Limited	257.249	5,361.34	208.41	242.241	1,446.32	59.71
14	Kerala State Electricity Board	26.643	761.32	285.41	25.461	908.13	356.67
<b>Total other utilities "C"</b>		<b>676.382</b>	<b>12,762.25</b>	<b>188.68</b>	<b>640.317</b>	<b>15,696.88</b>	<b>245.14</b>
15	Transmission Charges (CGS)		3,894.36	19.11		3,268.75	17.14
<b>Net Total (A + B + C)</b>		<b>2,714.48</b>	<b>50,694.42</b>	<b>186.76</b>	<b>2,547.91</b>	<b>57,007.50</b>	<b>223.74</b>

The average power purchase cost during 2007-08 was 186.76 ps/KWh and during 2008-09 it was 223.74 ps/KWh.

The Commission has also obtained the actuals of power purchase and cost during the first 6 months viz., April to September 2009 and the details are given in the Table-28 below:

Table - 28

**Power purchase cost during the first half year 2009-10**

S.No	Name of the Station	Energy Charges			Capacity Charges billed (Rs. In Lakhs)	FCA (Rs in Lakhs)	Others in (Rs in Lakhs)	Total (Rs in Lakhs)	Avg. Unit Cost (Rs per KWh)
		Energy Billed (MU)	Rate (Paise / Kwh)	Amount (Rs in Lakhs)					
1	NLC TS - II Stage I&II	308.49	1.210	3732.75	1028.69	430.79	222.57	5414.80	1.755
2	NLC TS - I (Expansion)	67.83	1.140	773.27	597.91	76.48	6.01	1453.67	2.143
3	RSTPS Stage I&II	260.92	0.828	2161.47	816.37	1478.97	183.08	4639.89	1.778
4	RSTPS Stage III	76.33	0.866	661.20	547.00	254.24	104.08	1566.52	2.052
5	Talcher Stage II	243.82	0.587	1431.93	1450.68	1414.16	178.17	4474.93	1.835
6	MAPS	13.27	1.908	253.18	0.00	0.00	3.59	256.77	1.935
7	KAIGA	39.48	3.036	1198.81	0.00	0.00	24.33	1223.15	3.098
8	PPCL	102.77	2.067	2124.63	0.00	0.00	0.00	2124.63	2.067
9	TNEB	214.92	1.914	4114.48	0.00	0.00	0.00	4114.48	1.914
10	KSEB	14.87	3.221	478.92	0.00	0.00	0.00	478.92	3.221
11	Kahalgaon	1.59	1.085	17.25	10.53	9.07	2.35	39.21	2.465
12	Talcher Stage I	3.31	0.411	13.59	19.64	13.53	3.88	50.64	1.531
13	Farakka	4.09	0.986	40.33	28.44	37.79	3.24	109.80	2.683
14	PGCIL			0	0.00	0.00	0.00	2861.64	0.212
	<b>Total</b>	<b>1351.69</b>		<b>17001.82</b>	<b>4499.26</b>	<b>3715.03</b>	<b>731.14</b>	<b>28809.06</b>	
	Average Rate (Rs/kWH)								<b>2.131</b>

5.16.2 The Commission has arrived at the power purchase cost for 2009-10 adopting the average cost as per actuals during the first half year from April to September 2009 as detailed in the Table-29 below:

Table - 29

**Power Purchase Cost Approved for the year 2009-10**

S. No	Station	Power Purchase (MU)	Avg Cost per unit (Rs per KWh)	Cost of Power Purchase (Rs in Lakhs)
<b>A</b>	<b>NLC</b>			
1	NLC TS II Stage I	432.37	1.755	7588.09
2	NLC TS II Stage II	150.53	1.755	2641.80
3	NLC TS I Expn	117.17	2.143	2510.95
<b>B</b>	<b>NTPC</b>			
1	NTPC, Ramagundam ST – I + II	567.38	1.778	10088.01
2	NTPC, Ramagundam ST – III	158.68	2.052	3256.11
3	NTPC, Talcher	503.61	1.835	9241.24
<b>C</b>	<b>Other CGS</b>			
1	MAPS	24.13	1.935	466.91
2	KAPS Stage 1&2	55.63	3.098	1723.41
3	KAPS Stage 3&4	23.41	3.098	725.42
<b>D</b>	<b>Other utilities</b>			
1	PPCL	219.83	2.067	4543.88
2	TNEB (Pondy & KKL)	395.55	1.914	7570.83
3	KSEB	32	3.221	1030.72
<b>E</b>	<b>Eastern Region CGS</b>			
1	Farakka	11.01	2.683	295.39
2	Kahalgaon	5.01	2.465	123.49
3	Talcher - 1	9.89	1.531	151.41
4	<b>PGCIL charges</b>			5723.28
	<b>Grand total</b>	<b>2706.20</b>	<b>2.131</b>	<b>57680.94</b>

**The Commission accordingly approves the power purchase cost at Rs. 57681 Lakhs for purchase of 2706.20 MU (Gross) for the year 2009-10.**

**5.17 Operation and Maintenance (O&M) Expenses**

The O&M expenses comprise the Employee expenses, Repairs and Maintenance (R&M) expenses and Administration and General (A&G) expenses.

The ED, Puducherry has projected the O&M expenses for the year 2009-10 along with actuals for 2007-08 and 2008-09 as detailed in Table – 30 below.

Table - 30

**O&M Expenses Projected by EDP for 2009-10**

(Rs. lakhs)

S.N	Particulars	2007-08 (Actuals)	2008-09 (Actuals)	2009-10 (Projected)
1.	Employee cost	3231	4873	6684
2.	R&M expenses	738	606	683
3.	A&G expenses	667	674	887
	<b>Total O&amp;M expenses</b>	<b>4637</b>	<b>6153</b>	<b>8254</b>

These O&M expenses are discussed in the following paras.

**5.17.1 Employee Cost**

The details of employee cost projected by EDP are given in the Table-31 below:

Table - 31

**Employee Cost Projected by EDP for 2009-10**

(Rs. lakhs)

S.N	Particulars	2007-08 (Actuals)	2008-09 (Actuals)	2009-10 (Projected)
<b>1</b>	<b>Salary</b>			
1.1	Salary (with VI <sup>th</sup> Pay Revision but without Arrears)	3113	3894	5168
1.2	Arrears paid (40% in 2008-09 & 60% in 2009-10)		864	1296
	<b>Total salary (inclusive of VI<sup>th</sup> Pay Revision Arrears)</b>	<b>3113</b>	<b>4758</b>	<b>6464</b>
2	Overtime Allowance (OTA)	51	52	82
	<b>Sub total</b>	<b>3164</b>	<b>4810</b>	<b>6546</b>
<b>3</b>	<b>Other allowances</b>			
3.1	Wages	9	12	26
3.2	Domestic traveling expenses (DTE)	37	36	78
3.3	Stipend	21	16	35
	<b>Sub total (other allowances)</b>	<b>67</b>	<b>63</b>	<b>138</b>
	<b>Total employee cost</b>	<b>3231</b>	<b>4873</b>	<b>6684</b>

The EDP has submitted that the employee cost for 2009-10 has been projected taking into consideration the increase in basic salary and related other remunerations on account of implementation of recommendations of Sixth Pay Commission. The EDP has indicated payment of 40% of arrears during 2008-09 and 60% of arrears during 2009-10. It is stated that on account of implementation of recommendations of Sixth Pay Commission, the EDP has projected considerably high employee cost for

the year 2009-10. The EDP has provided the existing pay scales and revised pay scales as approved by the Sixth Pay Commission and requested the Commission to approve the employee cost as projected considering the changes in pay scales and increase in other allowances.

The Commission has analyzed the employee cost. The EDP has not maintained separate accounts for the Electricity Department. The actual employee cost is as per the accounts for 2007-08 as given in the demand for grants of the Government of Union Territory of Puducherry for 2009-10.

The employee cost, which was Rs. 3231 lakhs during 2007-08 increased to Rs. 4873 lakhs during 2008-09. The increase is 51% over 2007-08. This is mainly due to pay revision w.e.f January 2006 and increase in HRA effective from 09/2008. The arrears for the period from January 2006 to August 2008 (30 months) amounting to about Rs. 2160 lakhs were approved for payment 40% (Rs. 864 lakhs) in 2008-09 and balance 60% (Rs. 1296 lakhs) in 2009-10. The EDP has furnished the actual employee cost of 2008-09 at Rs. 4758 lakhs. The expenditure from April 2008 to August 2008 was Rs. 1576 lakhs and the expenditure from September 2008 to March 2009 was Rs. 3181 lakhs, which includes 40% arrears of Rs. 864 lakhs. Thus the expenditure from September 2008 to March 2009 excluding the arrears worked out to 2317 lakhs and the increase is 741 lakhs (Rs. 2317 – 1576 lakhs) and the increase is about 47%. This increase is on account of implementation of the recommendations of Sixth Pay Commission. Central Government has revised the pay scales and allowances based on the Sixth Pay Commission and these equally apply to Union Territories as well. The EDP has projected the employee cost at Rs. 6684 lakhs for the year 2009-10 an increase of 37% over 2008-09. The projection includes Rs. 1296 lakhs towards 60% of arrears approved for payment during 2009-10. It is submitted by EDP that it has adopted the methodology of projection for FY2009-10 on accrual basis consistent with the procedure being adopted by other utilities across the country.

Some of the objectors who responded to the Public Notice also participated in the public hearing raised the issue of high employee cost stating that there is no basis for the exorbitant increase in the employee cost from Rs. 3231 lakhs in 2007-08 (actual) to Rs. 6684 lakhs in 2009-10 (Projected). It is observed that substantial increase has been on account of payment of arrears of pay as explained above.

Generally the over time payment to the employees is not allowed. In the case of EDP, it is a department in the Government and any over time paid to certain

categories of employees such as vehicle driver cannot be discontinued. Hence it is considered.

The EDP has furnished the employee strength as 1837 comprising of 1408 technical staff and 429 non-technical staff in the ARR. Later while furnishing the data in the formats to Draft Regulations the number of employees as on 01/04/2009 is given as 2571. The employees, number of consumers and the statistics of employee per million kWh sold and the number of employees per 1000 consumers etc., as compared to the neighboring states of AP, Tamil Nadu and Kerala are detailed below in Table 32.

