

# **ORISSA ELECTRICITY REGULATORY COMMISSION**

**Bidyut Niyamak Bhawan,  
Unit – VIII, Bhubaneswar – 751 012.  
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**Present** : Shri D. C. Sahoo, Chairman  
Shri H. S. Sahu, Member  
Shri B. C. Jena, Member

## **CASE NO. 9/2003**

**DATE OF HEARING** : **08.04.2003**  
**DATE OF ORDER** : **28.06.2003**

### **IN THE MATTER OF**

An application for approval of Revenue Requirement and Retail Supply Tariff and charges under Section 26 of the Orissa Electricity Reform Act 1995, for the financial year 2003-04.

## **ORDER**

M/s. Central Electricity Supply Company of Orissa Limited, Janpath, Bhubaneswar (in short, CESCO), the holder of The Orissa Distribution and Retail Supply Licence, 1999 (No.1/1999) has submitted an application u/s 26 of the Orissa Electricity Reform Act, 1995 (in short, Reform Act, 1995) in respect of its Revenue Requirement and Tariff for Retail Supply of electricity for different categories of consumers. Its application for determination of Retail Supply Tariff for the financial year 2003-04 has been registered as Case No. 9 / 2003. This case has been heard on 08.04.2003 and is being disposed off by this order of the Commission.

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## 1 PROCEDURAL HISTORY

- 1.1 On examination of CESCO's application, it was noticed that information and analysis with regard to a number of items which are extremely relevant for the determination of Retail Supply Tariff and Revenue Requirement had not been furnished. The Commission forwarded its comments / queries to CESCO calling for clarifications as well as additional information/particulars.
- 1.2 Subsequently, the licensee furnished the same and thereafter, filing of the application was treated as complete and the application admitted for hearing. The Commission has always emphasized on transparent, participatory and consultative approach to the entire process of the utility's Revenue Requirement and Tariff setting.
- 1.3 In order to invite objections from the public, the licensee was directed to publish public notices on the proposed Annual Revenue Requirement and Retail Supply Tariff in the format approved by the Commission.
  - 1.3.1 Notices were published in different leading English and Oriya daily newspapers having wide circulation in the licensee's area of supply and in the Commission's website [www.orierc.org](http://www.orierc.org) indicating the broad features of the licensee's proposed Revenue Requirement & Tariffs.
  - 1.3.2 The intending objectors had exercised their right to inspect/peruse the licensee's application and to obtain the salient features of the applications / full set of applications on payment of the prescribed fees from the specified offices of the licensee.
  - 1.3.3 In response to the above notices, objections were received from different quarters. The Commission received as many as 29 objections out of which the following 25 objections were admitted for personal hearing
    - (1) Orissa Consumers' Association, Biswanath Lane, Cuttack; (2) Mr. R. C. Padhi, MIG A/24, Brit Colony, Nayapally, Bhubaneswar; (3) National Aluminium Company Ltd. (NALCO), Nayapally, Bhubaneswar; (4) Aditya Aluminium Project, Sahid Nagar,

Bhubaneswar; (5) South Eastern Railways, Garden Reach, Kolkata; (6) Purvi Bharat Steels Ltd., Tangi, Cuttack; (7) Shreeji Ispat Limited, Jagatpur Industrial Estate, Cuttack; (8) Bajarangbali Alloys Private Limited, Choudwar, Cuttack; (9) Orissa Small Scale Industries Association (OSSIA), Ajoy-Binoy Bhawan, Industrial Estate, Cuttack; (10) Aditya Alloys Limited, Telengapentha, Cuttack; (11) Aditya Steel Industries Limited, Telengapentha, Cuttack; (12) Coastal Orissa Steel Manufacturers' Association (COSMA), Chauliagunj, Cuttack; (13) Magnum Fibres Pvt. Limited, Mancheswar Industrial Estate, Bhubaneswar; (14) Confederation of Indian Industry (CII), Forest Park, Bhubaneswar; (15) Association of Industrial Entrepreneurs of Bhubaneswar (AIEBA), Mancheswar, Bhubaneswar; (16) District Small Scale Industries Association, Industrial Estate, Cuttack; (17) Satyam Castings Pvt. Limited, Industrial Estate, Choudwar; (18) Federation of Consumer Organisation, Orissa & Bhubaneswar Consumers' Association, Buddha Nagar, Bhubaneswar; (19) Cuttack Municipal Corporation (CMC), Cuttack (20) Tata Iron & Steel Company Limited (TISCO), Forest Park, Bhubaneswar (21) D. Mangaraj, Nirakarpur, Dist. Khurda (22) Utkal Chamber of Commerce & Industry (UCCI), Nayapally, Bhubaneswar (23) Orissa Young Entrepreneurs' Association (OYEA), Industrial Estate, Cuttack (24) Chief Engineer, Public Health Circle (Urban), Bhubaneswar; (25) Mahanadi Coal Fields Ltd, Burla, Sambalpur.

All the above objections were scrutinised, found valid and admitted for hearing.

- 1.4 The licensee was given chance to file rejoinders, if any, to the objections filed by the objectors. The licensee filed its rejoinders serving copies on the objectors.
- 1.5 The date of hearing was fixed for 8 April, 2003. Notices were published in leading English and Oriya daily newspapers and were made available in the Commission's website [www.orierc.org](http://www.orierc.org) requiring the licensee and the objectors to appear personally or through their authorised representatives or duly constituted attorneys to take part in the hearing. The Commission also issued notice to the State Government to appear as an interested party. The Commission had neither received any response from the State Government nor any representative on behalf of the State Government was present during the hearing. This was even raised by a few of the objectors during the hearing process. They expressed their concern on the indifference and callousness on the part of the State Government on such a sensitive and important issue.
- 1.6 The case was heard on 8 April 2003. CESCO's case was presented by the Chief Executive Officer who supported the application and prayed for approval of the Revenue Requirement as well as the new tariff proposal. Objectors present were heard in person or through their authorised representatives or duly constituted attorneys. The Chairman as well as the Members raised certain queries to the licensee by way of clarification. Subsequently, the licensee submitted the required clarifications to these queries.
- 1.7 In its consultative process, the Commission convened the Commission Advisory Committee (CAC) meeting on 9 April, 2003 and consulted its constituent members about the proposed tariff and revenue requirement of the licensee.
- 1.8 **Legal Objections as to the Maintainability of the Case**
- 1.8.1 During the hearing, some of the objectors including the Orissa Consumers' Association, Cuttack and the Orissa Small Scale Industries Association, Cuttack raised the following objections regarding the maintainability of the case and prayed for the rejection of the licensee's hearing.
- a) OERC has not framed any regulation, by notification in the official Gazette to determine terms and conditions for fixation of the tariff under Sec 29 of the ERC Act, 1998 and Sec 26 of the OER Act, 1995. In the absence of such regulation, the Commission cannot proceed with this application.
  - b) The Commission has not prescribed any methodology or procedure for calculating the expected revenue from charges, which the licensee may be permitted to recover pursuant to the terms of its license and for determination of tariff to collect the revenues.
  - c) As per the provisions of Sec 57 and 57 A of the Electricity (Supply) Act, 1948 read with the Sixth Schedule of the same Act,, no application for the revision of tariff can be made within three years.
  - d) As the Commission is going to pass final orders in this case without following the procedures laid down in Sec 29 of the Reform Act, 1995, the present proceedings are vitiated.
  - e) As the base year tariff i.e., for FY 2002-03 has not been determined, any attempt to determine the tariffs for the ensuing year, i.e., FY 2003-04 is infructuous.
- 1.8.2 The Commission carefully considered the above preliminary objections raised by various objectors and is of the view that these objections are not substantiated by any valid ground.
- 1.8.3 Issues at paras 1.8.1 (a) to 1.8.1(d) were raised during the tariff proceedings in Case No. 22/1999 and again in Case No. 55/2001 & 5/2002 and the Commission held the view that such objections were not at all valid. The Hon'ble High Court of Orissa was also pleased to deal with these objections and did not find validity in any of them as per its order dated

22 December, 2000 passed in M.A. No. 51/2000. The Commission finds no reason to depart from its earlier rulings. Hence, such objections are over-ruled.

- 1.8.4 The Hon'ble High Court of Orissa, in its order dated 3 February 2003 passed in Misc Case No. 7410 & 8953 of 2002 (arising out of O.J.C. 6751/2001) has directed the Commission to make necessary calculations for the determination of tariff for the financial year 2002-03 taking into account the Govt. of Orissa Energy Department Notification No. 1068/E dated 29 January, 2003. Some of the objectors stated that till the base year tariff, i.e. for FY 2002-03 had been determined, any attempt to determine the tariff for the ensuring year, i.e. FY 2003-04 was infructuous.
- 1.8.5 The Commission also has taken note of the order dated 14 March 2003 of the Hon'ble High Court of Orissa in Miscellaneous Cases 414 and 580 of 2003 (arising out of OJC 6751 of 2001), wherein the Hon'ble Court has observed that "though the OERC can continue the exercise for determination of the tariff, the same shall not be given effect to without leave of this Court". Hence, this tariff order can be published only after taking leave of the Court.
- 1.1.6 The Commission, therefore, feels that none of the legal objections raised by the various objectors has any force in the eyes of the law and that the Commission has to proceed according to the procedure and principles established by it in the last five years as well as the principles of the Long Term Tariff Strategy (LTTS). We now proceed to examine the present tariff filing of CESCO and record our findings on the same.

## 2 CESCO'S PROPOSAL

- 2.1 CESCO has been carrying out the business of distribution and retail supply of electricity in the eight coastal Districts of the state of Orissa namely Puri, Khurda, Nayagarh, Cuttack, Dhenkanal, Jagatsinghpur, Angul, Kendrapara. The company receives bulk supply from GRIDCO at twenty interface points at HT and EHT.
- 2.2 The profile of the company as on 31<sup>st</sup> March, 2003 gives an overview of its current activities.
- |  |   |                               |
|--|---|-------------------------------|
| Total consumer strength                      | - | 7,63,216 nos.                 |
| Total input in MU                            | - | 4055.473(April,02 to Mar,03)  |
| Total billing in MU                          | - | 2310.599 (April 02 to Mar,03) |
| Total billing to consumers in (Rs. in lakhs) | - | 61200.4 (April 02 to Mar,03)  |
| 33 KV lines (in Kms.)                        | - | 2526.87                       |
| 11KV lines (in Kms.)                         | - | 14190.92                      |
| LT lines (in Kms.)                           | - | 18484.68                      |
| 33/11KV Transformers                         | - | 340 nos.                      |
| No. of Distribution Transformers             | - | 15106 nos.                    |
- 2.3 CESCO in para 2.1 and in para 2.3.2 of its Annual Revenue Requirement (ARR) and Retail Supply Tariff (RST) application of FY 03-04 has furnished the category-wise consumption details at various voltage levels for the past period as well as projected for the year 03-04, an extract of which is reproduced below.

**Table-1 : Energy Sale & Purchase**

Segment	FY 00 MU	FY 01 MU	FY 02 MU	FY 03	FY 04 (Proposed) MU
LT Category	1332	1379	1425	1451	1680
HT Category	338	387	422	362	432
EHT Category	320	453	296	497	423
Total Sales	1990	2219	2143	2311	2535
Energy Purchase	3607	4023	4186	4055	3960

- 2.4 CESCO has stated in its ARR and RST application of FY 03-04 that the sale in EHT is likely to decline during the FY 03-04 by 13% while HT sale is expected to rise by 12%. The LT sale is expected to rise by 12% during FY 03-04. This will result in tilting the balance in favour of LT segment. The licensee has given a comparative picture of category-wise sale mix at different voltage levels in the RST application for the FY 03-04 and stated that the system loss is on the increase due to the adverse consumer mix which is beyond the control of the Licensee.. The sale mix variation, slab-wise energy sales and category-wise consumer growth as projected by CESCO are given in the Tables 2, 3 & 4 respectively.