Table-32

**Number of Employees per 1000 Consumers**

S.N	Particulars	EDP as on 31/03/2009	AP as on 31/03/2008	Tamil Nadu as on 31/03/2008	Kerala as on 31/03/2008
1	No. of Employees	2571	62245	72723	25700
2	Energy Sold (MU)	1998	52678	59045	12126
3	No. of Consumers	356964	19473307	19433999	9096956
4	No. of Employees per Million units sold	1.29	1.18	1.23	2.12
5	No. of Employees per 1000 consumers	7.20	3.20	3.74	2.83
6	Per capita consumption (kWh)	2050	877	1145	444
7	Distribution lines (Ck. KM)	5751	818956	517604	270707

The number of employees per 1000 consumers appears to be high but the number of employees per million units sold is comparable with the neighboring states. The number of employees might be high due to the fact that the area of operation is spread to four regions and each region has its own staff.

The Commission has obtained the actual employee cost upto September 2009 (7 months from March 2009 to September 2009), which is about Rs. 2994 lakhs excluding arrears. The proportionate employee cost works out to about Rs. 5132 lakhs and considering payment of arrears of Rs. 1296 lakhs, the total requirement for 2009-10 works out to Rs. 6428 lakhs (Rs. 5132+1296 lakhs). The increase is mainly due to implementation of Sixth Pay Commission recommendation.

**The Commission accordingly approves the gross employee cost at Rs. 6428 lakhs against Rs. 6684 lakhs projected by EDP for the year 2009-10.**

### **Capitalization of Employee Cost**

The employee expenses in respect of execution of capital works need to be capitalized and included in the capital expenditure. The Electricity Department of Puducherry has been incurring capital expenditure over the years. But the Department has not shown any employee cost for capitalization in the projection for 2009-10. The department has been recovering 17% supervision charges on the cost of the works executed departmentally and these charges are included in the capital expenditure. But these supervision charges are included in the non tariff income instead of giving credit to the employee cost. These supervision charges need to be deducted from the gross employee cost and the employee cost net of capitalization is to be charged to revenue account.

The Electricity Department has accounted for an amount of Rs. 226 lakhs towards supervision charges (actual) during 2008-09 and included this in the non-tariff income. The Capex addition considered during 2008-09 was Rs. 2475 lakhs. The Capex addition approved for 2009-10 is Rs. 2596 lakhs. The proportionate employee cost for capitalization works out to Rs. 237 lakhs for the year 2009-10.

**The Commission approves the capitalization of employee cost at Rs. 237 lakhs for the year 2009-10.**

**The net employee cost after taking this into consideration works out to Rs. 6191 (6428 – 237) lakhs for 2009-10.**

### **5.17.2 Repairs and Maintenance (R&M) Expenses**

Any expenditure on restoring an asset back upto the level of performance at which it was, when it was first put to use is repairs expenditure. Any expenditure on maintaining the asset upto the level of performance at which it was when it was first put to use is maintenance expenditure.

R&M expenses include expenses on repairs and maintenance of electrical equipments, distribution network, vehicles, furniture and fixtures, office equipment, buildings etc.

The ED Puducherry has projected the R&M expenses at Rs. 683 lakhs for the year 2009-10 along with actuals for 2007-08 and 2008-09 as detailed in the Table-33 below.

Table-33

**R&M Expenses Projected by EDP for 2009-10**

(Rs. lakhs)

S.N	Particulars	2007-08 (Actuals)	2008-09 (Actuals)	2009-10 (Projected)
1	Plant and machinery	523	453	633
2	Buildings	215	153	50
	Total R&M expenses	738	606	683

The EDP has submitted that the R&M expenses to plant and machinery during 2008-09 is less than the expenditure incurred in 2007-08 as the funds were not available from Government during 2008-09 for R&M expenses and therefore EDP projected the R&M expenses under plant and machinery taking growth rate of 10% twice on the R&M expenses incurred during 2007-08. The R&M expenses under the head buildings during 2007-08 and 2008-09 include expenses of all the Government buildings.

The EDP has projected Rs. 50 lakhs for 2009-10 for electrical maintenance work on Electricity Department buildings only.

The actual expenditure upto September 2009 during 2009-10 has been obtained by the Commission which is Rs. 308 lakhs covering 6 months from April to September 2009 and the requirement for one year works out to Rs. 616 lakhs on prorata basis. This provision works out to 1.6% on the gross fixed assets of Rs. 38036 lakhs projected by EDP as on 31/03/2009 which is quite reasonable.

**The Commission accordingly approves the R&M expenses at Rs. 616 lakhs for the year 2009-10 against Rs. 683 lakhs projected by EDP.**

**5.17.3 Administration and General (A&G) Expenses**

The A&G expenses include rent rates and taxes, expenses on computerization, repayment towards establishment of SLD and its annual maintenance charges (AMC) to power grid, R&D of Meter Relay & Testing (MRT), Human resource Development (HRD), taxes legal charges etc.

The EDP has projected the A&G expenses at Rs. 851 lakhs for the year 2009-10. The component wise details are given in the Table 34 below along with actuals for 2007-08 and 2008-09.

Table – 34

**A&G Expenses Projected by EDP for 2009-10**

(Rs. lakhs)

S.N	Particulars	2007-08 (Actuals)	2008-09 (Actuals)	2009-10 (Projected)
1	Rent rate & taxes	21	20	23
2	Regulatory fee	-	-	36
3	Communication, computerization, SLDC & R&D, HRD, Other charges etc.	547	548	623
4	Legal & consultancy charges (Prs) etc.	0	1	26
5	Miscellaneous			
5.1	Office expenses (OE)	90	95	130
5.2	Other administrative expenses (OAE)	3	2	2
5.3	Advertisement	5	9	12
	Sub total	98	105	144
	<b>Total administration &amp; general expenses</b>	<b>667</b>	<b>674</b>	<b>851</b>

The EDP has submitted that while making provision for 2009-10 it has accounted tentative expenditure on fees payable to the Commission and to the consultants hired for implementation of various improvement activities. It is mentioned that the Power Grid Corporation of India Limited (PGCIL) had established a System Control Centre (SCC) in the Electricity Department at Puducherry. The total capital cost for the entire project for the Southern Region is said to be Rs. 530.79 crores out of which the share of UT of Puducherry is Rs. 23.43 crores. This cost is being recovered over a period of 15 years with interest from Puducherry. The monthly payment to be made by the UT of Puducherry is about Rs. 32.11 lakhs. After full recovery the assets shall be transferred to Puducherry at nominal value. EDP referred to the CERC order dated 27/01/2009 in petition No. 143/2005. This system control centre was made operational with effect from February 2003.

The lumpsum amount of Rs. 547 lakhs towards expenditure on communication, computerization etc includes 498 lakhs towards SLDC charges during 2007-08 and the amount of Rs. 548 lakhs for 2008-09 includes Rs. 494 lakhs towards SLDC charges. Other expenditure is normal A&G expenses which is quite reasonable. The Commission has obtained the actual A&G expenses during the first half year from April to September 2009, which is Rs. 440 lakhs which includes Rs. 337 lakhs towards SLDC charges. The EDP has projected the A&G expenses at Rs. 851 lakhs over the actual of Rs. 674 lakhs during the year 2008-09. The increase is about 26.26% which is very high. The A&G expenditure is a controllable expenditure and it is reasonable to provide an increase of 8% over the actuals for 2008-09. With 8% escalation the A&G expenses work out to Rs. 728 lakhs for the year 2009-10.



The Commission, accordingly approves the A&G expenses at Rs. 728 lakhs for the year 2009-10 against Rs. 851 lakhs projected by EDP.

#### 5.18 Depreciation

The ED Puducherry has projected the depreciation charges at Rs. 2108 lakhs for the year 2009-10 as detailed in the Table 35 below along the actuals for 2007-08 and 2008-09.

Table-35

#### Depreciation Projected by EDP for 2009-10

S.N	Particulars	(Rs. lakhs)		
		2007-08 (Actuals)	2008-09 (Actuals)	2009-10 (Projected)
1.	Gross block in beginning of the year	33304	36206	38630
2.	Additions during the year	2902	2424	2596
3.	Cumulative depreciation at the beginning of the year	17721	18972	20319
4.	Average rate of depreciation	3.60%	3.60%	5.28%
5.	Depreciation for the year	1251	1347	2108
6.	Cumulative depreciation at the end of the year	18972	20319	22428

The ED Puducherry has submitted that it has applied the rate of depreciation at 3.60% for 2007-08 and 2008-09 on the opening GFA of respective years and half of capital additions during the years. For the year 2009-10 the EDP has considered rate of depreciation at 5.28% in line with the rates provided in CERC (Terms and Conditions of Tariff) Regulations, 2009. The EDP has further submitted that in the absence of annual audited accounts, the asset wise details are not available and requested to approve the depreciation as projected.

#### Commission's Analysis and Decision

The EDP has arrived at the gross fixed assets to end of March 2009 at Rs. 38630 lakhs as dealt in detail in para 5.14.3 above. But the Commission has not accepted the Gross Fixed Assets as projected by EDP in the absence of Asset and Depreciation Registers.

The capital expenditure for the year 2009-10 has been projected at Rs. 8991 lakhs and it is approved at Rs. 6000 lakhs in para 5.15. Out of the proposed capital expenditure the EDP has projected Rs. 2596 lakhs for capitalization during 2009-10. The capitalization of Rs. 2596 is approved as it relates to the on going normal development schemes such as release of new services replacement of meters and

improvement of distribution network. Thus the new addition of assets during the year 2009-10 is to the extent of Rs. 2596 lakhs for which depreciation is to be provided.

Regulation 26 of the proposed Draft Regulations lays down that depreciation for generation and transmission asset shall be calculated annually at the rates specified by CERC from time to time while depreciation for distribution and other assets not covered by CERC shall be as per GOI norms of 1994 as may be revised by the Commission from time to time. The effective rate of depreciation for distribution assets is 5.28% vide Appendix – III (Depreciation schedule) of CERC (Terms and Conditions of Tariff) Regulations, 2009.