**Table-2 : Sale Mix Variation**

<b>Segment</b>	<b>CESCO FY 00</b>	<b>CESCO FY 01</b>	<b>CESCO FY 02</b>	<b>CESCO FY 03</b>	<b>CESCO FY 04 (Proposed )</b>
	% of Total	% of Total	% of Total	% of Total	% of Total
LT Category	66.93	62.15	66.5	62.80	66.27
HT Category	16.98	17.44	19.69	15.68	17.04
EHT Category	16.08	20.41	13.81	21.52	16.69
Total	100.0	100.0	100	100.00	100

**Table-3  
Slab Wise Energy Sales  
(for Domestic & Commercial category)**

	<b>FY 03 (proposed)</b>		<b>FY 04 (proposed)</b>	
	<b>MU</b>	<b>% of Total</b>	<b>MU</b>	<b>% of Total</b>
<b>Domestic</b>	1057.52	100.00	<b>1196.07</b>	100.00
Kutir Jyoti	16.846	1.59	19.052	1.59
Others				
0 <=100 KWH	329.29	31.14	706.21	59.0
> 100<=200 KWH	197.27	18.65	233.049	19.5
> 200 KWH	514.12	48.62	237.757	19.9
<b>Commercial</b>	245.65	100.00	<b>277838</b>	100
0 <=100 KWH	16.61	6.76	138.919	50.0
> 100<=300 KWH	101.09	41.15	73.627	26.5
> 300 KWH	127.95	52.09	65.292	23.5

**Table-4  
Category-Wise Consumer Growth (ALL FIGS. IN NUMBER)**

<b>Segment</b>	<b>FY 02 (As on Ist April2001)</b>	<b>FY 03 (As on Ist April2002)</b>	<b>FY 04 (Proposed)</b>	<b>FY 04 (As on Ist April 2003)</b>
LT (Nos)	656535	691921	746443	762686
% Rise		5.39	7.88	10.23
HT (Nos)	377	452	512	520
% Rise		19.89	13.27	15.04
EHT (Nos)	6	8	9	10
% Rise		33.33	12.50	25

Total nos.	656918	692381	746964	763216
% Rise		5.40	7.88	10.23

- 2.5 Category-wise load growth, category-wise energy consumption, metering position and target date for 100% metering are presented in Tables 5, 6, 7 and 8 as under.

**Table-5**  
**Category Wise Load Growth (In MW/MVA)**

<b>Segment</b>	<b>FY 03 (Proposed)</b>	<b>FY 04 (Proposed)</b>	<b>% Rise over Previous Year</b>
Domestic	730.997	789.277	7.97
Commercial	128.872	139.335	8.12
Irrigation	45.315	86.10	90.0
Other LT	121.378	138.068	13.75
HT Consumer	168.439	194.498	15.47
EHT Consumer	116.660	127.125	8.97
<b>TOTAL</b>	<b>1311.661</b>	<b>1474.403</b>	<b>12.41</b>

**Table-6**  
**Category-wise Growth (In MU)**

	<b>FY 02</b>	<b>FY 03 (Proposed)</b>	<b>% Rise over Previous Year</b>	<b>FY 04 (Proposed)</b>	<b>% Rise over Previous Year</b>
Domestic	986.892	1040.674	5.45	1196.07	14.93
Commercial	231.643	245.648	6.05	277.838	13.10
Irrigation	39.772	32.226	-18.97	36.448	13.10
Other LT	148.166	150.088	1.30	169.753	13.10
HT Consumer	422.08	381	-9.73	430.89	13.09
EHT Consumer	295.812	487	64.63	423.00	-13.14
<b>TOTAL</b>	<b>2143.036</b>	<b>2336.23</b>	<b>9.01</b>	<b>2533.999</b>	<b>8.47</b>

**Table-7**  
**Metering Position at the end of March, 2003**

Consumer Category	Total no. of consumers	Total nos. of meters	Total nos. of un-metered consumers	Total nos. of defective meters	Total nos. of working meters
LT	762686	643454	119232	235824	407630
HT	520	510	10	47	463
EHT	10	10	NIL	NIL	10
TOTAL	763216	643974	119242	235871	408103

**Table – 8**  
**TARGET DATE FOR 100% METERING**

Sl. No.	Items	Target for 100% metering
1	All consumers	31 <sup>st</sup> Dec,2004
2	33 kv feeders	31 <sup>st</sup> March,2004
3	11 kv feeders	31 <sup>st</sup> March,2004
4	33/11 kv transformer	31 <sup>st</sup> March,2004
5	11/0.4 kv transformer	31 <sup>st</sup> March,2004

## 2.6 REVENUE REQUIREMENT

- 2.6.1 The licensee is required to meet the cost of power to be purchased from GRIDCO, the cost of distribution which covers expenses on account of employees, administration and general expenses, repair and maintenance expenses, depreciation, interest on loan, appropriation to contingency reserve and provision for bad and doubtful debts. In addition to this, the licensee is expected to earn a reasonable return on its capital base based on the methodology prescribed in the Sixth Schedule to the Electricity Supply Act, 1948. The cost of power purchase covers not only the cost of power required to meet the need of the end users but also it covers the cost of energy lost on account of technical and commercial losses of the distribution system. The licensee is also required to meet the cost of capital of new investments needed to improve system reliability and quality of power supply.
- 2.6.2 The licensee earns its revenue through retail supply tariff from the consumers of electricity within its area of license. A summary of proposals of its revenue requirement and the expected revenue at the present tariff for the year 2003-04 as proposed by the licensee is presented in Table -9.

**Table-9**  
**CESCO's Revenue Requirement for 2003-04**

	<b>Rs. in Crore</b>
Power Purchase Cost	518.76
Distribution Cost	462.14
Contribution to Contingency Reserve	0.0
Previous loss	1135.10
Total Revenue Requirement	2116
(-) Misc. Receipts	(-) 26.22
Reasonable Return	61.15
Net Revenue Requirement	2150.93
Net Revenue Receipt from Sale of Power to DISTCOs	733.50
Deficit	1417.43

- 2.7 CESCO in its RST application for FY 2003-04 has submitted that the gap between revenue from sale of power and the actual expenditure has been steadily increasing with every passing day making it difficult to fulfil its obligations as a licensee. The continued financial constraints threaten to jeopardise the very existence of the organisation.
- 2.8 CESCO has stated that the ground realities are vastly different from the benchmarks that are considered in the tariff setting process which are seriously affecting the extent of cost coverage. Therefore, the licensee requests the Commission to relax its benchmarks to revise the existing tariff rates as early as possible keeping in view the financial stress under which the company is operating.
- 2.9 The licensee prays that to avoid steep rise and tariff shock to the consumers, the deficit in revenue to the tune of Rs.1214.10 crore may be treated as a regulatory asset and be allowed to be recovered over next three years i.e. FY-05, FY-06 and FY-07. The interest cost on account of regulatory asset may please be allowed to be recovered as pass through.
- 2.10 The licensee has stated that apart from the first tariff order of the Commission which came into effect from 1.4.97 and was applicable for the full year, all subsequent tariff revisions have been enforced in the last few months of the financial years depriving the licensee of revenue recovery for a number of months in each year. This has adversely affected the finances of the licensee.
- 2.11 The financial losses suffered in FY 00 and 01 were enormous and CESCO presently stands on the brink of liquidation with its networth of Rs.72.2 crore eroded several times. CESCO has further stated that it is one of the few utilities in the world that have borne the brunt of nature's fury in such quick succession such as, the super-cyclone and floods.
- 2.12 CESCO has stated that the initial adoption of 35% as the maximum T&D loss allowed in tariff order of 1997 and the subsequent lowering it to 34% vide tariff order of 2001 and 35.94% vide Tariff Order of 02 did not augur well for the licensee. The ground realities were poles apart. That's why, the licensee requests the Commission to adopt a benchmark which can be achievable.
- 2.13 **TARIFF PROPOSAL**

**2.13.1 Main Features of CESCO's Proposal**

CESCO has proposed a tariff to reduce the gap between revenue requirement and expected revenue from existing tariff and charges for the FY 2003-04. Based on the concept of rationalisation of tariff structure of the previous years, CESCO proposes a tariff that is just and reasonable and the same principle is also adopted for proposing the fixed charges also. The fixed charges proposed is only 23% of the total revenue generation proposed and

therefore is less than 33% of fixed costs which should be recovered through fixed charges. The salient features of tariff proposal of CESCO are as follows:

**2.13.1.1 Demand Charges:**

- Demand charges are proposed at Rs.200 per KVA except for the following categories:  
All Domestic, Commercial, Small Industry, Medium Industry, Irrigation, Street Lighting, Public Institution, PWW <100 KW.
- Demand charge for Bulk Supply Domestic is pegged at Rs 10 per KW.
- Demand charge for HT Irrigation is proposed at the existing level of Rs.30 per KVA.
- The MFC for LT Irrigation is proposed at Rs.20 for the first KW and Rs.10 for the rest.
- MFC for Street Lighting, Small Industry, PWW<100KW, Public Institution and Medium Industry are proposed to continue at the existing rate.

**2.13.1.2 Customer Service Charge:**

Customer Service Charges are proposed to continue at the existing rate for all categories.

**2.13.1.3 Energy Charges:**

- Energy charges in respect of EHT consumers with various load factors (LF) except Emergency Supply to CPPs are proposed as follows:

General Purpose	300 Paise/Kwh
Large and Heavy Industry	295 Paise/Kwh
Railway Traction, PII, Mini Steel Plant	290 Paise/Kwh
Colony Consumption	260 Paise/Kwh

- Energy charge in respect of colony consumption is proposed at 320 p/u at HT and 260 p/u at EHT.
- The energy charges in respect of EHT & HT consumers based on their usage are proposed as under:-

EHT	LF	Rate (P/U)
	50 to 60%	220
	Above 60%	190
HT	50 to 60%	240
	Above 60%	210

- Power Intensive Industries with various load factors(LF) should pay the following tariff :

LF	Rate (P/U)
Upto 40%	205
Above 40%	180

- Domestic and Commercial tariff are proposed as follows:

Domestic	Slab	Tariff (P/U)
	<=100	200
	100-200	320
Commercial	Above 200	450
	<=100	450
	100-200	580
	Above 300	600 for all units.

- Rebate** :CESCO proposes that rebate may be allowed on current bills only when the entire bill including the arrears and current charges are paid in full. It proposes the continuation of the present rebate structure
- DPS** : DPS at the rate of 2% per month is proposed for all consumers.
- Disconnection** : Disconnection Notice to consumers could form parts of the Energy Bill served to consumers along the line of practice followed by the Department of Telephones..
- Reconnection** : The reconnection charges are sought to be revised as follows:

Connection Type	Charges (Rs.)
Single Phase Domestic	60
Single Phase Other Consumer	100
3 Phase Line	200
HT & EHT line	1000

- PF penalty** : CESCO requests to reintroduce PF penalty in case of Medium Industries and Bulk GP consumers.

#### 2.14 Prayer for 2003-04

CESCO has made the following prayers to the Commission:

- ◆ Approve the proposed Retail Supply Tariff and Charges.
- ◆ Approve the proposed revenue requirements.
- ◆ Confirm revenue requirements, calculation of capital base and calculation of clear profits for the year 2003-04.
- ◆ Allow a voltage-wise loss stipulation for computing Revenue Requirement.
- ◆ Institute Purchased Power Price Adjustment Clause (PPPAC) to cover all changes in the cost of power purchase.
- ◆ Approve the proposed tariff to be effective from 1<sup>st</sup> April, 2004.

### 3 **OBJECTIONS AND QUERRIES RAISED DURING THE HEARING PROCESS**

The Commission considered objections raised by twenty-five objectors in their written petitions as well as the oral submissions during the public hearing process. Some of the objections were found to be of general nature while others were specific to the proposed Revenue Requirement and Tariff filing for the financial year 2003-04. Based on their nature and type, these objections have been categorised broadly as indicated below:

#### 3.1 **T & D Losses, Efficiency Improvement and Customer Service**

- 3.1.1 A majority of the objectors, pointed out that there had been no perceptible improvement in efficiency nor any reduction in the system losses.
- 3.1.2 Sri M V Rao submitted that despite massive investments in system improvement, tardy growth of consumption and 41% of the sales at EHT/HT voltages, the losses continued to be inordinately high. He further stated that if the licensee had been able to contain the T&D losses at the levels set forth by the Commission for FY 2003-'04, there would have been no need for an upward revision of tariffs and the licensee would have ended up with a surplus even on current rates of realisation. This was also supported by the Orissa Small Scale Industries Association which stated that the Licensee has not done anything to reduce losses in pursuance of the recommendations of the Sovan Kanungo Committee.
- 3.1.3 Voltage variations, frequency excursions beyond the prescribed limits, frequent interruptions and poor customer service came in for severe criticism from many objectors including Orissa Small Scale Industries Association, TISCO and Utkal Chamber of Commerce and Industry. Representatives of various industries and Associations of Industries complained of damage to their machineries resulting from large fluctuations in voltage and frequency.
- 3.1.4 Bajrangbali Alloys Private Limited strongly protested against the poor quality of service. The licensee has not been able to curtail the frequent power failures, low voltages, erratic supply, and has not given any prior intimation of these cuts and voltage fluctuations, which have adversely affected production in industries. South Eastern Railways, Kolkata prayed that frequent voltage variations and frequency excursions beyond the limits prescribed have affected the performance of various electrical equipments in locomotives, and prayed that the Commission may consider appropriate compensation for such damages in its favour. Orissa Small Scale Industries Association also highlighted the poor consumer service meted out by the licensee.
- 3.1.5 Mahanadi Coal Fields pointed out that apart from the regular power cuts, the consumers have been subjected to frequent break-downs and interruptions in supply, which were purely due to poor maintenance of the licensee's lines and sub-stations. They suggested that suitable penalties should be imposed on the Licensee for shortfalls in the prescribed Service Standards.