The depreciation for the year 2009-10 has been worked out at Rs. 62 lakhs as detailed in the Table - 36 below:

Table – 36

**Depreciation for 2009-10 as Approved by the Commission**

<b>S.N</b>	<b>Particulars</b>	<b>(Rs. lakhs)</b>
1.	Gross fixed assets as on 01/04/2009	
2.	Additions during the year 2009-10	2596
3.	Gross fixed assets at the end of the year 2009-10	2596
4.	Average assets	1298
5.	Rate of depreciation	5.28%
6.	Depreciation for the year	62

**The Commission, accordingly, approves the depreciation charges at Rs. 62 lakhs for the year 2009-10 against Rs. 2108 lakhs projected by EDP.**

**5.19 Interest and Finance Charges**

The EDP has projected the interest and finance charges at Rs.2359 lakhs for the year 2009-10 as detailed in the Table-37 below:

Table - 37

**Interest and Finance Charges Projected for 2009-10**

<b>S.N</b>	<b>Particulars</b>	<b>(Rs. lakhs)</b>
		<b>2009-10 (Projected)</b>
1.	Opening loan	19315
2.	Loan additions	1817
3.	Repayment	1932
4.	Closing loan	19201
5.	Average loan	19258
6.	Wt. Average interest on loan	12.25%
7.	Interest on loan	2359
8.	Guarantee fees	-
9.	Total interest and finance charges	2359

The EDP has given the gross fixed assets at 38630 lakhs as on 01/04/2009 and considered 50% of this as debt and 50% as equity and the addition of assets during 2009-10 at 70% debt and 30% equity during 2009-10. The entire capital expenditure was incurred by Government of Union Territory of Puducherry and there were no loans borrowed for the purpose. The EDP has assumed the opening loan at Rs. 19315 lakhs and addition of loans (70% of Capex) during 2009-10 at Rs. 1817 lakhs and claimed interest charges at 12.25% (weighted average interest on loan) on the notional loan outstanding. EDP has assumed that the notional loan will be repaid in 10 years. The EDP has not claimed any finance charges stating that the entire capital expenditure has been funded through equity and does not involve any external borrowings. The EDP has further submitted that in future, in case of funding of CAPEX through external borrowings the EDP would be claiming finance charges for those fiscal years.

Regulation 25 of the proposed draft regulations lays down

1. *“For existing capital, interest and finance charges on loan capital shall be computed on the outstanding loan, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreement.*
2. *“Interest and finance charges on loan capital for new investments shall be computed on the loans, duly taking into account, the rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall, however, be restricted to the prevailing Prime Lending Rate of the SBI”.*

The EDP has not borrowed any loans in the past upto 31/03/2009 and has not proposed to borrow any loans to meet the capital expenditure projected for the year 2009-10. The interest charges projected by EDP for 2009-10 are on the basis of notional loan without actually floating any loan”.

**The Commission therefore does not consider any interest and finance charges projected by the EDP for 2009-10.**

#### **5.20 Interest on Working Capital**

The EDP has projected the interest on working capital at Rs. 1685 lakhs for the year 2009-10 @ 12.25% being the SBI PLR as on 1<sup>st</sup> April 2009 as detailed in the Table 38 below.

Table - 38

**Interest on Working Capital Projected for 2009-10**

(Rs. lakhs)

S.N	Particulars	2007-08 (Normative)	2008-09 (Normative)	2009-10 (Projected)
1.	O&M expenses (1 month)	386	513	685
2.	Book value of stores, materials and supplies (1 month)	205	217	230
3.	Receivables (2 months)	8832	8801	12838
<b>4.</b>	<b>Total working capital</b>	<b>9423</b>	<b>9530</b>	<b>13753</b>
5.	Rate of interest on working capital	12.25%	12.25%	12.25%
6.	Total interest on working capital	1154	1167	1685

The EDP has submitted that interest on working capital for 2009-10 has been computed on normative basis on the following assumptions.

1. O&M expenses for one month
2. Book value of stores material and supplies for one month or maintenance spares @ 1% of the historical cost escalated @ 6% P.A. from the date of commercial operation and
3. Receivables equivalent to two months

The EDP has mentioned that it is based on the Terms and Conditions of Tariff Regulations issued by various SERCs on working capital.

Regulation 29(3) of the proposed draft JERC (Terms and Conditions of Tariff) Regulations 2009 specified that subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting

- (a) power purchase cost
- (b) employee cost
- (c) administration and general expenses
- (d) repair and maintenance expenses
- (e) sum of two months requirement for meeting fuel cost

The rate of interest on working capital shall be equal to the short term Prime Lending Rate of SBI as on 1<sup>st</sup> April of the relevant financial year.

The EDP has no generation facility and therefore no fuel cost is involved. In terms of the parameters proposed in the draft regulations the interest on working capital works out to Rs. 666 lakhs for the EDP for the year 2009-10 as detailed in the Table 39 below:

Table – 39

**Interest on Working Capital Approved for 2009-10**

(Rs. lakhs)

S.N	Particulars	2009-10
1.	One month power purchase cost	4807
2.	One month employee cost	516
3.	One month Adm & Gen. Charges	51
4.	One month R&M expenses	61
5.	Two months fuel cost	-
<b>6.</b>	<b>Total working capital</b>	<b>5435</b>
7.	Rate of interest on working capital	12.25%
8.	Interest on working capital	666

For an integrated utility the capital base as per the provisions of Sixth Schedule of repealed Electricity (Supply) Act 1948 includes working capital as well. However for the reasons mentioned in para 5.22.1 the return on capital base has not been considered in the present tariff order. However the Commission considers the interest on working capital even though the return on capital base has not been considered.

**The Commission accordingly approves the interest on working capital at Rs. 666 lakhs against Rs. 1685 lakhs projected by EDP for the year 2009-10.**

**5.21 Provision for Bad Debts**

The EDP has projected the provision for bad debts at Rs. 142 lakhs for the year 2009-10 at 0.25% of revenue from the sale of power to the consumers.

The Commission has obtained the details of category wise revenue arrears as on 31/03/2008 and 31/03/2009 which are given in the Table-40 below:

Table - 40

**Category-wise Revenue Arrears Outstanding**

(Rs. lakhs)

S.N	Particulars	Revenue arrears as on	
		31/03/2008	31/03/2009
1.	Commercial (A1)	1115	1696
2.	Domestic	1709	1738
3.	Low Tension Industries (C)	1506	2122
4.	Agriculture (D)	689	742
5.	HT consumers	4124	4592
6.	Government Departments	351	479
7.	Local bodies	1858	2154
	<b>Total</b>	<b>11352</b>	<b>13523</b>

The arrears represent 2.5 to 3 months sales revenue. The arrears need to be reduced by increasing the collection efficiency.

A fixed percentage of dues from consumers need to be maintained as a provision for meeting the debts that may turn bad.

Regulation 28 of JERC proposed draft regulations allows a provision for bad debts upto 1% of receivables after the licensee gets the receivables credited.

The arrears have not been audited. However the Commission considers a provision of 0.5% of the arrears outstanding as on 31/03/2009 other than the dues from Government Departments and local bodies. The dues from the Government Departments and local bodies can be realized with the help of Budgetary allocation from the Government budget.

The EDP is directed to get the arrears receivable from various categories of consumers audited and provide the age wise analysis to the Commission in the next ARR.

**The Commission accordingly approves the provision for bad and doubtful debts at Rs. 55 lakhs @ 0.4% of the arrears outstanding as on 31/03/2009.**

**5.22 Return on Equity / Return on Capital Base**

The EDP has claimed Rs. 3153 lakhs towards Return on Equity for the year 2009-10 as detailed in Table – 41 below:

Table - 41

**Return on Equity Projected by Electricity Department, Puducherry**

Rs. Lakhs

S.No	Particulars	2009-10
1	Opening Equity	19315
2	Equity Addition (30% of Capex for the FY)	779
3	Closing Equity	20094
4	Average Equity	19705
5	Rate of Return on Equity	16%
6	Return on Equity	3153

It is mentioned that EDP being a Government Department the entire capital employed till date has been funded through equity infusion by the Government of Puducherry through Budgetary support without any external borrowings. The EDP has arrived at the gross fixed assets as on 1.4.2009 at Rs. 38630 lakhs. The EDP

has not maintained any asset register. The entire gross fixed assets has been totally derived from the budgetary provisions of the Government of Puducherry under various plan schemes. To a query from the Commission it is clarified that no grant has been received by the Department under Rural Electrification / APDRP or other schemes. The gross fixed assets as on 31.03.1993 as per proforma accounts for the year 1992-93 was taken as basis and the addition of capex during the years 1993-94 to 2008-09 as per the budgetary provisions has been taken into consideration. Thus the EDP has arrived Rs. 38630 lakhs of GFA as on 1.4.2009. The EDP has considered a normative debt equity ratio of 50:50 and accordingly the opening equity has been put at Rs. 19315 lakhs as on 1.4.2009. The Electricity Department has proposed the capital investment / capital expenditure at Rs. 8991 lakhs for the year 2009-10 and proposed to capitalise i.e., transfer to fixed assets to the extent of Rs. 2596 lakhs during the year. EDP has assumed the debt equity ratio of 70:30 for the assets proposed to be added during 2009-10. Thus 30% of the capitalized assets of Rs. 2596 lakhs works out to 779 lakhs and this is taken as equity addition during 2009-10 and arrived at the closing equity of Rs. 20094 lakhs for the year 2009-10. The EDP has computed the Return on Equity considering the rate of return at 16% on the average equity for the financial year.

The Electricity Department has mentioned in support of 50:50 debt equity ratio that DVC was allowed normative debt equity of 50:50 for the purpose of tariff determination. The EDP has also cited that in the case of Central Power Sector undertakings (CPSUs) such as NTPC, NHPC, PGCIL etc where the actual equity deployed in the assets created prior to formulation of Tariff Regulations, was much higher than the normative debt equity ratio of 70:30 and the CPSUs were allowed a debt equity ratio of 50:50 for the purpose of determination of tariff, irrespective of the old assets.

#### **5.22.1 Commission's Analysis and Decision**

It may be mentioned here that the DVC was formed with special objectives on the lines of Tennessee Valley Corporation (TVC) and the DVC has an equity from the participating Governments i.e. Government of India, Government of Bihar and Government of West Bengal and DVC is mainly involved in power generation. Apart from equity from participating Governments, DVC has large cash reserves. In the case of CPSUs the CERC after considering the views of all the parties adopted the cost of equity approach. The CPSUs such as NTPC and NHPC are generation

corporations with adequate equity participation by Central Government, functioning under commercial principles.

In the case of Puducherry, it is an Electricity Department of Government of Puducherry and it is an integrated utility in its present form as defined in Regulation 2 (9) of the Draft Tariff Regulations. The Electricity Department is not restructured and corporatised. It is said to be under the process of restructuring. As seen from the Electricity Department website, M/S KPMG Advisory Services Pvt Ltd, Chennai have been appointed as the consultants for the power sector reforms and to draw the road map for converting the Electricity Department into a corporate body and an agreement to this effect was signed with M/S Advisory Services Pvt Ltd, Chennai on 15/06/2009. Since it is an integrated utility, till the time it remains integrated utility it shall be entitled to a return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948 vide proviso under Regulation 23 of the Draft Tariff Regulations.

The capital base is the sum of original cost of Gross Fixed Assets (net of contributions from consumers) works in progress, investment made and working capital reduced by accumulated depreciation, Government loans, approved borrowings, security deposits, tariffs and dividend control reserve. The capital base represents the funds invested by the proprietor expecting some return thereon. The specified positive items under the capital base represent all the prudent investments made by the utility (by utilizing approved funds – both utilities own funds as well as borrowed funds).

The specified negative items under the capital base generally represent investments recovered (in the form of depreciation) and the funds representing other than utility's own funds and certain approved reserves. Thus the net prudent investments made by the utility will be arrived at for the purpose of calculating reasonable return.

The reasonable return will be allowed on net capital base and certain other approved borrowings / reserves. Reasonable return is the sum of amount arrived at by applying the standard rate based on the vintage of assets, to capital base at the end of the year and certain other permissible earnings as spelt out viz 0.5% on the loans advanced by way of bonds / debentures and 0.5% on the development reserve.

The level of rate of return is different for four vintages of assets as detailed below:



1. Assets acquired upto 31/03/1965 earn a rate of return of 7%.
2. Assets acquired between 01/04/1965 to 31/03/1992 earn a rate of return of 10%.
3. Assets acquired between 01/04/1992 to 31/03/1999 earn a rate of return of 13%.
4. Assets acquired after 31/03/1999 earn 16% rate of return.

The EDP has not maintained the asset register. The Electricity Department has not prepared the statement of Accounts viz Profit and Loss Account, Balance Sheet etc. The audited proforma accounts were available for the year 1992-93 only. The Electricity Department was requested to furnish the data relating to Gross Block of assets as on 31/03/2009 with details of asset name, value and date of acquisition, date put to use, whether depreciated or written off. The EDP has not accounted for consumer contribution on service lines. The consumer contribution was combined with the security deposits from consumers and meter security deposits. The EDP has not furnished the details separately. Electricity Department Puducherry has not furnished the required details.

**In view of the above the Commission is not allowing any return on capital base till such time the asset register is prepared and the accounting statements are prepared and got audited for considering the Return on Equity or Return on Capital Base as the case may be.**

### 5.23 Non-Tariff Income

The EDP has submitted that the non-tariff income includes the collection of supervision charges, storage charges, departmental charges, cost of auctioned stores etc. the EDP projected the non-tariff income at Rs. 325 lakhs for the year 2009-10 as detailed in the Table-42 below:

Table-42

#### Non-tariff income projected by EDP for the year 2009-10

S.N	Particulars	(Rs. lakhs)		
		2007-08 (Actuals)	2008-09 (Actuals)	2009-10 (Projected)
1	Non-tariff income	269	300	325

To a query from the Commission the EDP has submitted that the following receipts have been accounted for under other receipts.

- a. Supervision charges
- b. Storage charges

- c. Departmental charges
- d. Cost of auctioned stores
- e. Sale of tender
- f. Testing charges
- g. Feasibility certificate charges
- h. Licence renewal charges
- i. Leave salary contribution
- j. Interest from security bonds

The supervision charges are the recovery of 17% of the cost of the works executed departmentally. The other items are usual non-tariff income items.

During validation of ARR data the actual other income during 2008-09 has been obtained which is in the order of Rs. 387 lakhs.

The actual supervision charges considered for the year 2008-09 under 'other receipts' was 226 lakhs. The employee cost should be reduced to the extent i.e 226 lakhs under capitalization of 'employees cost' instead of crediting the non-tariff income. The difference is 161 lakhs representing the actual non-tariff income. Assuming a 10% increase over 2008-09 actuals the non-tariff income works out to Rs. 177 lakhs for the year 2009-10.

EDP is directed to maintain the non tariff income component wise as laid down under Regulation 33 of the proposed Draft Tariff Regulations and furnish the component wise details from next ARR onwards.

**The Commission accordingly approves the non-tariff income at Rs. 177 lakhs for the year 2009-10 against Rs. 325 lakhs projected by the EDP.**

#### **5.24 Revenue from Existing Tariff**

The EDP has furnished the revenue from existing tariff at Rs. 56973 lakhs for the year 2009-10. The power available as per entitlement from CGS and others is, more than the energy requirement based on the category wise energy demand (sales) arrived at for the year 2009-10. There is excess energy available from CGS and others over and above the category wise energy demand. The expected revenue from the existing tariff on the basis of sales approved by the Commission including sales outside the state works out to Rs. 58540 lakhs as given in the Table 43 below:

Table -43

**Revenue with Existing Tariff 2009-10**

S.N	Category/ sub category	No. of Consumers	Contracted MD (Kva) (Billed)	Sales (lakhs units)	Total Revenue with existing tariffs (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)	(6)
<b>I</b>	<b>High Tension</b>				
1	HT Category I (A)	338	160926	4289	14083
2	HT I - B	41	145362	5451	17705
3	HT Category II	40	15270	270	787
4	HT Category III	6	90650	2600	8803
	<b>HT Total</b>	<b>425</b>	<b>412208</b>	<b>12610</b>	<b>41378</b>
<b>II</b>	<b>Low Tension</b>				
1	Domestic	228555		4529	3758
2	Public Lights	47686		180	312
3	Commercial	40539		1590	4564
4	Agriculture	8960		480	47
4	LT industrial	5828		1413	3410
5	Water tank C-2	57		67	121
6	OH. OB	41200		141	0.00
	<b>Total LT</b>	<b>372825</b>	<b>0</b>	<b>8400</b>	<b>12212</b>
<b>III</b>	Outside State Sales			1650	4950
	<b>Grand total</b>	<b>373250</b>	<b>412208</b>	<b>22660</b>	<b>58540</b>

The revenue from sales out side the State is considered at Rs. 3.00/kWh as the surplus power is available mostly during off peak hours.

**The Commission accordingly approves the revenue from existing tariff and sales out side the state at Rs. 58540 lakhs for the year 2009-10.**

### 5.25 Revenue Requirement

The summary of the revenue requirement of the Electricity Department, Puducherry for the year 2009-10 as analyzed in the preceding paragraphs is given in the Table 44 below.

Table - 44

**Revenue requirement for the year 2009-10**

(Rs. lakhs)

<b>S.N</b>	<b>Particulars</b>	<b>Proposed by the EDP</b>	<b>Approved by the Commission</b>
1.	Cost of power purchase	61408	57681
2.	Employee cost	6684	6191*
3.	Repairs & maintenance expenses	683	616
4.	Administration & general expenses	851	728
5.	Depreciation	2108	62
6.	Interest and finance charges	2359	-
7.	Interest on working capital	1685	666
8.	Provision for bad debts	142	55
9.	Return on equity / capital employed	3153	-
<b>10.</b>	<b>Total Revenue Requirement</b>	<b>79073</b>	<b>65999</b>
11.	Less: Non tariff income	325	177
<b>12.</b>	<b>Net Revenue Requirement</b>	<b>78748</b>	<b>65822</b>
<b>13.</b>	<b>Revenue from existing tariff</b>	<b>56973</b>	<b>58540</b>
<b>14.</b>	<b>Gap for 2009-10 (12-13)</b>	<b>21775</b>	<b>7282</b>
<b>15.</b>	<b>Sales (Lakh units)</b>	<b>22669.3</b>	<b>22660</b>
<b>16.</b>	<b>Average cost (Rs./kWh)</b>	<b>3.47</b>	<b>2.90</b>

\* Net after capitalization

It can be seen from the above the revenue gap for the year 2009-10 is Rs. 7282 lakhs against the gap of Rs. 21775 lakhs projected by the Electricity Department, Puducherry.

## 6. Power Purchase Cost Adjustment

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**6.1** Electricity Department, Puducherry (EDP) depends for its power requirements entirely on Central Power Generating Stations, TNEB, KSEB and PPCL and purchases power from these sources. EDP has no control over any increase in price of the power from these sources due to any increase in fuel and other costs. The commission is of the view that any increase in power purchase costs on account of increase in fuel and other costs has to be passed over to the consumer as per approved formula.

The approved power purchase cost adjustment(PPCA) formula is given below:

$$\text{PPCA (per/kWh)} = \frac{\text{QPP}(\text{RPP}_2 - \text{RPP}_1)}{\text{QPP} \times (\text{I} - \text{L}) - \text{PSE}}$$

Where:

QPP= Quantum of power purchase from different sources and fed to EDP system (in MUs)

RPP<sub>1</sub> = Average rate of power purchase as approved by the Commission (in Rs./kWh)

RPP<sub>2</sub> = Average rate of power purchase during the adjustment period (in Rs./kWh)

L = T&D loss as provided by the Commission or actual whichever is lower

PSE = Power sold to exempted categories.

The approved (PPCA) formula is subject to the following conditions.

- (i) The basic nature of PPCA is 'adjustment' i.e. passing on the increase or decrease, as the case may be.
- (ii) The operational parameters / norms fixed by the Commission in this tariff order shall be the basis of calculating PPCA charges.

- (iii) Incremental cost of power purchase due to deviation in the allocation of power, power purchase at higher rate, etc., shall be allowed only, if it is justified to the satisfaction of the Commission.
- (iv) Any cost increase by the EDP by way of penalty interest due to delayed payment etc., and due to operational inefficiency shall not be allowed.
- (v) PPCA charges shall be levied on all categories of consumers, except one-hut-one bulb and agricultural consumers.
- (vi) The data in support of PPCA claims shall be duly authenticated by an officer of the EDP not below the rank of Superintending Engineer.
- (vii) Variation of PPCA charge will be allowed only when it is five (5) paise and more per unit.
- (viii) The PPCA charges shall be revised by the EDP for the first time after six months from the date of implementation of the order and every six months thereafter.
- (ix) The approved formula is subject to review as the Commission may deem fit.

## 7. Directives

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ARR and Tariff Petition for FY 2009-10 and supporting data that has been filed by Electricity Department, Puducherry (EDP) shows that EDP neither maintained separate accounts and asset register for the Electricity Business nor got them properly audited. Further the operational and financial performance requires considerable improvement in order to reduce costs.

In this context the Commission issues the following directives to EDP within the parameters of Section 61 of the Electricity Act, 2003, stipulates that the Commission shall be guided by the factors which would encourage competition, efficiency, economical usage of resources, grid performance and optimum investment in specifying the terms and conditions for determination of tariff. Therefore, to ensure proper accounting audit and efficient performance to optimize resource use, the Commission issues the following directives:

### **Directives**

#### **1. Annual Statement of Account**

Electricity Department, Puducherry has not prepared the accounts for the Electricity Department separately. Electricity Business being come under Regulation under Electricity Act, 2003, the accounts pertaining to Electricity Business are required to be prepared separately and got audited. The Department is directed to prepare "Accounting Statement" which includes balance sheet, profit and loss account, cash flow statement, report of the auditors, cost records etc., together with notes and such other supporting statements and submit the same along with the next ARR and Tariff Petition.