#### 3.2 **Load Growth, Contract Demand and Sales & Revenue Forecasts**

- 3.2.1 Sri R C Padhi has stated that the estimated 13% increase in sales in the domestic and commercial categories is unduly inflated since any increase in the quantum sold to LT consumers is on account of regularisation of illegal connections and not because of any addition to the drawl of energy by these categories. Inflated LT sales would lead to a higher Revenue Requirement through a higher cost of power purchase. Sri M V Rao of UCCI highlighted that the growth in the number of consumers did not reflect growth in the sale of energy, since the sales volume has remained almost static for the last five years. In fact, the load growth in the last few years has been only around 3%.
- 3.2.2 Orissa Young Entrepreneurs Association stated that the connected load should be calculated taking into account only the machinery that are put to use and not the idle or

obsolete machines kept in the premises. Orissa Assembly of Small and Medium Enterprises prayed before the Commission that the contract demand for small and medium industries should be fixed on the basis of maximum demand recorded and not on the basis of connected load.

### 3.3 **Meters and Meter Rent**

Sri R C Padhi has pointed out that there is no requirement on the part of the Licensee to raise loans in order to procure meters. The meter rent fixed by the Commission should reflect the entire cost of metering and should be maintained in a separate account, distinct from other costs and revenues. The licensee has also provided no information on the progress of replacement of meters and the benefits, if any, that have been achieved. According to Sri Padhi, there are still 91,360 un-metered consumers and 2,16,718 defective meters. Going by the Kanungo Committee's recommendations, all un-metered supplies should have been metered and all defective meters should have been corrected by now. District Small Scale Industries Association (Cuttack) stated that the meter rent for SSI units was too high. They wanted CESCO to collect meter rent through easy instalments. OYEA expressed the view that installation and rent collection in respect of Chinese made meters are arbitrary.

### 3.4 **Revenue Requirement**

The Commission, at the beginning of the hearing process, sought clarification from the licensee as to whether the Revenue Requirement proposed for FY 2003-'04 took into consideration the various benefits and measures suggested by the OERC in their FY 2003 tariff order and accepted by the State Government. Orissa Assembly of Small and Medium Enterprises, Balasore also asked for similar clarification from the licensee. Sri M V Rao of the UCCI pointed out that the licensee had not built into its Revenue Requirement the benefits from the acceptance of the recommendations of the OERC by the Govt. of Orissa.

#### 3.4.1 **Audited Accounts**

A majority of the objectors pointed out that the licensee's proposal for Revenue Requirement and tariff revision had not been based on Audited Accounts. Audited accounts for the financial years FY 2001-'02 and FY 2002-'03 are not available and hence the filing has been based on inaccurate and unsubstantiated statements. Sri R C Padhi maintained that failure to produce audited accounts amounted to contravention of the License conditions.

#### 3.4.2 **Depreciation and Asset Register**

3.4.2.1 Sri M V Rao submitted that the licensee did not take into account the impact of the GoO Notification No 1068/E dated 29 January, 2003 while computing the Revenue Requirement for FY 2003-04 as far as depreciation is concerned

3.4.2.2 Sri R C Padhi objected that in spite of the Commission's earlier directives, the licensee had not made any attempt to build up an asset register. He suggested that the licensee's claim for depreciation should be allowed only after thorough verification of its asset register.

#### 3.4.3 **Network Costs**

Sri R C Padhi contended that the Employee and A&G costs should be increased only to the extent of 4% over the 2002-03 level generally in line with inflation.



### **3.4.4 Interest and Financing Costs**

- 3.4.4.1 The Commission sought clarification from the licensee as to whether they had given effect to the reduction on the interest rate on account of the World Bank loans as approved by the GoO.
- 3.4.4.2 Sri M V Rao pointed out that the licensee should incorporate in their revenue requirement for FY 2003-04 the benefits arising out of the acceptance of the OERC's recommendations by the GoO, which would reduce the interest burden on the retail supply tariff by Rs. 36 crore approximately.
- 3.4.4.3 Most objectors talked against the high overheads, uneconomical purchases and wasteful expenditure of the Licensee. Orissa Young Entrepreneurs Association wanted that all the claims of the Licensee should be scrutinised by OERC.

### **3.4.5 Past Losses**

- 3.4.5.1 The Commission asked for the detailed break-up of the amount of past losses for FY 1999-00 as well as for the subsequent years and the licensee's plan to address those losses.
- 3.4.5.2 Sri R C Padhi suggested that past losses should not be included in tariff.

## **3.5 Cost of Supply and Multi Year Tariff**

Aditya Aluminium suggested that power tariff should be fixed for a minimum period of 5 years and should vary on the basis of consequential increases in bulk supply tariff, and the latter should also be revised on the basis of variable costs only. UCCI and OYEA also expressed similar views.

### **3.5.1 Cost of Supply**

- 3.5.1.1 TISCO suggested that the cost of power should be computed after taking into account three factors such as, (a) 60% of the power coming from hydro, (b) 41% of the power sold at HT / EHT voltages and (c) sale to agriculture being only 4%.

### **3.5.2 Tariff Structure Design**

- 3.5.2.1 Sri R C Padhi suggested that since the domestic consumers have contributed lion's share to the mounting debts of the licensees, the Commission should impose a penalty on delayed payment of, say, 1%, which would incentivise the consumers to ensure timely payments of their electricity bills. Orissa Small Scale Industries Association pointed out that the present tariff structure does not encourage higher consumption, since it is linked to higher tariff rates. Utkal Chambers of Commerce and Industries (UCCI) proposed a uniform Retail Tariff structure with a differential Bulk Supply Tariff. TISCO and CII also endorsed this view.
- 3.5.2.2 Several Objectors stressed on removal of all cross-subsidies in the system, in line with the ruling of the Hon'ble Supreme Court of India, dated 3 October, 2002. Aditya Aluminium, Shreeji Ispat, Aditya Alloys, CII and TISCO wanted to do away with the cross-subsidy available to Mini Steel Plants. TISCO and UCCI did not want consumers to cross- subsidise losses on account of rural electrification, lift irrigation and Kutir Jyoti programmes which are part of Government's social service agenda and should be funded by Government.
- 1.1.6.1 The Railways, Bajrangbali Alloys and Aditya Alloys prayed for adoption of a single part tariff covering energy charges alone.

- 1.1.6.2 Mahanadi Coal Fields suggested a different method of computing power factor incentive / penalty, overdrawl penalty and energy charges.

### **3.5.3 Special Category Tariffs**

- 3.5.3.1 The representatives of Tata Steel made out a case for allowing special tariff @ Rs 1.82/kwh (linked to BST) at 80% load factor with guaranteed payment of minimum charges at 70 % load factor of contract demand, for the Ferro Alloys industries in the State to enable them to compete in the national and international markets. The Ferro-Chrome based industries in the State include M/s Ferro Alloys Corporation (FACOR), Bhadrak, IDCOL Ferro-Chrome & Alloys Limited (IFCAL), Jajpur Road, Ispat Alloys Ltd., Balasore and TISCO, Bhubaneswar etc.
- 3.5.3.2 Purvi Bharat Steels, Shreeji Ispat, Bajrangbali Alloys and Aditya Alloys prayed for a special tariff for Induction Furnace / Rolling Mills. They also suggested that Mini Steel units should not be subsidised.
- 3.5.3.3 Coastal Orissa Steel Manufacturers Association (COSMA) opposed CESCO's proposal to fix energy charge at Rs 4.20 / unit for large industries as against Rs 3.00/unit for Power Intensive Industries and Mini Steel Plants. They argued that a Mini Steel Plant is essentially a large Industry and there is no justification to have two different tariffs for them.
- 3.5.3.4 South Eastern Railways (SER), Kolkata prayed for special consideration while fixing traction tariff for the Railways, keeping in view its bulk consumption and prompt payment history. The SER representative also highlighted that during the last 30 years, the tariffs for railway traction had grown much faster as compared to the general price levels. It also prayed for the waiver of the Security Deposit given the track record of its punctuality in payment of bills.

### **3.5.4 Paying Capacity of Consumers**

- 3.5.4.1 Sri R C Padhi, TISCO and UCCI suggested that consumers' paying capacity should be taken into account while fixing tariff.
- 3.5.4.2 **Time of Use Tariffs**
- 3.5.4.3 Purvi Bharat Steels, Shreeji Ispat, Bajrangbali Alloys and Aditya Alloys stressed the need for incorporation of TOD Tariffs into the tariff structure, specially in the light of the implementation of ABT in the Eastern Region and this should be implemented along with matching incentives / penalties which would maximise the benefits for the consumers of the state.
- 3.5.4.4 Coastal Orissa Steel Manufacturers' Association suggested that Large and Heavy Industries should be given concessional tariff for power consumed at night and during off-peak hours.

#### 4 CESCO'S REPLIES TO THE OBJECTIONS AND QUERRIES RAISED

CESCO filed its rejoinders with this Commission on 11 March, 2003 in reply to the various objections raised and clarifications sought for. The licensee subsequently filed its replies on 15 April, 2003 to the objections raised during the public hearing on 8 April, 2003.

##### 4.1 T&D Losses and Efficiency Improvement

4.1.1 CESCO submitted that the T&D loss has been reduced from 49% during FY 2001-02 to 43% in FY 2002-03, whereas the collection efficiency has improved from 79% to 98% of BST bill during the same period.

4.1.2 The licensee has been following an aggressive loss reduction programme and has targeted to reduce overall T&D losses to 36% by the end of FY 2003-04, a reduction of 6%. The year-wise overall T&D loss levels are presented below:

	FY 1999-'00	FY 2000-'01	FY 2001-'02	FY 2002-'03
Overall T&D Loss Levels	44.84%	44.89%	49%	43%

4.1.3 The licensee also agreed to the proposal of CII for planned loss reduction as proposed by the Sovan Kanungo Committee. It further submitted that it had taken several steps to reduce the loss levels, which include installation of new meters in the premises of all un-metered and defective metered consumers, hiring of ex-service personnel for the detection and removal of hooking, etc. The measures have already shown results in the form of improved consumer billing as well as significant reduction in input energy.

4.1.4 The licensee submitted that since metered data were not available in respect of separate drawl of power for LT and HT categories, it has not been able to compute the losses incurred on the LT and HT voltage levels separately. Variations in the consumption of EHT consumers has a significant bearing on the determination of overall loss of the distribution licensee. The licensee, therefore, appeals to the Commission to recognise the impact of the sales mix and allow the loss levels proposed in the tariff application.

4.1.5 Referring to collection efficiency, CESCO stated that it was making all out efforts to improve revenue collection; as a result of which, the average collection had increased from Rs. 37 crore to Rs. 43 crore per month during FY 2002-03. The licensee had also formed village level committees to settle the billing disputes and to collect the arrears.

##### 4.2 Performance Improvement, Quality of Supply and Consumer Service

4.2.1 CESCO submitted that it had initiated strong measures to contain corruption and improve the standards of service to its consumers. It has already dismissed 12 employees on account of corruption and 67 employees have been given VRS and CRS.

4.2.2 CESCO stated that the measures to improve the quality of supply to consumers included steps like the distribution of consumer pass books, setting up of mobile fuse call centres etc. The licensee is currently taking action to set up single-point consumer service centres in major cities to start with. It also plans to introduce spot billing and monthly billing in the near future and also involve the general public in the management of electricity through formation of village committees.

4.2.3 In replying to consumers' queries on low voltages and frequent power failures, the licensee submitted that the low voltage was caused because of over-drawl by non-bonafide and illegal consumers. The licensee appealed to the consumers to declare their correct load, to help prevent illegal abstraction of energy and to bring illegal consumers to the notice of the licensee.