The Commission will not accept ARR and Tariff Petition from EDP without the Audited Annual Statement of Accounts.

## **2. Preparation of Asset and Depreciation Registers**

Electricity Department, Puducherry has mentioned that in the absence of audited annual accounts the asset wise details are not available and the block wise details are being assimilated and will be made available in the future filings. Similarly the Electricity Department has not maintained the depreciation register. The department has taken the proforma accounts of 1992-93 as base and the capital expenditure additions during the years 1993-94 to 2008-09 and applied the prevailing depreciation rates to the entire capital expenditure without taking into consideration, whether the assets exist, are in useful condition, are used for the electricity business and the assets have not been completely depreciated etc.

The Electricity Department is directed to arrange for the preparation of Asset and the Depreciation Registers function wise and asset classification wise.

Till such time the above registers are prepared and got audited it is not feasible for the Commission to consider the gross fixed assets and accumulated depreciation for Return on Equity or Return on Capital Base in accordance with the Draft Tariff Regulations.

## **3. Accounting of Security Deposits etc. under appropriate head of accounts**

Electricity Department, Puducherry has combined the security deposits, meter security deposits and consumer contribution for service lines from the consumers under one account head. The EDP is directed to separate these components and account them separately under relevant heads of account.

## **4. Transmission and Distribution Losses**

Electricity Department has projected the transmission and distribution losses at 14% for the year 2009-10. It is observed that two categories of consumers are being supplied un-metered electricity. This fact also has a bearing on accuracy of losses being reported. It is considered that this loss level for a small distribution system is high and there is scope for reduction of losses. Since EDP operates small areas it is possible to reduce T&D losses from the existing 14% during 2010-11. The EDP is directed to get a study of the distribution system of EDP conducted by a third party with the approval of the Commission so that appropriate loss trajectory could be fixed.



Electricity Department, Puducherry shall get energy audit conducted by a third party at 11kV feeder and distribution transformer levels to identify the high loss areas and take steps to reduce the technical loss and control pilferage of energy. The deemed licensee shall also furnish six monthly energy audit report to the Commission as required under Regulation 15(4) of the Draft Regulations.

Effective steps are required to be taken to segregate technical and commercial losses and reduce the losses.

#### **5. Metering of Consumers**

Under Section 55 (1) of Electricity Act 2003, no licensee shall supply electricity after expiry of two years from the appointed date except through installation of a correct meter in accordance with the regulations to be made in this behalf by the Authority. Accordingly metering is required to be done in line with Central Electricity Authority (Installation and Operation of Meters) Regulations 2006.

Electricity Department, Puducherry is directed to provide meters to all such consumers such as one hut one bulb, agriculture etc. who are not metered for supply of electricity at present. As the number of consumers under these two categories are not many, they may be metered to record energy consumption correctly.

The present status of metering and action plan for metering the unmetered consumers shall be reported to the Commission before 30<sup>th</sup> June 2010.

#### **6. Estimation of the Consumption by Agriculture Pump Sets**

Electricity Department, Puducherry has not furnished the basis for arriving at the estimated consumption of Agriculture category of the consumers. EDP shall obtain the actual connected load particulars of Agricultural connection and submit the same to the Commission.

Wherever possible, lines predominantly feeding agricultural connections shall be segregated from other loads and metered to assess agricultural consumption at agricultural feeder level as well as consumer level.

#### **7. Management Information System (MIS)**

Electricity Department, Puducherry is directed to take steps to build credible and accurate data base and management information system to meet the requirements for filing ARR & Tariff Petition as per regulatory requirement and also to suit the Multi

Year Tariff Principles which the Commission may consider at the appropriate time under Regulation-11. The formats software and hardware may synchronize with the Regulatory Information and Management System (RIMS) circulated by Central Electricity Regulatory Commission (CERC).

### **8. Billing and Collection Efficiency**

The billing efficiency is about 86% and the collection efficiency is less than 95%. There is scope for increasing the billing and collection efficiency.

Electricity Department, Puducherry is directed to initiate measures to improve the billing efficiency in respect of metered services and collection efficiency to hundred percent in a time bound manner.

### **9. Collection of Arrears**

Electricity Department, Puducherry is having substantial arrears outstanding from various categories of consumers. The arrears are of the order of Rs 135.26 crores as on 31-03-2009. The arrears amount is equal to about 3 months sales revenue, which affects the cash flow of the utility.

Electricity Department, Puducherry is directed to provide age-wise analysis before the next ARR and initiate measures to liquidate the arrears by 31.12.2010.

### **10. Load Shedding**

Electricity Department, Puducherry is directed to minimize load shedding. EDP shall obtain the prior approval of the Commission if any load shedding is planned. If there are any constraints in the system such as over loading of lines or power transformers a detailed project report has to be prepared immediately to improve the system. The department should provide uninterrupted power supply as per Supply Code & SOP to the extent possible at the stipulated voltage in accordance with standards notified by the Commission.

### **11. Organizing the Mahe, Karaikal, Puducherry and Yanam Regions as Cost Centres**

All the four regions of EDP distribution wing shall be organized as cost centers and they shall be accountable for (i) energy accounting viz., energy drawn and billed, distribution losses etc., (ii) Metering (iii) Meter reading, billing and revenue collection.

Electricity Department, Puducherry is directed to draw out an action plan to organize the region-wise cost centers to make them accountable for their performance and submit it to the Commission by 30.9.2010.

**12. Replacement of Non-functional / Defective Meters and old Electro-magnetic meters**

The non-functional / defective meters existing in the EDP distribution system contribute to losses of the system.

Electricity Department, Puducherry is directed to report to the Commission by 30.06.2010 details of such defective meters category-wise in the system as on 31.12.2009, with an action plan to replace them.

**13. Qualify of Power Supply and Service to Consumers**

Electricity Department, Puducherry is required to provide quality power supply to all consumers at acceptable voltage and with minimum interruptions. EDP shall strengthen system wherever necessary. The EDP shall establish Consumer Service Centers wherever required to attend to consumer complaints promptly on interruptions of power supply, billing etc., in order to improve service to consumers.

**14. Demand Side Management and Energy Conservation**

Demand side management and energy conservation are important areas, which should be in focus in the EDP, particularly, in the context of peak load. Time of Day tariff is one of the measures, which could be implemented to control the peak demand. EDP is directed to examine the feasibility of introducing ToD tariff to consumers

The other measures that could be implemented to reallocate and rationalize demand and conserve energy are promoting awareness towards use of CFL lamps by the consumers. EDP shall educate the consumers by way of demonstration, holding meetings at various levels and through electronic and print media in order to promote demand side management and energy conservation measures by way of using energy efficient lights. EDP shall install capacitors at 110 kV and 33 kV substations and also for agricultural pumpsets to meet the reactive power requirements of the system.

**15. Pilferage of Energy**

Pilferage of electricity by various categories of consumers by illegal tapings from electric lines, tampering of meters etc., result in enormous loss of revenue to the EDP. The Commission feels that there is need to launch an extensive drive to revoke illegal connections, if any, check meter tampering and also to keep constant vigil in this regard which will result in reduction of AT&C losses. Requisite action under Sections 135 and 138 of Electricity Act, 2003 is required to check pilferage in a time bound manner.

Electricity Department, Puducherry is directed to furnish an action plan on this.

**16. Developing each Regional System as a Standalone System**

Puducherry consists of four territories namely, Yanam, Karaikal, Puducherry and Mahe. All the territories are geographically separate and are having independent distribution system being supplied power from different sources. A study shall be conducted by EDP for feasibility to operate these areas as standalone systems with their own tariff and submit to the Commission by 31.12.2010. while conducting the study the feasibility of supply of power from central generating station to Mahe as in the case of Yanam may be examined.

**17. Employee Cost**

As per information made available by EDP on deployment of manpower on O&M work and Administration EDP is directed to have a look at the employee strength its relative deployment and rationalize the staff requirement to reduce the manpower and the related costs. A study may be conducted on the manpower in EDP and see to what extent the manpower could be rationalized / reduced.

A report shall be submitted to the Commission before November 2010.

**18. Establishment of Forum for Redressal of Grievances of Consumers**

Commission has issued (Establishment of Forum for Redressal of Grievances of Consumers) Regulations, 2009 for establishment of the Forum to address the grievances of consumers.

Electricity Department, Puducherry is directed to establish the Forum immediately as per the guidelines issued by the Commission in the above Regulations and Operationalise CGRF and publicize its address and contact numbers through the bills and various other means. EDP is directed to intimate the action taken in establishment of Forum for Redressal of Grievances of Consumers before 31<sup>st</sup> March 2010.

**19. Adjustment of Interest on the required fixed deposit made by the consumer towards monthly electricity charges.**

EDP is directed to examine whether the consumers whose monthly bill is Rs.500 per month are above can deposit the required amount as fixed deposit so that the interest against this deposit can be adjusted towards the monthly electricity charges to be paid by that consumer.

A report shall be submitted to the Commission before June 2010.

## **8. Tariff Principles, Tariff Proposed by EDP and Approved by the Commission**

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### **8.1 Introduction: Tariff Principles**

8.1.1 In determining the annual revenue requirement of EDP and the retail supply tariff for the year 2009-10, the Commission is guided by the provisions of the Electricity Act 2003 and the draft Regulations of the Commission. The Commission has circulated the draft Regulations on "Terms and Conditions for Determination of Tariff" and comments are invited. The regulations will be notified shortly. Section 61 of the Electricity Act lays down the broad principles which should guide the determination of retail supply tariff. These principles are that the tariff should "progressively reflect cost of supply of electricity" and also "reduce cross subsidies" within a period to be specified by the Commission. The Act lays special emphasis on safeguarding of consumer's interest and also requires that the costs should be recovered in a reasonable manner.

The Act mandates that the tariff determination should be guided by factors, which "*encourage competition, efficiency, economical use of resources, good performance and optimum investment*". The NTP provides comprehensive guidelines for determination of tariff as also working out the revenue requirements of power utilities. The Commission would follow these guidelines as far as possible.

8.1.2 The NTP mandates that the Multi Year Tariff (MYT) framework be adopted for determination of tariff from 1<sup>st</sup> April 2006. However the Commission is not in a position to introduce MYT regime in the Union Territory of Puducherry mainly because of lack of requisite data. The present MIS and regulatory reports of EDP are totally inadequate for such an exercise. Under these circumstances it would not be practicable to implement the MYT framework. The Commission will introduce MYT immediately once the requisite data for minimum appropriate period is available.

8.1.3 The Commission has considered the average cost of supply in the absence of relevant data for working out consumer category wise cost of supply.

## **8.2 Tariff approved by the Commission**

8.2.1 The following is considered while arriving at category-wise tariff.

8.2.2 The Commission approves annual revenue requirement of Rs.65999 lakhs only. The average cost of supply has been arrived at Rs.2.90 per unit. The retail supply tariffs were last revised in the year 2002 by the Government of Puducherry.

8.2.3 The existing consumer categories along with their sub-categories / slabs shall continue.

8.2.4 The following categories (i.e.)

- Public lights, and
- Water tank

shall pay a tariff which is equal to the average cost of supply.

8.2.5 HT category-II shall pay the tariff as recommended by EDP in their petition.

8.2.6 The One Hut One Bulb(OHOB) category shall pay Rs.15/- per month, which is 17.2% of the average cost of supply. Electricity Department, Puducherry shall ensure minimum supply as per National Electricity Policy guidelines to this category.

8.2.7 The tariff for the category of farmers shall be Rs.25/HP per annum and Rs.100/HP per annum for small and other farmers respectively.

8.2.8 The balance amount of ARR after deducting the amount on account of categories mentioned at para 8.2.4, 8.2.5,8.2.6 and 8.2.7 above be apportioned among balance categories in the ratio of their present share in the existing revenue.

8.2.9 The ratio between demand charges and energy charges as existing in a category of consumers shall continue to be the same.

8.2.10 The temporary supply rates shall be as proposed by EDP in their proposal.

The tariff rates category-wise as proposed by Electricity Department, Puducherry are given in Table-45 below:

Table-45

## The category-wise tariff existing and proposed by EDP

Sl.No.	Category/ sub-category	Energy Charges		Demand Charges	
		Existing energy charges (P/ kWh)	Proposed energy charge tariff (Ps/kWh)	Existing Demand charges (Rs. / kVA/PM or Rs. per consumer PM)	Proposed demand charges tariff (Rs./kVA/PM or Rs.per consumer PM)
1	2	3	4	6	7
<b>I</b>	<b>High Tension</b>				
<b>1</b>	<b>HT Category I (A)</b>				
a)	Upto 1lakh units	260	345	135	205
b)	Above 1 lakh units	275	355	135	205
<b>2</b>	<b>HT I - B</b>				
	All units	280	355	140	210
<b>3</b>	<b>HT Category II</b>				
	All units	210	285	120	190
<b>4</b>	<b>HT Category III</b>				
	All units	280	355	140	210
<b>II</b>	<b>Low Tension</b>				
<b>1</b>	<b>Domestic</b>			0	
	OH. OB				15/PM/con.
a)	0-100 units	55	90	0	0
b)	101-200 units	80	130	0	0
c)	201-300 units	145	225	0	0
d)	Above 300 units	175	300	0	0
<b>2</b>	<b>Public Lights</b>	175	350	0	0
<b>3</b>	<b>Commercial</b>				
a)	0-100	190	350	20	20
b)	101-250	280	350	20	20
c)	Above 250	325	400	20	20
<b>4</b>	<b>Agriculture</b>				
a)	Small Farmers			0	50/HP/A
b)	Other Farmers			75/HP/A	150/HP/A
<b>4</b>	<b>LT industrial</b>				
a)	0-1000	230	330	20	20
b)	Above 1000	250	375	20	20
<b>5</b>	<b>Water tank C-2</b>	180	350	25	25

## TEMPORARY SUPPLY

Sl. No.	Category	Energy charges Proposed by EDP	Minimum charges Proposed by EDP
(a)	Lights or combined installation of lights and fans, Motive Power, Heating and others.	Entire consumption 500 paise per unit	Rs.120 per service per month
(b)	Special Illumination	Entire consumption 800 paise per unit	Rs.300 per service per month
(c)	Construction and testing purpose for load exceeding 130 HP or 97 KW	Entire consumption 500 paise per unit	As in High tension-I

The tariff rates category-wise as approved by the Commission are given in the Table-46 below:



Table-46

## Category-wise tariff approved by the Commission

Sl.No.	Category/Sub-category	Energy charges Approved by Commission (Ps/kWh)	Demand charges Approved by Commission		
			Demand charges Rs./kVA	Service charges Rs./month	Fixed charges Rs./HP/annum
<b>I</b>	<b>High Tension</b>				
<b>1</b>	<b>HT Category I (A)</b>				
a)	Upto 1lakh units	<b>295</b>	<b>155.00</b>	-	-
b)	Above 1 lakh units	<b>310</b>	<b>155.00</b>	-	-
<b>2</b>	<b>HT I - B</b>				
	All units	<b>315</b>	<b>160.00</b>	-	-
<b>3</b>	<b>HT Category II</b>				
	All units	<b>290</b>	<b>155.00</b>	-	-
<b>4</b>	<b>HT Category III</b>				
	All units	<b>285</b>	<b>190.00</b>	-	-
<b>II</b>	<b>Low Tension</b>				
<b>1</b>	<b>Domestic</b>			<b>15.00</b>	-
	OH. OB				
a)	0-100 units	<b>60</b>	-	-	-
b)	101-200 units	<b>90</b>	-	-	-
c)	201-300 units	<b>165</b>	-	-	-
d)	Above 300 units	<b>200</b>	-	-	-
<b>2</b>	<b>Public Lights</b>	<b>290</b>	-	-	-
<b>3</b>	<b>Commercial</b>				
a)	0-100	<b>215</b>	-	<b>25.00</b>	-
b)	101-250	<b>315</b>	-	<b>25.00</b>	-
c)	Above 250	<b>365</b>	-	<b>25.00</b>	-
<b>4</b>	<b>Agriculture</b>				
a)	Small Farmers		-	-	<b>25.00</b>
b)	Other Farmers		-	-	<b>100.00</b>
<b>4</b>	<b>LT industrial</b>				
a)	0-1000	<b>260</b>	-	-	<b>25.00</b>
b)	Above 1000	<b>280</b>	-	-	<b>25.00</b>
<b>5</b>	<b>Water tank C-2</b>	<b>290</b>	-	-	<b>25.00</b>

## TEMPORARY SUPPLY

Sl.No.	Category	Energy charges Approved by the Commission	Minimum charges Approved by the Commission
(a)	Lights or combined installation of lights and fans, Motive Power, Heating and others.	Entire Consumption: 500 paise per unit	Rs.120 per service per month
(b)	Special Illumination	Entire Consumption: 650 paise per unit	Rs.300 per service per month
(c)	Construction and testing purpose for load exceeding 130 HP or 97 KW	Entire Consumption 500 paise per unit	As in High tension-I

## COMMISSION'S ORDER

Having considered the petition of Electricity Department, Puducherry (EDP) approval of Annual Revenue Requirement (ARR) and determination of retail tariffs, the Commission approves the Annual Revenue Requirement (ARR) and the Retail Tariff for EDP.

- 1.0 The break-up of the Annual Revenue Requirement approved for EDP for the year 2009-10 is given below:

		(Rs. lakhs)
Sl. No.	Details	Year 2009-10
1	Power purchase cost	57681
2	Employees cost	6191
3	Repairs and maintenance expenses	616
4	Administrative and general expenses	728
5	Depreciation	62
6	Interest and finance charges	-
7	Interest on working capital	666
8	Provision for bad debts	55
9	Return on equity / capital base	-
10	Total revenue requirement	65999

- 2.0 The approved Retail Tariff will be in accordance with Tariff Schedule annexed to this Order.

The order shall come into force with effect from \_\_\_\_\_ February, 2010.

Sd/-

\_\_\_\_\_  
**R. K. SHARMA**  
Member

Sd/-

\_\_\_\_\_  
**Dr. V. K. GARG**  
Chairman

## **TARIFF SCHEDULE**

### **TARIFF FOR SUPPLY OF ELECTRICITY AT LOW TENSION AND HIGH TENSION**

#### **GENERAL**

1. The tariff figures indicated in this tariff schedule are the tariff rates payable by the consumers of Union Territory of Puducherry.
2. These tariffs are exclusive of electricity duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time.
3. All these tariffs for power supply are applicable to only one point of supply.
4. The charges specified are on monthly basis. The licensee may decide the period of billing and adjust the tariff rate accordingly.
5. Except in cases where the supply is used for the purpose for which the licensee has permitted lower tariff, the power supplied to any consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff.
6. The above is without prejudice to the rights of JERC for the State of Goa and Union Territories to determine different tariffs for such consumers as it may consider it expedient under the provisions of Section 61 and 62 of the EA, 2003.
7. The power purchase cost adjustment charges (PPCA) shall be applicable on approval from the Joint Electricity Regulatory Commission for the State of Goa and Union Territories.

**A. LOW TENSION SUPPLY****Domestic Purposes****1.0 Domestic Purposes (A2)****1.1 This tariff is applicable to services for lights, fans, Air-conditioning, Heating and other small domestic appliances etc used for:**

- a) Genuine domestic purposes including common services for stair-case, lifts, water tanks with motor not exceeding 3 H.P in the domestic apartments.
- b) Supply to actual places of public worship such as temples, mosques, churches.
- c) Ashrams and Mutts, Non-commercial orphanage homes and old people homes run by religious and charitable institutions, social welfare and voluntary organisations.
- d) Youth hostels, Harijan hostels, Rehabilitation Centres, Anganwadies and Balwadies run by Social Welfare Department.
- e) For own residences where one room is set apart for the purpose of consultation by doctors, lawyers, engineers, architects and auditors.
- f) To handloom in residence of handloom weavers (regardless of the fact whether outside labour is employed or not) and to handloom in sheds erected.
- g) To the residences where supply from a house is extended to tailoring shops, Job typing, document writing, Laundry pressing, and small caterers set up in the verandah of the house with small lighting load only (one tube light only).

**1.2 The energy charges for Domestic Service are as indicated in the table below.**

<b>Consumption</b>	<b>(Rate/unit/month)</b>
0 – 100 units per Month	60 paise per unit
101-200 units per Month	90 paise per unit
201 – 300 units per Month	165 paise per unit
Above 300 units per Month	200 paise per unit

**1.3 Minimum Charges : Rs.15.00 per month per service****Note:**

1. In areas where spot billing is not done, flat rate payment system for domestic consumers is being followed. Efforts are being made by the department to do away with this mode of billing once all such consumers are covered under spot billing system which shall be completed within a period of 3 months.