##### 4.3 Metering and Consumer Billing

- 4.3.1 Many objectors stated that the licensee was charging meter rent and also incorporating in tariff the impact of the loans raised by the licensee for the purchase of meters. The licensee in its reply stated that it claimed meter rent as per the relevant provisions of the Indian Electricity Act, 1910. The expenses on account of loans for the purchase of meters has been loaded in tariff when the installed meters need to be replaced before the recovery of the entire cost of the meters in the form of meter rent.
- 4.3.2 CESCO stated that it had taken up a special drive for consumer metering and removal of the un-metered consumers from its consumer base. It had procured 4,20,000 single-phase meters and 7,860 three-phase meters. The licensee has already replaced 1,00,000 domestic meters by February, 2003.
- 4.3.3 The licensee submitted that it delivered the bills to the consumers well within the due date. In case of any delay, the consumers should arrange for a copy of the same from the office of the concerned engineer as per the provisions of Section 90 of Chapter IX of the Distribution Code. The licensee has also employed additional staff for timely bill distribution and had set-up consumer care and redressal centres to address the consumers' grievances including personal hearings by the CEO on every working day for faster redressal.

#### 4.4 **Revenue Requirement**

##### 4.4.1 **Audited Accounts**

4.4.1.1 A number of objectors talked of non-availability of the Audited Accounts of the licensee. CESCO replied that as per the Transfer Scheme Notification dated 25 November, 1998, the finalisation of the Audited Accounts for FY 1998-1999 was entrusted to GRIDCO, which submitted the same to CESCO only at the end of 2001. The licensee also stated that the statutory audit for the financial year 1998-1999 was complete and the C & AG Report were awaited. The audit of the subsequent years can be taken up on completion of the present audit. It also clarified that the accounting year for the licensee was from 1 April to 31 March of the subsequent year, and hence, the audited accounts for the financial year 2002-03 are not yet due.

4.4.1.2 The licensee stated that it cannot sustain the revenue shortfall till the audited accounts become available. It cannot meet its current costs with the existing levels of tariffs and prays before the Commission to approve the proposed revision in tariff on the basis of provisional accounts.

##### 4.4.2 **Fixed Assets Register**

4.4.2.1 The licensee submitted that it has been appraising the Commission of steps taken for preparing its fixed assets register.

##### 4.4.3 **Power Purchase Costs**

4.4.3.1 Replying to UCCI's objections regarding the availability of hydropower or pithead thermal stations, the licensee submitted that it had purchased power from GRIDCO in bulk at the rate prescribed by the Commission.

##### 4.4.4 **Operation and Maintenance (O&M) Costs**

4.4.4.1 Many objectors opposed the proposed O&M charges. The licensee submitted that the overall expenditure had been projected taking into account provisional accounts and it had sought reasonable increases of 3% on salary, 8% on material costs and 5% on Administrative and General Expenses over the last year. These rates shall accommodate the normal inflationary hikes and specific rises in unavoidable expenditure.

#### **4.4.5 Delayed Payment Surcharge (DPS)**

4.4.5.1 CESCO has proposed Rs.168.00 crore as DPS payable by the licensee to GRIDCO, because of the non-realisation of arrears from its consumers. As such, this should be allowed as part of the Revenue Requirement for FY 2003-04.

#### **4.4.6 Past Losses**

4.4.6.1 In replying to the objections and queries raised on the huge amount of past losses claimed by the licensee as part of its Revenue Requirement for FY 2003-04 as Special Appropriations, the licensee submitted that the past losses aggregating Rs.1,133 crore should be passed on through tariffs in a phased manner.

### **4.5 Tariff Design, Tariff Determination and other Regulatory Issues**

#### **4.5.1 Proposal for Annual Revenue Requirement and Revision of Tariffs**

4.5.1.1 CESCO has submitted that the licensee's proposal for the revision in tariffs is based on Section 26 of the OER Act 1995. A reasonable estimate of the licensee's Annual Revenue Requirement (ARR) for FY 2003-04 has been prepared on the basis of provisions under Chapter VIII of the Reform Act. The licensee has also submitted that the recovery of the licensee's expenses along with the reasonable return from the tariffs charged to consumers is essential for its survival.

#### **4.5.2 Tariff Design**

4.5.2.1 Referring to the objectors' suggestion for implementing a single part tariff, the licensee replied that two part tariffs were being charged to retail consumers so as to match the two-part tariff being charged by GRIDCO for supplying energy in bulk to the licensee..

4.5.2.2 M/s Purvi Bharat Steels Ltd. and other re-rolling mills and induction furnace industries stated that lower tariffs were being charged by neighbouring states on these industries. The licensee submitted that the proposal of lower tariff was not acceptable since the tariff was determined by factors such as, cost of power, other expenditure, reasonable return, etc., which vary from one geographical area / area of operation to another.

4.5.2.3 Reacting to requests to levy similar tariffs for similar industries at different voltage levels, the licensee submitted that this has not acceptable because the costs of supply at different voltage levels were different.

#### **4.5.3 Cost of Supply and Cross-Subsidisation**

4.5.3.1 In replying to the queries raised on the proposed tariffs for the LT and Domestic consumers, the licensee submitted that these were based upon the cost of supply to these categories of consumers. It also added that a similar methodology had been adopted for determination of proposed tariffs for HT and EHT categories.

#### **4.5.4 Special Category Tariffs**

4.5.4.1 In reply to the objectors' demand for a separate tariff for Induction Furnace and Re-Rolling Mills, the licensee stated that the category of consumers had been determined by the Commission and the tariff fixed for each consumer category was as per the orders of the Commission.

#### **4.5.5 Penalties and Rebates**

4.5.5.1 The licensee has proposed to allow rebates to consumers making payment within due date and charge a Delayed Payment Surcharge (DPS) on irregular and

defaulting consumers. In replying to objections to this proposal, CESCO stated that it had to pay GRIDCO 2% per month as DPS on the amount of BST not paid by the licensee, as consumers of the licensee had not been paying in time. This rebate and penalty proposed by the licensee would motivate the consumers to pay in time and to avail double benefits, i.e., getting rebates and avoiding DPS.

#### **4.5.6 Electricity Duty**

4.5.6.1 Referring to the objections raised on the collection of electricity duty by the licensee, CESCO submitted that the fixation of category-wise rates of electricity duty was done by the State Government and hence it was outside the purview of the licensee. The licensee only collects the electricity duty on behalf of the State Govt. and the same is remitted to the state exchequer.

#### **4.5.7 Consumer Security Deposits**

4.5.7.1 Replying to South Eastern Railway, Kolkata's objection that the licensee was charging Security Deposit from consumers, the licensee stated that the Consumer Security Deposits were being raised based on calculations as per the norms laid down by the OERC in its Distribution Code.

### **4.6 Other General and Miscellaneous Issues**

#### **4.6.1 NALCO's Objections**

4.6.1.1 The licensee clarified that GRIDCO had transferred its entire business of distribution and retail supply to its successor distribution companies under the Orissa Electricity Reform (Transfer of Assets, Liabilities, Proceedings and Personnel of GRIDCO to Distribution companies) Rules, 1998 notified in the extraordinary Gazette dated 26 November 1998. Further, the Commission by its order dated 31 March 1999, granted exclusive license to CESCO to distribute electricity within its area of operations, including Angul, where NALCO's CPP has been situated. CESCO being the distribution and retail supply licensee in the area is entitled to raise the monthly bills towards import of power by NALCO.

#### **4.6.2 Multi-Year Tariff Framework**

4.6.2.1 The licensee clarified that the development of a multi-year tariff framework is under active consideration of the Commission.

## **5 COMMISSION'S OBSERVATION AND ANALYSIS OF LICENSEE'S PROPOSAL**

On detailed scrutiny and examination of the Annual Revenue Requirement and Retail Supply Tariff Application for the FY 2003-04 along with clarifications submitted by the licensee before the Commission, the written and oral submissions of the objectors and the views of the Members of the Commission Advisory Committee, the Commission has passed the order, as detailed below.

### **5.1 Scenario of the Power Sector Reform in Orissa**

5.1.1 All the distribution licensees have made strong plea that the sectoral survival is possible in the present situation in Orissa only when the input cost of power purchase is brought down by reducing the bulk supply tariff charged by GRIDCO to the DISTCOs.

5.1.2 The State of Orissa was the first to initiate power reform in the country. The Orissa Electricity Reform Act, 1995 was put into the statute with a view to restructure the electricity industry in the state and rationalise the generation, transmission, distribution and supply of electricity and to create avenues for participation of private sector entrepreneurs and create infrastructure for development and management of electricity industry in an efficient, economic and competitive manner. Orissa Electricity Regulatory Commission has been constituted under the Act for overseeing and regulating the affairs of electricity industry in the State including rationalisation/setting of tariff.

### **5.2 Restructuring of the Power Sector**

5.2.1 Prior to coming into force of the OER Act, 1995 on 01.4.96, the 460 MW capacity Thermal Station at Talcher owned by OSEB was sold to NTPC in June, 1995 at a consideration of Rs.356.00 Crore.

5.2.2 The OSEB was dissolved and unbundled with the take over of hydro assets owned by the OSEB and the Government by the Orissa Hydro Power Corporation and its transmission and distribution business was taken over by GRIDCO with effect from 1<sup>st</sup> April 1996. Thereafter, the distribution and retail supply of electricity was vested in four distribution companies initially as wholly owned subsidiary companies of GRIDCO. Three of these distribution companies were privatised on 1<sup>st</sup> April 1999 and the fourth one on 1<sup>st</sup> September 1999 after dis-investment of its 51% share. The state owned Orissa Power Generation Corporation created in 1984 continued to operate as a separate entity and manages the Ib Thermal Power Station of capacity 2x210 MW (420 MW) near Jharsuguda.

5.2.3 The assets of the erstwhile OSEB including those of the hydro generating stations were taken over by the State Government, revalued and transferred to GRIDCO and OHPC. The upvalued amount was adjusted in favour of the state Government through grant of equity share and issue of bonds bearing no interest with a moratorium period of five years with provision of subsequent conversion in phases into equity and issue of debentures bearing interest. Revaluation of assets was considered to enable the Government of Orissa to realize more realistic value for its past investment at the time of privatisation and also enhance the creditworthiness of the utilities. The revaluation was based on the revenue earning potential and was intended as a means of raising revenue through higher level of depreciation, higher operation and maintenance cost, higher return on equity for smooth functioning of the power sector. To sum up the revaluation was also done with the objective of eliminating GRIDCO's and OHPC's dependence on budgetary support from Government of Orissa.

5.2.4 The process of reform and restructuring paved the way for commitment of World Bank loan of 350 US million dollars for long term capital investment in the power sector in

Orissa along with 65 million sterling pound funding from the DFID to meet urgent needs of repair & maintenance expenses and consultancy support. The World Bank also prepared a report known as the Staff Appraisal Report in April 1996 on the Orissa Power Sector Restructuring Project and made financial projections based on certain assumptions of power purchase, power sale, level of transmission and distribution loss, collection efficiency and operating expenses which envisaged that GRIDCO after meeting all costs will turn around from FY 1997-98 onwards. There was no provision of transitional support whatsoever during this period. On the contrary, State Government adjusted a sum of Rs.340.2 Crore payable to GRIDCO against the upvaluation of assets. All the liabilities of erstwhile OSEB were also passed on to GRIDCO based on the above financial analysis and projections.

- 5.2.5 In reality, the projections went haywire and the financial health of GRIDCO is far from satisfactory as the accumulated losses of GRIDCO has increased to Rs.1193 Crore by the year FY 1998-99 and is likely to be Rs.2149.68 Crore by 2002-03. It faces acute liquidity problem as the DISTCOs have paid to GRIDCO towards purchase of power only about 62.75% of BST bills for FY 2001-02. However with continuous review and advice by the Commission the collection from DISTCOs against bill has gone up to 89.75% by the end of January, 2003.
- 5.2.6 In the post-reform period from 1 April, 1996 to 31 March, 2001, the state generators, namely, OPGC and OHPC have earned profit of Rs.768 Crore in books which should have made them financially viable but in reality, OHPC is faced with cash crunch due to non-payment of its energy dues by GRIDCO.
- 5.2.7 Private capital has been infused in the form of disinvestment of 49% of equity shares of OPGC (Rs.603 Crore), sale of 51% share of distribution business of GRIDCO (Rs.159 Crore). However, the Power Sector was not benefited by such infusion.
- 5.2.8 In OSEB days, the State Government was required to provide necessary subvention under Section 59 of the Supply Act 1948 so as to leave a surplus of not less than 3% on net fixed assets to OSEB after meeting all expenses properly chargeable to revenue including O&M and management expenses, taxes, depreciation and interest etc. for sustenance of the power sector to meet its socio-economic obligations of giving power supply to the vulnerable sections of the society but in the post-reform era, the Government of Orissa has totally divested itself from the burden of such payment which on a rough estimate would have come to Rs. 4430 Crore by 31<sup>st</sup> March 2003, had the OSEB continued as an entity.
- 5.2.9 As reflected in earlier orders the Commission believes that payment of subsidies are not in consonance with the spirit of the Reform Act, 1995 but the State Government's financial back-up in the form of subvention or subsidy during the transitional period could have substantially eased the situation. The Govt. of Andhra Pradesh. have issued policy directions, that the tariff in respect of the subsidized categories may be reduced to levels proposed by the Distribution Companies, for which subsidy of Rs. 1513.49 crore would be made available to the Distribution Companies for FY 2003-04. Similarly Govt. of Uttar Pradesh has provided subsidy of Rs.850 crore in FY 2002-03. Govt. of Karnataka has already released subsidy of Rs.1872 crore against the claim of Rs.2231.30 crore for the year 2001-02, Rs.1303.68 crore for the year 2002-03. Further Karnataka Govt. has gone one step ahead by allowing KPTCL and ESCOMs to retain electricity duty collected from the consumers which amounts to Rs.140 crore approximately to the end of December 2002. Govt. of Karnataka also indicated R.E. subsidy for the year 2003-04 to the extent of Rs.1479.37 crore.
- 5.2.10 The single most important factor that raised the revenue requirement of all the licensees in the post-reform era was the substantial rise in the cost of hydro power as well as in the cost of transmission and distribution on account of revaluation of assets as on 01.4.96 and



also providing an accelerated rate of depreciation as per Govt. of India guidelines. Further, in the pre-reform era, power requirement of the state was met mostly from sources within the State and limited procurement from Central Generating Stations and CPPs. However, with the passage of time, the State became more dependent on drawal of power from the Central Generating Station due to delayed commissioning of the Upper Indravati Hydro Electric Project. The NTPC power remained costlier as their power stations in the eastern regions were new stations and continued to operate at low PLF resulting higher cost/kwh. On the revenue side, the single most important factor has been the non-materialisation of EHT and HT loads as envisaged at the time of Reform in the SAR of World Bank..

- 5.2.11 The forecast of consistent reduction in transmission and distribution loss from an estimated level of 39.5% for the FY 1996-97 to 22.7% by the FY 2000-01 has not worked out. Even the initial assessment of loss as 39.5% for the FY 1996-97 turned out to be 49.4% as revealed from the audit report for the corresponding year.
- 5.2.12 The transmission and distribution sector continued to bear further financial liabilities due to interest burden on account of debt servicing of past loans & liabilities and large scale investment in transmission and distribution for improvement of quality of power supply without corresponding rise in sale of power.
- 5.2.13 The anticipation that the impact of revaluation of assets would be offset by the growth of EHT and HT loads has not worked as the expected load growth like installation of steel plant at Gopalpur, Duburi projected in pre-1996 era did not materialise coupled with recession in the industrial sector severely hurting the anticipated growth at HT & EHT. Further, to make the matters worse, the loads in the subsidised categories continued to increase. This has adversely affected the revenues of the utilities.
- 5.2.14 The actual sale of 2760 MU to the industrial HT & EHT bulk supply and railway in 2000-01 was far below the load projection of 7009 MU for these categories made in the Staff Appraisal Report which has seriously affected the revenue earning potential of the licensees, widened the gap between the cost of supply and revenue realisation and reduced the scope of cross-subsidy to low voltage classes of consumers.
- 5.2.15 Had the load projection contemplated in the Staff Appraisal Report materialised, the revenue position of the utilities would have been much better and it would have contributed to an overall reduction in T&D loss figure.
- 5.2.16 Some HT/EHT consumers preferred generation of power from their own Captive Power Plants rather than avail power from DISTCOs on cost consideration though the Eastern Zone continues to be surplus in generation.
- 5.2.17 Though collection efficiency is around 98% to 99% in privately managed utilities like CESC, Calcutta and BSES. Bombay, the DISTCOs in Orissa have achieved only 75% for 1999-00 and 76% for the year 2000-01. Their failure to collect the revenue at the tariff permitted by the Commission from year to year and to convert the lost units by regularising unauthorised connection and reducing load have magnified the liquidity problem. However, due to continuous review by the Commission the collection efficiency of the DISTCOs has gone up to 81% during 10 months period of the FY 2002-03. The collection efficiency would have further improved had the Govt. and Govt. owned PSUs cleared their current and arrear energy dues.
- 5.2.18 The affordability of a large section of consumers mostly from domestic, irrigation, small industrial segments, etc. constituting more than 90% of the total consumers strength happened to be major hurdle in attaining a cost based tariff structure, which in effect would result in reduction of Industrial Tariff and substantial increase in LT Tariff.

- 5.2.19 It was expected that a vibrant industrial sector would support and make the power sector self-sustaining for which no provision was kept to provide financial support to GRIDCO/DISTCOs during the transition years though GRIDCO/DISTCOs in their new incarnation were still required to undertake socially purposive but unremunerative measures such as Rural Electrification and supply to the rural poor. Further the state's economy had received tremendous setback due to occurrence of natural calamities like super cyclone, drought and flood in succession affecting both the utilities and the consumers. The DISTCOs were also severely affected by these natural calamities by way of severe damage and loss to their assets. Collection of revenue also had a severe set back because of the financial condition of the consumers impacted by these calamities. Besides, the customer care of the distribution companies has left much to be desired raising questions on efficacy of privatisation.
- 5.2.20 It may be reiterated that the asset revaluation, absence of subvention from the Government, high level of transmission and distribution loss, non-maturing of HT & EHT loads, coupled with poor billing and collection of the distribution companies are the causes of imbalancing factors leading to the losses in the GRIDCO and distribution utilities.
- 5.2.21 While deciding the tariff for FY 2002-03, the Commission suggested a mid course correction of the Power Sector Reform in Orissa to strengthen the power sector in the interest of the consumers, investors and the state's economy.
- 5.2.22 With this scenario in view, the committee of independent experts (hereafter called the Kanungo Committee) appointed by the Government of Orissa have very aptly recommended, as a mid-course correction, certain measures setting aside and keeping in abeyance till sectoral turnaround, the revaluation assets of OHPC, payment of interest to the State Government on the loans imposed on the licensees due to revaluation to provide requisite support to the power sector for its resuscitation and among other things have made the following significant recommendations :
- Revaluation of GRIDCO and OHPC assets to be kept in abeyance till the system is brought to balance.
  - State Government to agree to allow moratorium on debt servicing to the State except the amounts in respect of loans from the World Bank.
  - **An interim financial package amounting to Rs.3240 Crore (estimated) to be availed from World Bank and the DFID to bridge the cash gap in order to keep the tariff at the same level for the period from 2001-02 to 2004-05.**
  - Instituting regular systems of monitoring of consumer grievances and services supplemented by test checks.
  - Setting up of Rural Engineering Planning Organisation (REPO) and Rural Electrification Planning Units (REPU) under Government of Orissa to monitor RE and LI works.
  - At this point of crisis, all agencies such as State Government, the Central Government, the World Bank and DFID should get together to rescue the reform process.
  - Reduction of distribution loss @ 5% p.a. with a base level of 42.2% in the year 2001-02.
  - Collection efficiency of DISTCOs to increase from 76% to 85% by 2004-05.

- 5.2.23 The inescapable conclusion emerges from the aforesaid observation is that support for sectoral revival can be possible with reduction in input cost to the distribution companies, which has occurred on account of exponential rise in (a) cost of power (b) cost of transmission (c) cost of distribution. The rise in power purchase cost has been more steep in respect of Orissa Hydro Power Corporation (old stations) where the per unit cost of power purchase went up from 22 paise/unit as on 31 March, 1996 to 38 paise/unit as on 1 April, 1996 and 49 paise/unit between 1997-98 to 2000-01.

### 5.3 **Strategies for Improvement of Power Sector**

- 5.3.1 With this background, the Commission deems it fit to have a review of the various policy options being followed in the post reform era in the best interest of the power sector in the state within the frame work of existing Act, Rules and Regulations. The Central Govt. as well as State Govt. have taken various steps to bring out improvements in the power sector.

### 5.4 **Recommendations of Deepak S. Parekh Committee**

- 5.4.1 Expert committee constituted by Govt. of India under the Chairmanship of Shri Deepak S. Parekh in their report recommended that the State Govt. as the sole owner of the SEBs and as the primary driver of the reform process, should consolidate these liabilities, take them over and transfer them to a Power Sector Reform Fund (PSRF). The next step would be for the State to write off its own loans to the SEB. The committee considers that these steps are not only necessary in order to enhance the credibility of the restructuring process but would also enhance the sale value at the time of privatisation.
- 5.4.2 In order to enhance the credibility and mitigate the risk of policy reversals, the committee recommends that the State Govt. should ring-fence both the liabilities and the inflows earmarked for the sector restructuring into a PSRF. All existing liabilities of the sector should be transferred to the PSRF and, concomitantly, existing receivables, privatisation proceeds, grants from the Government of India and other donor agencies and a portion of the surplus from future operations (say, in the form of a PSRF surcharge) should be transferred to the PSRF to defray these liabilities.
- 5.4.3 **In the line of the recommendations of the Deepak S. Parekh Committee, the Commission advise Govt. of Orissa u/s 11 (a) of the OER Act, 1995 for taking over the loans and liabilities of GRIDCO upto 31<sup>st</sup> March 1999 i.e. prior to privatisation of distribution business vide D.O. No.CHM/2003/378 dated 21.02.2003. The Commission is of the opinion that once the amount of old outstanding loans are transferred to PSRF its realisation, can be addressed as per the methods mentioned in para 5.3.1.2 of the committee report.**

### 5.5 **Decision of Govt. of Orissa on recommendations of Kanungo Committee (The committee of independent experts) and suggestions of OERC**

- 5.5.1 The Govt. of Orissa took following decisions vide notification No.R&R-I-2/2002/1068 dt.29.01.2003 on the recommendations of Committee of Independent Experts to review Power Sector Reform in Orissa and corrective suggested by the Commission.

- 5.5.1.1 The effect of upvaluation of assets of OHPC and GRIDCO indicated in Notification No.5210 dated 01.04.1996 and No.5207 dated 01.04.1996 would be kept in abeyance from the Financial year 2001-02 prospectively till 2005-06 or till the sector turns around whichever is earlier to avoid redetermination of tariff for past years and also redetermination of assets of various DISTCOs. For this purpose depreciation would be calculated at pre-1992 norms notified by Govt. of India.
- 5.5.1.2 Moratorium on debt servicing by GRIDCO and OHPC to the State Govt. would be allowed from the financial year 2001-02 till 2005-06 except the amount in respect of loan from the World Bank to the extent the State Govt. required to pay to the Govt. of India.
- 5.5.1.3 The outstanding dues payable to OHPC by GRIDCO till 31.03.2001 on account of power purchase would be securitised through issue of power bond by GRIDCO to OHPC.
- 5.5.1.4 GRIDCO and OHPC shall not be entitled to any Return on Equity (ROE) till the sector become viable on cash basis or 2005-06 whichever is earlier.
- 5.5.1.5 Under conditions of normal hydro availability the State becoming surplus in power availability, GRIDCO may take steps for export of power. GRIDCO would take steps to procure cheap power from CPPs like NALCO & ICCL. OHPC & OPGC may be allowed to undertake 3<sup>rd</sup> party sale outside the State subject to permission from appropriate authorities.
- 5.5.1.6 OERC would consider multi-year tariff schedule, which would help the utility like Generator, GRIDCO and DISTCOs to embark upon long term business plan.
- 5.5.1.7 World Bank loan would be passed on by State Govt. to GRIDCO and DISTCOs as 70% loan @ 13% interest per annum and balance 30% would be as grant.
- 5.5.1.8 Tax-free bonds @ 8.5% interest would be guaranteed by Govt. of Orissa for PFC REC loan.
- 5.5.1.9 There shall be 5% overall reduction of distribution losses every year from financial year 2002-03 and 2005-06 bench-making the starting distribution loss of 42.21% in financial year 2001-02.
- 5.5.1.10 Collection efficiency of revenue to be calculated as 85% for the financial year 2001-02 reaching to 95% in 2005-06.
- 5.5.1.11 Aggressive feeder metering in LV side of distribution transformers should be made within 12-18 months to identify loss prone area. OERC would be requested for compliance from DISTCOs.
- 5.5.1.12 Swapping of Govt. dues from GRIDCO against dues of GRIDCO from Govt. and balance receivables if any be settled.
- 5.5.1.13 Suitable budgetary provisions be made after actual verification for payment in full of electricity dues of GRIDCO/DISTCOs against various Departments of the State Govt. Such dues could be paid directly to the OHPC Ltd. and the books of accounts of the concerned DISTCOs and GRIDCO adjusted as paid and received.
- 5.5.1.14 Govt. would exempt water cess on the volume of water used by OHPC for generation of electricity.
- 5.5.1.15 GRIDCO should refrain from purchasing materials, which are not required for minimum utilisation. GRIDCO is also advised not to initiate new contracts unless

the position is reviewed by their Board of Directors and approved by Energy Department.