2. The scheme for concessional supply to Domestic Consumers with Energy Consumption not exceeding 75 units per month is now withdrawn.
3. If separate service connection exists for Air-conditioners, Lifts, and Water Motors provided in the residences, this shall be discontinued and merged with the already existing domestic services within three months.

## 2.0 Hut Services (A3)

- 2.1 For supply to bonafide hut services with only two numbers of 40 W Florescent Tube lights.
- 2.2 The energy charges for hut service (OBOH) are as indicated in Table below:

Description	Fixed Charges
Hut Services	Rs. 15.00 per connection per month

### Note:

- (1) Hut is defined as a living place not exceeding 300 sq. ft. or 27.87 sq.m. with mud wall/brick wall or thatched wall and thatched roof only. Hut does not include farm huts. If any of the conditions is changed at a later stage, this concessional supply will be discontinued and the consumer will have to take metered supply.
- (2) The tariff under this item is also applicable for houses constructed for economically weaker sections under the "Chief Minister's 5000 houses programme" and houses constructed by the District Rural Development Agency under Indira Awaas Yojana and by the Adi Dravidar Welfare Department having a living space not exceeding 300 sq. ft. or 27.87 sq.
- (3) The consumer under this category should use only two numbers of 40 watts florescent tube lights. He should not use bulbs/tube lights of higher wattage or connect any other electrical equipment/ appliances other than those mentioned above. Supply from such services should not be tapped for any other purposes including functions , public meetings and also for neighboring huts. If at any time, any unauthorized load or extension, use of higher wattage bulbs or use of service for other purposes is detected, the service will be disconnected forthwith.

## 3.0 Commercial (A1)

- 3.1 This tariff is for Lights and combined installation of lights and fans, mixed loads of lights and power, heating and air-conditioning applicable to:
  - a) Non-domestic and non-industrial consumers, trade and commercial premises.
  - b) Educational institutions, hostels, public libraries.

- c) Hotels, Restaurants, Boarding and Lodging Homes
- d) Hospitals, Private clinics, Nursing Homes, Diagnostic Centres, X-ray Units etc.
- e) IT related development Centres and Service centres.
- f) Common services for Stair-case, lifts, water tanks with motor not exceeding 5 H.P etc in the purely commercial / combination of commercial and domestic.

3.2 The energy charges are as indicated in the table below:

<b>Consumption</b>	<b>(Rate/unit/month)</b>
0-100 units per month	215 paise per unit
101-250 units per month	315 paise per unit
Above 250 units per month	365 paise per unit

**3.3 Minimum Charges : Rs. 50.00 per month per service**

**3.4 Service Charges : Rs. 25.00 per month per service**

**Note:**

1. Separate services extended for Air-Conditioners, lifts and other power loads such as water motors are proposed to be merged into the existing service and billed as a single service within a period of three months.

**4.0 Agricultural Services (D)**

**Agriculture/Cottage Industries, etc.**

**4.1 Agriculture (D1)**

For supply to bonafide Agricultural Services with a connected load of not less than 30 HP per service.

<b>Description</b>	<b>Fixed Charges</b>
Small Farmers	Rs. 25.00 per HP per annum
Other Farmers	Rs. 100.00 per HP per annum plus Service charges Rs.200 per service per annum

The earlier option of charging other farmers at Rs. 0.19 per unit is to be discontinued.

**Note:**

1. Electricity will be supplied under the tariff category "Small farmers" to those consumers whose families are solely dependent on the income derived from their agricultural land holding, which should not exceed two and half acres of wet land

or five acres of dry land. A certificate to this effect from Revenue authority shall be produced. "Small farmer means a person whose total holding, whether as owner, tenant or mortgaged with possession or partly in one capacity and partly in another, does not exceed two-and-a half acres of wet lands or five acres of dry land. In computing the extent of land held by a person who holds both wet and dry lands, two acres of dry land shall be taken as equivalent to one acre of wet land.

2. The above concession will be withdrawn if resale of energy or unauthorized load / extension or use for other purpose is detected by the Department.
3. Agricultural power loads below 3 H.P. will be charged under General Category Tariff A1. A bonafide farmer may use his motor in the Agricultural Service for allied agricultural purposes such as sugarcane crushing, thrashing etc. with the prior approval of concerned Executive Engineer (Operation & Maintenance), Electricity Department.
4. However, power supply to Farm Houses shall be metered separately and charged under Domestic tariff.

#### **Payment of Tariff Charges by Agriculture consumers**

- (1) The Tariff shall be collected in three equal installments payable in April, August and December in each year. The installments shall be payable before the 15th of the respective months. The service charges of Rs 200 per annum shall also be collected in three installments of Rs. 75, Rs. 75 and Rs. 50 along with installment of flat rate in April, August and December months.
- (2) For new service, the first installment shall be proportionate to the number of whole months remaining till the month in which the first installment is due. Fraction of a month shall be reckoned as a whole month.

**4.2 Cottage Industries / Horticulture / Poultry Farms (D2):** It is applicable to cottage industries, private Horticultural nurseries including Plant tissue culture media and bona fide poultry farms.

The energy charges are as indicated in the table below:

<b>Description</b>	<b>Energy Charges</b>
Cottage Industries	Tariff rates as applicable in case of Domestic Consumers
Horticulture	
Poultry Farms	

**Note:**

**(a) Cottage industries**

The following conditions should be satisfied in order that an industry may be classified as a bona fide cottage industry:

- (1) It should be conducted entirely within the home, the home being deemed to be permanent residence of the proprietor.
- (2) The industry shall not cause any residence to constitute a factory within the meaning of the Factories Act, 1948.
- (3) Not more than two persons outside the immediate family of the proprietor shall be employed in the factory.
- (4) It should be certified by the Director of Industries that the industry for which power is used is a cottage industry.
- (5) The produce is not purely utilized mainly for the domestic consumption of the proprietor but should also be available for sale to the public.

**(b) Poultry farms**

The following conditions should be satisfied in order that the service may be classified as a bona fide poultry farm.

- (1) The capacity of the farm shall be a minimum of 100 birds and maximum of 5,000 birds (both layer and broiler birds).
- (2) The application of the beneficiary seeking such concession shall be verified and recommended by the Animal Husbandry Department.

**(c) Horticultural**

- (1) The applications of the beneficiary seeking such concession shall be verified and recommended by the Director, Agriculture Department.

**5.0 Public lighting**

**5.1** The tariff for public lighting (exclusive of installation, renewal charges, etc.) shall be as follows:

Description	Energy Charges (Rate/unit/month)
Public Lighting (Entire Consumption)	290 paise per unit

**5.2** This tariff will also apply to public lighting in markets, bus stands, traffic signals, high mast lights on public ways, public parks, public lighting in notified industrial estates.



**6.0 Industrial (C)****6.1 LT Industrial (C1)**

Applicable to low tension industrial consumers including lighting in the industrial services except those mentioned in Tariff 'C2' category.

6.2 The energy charges are as indicated in the table below.

<b>Consumption</b>	<b>(Rate /unit/month)</b>
(i) Upto 1000 units per month	260 paise per unit
(ii) Above 1000 units per month	280 paise per unit

**Minimum Charges : Rs. 60.00 per HP per month**

**Service Charges : Rs. 25.00 per service per month**

**Note:** The existing services under the tariff categories A1, A1(II) and C1 + 20 effected for the offices located within the premises of the industrial service will be dispensed within three months and shall be charged alongwith the Industrial service under tariff category C1 as a single service. Till such time, the energy consumption under these categories shall be considered under A1 category.

**6.3 LT Industrial (C2)**

Applicable to water tanks including lighting in the premises maintained by State Government Departments / Undertakings and Local Bodies.

6.4 The energy charges are as indicated in the table below.

<b>Description</b>	<b>(Rate/unit/ month)</b>
<b>Water Tank C2</b> Entire Consumption	290 paise per unit

**Minimum Charges : No Minimum Charges**

**Service Charges : Rs. 25.00 per service per month**

**Note:**

Separate services existing for lighting purpose shall be merged with the existing tariff category C2 service within a period of three months.

**B. HIGH TENSION SUPPLY****7.0 High Tension - I**

7.1 Applicable to industrial and commercial establishments, registered factories, Laboratories telephone exchanges, Broadcasting and other establishments other than those coming under the category "High tension II & III" under the heading "High Tension Supply".

7.2 The Demand and the Energy Charges are as indicated in the table below

Description	Charges
<b>(I) HT (I) (a) – For Contracted Demand of 2000 KVA &amp; less</b>	
1. Demand Charges	Rs. 155.00 per KVA per month
2. Energy Charges	
Upto 100000 units	295 paise per kWh
Above 100000 units	310 paise per kWh
<b>HT (I) (b) – For Contracted Demand greater than 2000 &amp; less than or equal to 5000 KVA</b>	
1. Demand Charges	Rs.160 per kVA per month
2. Energy Charges (Entire consumption)	315 paise per kWh

7.3 The above tariff is subject to a monthly minimum payment of three-fourth times the demand charges for the contracted load in KVA.

7.4 The billing demand shall be the maximum demand recorded during the month or 75% of contracted demand whichever is higher. If in anyone month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand will be billed at double the normal rate.

**Note:****I. Supply Voltage**

The supply voltage for HT consumers upto 5000 KVA will be 33kV, 22 KV or 11 KV as the case may be. New High Tension consumers who want to avail a maximum demand above 5000 KVA or existing High Tension consumers who want to enhance their demand to the above level should avail power only at 110 KV or 132 KV as the case may be. In case the existing consumers whose sanctioned demand exceeds the above limit of 5000 KVA at 33kV, 22 KV or 11 KV as the case may be, the consumer shall be charged an extra levy over and above the normal tariff at double

the normal tariff rate for the energy consumed in excess, calculated on the basis of 500 units per KVA over the excess demand.

**II. Seasonal demand**

For loads strictly seasonal in character, the main plant is regularly totally closed down during certain months in the year, the consumption of the consumer will be charged under "High Tension I" category + 10% for energy charges only and not for demand charges. The billing demand shall be the actual maximum demand recorded. This concession is however subject to the express condition that-

(a) For the off-season and the working season in the same month, the calculation of billing demand for working season shall be proportionate to the actual maximum demand or 75% whichever is higher and for off-season period the proportionate actual maximum demand recorded.

(b) The consumer gives advance notice in writing to the Superintending Engineer, Electricity Department, of the total or partial closing down of the plant.