5.5.1.16 GRIDCO should take prompt and effective action for payment of interest towards World Bank loan. In case of default, this should be adjusted out of the any release to GRIDCO.

5.5.1.17 A year-wise target of reduction of cash loss should be fixed and monitored.

5.5.1.18 Subsequently a corrigendum has been issued by the State Govt. vide Department of Energy Notification No. 5302 dated 06.05.2003 on the above mentioned Notification No. R&R-I-2/2002-1068 dt.29.01.2003. The corrigendum is mentioned as under.

The para- IV and para- XIII of the Notification No. R&R-I-2/2002-1068 dated 29.01.2003 may be read as follows :-

IV) GRIDCO and OHPC shall not be entitled to any return on Equity ( ROE ) except in respect of the new projects commissioned after 01.04.1996 till the sector become viable or end of 2005-2006 whichever is earlier.

(XIII) Suitable budgetary provisions be made after actual verification for payment in full of electricity dues of GRIDCO/DISTCOs against various Departments of State Government. Such dues could be paid directly to O.H.P.C Ltd. and the books of accounts of the concerned DISTCOs and GRIDCO adjusted as paid and received. Only the dues of CESCO will be paid to O.P.G.C through Escrow with GRIDCO.

## **5.6 Implementation of multi-year tariff strategy**

5.6.1 In course of the hearings, the utilities as well as some of the respondents spoke about the element of uncertainty and risk inherent in an annual tariff setting exercise and they pleaded for introduction of a multi-year tariff regime, which would reduce such uncertainty. The Commission is conscious of the need for greater certainty in the regulatory treatment of a host of issues having direct impact on tariff setting. Section 26 of the OER Act, 1995 does not permit for multi-year tariff fixation but there is no bar for determination of long-term tariff strategy. Government of Orissa vide notification referred above is of the view that OERC would consider multi-year tariff schedule, which would help the utility like generators, DISTCOs and GRIDCO to embark upon long-term business plan.

5.6.2 The Commission also is in favour of setting out principles of long term tariff strategies so that rules of the game can be known to each and every player of the power sector. The long term tariff strategy aims to promote sustainable and meaningful efficiency improvements help the licensee and the power sector in Orissa to achieve financial stability and safeguard the consumers interest through better quality service and competitive tariffs. The Annual Revenue Requirement of the licensee shall determine during control period on the basis of the pre-determined principles. The control period covers four financial years starting from 1.4.2003 and ending on 31.03.2007. The first year of the control period i.e. FY 2003-04 shall be treated as the transition period. During the first control period the performance targets shall relate to the system losses and collection efficiency for different consumers of category. The performance targets shall also include the quality of supply and customer service standard. The cost can be segregated into two parts viz. controllable of cost and non-controllable cost. In case of controllable cost, any deviation from the benchmark fixed by the Commission shall not be allowed as pass through. The cost arising from factors that are not under control of the licensee shall be subject to adjustment of forecast value and actual values so as to protect the licensee from such variations. The Commission intends to conduct a detail review of the performance

during the control period in October 2006 and come out with a review consultation paper on the performance of licensees during the control period vis-à-vis performance targets as well as the LTTS principles for the next control period.

- 5.6.3 **The implementation of LTTS has been brought out through the Commission's order no dt 18. 06. 2003 in Case No. 8/ 2003 separately.**

## 5.7 **Implementation of Availability Based Tariff (ABT)**

- 5.7.1 The Availability Based Tariff has been implemented in the Eastern Region w.e.f. 1<sup>st</sup> April 2003. The principle of ABT aims to enforce grid discipline with an objective to maintain consistency in frequency and efficient use of available energy resources. It has three part tariff structure.

5.7.1.1 Availability Charge for allocated Capacity (Fixed Charge).

5.7.1.2 Energy Charge for Scheduled drawal (Variable Charge).

5.7.1.3 Unscheduled interchange ( **U I Charge**)

- 5.7.2 The special feature of the above commercial mechanism is UI Charge. Under this scheme, any deviation of drawal from the scheduled shall be liable to UI charges Payable/Receivable to the utility concerned. This UI is to be worked out for each 15 minutes blocks period and there shall be 96 Blocks period in each day of operation. The charges for unscheduled drawal shall be based on average frequency of the relevant block period. The UI rate varies with maximum 420 paise/KWH at 49.0HZ and minimum of 0 Paise/KWH at 50.5HZ. The UI Charge at different frequency is linear in the step size of 0.02HZ. During under frequency condition overdrawal beyond schedule will attract disincentive in the form of a higher charge which can go up to 420 p/u at a 49 HZ and incentive for underdrawal will be available at the same rate during low frequency condition. Vice versa is applicable during high frequency condition. This being the principle during ABT regime, no separate charge need to be specified for overdrawal or underdrawal by DISTCOs. During ABT operation, a DISTCOs overdrawal during under frequency condition will be liable to pay UI charges as per rule. There may be a situation when one DISTCOs is overdrawing and another is under drawing so that net impact on GRIDCO drawal is nullified. In that case cost recovery of UI charges from overdrawing DISTCOs will not be appropriated by GRIDCO and will be kept in a separate account. Such cases need to be referred to Commission for direction on appropriation of these funds. The DISTCOs in turn need to bring to the notice of the consumers particularly industrial ones of EHT and HT category about the impact of the overdrawal during under frequency condition and should have a back to back arrangement for passing on the extra burden due to UI charges to those industries overdrawing during UF condition. The meters in the consumer premises should be capable to record the 15 minutes interval load drawal with a memory retention of at least 60 days.

- 5.7.3 ABT is a new concept with three elements of charges. In initial years there might be teething problems. The utilities need to remain alert to avoid such huge financial burden on account of UI charges.

## 5.8 Securitisation of Power Purchase dues

- 5.8.1 In OERC order (Case No.29 & 30/2000 dtd.16.03.2001) on FRP and securitisation, the Commission observed “the Commission grants in principle approval of the Financial Restructuring Plan indicated in paras 12 and 13 of this order and plan for rescheduling of loans as contained in their application dtd.19.09.2000 vide Case No.30/2000 dtd.30.09.2000 and 29/2000 dtd.19.09.2000 respectively. GRIDCO with the support of GOO must plead with the GOI and the funding agencies for one time settlement, waiver of dues and fresh loans and after taking the results into account, implement the financial restructuring plan to revise GRIDCO so as to put it on recovery path towards viability”.
- 5.8.2 Further, the Commission has observed, “the retail tariff levels as proposed in the FRP is based on the BST calculation. The projection has not taken into account the debt service due to the tax free bonds to be issued by GRIDCO. On the other hand, they have proposed additional borrowing to the tune of Rs.929 Crore in the year 2001 and further Rs.631 Crore in the year 2002. This will definitely impact the BST as well as the retail tariff thus upsetting some of the crucial FRP assumptions. We are not in a position to give clearance and commitment for future tariff, as these will be dealt separately on a year to year basis in accordance to the OER Act”.
- 5.8.3 A submission was made on behalf of GRIDCO during the course of the public hearing that GRIDCO had not been able to pay the dues to generators due to non-payment by the DISTCOs to GRIDCO. The power purchase payables as on 28<sup>th</sup> of February 2001 is given below :

**Table : 10**  
**(Rs. in Crore)**

<b>Power Purchase Payables</b> <b>(As on 28<sup>th</sup> Feb,2001 without March,01 bill)</b>				
Central Sector Generators	Principal outstanding	DPS outstanding	40% DPS applicable for securitisation	Total outstanding for securitisation
NTPC (Incl. TTPS)	410.73	126.75	50.70	461.43
NHPC	5.05	9.87	3.95	9.00
PGCIL	11.39	-		11.39
NALCO	156.46	-		156.46
Total payables to CPSUs	<b>583.63</b>	<b>136.62</b>	<b>54.65</b>	<b>638.28</b>

- 5.8.4 GRIDCO pleaded that NTPC had been regulating power supply to Orissa due to non-payment of dues and in accordance with the CERC order dt.11 January 2002 a utility would be required to bear the fixed cost of the generators in proportion to the share allocation during the period of energy regulation by the central generators. In this situation, the liability of GRIDCO will further increase if the Commission does not reconsider its own decision of not allowing the interests on account of securitization of power purchase liabilities. In view of the regulation of power by NTPC, it has become extremely urgent on the part of GRIDCO to create special purpose vehicle for securitizing power purchase liability of NTPC through issue of bonds and the Commission may permit the interest on bond as a pass through in the revenue requirement for the year 2001-02 and 2002-03. As indicated in para above, the Commission being concerned about the mounting liabilities of GRIDCO accepts securitisation of current liabilities as on 28.2.2001 payable to CPSUs like NTPC and NALCO through issue of new bonds. In addition, the

Commission also accepts the interest liability of the past bonds issued by GRIDCO which was earlier disallowed provided these bonds are converted at 8.5% coupon rate in line with recommendation of Ahluwalia Committee.

- 5.8.5 The financial position of GRIDCO is such that the liability on account of power purchase is on the rise due to non-payment of BST bills by the distribution companies creating a debt trap both for GRIDCO as well as for the generators. At the time of passing of the FRP order as indicated in the para above, the issue of pass through of the burden of interest on power bonds on account of non-payment of power dues is required to be addressed in this tariff order. The Commission has come to conscious decision that unless the power purchase liabilities are allowed to be securitised in full, the problem of liquidity cannot be addressed. In any case, this has to be a one time settlement in accordance with the policy followed at the national level where the GOI has categorically accepted the ground realities and allowed securitisation of power dues as well as other dues payable to the GOI organisations by the SEBs. The case of Orissa is no different except that it has taken an advance step of reforming its own power sector for which SEB has been replaced by the GRIDCO and the DISTCOs. Accordingly, this principle should be applicable mutatis mutandis to GRIDCO which is purchasing bulk power from generators.
- 5.8.6 This will have the advantage of retiring high cost debts carrying interest rate more than 24% per annum, (LPSC @ 2% p.m.) on the central generator dues. Securitisation of these dues will reduce the interest burden to 8.5% as recommended by the Ahluwalia Committee in its report for one time settlement for CPSU dues and accepted by the Government of India. The Commission would further expect that the dues of CPSUs like NALCO should also be securitised by GRIDCO in similar manner.
- 5.8.7 As far as the recovery of interest from DISTCOs is concerned, the analogy as applied for GRIDCO shall apply in this case, since there is a back to back arrangement between GRIDCO and DISTCOs for recovery of the institutional loans handed over at the time of separation of distribution business from GRIDCO. Interest shall be calculated during the year 2002-03 on the loans and past bonds securitized carrying a lower rate of interest of 8.5%.

## 5.9 Reasonable Return

- 5.9.1 The Commission is aware that the capital base of all the licensees are negative and their networth has been eroded. As such, no returns are possible to the licensees and they stand to earn only 0.5% on the approved loans. The Commission is of the view that an appropriate base for returns is required for enabling fresh infusion of capital and hence, it has allowed a 16% return on equity instead of the traditional return on capital base. The Commission in this regard has thereby departed from Sixth Schedule.

## 5.10 Treatment of Working Capital

- 5.10.1 The Commission believes that the companies must commit themselves to a higher level of efficiency, bring loan to meet the working capital needs so that the transmission utility and the generators are not starved of funds. There is a gap between the revenue billed and the revenue realised due to inefficiency on the part of the licensees for failing to take appropriate and expeditious steps like disconnection in time or initiation of civil suits to realise the arrear dues. Under the present tariff the domestic, commercial, irrigation and agricultural consumers and small industries, are not required to pay any DPS for delay in payment, whereas medium industries and other categories only pay one time DPS. This is a disincentive for revenue collection especially when the licensees are not capable of realising the dues after the due date of payment is over. The Commission therefore, thinks it appropriate to levy a DPS of 2% due to non-payment by the consumers as was suggested by one of the objectors, Sri R C Padhi.



5.10.2 The distribution companies have failed to bring required working capital to ensure proper cash flow to meet all expenses. The licensee can get rebate on prompt payment from GRIDCO @2% per month, which will reduce its power purchase liability. Thus, if the licensee arranges working capital from the commercial and financial institutions, they can save not only the DPS but will earn a rebate from the GRIDCO that will compensate the interest on working capital and may accrue some revenue in the form of rebate. The licensee is having a huge amount of arrears to be collected from consumers in the period of its taking over the business from 01.04.99 till 31.03.2003. As per the figure submitted by CESCO, the arrears as on 31<sup>st</sup> March 2003 is around Rs.1215 crore. Apart from 90% collection of the current revenue if the licensee collects at least 15% to 20% of the arrears outstanding, it will be flushed with sufficient fund and may not require any working capital for its day to day management. Moreover, the licensee is collecting security deposit equivalent to interest free two months charges available with DISTCOs. This amount can be utilised for meeting working capital requirements as a stop gap arrangement.

5.10.3 In addition to the above, if any finance is availed from any other source to meet the working capital requirements to the extent of revenue shortfall of 10% as recognised by the Commission, the servicing of the same can be passed on to consumers after due scrutiny and approval by the Commission.

#### 5.11 **Swapping of dues receivable from the Govt. against amount payable to GRIDCO**

All the DISTCOs, during hearing, pointed out that they are unable to collect arrears of Govt. Deptts. and Public Sector Undertakings due to which they could not meet the GRIDCO's demand towards BST bill and loan instalments. They submitted that the Govt. arrears should be adjusted against the dues of GRIDCO so that they would be relieved from servicing the dues of GRIDCO to some extent. Govt. of Orissa in their notification dated 29.01.2003 decided to swap Govt. of dues from GRIDCO against dues of GRIDCO from Govt. and balance receivables, if any be settled. In the light of the above decision, the Commission is of the opinion that the dues of DISTCOs from Govt. of Orissa/Public Sector Undertaking can be adjusted against the dues of GRIDCO from the DISTCOs. **In order to adjust the arrears from the Govt. against GRIDCO dues, DISTCOs should provide authenticated audited figures by 31.08.2003 for further action at Commission's end. In principle, as per Govt. Notification No. 1068 dated 29.01.03, these audited amounts will be deemed to have been passed on to GRIDCO. In other words, the State Govt. will pay the amount to GRIDCO/OHPC as approved by the Commission.**

#### 5.12 **T&D loss**

5.12.1 The next issue is determination of the total cost of distribution and retail supply. The supply business requires purchase of power by the DISTCOs from GRIDCO for supply to consumers. The energy received at grid sub-stations at 33 kV by the DISTCOs and supplied to the end-use consumers at different voltage levels which entails both technical and commercial losses. The quantum of power purchase is metered in each grid sub-station and is reflected in the various data recorded in the Energy Billing Centre (EBC) and in the BST bill of GRIDCO raised on DISTCOs. The table below shows the details of power purchase, sale and distribution loss of the DISTCOs from 99-00 to 02-03.

**Table : 11 Actual Performance (As per filing of the DISTCOs )**

	<b>FY 00</b>	<b>FY 01</b>	<b>FY 02</b>	<b>FY 03</b>
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<b>WESCO</b>				
Energy Purchased (MU)	2688.429	2867.767	2979.287	3353.720
Energy Sale (MU)	1500.831	1628.892	1595.781	2069.272
Distribution Loss (%)	44.17	43.20	46.44	38.30
<b>NESCO</b>				
Energy Purchased (MU)	2258.00	2437.00	2303.00	2396.116
Energy Sale (MU)	1279.00	1358.00	1128.00	1404.968
Distribution Loss (%)	43.36	44.28	51.02	41.36
<b>SOUTHCO</b>				
Energy Purchased (MU)	1433.00	1522.70	1521.97	1555.99
Energy Sale (MU)	833.00	875.43	906.09	946.94
Distribution Loss (%)	41.87	42.51	40.47	39.14
<b>CESCO</b>				
Energy Purchased (MU)	3607.00	4023.00	4186.00	4055.437
Energy Sale (MU)	1990.00	2219.00	2143.00	2310.599
Distribution Loss (%)	44.83	44.84	48.81	43.02
<b>TOTAL</b>				
Energy Purchased (MU)	9986.43	10850.47	10990.26	11361.263
Energy Sale (MU)	5602.83	6081.32	5772.87	6731.779
Distribution Loss (%)	43.90	43.95	47.47	40.75

5.12.2 The Commission in its Retail Supply Tariff order for the year 2002-03 accepted the distribution loss figure as adopted by the Kanungo Committee as 42.21% for the base year FY 2001-02.

5.12.3 This figure of 42.21% represents the overall average distribution loss for the entire State but varies across the four distribution companies depending upon their consumer mix. The variation in loss figures across the DISTCOs are exhibited in the table given below. The Commission also adopted the recommendation of the committee for reduction of distribution loss at least at the rate of 5% per annum from 2001-02 to 2002-03. The Commission, therefore, directed that for the purpose of determination of tariff and the revenue requirement the rate of loss reduction would be calculated at the rate of 5% (overall average for the state) starting from the FY 2001-02 and 2002-03, as detailed below. The shortfall between the actual loss reported by licensees and what has been approved by the Commission will have to be absorbed by the licensees.

**Table : 12**

	<b>FY 2001-02</b>			<b>FY 2002-03</b>		
	Purchase (MU)	Loss(%)	Sale(MU)	Purchase (MU)	Loss(%)	Sale(MU)
CESCO	4167.77	40.94	2461.485	4321.00	35.94	2768.03

NESCO	2253.62	46.98	1194.8693	2291.20	41.98	1329.36
WESCO	2980.64	41.08	1756.1931	3066.54	36.08	1960.13
SOUTHCO	1525.07	40.89	901.46888	1682.39	35.89	1078.58
TOTAL	10927.10	42.21	6314.02	11361.13	37.21	7136.10

- 5.12.4 The Commission also stated in the said order that while formulating the multi-year tariff proposed to be effective from 01.04.2003, this aspect of loss reduction along with collection efficiency etc will be adopted for the control period.
- 5.12.5 As part of its consultative process on tariff fixation, the Commission convened its Commission Advisory Committee (CAC) meeting on 9<sup>th</sup> April, 2003 and its constituent members rendered valuable input regarding the proposed tariff and revenue requirement of the licensees.
- 5.12.6 Cutting across the board, members representing varied interest groups expressed concern about the persistent high transmission and distribution losses of GRIDCO and the DISTCOs. They suggested that the operational efficiency of the licensees should be streamlined and monitored more rigorously. They were of the view that inability of the license holders to bring down T & D loss in a phased manner and to achieve the benchmarks set by the Commission in its previous tariff orders, was the primary reason why they were not financially viable even after seven years of reform. They emphasized that T&D loss should come down from 35% in 2000-2001 to 32% in the current year.
- 5.12.7 Members were unanimous that indifference of the state government to issues such as revenue subsidy for rural electrification works, clearance of government energy arrears and enactment of anti theft law has contributed in large measure towards downsliding of power sector reform in the State. They called for greater political will in dealing with the problems of the energy sector.
- 5.12.8 The CAC was also critical of the un-audited accounts and unauthenticated figures dished out by the GRIDCO and DISTCOs in their tariff proposals. They pointed out that cross check of figures in respect of valuation of assets, T & D loss and other expenditures presented to the Commission in different occasions by these companies revealed gross discrepancies. Members suggested that all figures submitted by the licensee in tariff, should be subjected to thorough scrutiny before allowing them to pass through.
- 5.12.9 The commission's decision to allow securitisation of arrear dues in last year tariff reversing its own previous order was opposed by the members who were of the opinion that this would penalise consumers who had already paid for the cost of energy in the relevant year.
- 5.12.10 Members also suggested that to avoid any needless burden on consumers, both hydro and thermal generators should make short-term power projection with 5% margin for emergencies and costly power from central power stations should be surrendered. The CAC stressed on aggressive bi-lateral trading as a effective means to offset high power purchase costs.
- 5.12.11 With regard to the current additional expenditure on power due to failure of the monsoon, CAC members urged the government to make every effort to secure grant from the National Calamity Fund by the state government. They demanded that the recommendations of the Parekh Committee should be implemented without delay.
- 5.12.12 The objectors in general were of the opinion that adoption of a uniform loss figure for the four distribution companies with a different load mix would hide the inefficiency of the companies with higher components of HT and EHT load. EHT component of load makes a

big difference to the overall loss figure for the company as loss in EHT category is practically negligible. The average loss as a percentage of the total power procurement from the GRIDCO by DISTCOs as well as the direct sale figures at EHT as projected by the four DISTCOs are given in the table below for the FY 2003-04.

**Table : 13**

PROPOSED FOR FY 2003-04 BY DISTCOs	NESCO	WESCO	SOUTHCO	CESCO	TOTAL
Input for the DISTCOs (MU)	2464.31	3773.58*	1580	3960	11777.89
Sale at EHT (MU)	471.48	1346**	153.64	423	2394.12
Proposed Distribution Loss (%) for 2003-04	38.49	32.42***	36.26	35.98	35.41
Distribution Loss(%) as set by OERC for 2003-04	36.98	31.08	30.89	30.94	32.21

\* Input for WESCO has been arrived at based on its submission dtd. 25.01.2003 and 05.02.2003 through affidavit for additional sale of 270 MU to M/S INDAL, Hirakud, Rourkela Steel Plant and some HT Industries.

\*\* including the additional sale to M/S INDAL & M/S RSP.

\*\*\* WESCO in its ARR has indicated target distribution loss of 34.86% for the year 2003-04. With the additional sale at EHT, the target loss works out to 32.42%.

5.12.13 Some of the objectors have pointed out that the distribution loss is being computed including EHT energy consumption to show a reduced level of loss. The total power sale to a DISTCO is arrived at the Energy Billing Centre of GRIDCO by integrating the EHT drawal at 132/220 kV and bulk power drawal at 33 kV from any grid sub-station. Therefore, sale at EHT can be taken out from the total power purchase figures to determine the energy input to various DISTCOs for supply to HT and LT consumers. If the EHT sale projected by the four DISTCOs are taken out from the total sale projected by these companies, the distribution loss as the percentage loss on HT and LT input will be as under.