**8.0 High Tension - II**

8.1 Applicable to State and Central Government establishments of non-industrial and non-commercial nature.

8.2 The demand and energy charges are as indicated in the table below.

Description	Charges
I. Demand Charges	Rs. 190.00 per kVA per month
II. Energy Charges (Entire consumption)	285 paise per kWh

8.3 The above tariff is subject to a monthly minimum payment of three-fourth times the demand charges for the contracted load in KVA.

**9.0 High Tension - III**

9.1 Applicable to all types of industries supplied at 110 KV or 132 KV as the case may be.

9.2 The demand and energy charges are as indicated in the table below.

Description	Charges
I. Demand Charges	Rs. 160.00 per kVA per month
II. Energy Charges	
(i) Entire consumption	315 paise per kWh

9.3 The above tariff is subject to a monthly minimum payment of three-fourth times the demand charges for the contracted load in KVA.

9.4 The billing demand shall be the maximum demand recorded during the month or 75% of contracted demand whichever is higher. If in anyone month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand will be billed at double the normal rate.

**C. TEMPORARY SUPPLY**

10.0 The tariff applicable and minimum charges for the temporary supply of energy will be as follows:

Sl. No.	Category	Tariff Applicable	Minimum charges
(1)	(2)	(3)	(4)
(a)	Lights or combined installation of lights and fans, Motive Power, Heating and others.	Entire Consumption: 500 paise per unit	Rs.120 per service per month
(b)	Special Illumination	Entire Consumption: 650 paise per unit	Rs.300 per service per month
(c)	Construction and testing purpose for load exceeding 130 HP or 97 KW	Entire Consumption 500 paise per unit	As in High tension-I

**Note:**

(1) The rate for Special illumination shall apply to weddings, garden-parties and other Private/Government functions when the illumination is obtained through bulbs fastened in other surfaces of wall of buildings, on trees and poles inside the compound and in pandal etc., outside the main building.

- (2) In cases where such Special illumination is done in the existing regular services the energy utilized for such illumination shall be metered separately and the consumption will be charged under Special illumination charge as levied under temporary supply.
- (3) Wherever such Special illumination is done unauthorisedly, a penal charge of Rs.100 for service shall be levied in addition to the existing tariff of the installation.
- (4) Other conditions for collection of line and service connection charges, dismantling, security deposit etc. will be as per the rules now in force.
- (5) For supply required at short notice that is within three days from the date of application for temporary service connections, an urgency charge of Rs.25 shall be paid along with other normal tariff charges.

**List of organizations / individuals who filed their objections on the petition.**

1. Pulkitt Steel Rolling Mills, R.S. No. 95/2, 3&4, Eripakkam (V), Netappakkam Commune, Puducherry – 605 510
2. Sar Ispat Pvt. Ltd., No. D-11, Galaxy House, Achariya Niketan, Mayur Vihar, Phase-I, New Delhi – 110 091.
3. Crimson Metal Engineering Limited, PIPDIC Industrial Estate, Sederapet, Puducherry-605 111.
4. Flat Products, Karasur (V), Sederapet, Puducherry-605 111
5. AKS Alloys (P) Limited, No. 84&85, Arihant Plaza, 3<sup>rd</sup> Floor, Waltax Road, Chennai – 600 003
6. Sri Padmabalaji Steels (P) Limited, No. 69/1, Keezharvanjue (V), T.R. Pattinam, Karaikal
7. Ankit Ispat Private Limited, AML Tower, No. 9, 6<sup>th</sup> Street, Gopalpuram, Chennai – 600 086 (Unit at Karraikal)
8. Sree Rengaraj Steels (Karaikal), R.S. No. 90, Vanjure (V), Nagore Main Road, Karaikal – 611 002
9. Nithya Packaging Pvt. Ltd., (Paper Division), No. 48, 3<sup>rd</sup> Cross Street, Anandhraangapillai Nagar, Puducherry – 605 008
10. Aml Steel Limited, AML Tower, No. 9, 6<sup>th</sup> street, Gopalpuram, Chennai – 600 086.
11. Pushpit Steels Pvt Limited, R.S. No. 94/2, 3&4, Eripakkam (V), Netapakkam Commune, Puducherry – 605 106
12. Karur K.C.P. Packaging Ltd. (Pondy Paper Division), R.S. No. 112, Thiruvandarkoil, Puducherry-605 102
13. Inox Air Products Limited, Regd. Off: 7<sup>th</sup> Floor, Ceejay House, Dr. Annie Besant Road, Warli, Mumbai – 400 018, Unit: R.S. No. 26, Kannaikoil-Bahour Main Road, Manapet (P.O.), Puducherry – 607 402.
14. J.B.A. Re-Rollin Mills, R.S. No. 6/1A & 2B 136/2, Thondamanatham (V) Villianur Commune, Puducherry-605 510
15. Psp Steel Private Limited, R.S.No. 67/1, 67/2, Thirumalairayanpattinam, Vanjore, Karaikal-609 606.
16. M.M.S. Steel (P) Limited, 100, Avarampalayam Road, Ganapathy, Coimbatore – 641 006, (Karaikal Unit).
17. Meenakshi Steels, 19, Alsa Mall (3<sup>rd</sup> Floor), 4-Monthieth Road, Chennai-600 008

18. Shri Ulaganayagi Amman Steels, Keelavur (V), Tirunallar, Karaikal, Puducherry U.T.
19. Sumangala Steel (P) Limited, Regd. Off: 45, Chamiers Road, Chennai-600 028, Factory Add: PIPDIC Industrial Estate, Mettupalayam, Puducherry-605 009
20. Advait Steel Rolling Mills (P) Limited, No. 62/6, Thethampakkam, Suthukeni (P), Mannadipet Commune, Puducherry – 605 510
21. J.B.A. Steels, R.S. No. 95/2, 3&4, Eripakkam (V), Villainur Commune, Puducherry-605 510
22. Mej Alloys, R.S. No.54/1, Karasur (V), Villainur Commune, Puducherry-605 510.
23. Adithya Ferro Alloys Private Limited, 242/1, Surakudy (V), Peralam Main Road, Thirunallar Commune, Karaikal – 609 607
24. Varadha Steels, R.S. No. 122/1 & 122/6, Thuthipet, Villainur Commune, Puducherry-605 510
25. Kannappan Iron And Steel Company Private Limited, R.S.No. 10/1, Nagoor Road, Mela Vanjore, T.R. Pattanam (P.O.), Karaikkal – 609 606
26. National Oxygen Limited, No. 80, Greams Road, Chennai
27. Snam Alloys (P) Limited, 21 E, Attibele Industrial Estate, Anekal Taluk, Bangalore – 562 107 (Unit at Puducherry)
28. Sumangala Alloys (P) Limited, 45- Chamiers Road, Chennai-600 028 (Additional objections)
29. Chemfab Alkalis Limited, Gnanananda Place, Kalapet, Puducherry-605 014
30. Cheslind Textiles Limited, No. 26/8, Perumal Koil Street, Thirubuvanai, Puducherry-605 107
31. The Southern India Mills Association, Post Box No. 3783, 41, Race Course, Coimbatore-641 018
32. The National Sewing Thread Company Limited, No. 11, Venugopala Pillai Road, Chidambaram-608 001
33. Yanam Chamber Of Commerce And Industry, Yanam-533 464
34. AVR Zinc Products (P) Limited, Advipolam, Yanam-533 464
35. Sri Vasavi Pigments (P) Limited, Radhanagaram, Yanam-533 464
36. Association Of Small Industries Of The Union Territory Of Puducherry & Others, Industrial Estate, Thottancharady, Pondicherry-605 009
37. Yanam Civil Rights Society, Yanam-533 634
38. Ajanta Sea View Hotel, Puducherry

39. Sri K. Ravindran, Puducherry
40. M/S Kaveri Alloy Castings Pvt Ltd. , Sedarpet, Puducherry- 605 111
41. Sri R.P. Paneerselvan, President, Physically Handicapped Youth Association, Puducherry
42. Additional objections filed by M/s Pulkitt Steel Rolling Mills & Others , Eripakkam (V), Netappakkam Commune, Puducherry-605 510
43. The Additional objections filed by Southern India Mills' Association, 41, Race Course Road, Coimbatore-641 018



**Annexure – II**

- (A) List of consumers / representatives of organizations who raised objections / suggestions during the public hearing at Yanam on 08/01/2010.**
1. Sri Ponugumatla Vishnu Murthy
  2. Sri Kodli Mallikarjuna Rao
  3. Sri Manchala Satya Sai Kumar
  4. Sri M.A. Sirajuddin
  5. Sri Khan
  6. Sri Yerra Subramanyeswara Rao
  7. Sri Kapanganti Mukunda Kumar
  8. Sri Tirukoti Nageswara Rao
  9. Sri N. Subramanyam
  10. Sri E. Vishnuvardhan Rao, Secretary, Yanam Chamber of Commerce and Industry
  11. Sri U. Rajeswara Rao, Representing Regency Ceramics Limited
  12. Sri Gowri Sankar, Representing Godavari Craft Papers
  13. Sri Rama Rao, Representing Hitech Engineering (P) Limited
  14. Sri K. Veerayya, Representing Sri Venkateswara Hitech Agro (P) Limited
- (B) List of consumers / representatives of organizations who raised objections / suggestions during public hearing at Puducherry on 11/01/2010**
1. Sri S. Iyyappan
  2. Sri Md. Iqbal
  3. Sri K. Ravindran
  4. Sri S.R. Krishnan, Representing Physically Handicapped Youth Association
  5. Sri Siva Pragasham, Farmer from Kariamanikam village
  6. Sri Madurai
  7. Sri Charles
  8. Sri Sekhar, Representing Rajiv Gandhi Human Rights Awareness Organisation, Puducherry
  9. Sri Padmanabhan, President, Karainkal Industries Forum
  10. Sri Sridhar Prabhu, Advocate, Representing Pulkit Steel Rolling Mills and other 26 industries (Objectors 1 to 27 of Annexure-I)

11. Sri Ramesh Kumar, Representing Sri Rajeswari Mills
12. Sri S. Naga Subramanian
13. Sri P. Senthil Kumar, Representing Southern India Mills Association
14. Sri P.V. Rajendran
15. Sri N. Sham Sundar
16. Sri Mohamed
17. Sri A. Partha Sarathy
18. Sri George Kutti Abraham, Representing Pondicherry Industries Association
19. Sri Ravi George
20. Sri D. Hari Rajan, Representing Ajantha Seaview Hotel