**Table : 14**

**Distribution Loss as percentage of HT & LT input as proposed by the**

**Distribution Companies for the year 2003-04**

	NESCO	WESCO	SOUTHCO	CESCO	ORISSA
Loss at HT & LT (%)	47.59	50.40	40.16	40.32	44.45

- 5.12.14 The Commission had also observed in the previous tariff order that the high T&D loss is not an isolated phenomena in Orissa. Higher level of loss figures are being gradually disclosed in all most all the reforming states in the country. The World Bank on whose SAR Commission relied in fixing an overall loss level of 35% in FY 1997-98 subsequently came out in its midterm review report dtd.31.10.1998 that it underestimated the actual loss level in the beginning. The World Bank states, “Consultation with the Commission on the issue of recognizing the actual system loss levels and pass through of prior years’ financial losses, given that we all so severely underestimated GRIDCO’s system losses in 1996 and set unachievable performance targets”.
- 5.12.15 The DISTCOs have not initiated any concerted and vigorous efforts on metering of 33/11 KV feeders and on LV side of transformer and at consumers served by the feeder to ascertain the actual level of loss and identify loss prone areas. However CESCO in its reply dtd. 17.02.2003 to the queries raised by the Commission has committed to complete all feeder metering and LV side of Transformers by end of March, 2004 and consumer end metering by December, 2004.
- 5.12.16 The Commission with the assistance of the Department for International Development (DFID) has conducted pilot study in one 11 kV feeder for WESCO, NESCO and SOUTHCO and two feeders of CESCO through Commission’s consultant i.e. PWC. The report of this pilot study demonstrates that there is ample scope and opportunity for quick reduction of loss by the DISTCOs. Since the result arrived based on the study of a single feeder may not give a representative picture of the distribution loss, the Commission with the assistance of DFID through PWC have taken up the exercise of carrying out additional pilot studies on selected number of 11kv feeders having mixed load.
- 5.12.17 The distribution companies while submitting the business plan for a period of 5 years to the Committee of Independent Experts in the month of October, 2001 have supplied the following distribution loss figures for the year 2001-02 to 2004-05:-

**Table-15**  
**Figure of distribution loss projected by DISTCOs before**  
**the Committee of Independent Expert**

<b>Name of the company</b>	<b>FY 01-02</b>	<b>FY 02-03</b>	<b>FY 03-04</b>	<b>FY 04-05</b>
CESCO	40.94%	39.35%	37.57%	36.08%
NESCO	46.98%	40.77%	36.85%	34.12%
WESCO	41.08%	39%	36.93%	34.89%
SOUTHCO	40.89%	39.21%	36.01%	33.14%
ALL ORISSA	42.21%	39.56%	37.00%	34.87%

**Table-16**  
**Figure of distribution loss achieved by DISTCOs during FY 2002-03**

<b>Name of the company</b>	<b>FY 02-03</b>	<b>Target level of distribution loss set by the Commission for FY 2002-03</b>
CESCO	43.02%	35.94%
NESCO	41.36	41.98%
WESCO	38.3%	36.08%
SOUTHCO	39.14%	35.89%
ALL ORISSA	40.75%	37.21%

- 5.12.18 The committee, however, accepted distribution loss of 42.21% for the base year of FY 2001-02 after hearing the DISTCOs and suggested reduction of distribution loss by 5% each year from FY 2002-03 to reach a level of 22.21% in the year 2005-06 and extended to 20% by end of the year 2006-07.
- 5.12.19 The pilot study conducted by the Commission brings out very clearly that the scope of reduction of distribution loss is enormous unless the companies take effective and concrete steps such as technical, financial and managerial decisions in this regard, any number of alibis expressing inability for not reducing the distribution loss are not acceptable to the Commission. Besides, higher level of loss found out on the basis of pilot study is purely indicative as the number of feeders selected were mini scale in number as compared to the existing feeders. Pilot study results cannot be taken as basis for determining loss levels existing in different DISTCOs, as study of one feeder out of hundreds of feeders in the company with varied load mix, concentration of loads, length and size of feeders cannot be a representative one. But this study brought to the fore very interesting facts like direct tapping of 11 kV feeder by industrial consumers, by-passing of meter CTs, etc. It so happened in some areas where pilot study was being taken up, the consumers locked their houses and went away virtually preventing the utility staff and consultants to check the status of the meter. Pole scheduling in the study area revealed unauthorized abstraction of energy by the illegal consumers, consuming energy far more in excess of what was shown in the consumer ledger of the DISTCOs.
- 5.12.20 The Commission in its tariff order dtd. 19<sup>th</sup> April, 2002 for the year 2002-03 accepted the distribution loss figure as approved by the Kanungo Committee as 42.21% for the FY 2001-02 which is treated as the base year. This figure of 42.21% represents the overall average distribution loss for the entire State but varies across the four distribution companies. The variation in loss figures across the DISTCOs is exhibited in the table given below. The Commission also adopted the recommendations of the committee for reduction of distribution loss at least at the rate of 5% per annum from 2001-02 to 2002-03.

**Table : 17**

	<b>FY 2001-02</b>			<b>FY 2002-03</b>		
	Purchase (MU)	Loss (%)	Sale (MU)	Purchase (MU)	Loss (%)	Sale (MU)
CESCO	4167.77	40.94	2461.485	4321.00	35.94	2768.03
NESCO	2253.62	46.98	1194.8693	2291.20	41.98	1329.36
WESCO	2980.64	41.08	1756.1931	3066.54	36.08	1960.13
SOUTHCO	1525.07	40.89	901.46888	1682.39	35.89	1078.58
TOTAL	10927.10	42.21	6314.02	11361.13	37.21	7136.10

- 5.12.21 The Commission therefore directed that for the purpose of determination of tariff and the revenue requirement the rate of loss reduction will be calculated at the rate of 5% (overall average for the state) starting from the FY 2001-02 and 2002-03.
- 5.12.22 While formulating the multi-year tariff starting from 2003-04 as the transition year, this aspect of loss reduction along with collection efficiency etc will be decided for the Control Period, i.e. 2003-04 to 2006-07.
- 5.12.23 The Commission wants to make it expressly clear that there is no shortcut way unless a systematic drive is made to reduce the distribution loss. This should necessarily include metering of 11 kV feeders, metering at LV side of transformers, pole scheduling,

verification, if deemed necessary of consumer connected loads, rectification or replacement of consumer meters so that each feeder is converted to a **Profit Centre** as has been very aptly stated by the Ministry of Power, GoI, which is allotting a large sum of money to meet the cost of metering etc. to achieve the goal in a time bound manner, which will be available through State Govts. to utilities and SEBs under APDRP programme.

5.12.24 CESCO has committed to complete all the feeder metering by 2004 and LV side of transformer metering by March, 2004. The table below indicates that there are about 2 to 3 Nos. of 11 kV feeders, 1 No. of 33 kV feeder and 2 Nos. of 33/11 kV transformers under each section in the State. Number of transformers, feeders, and field sections with the Distribution Companies as on 31<sup>st</sup> March, 2003 are as under :-

**Table : 18**

	33/11 Transformer (In Nos)	33KV Feeders(In Nos.)	11KV Feeders(InNos)	Distribution Transformers ( In Nos)	Field Sections (In Nos )
CESCO	340	125	534	15106	245
NESCO	196	48	355	9942	109
WESCO	199	91	390	10775	128
SOUTHCO	190	141	385	9141	112
ALL ORISSA	925	405	1664	44964	594

5.12.25 The Commission, among other things, has attached highest priority on these aspects and shall expect the licensee to aggressively taking up related activities and complete the same by 31.03.2004 as committed by them in the bimonthly review.

5.12.26 Though the Commission in deference to the spirit of OER Act, 1995 would have liked for a hands-off regulation while dealing with day to day activities of DISTCOs, but it finds to its dismay that utilities have taken advantage of this liberal gesture and have done precious little to address this issue which constitutes a menace to the viability of the power sector. Therefore, the Commission would remain closely associated for some time to come in monitoring the activities of DISTCOs in this regard.

### 5.13 AT&C loss (Aggregate Technical and Commercial Loss)

5.13.1 The Kanungo Committee Report, has coined AT&C loss as distinct from the conventional T&D loss which would capture the totality of loss, both technical as well as commercial owing to non-billing, non-collection, theft, etc. In the similar line, the Delhi Electricity Regulatory Commission is of view that the clearest measure of overall efficiency of the distribution business is the difference between units input into the system and the units for which payment is collected. The losses of any kind, technical, non-technical or non-realisation of payments amount to loss in revenues. Efficiency gains must embrace all these aspects. **Hence, the losses should be measured as the difference between the units input and the units realised (units collected).** Such difference is hereinafter referred to as “AT&C Loss” (Aggregate Technical and Commercial Loss). The Government of National Capital Territory of Delhi, as a matter of policy has decided that the AT&C loss shall be the basis for determination of tariffs and also for computation of incentives for better performance. The formula as under indicates the method of determination of AT & C Loss

$$AT \& C \text{ Loss } \% = \left\{ 1 - \left[ \frac{\text{Units billed}}{\text{Units input}} \times \frac{\text{Revenue Collected}}{\text{Revenue Billed}} \right] \right\} \times 100 \%$$

5.13.2 The Commission also adopts the terminology AT&C Loss” (Aggregated Technical and Commercial Loss) as a performance parameter for the multi-year tariff strategy commencing from 2003-04. Accordingly, the Commission fixes the performance target for the Distribution Companies as given in the tables below.

**Table : 19**

**AT & C Loss Target fixed for FY 2003-04, the first year of the Control Period**

	NESCO	WESCO	SOUTHCO	CESCO
<b>Target fixed for 2002-03</b>				
Distribution Loss (%)	41.98	36.08	35.89	35.94
Collection Efficiency (%)	87.5	87.5	87.5	87.5
AT & C Loss (%)	49.	44.1	43.9	43.9
<b>Target fixed for 2003-04</b>				
Distribution Loss (%)	36.98	31.08	30.89	30.94



Collection Efficiency (%)	90	90	90	90
AT & C Loss (%)	43.28	37.97	37.80	37.85

The AT & C loss target for FY 2003-04 will be based on the AT & C loss adopting base year FY 2002-03, as determined by the Commission.

#### 5.14 Method of determination of Power Purchase

5.14.1 The power purchase by the DISTCOs are metered at various grid sub-station's interface points and the DISTCOs are billed according to the meter reading at these points. Actual figures of billing raised by GRIDCO to the DISTCOs for the year 2002-03 are already available. The DISTCOs have estimated their anticipated power purchase from GRIDCO as indicated in their tariff filing. As far as the FY 2003-04 is concerned, the Commission will go by the growth rate projected for the various classes of consumers by the DISTCOs at different voltage levels in the context of LT & HT and calculate the incremental power requirement over and above the actual consumption in FY 2002-03. For EHT consumers proposed sale indicated by CESCO has been considered.

5.14.2 Further, in case of NESCO and CESCO additional sale of 258 MU and 22 MU respectively has been considered based on the percentage rise in the actual consumption in the year 2002-03 by the Ferro Alloys Industries at EHT with reference to the proposed consumption for the said year indicated in the ARR Proposal for the year 2002-03. The total quantum of power purchase for the year 2003-04 has been arrived at as given in the table below.

**Table : 20**

	<b>FY 2003-04</b>		
	Purchase (MU)	Loss(%)	Sale(MU)
CESCO	3981.64	30.94	2749.72
NESCO	2721.96	34.84	1773.52*
WESCO	3773.58	31.08	2600.75
SOUTHCO	1580.00	30.89	1091.94
TOTAL	12057.18	31.86	8215.93

\*Sale at LT & HT has been calculated applying OERC target level of loss on units purchased and with the additional sale to Ferro Alloys Industries at EHT, the loss level works out to 34.84%.

5.14.3 “The Commission will approve the quantum of power to be purchased by the distribution licensee from GRIDCO. When the DISTCO purchases cheaper power from other sources in preference to the power committed to be purchased from GRIDCO, the licensee shall pay the fixed charges in respect of the power committed but not purchased. The distribution licensees are allowed to purchase cheaper power over and above the quantity of power committed to be purchased from GRIDCO as per Commission’s order. The DISTCOs are be permitted to sale the surplus power to consumers outside the State and retain the profits of the transactions. Any profit or loss arising out of this transaction will not be passed on to other consumers in his licensed area.”

#### 5.15 Determination of expected revenue

5.15.1 On the quantum of energy to be purchased by the DISTCOs the percentage of distribution loss as approved by the Commission shall be applied to determine the quantity to be sold during the financial year 2003-04 as given in the table above. The expected revenue from sale of power shall be calculated separately for each category. The shortfall between the estimated revenue requirement and the expected revenue will represent the deficit in revenue which need to be funded through interim financing or through tariff.

#### 5.16 Collection efficiency of DISTCOs

5.16.1 The Committee of Independent Experts had also recommended that the ground reality of billing and collection by the distribution companies in the present Orissa situation need to be recognised. For this purpose, they had suggested that 78% should be accepted as the collection efficiency for the base year 2001-02 going upto 95% by the year 2005-06. The Committee had recommended that the cash gap should be funded by Govt. of Orissa through interim financing other than debt.

5.16.2 The Commission in its tariff order dt. 19.04.2002 considered that with receipt of Government dues, the collection efficiency would increase to 85% for the year 2001-02. In the neighbouring states, such as Andhra Pradesh and Karnataka, the collection efficiency of the utilities is above 95% .In Rajasthan, the collection efficiency is 103%. The Commission is of view that the entire amount on account of non-collection cannot be treated as bad debt as this will further enhance the revenue requirement. Acceptance of the entire uncollected dues of a particular year therefore cannot be written off as bad and doubtful debt and cannot be treated as a pass through for next year tariff. This will accentuate the burden on the paying consumers of the state. The distribution companies have to gear up their machinery for improving collection of revenue for which they need law and order support. To translate this into action, the Commission fixed a yardstick for collection efficiency 85 %for the year 2001-02 and 87.5 % for the year 2002-03. **Accordingly, the Commission fixes target for collection efficiency as 90 %for the year 2003-04 which is built in the AT&C target fixed as mentioned earlier.**

5.16.3 A summary of purchase, sale of power and expected revenue for the year 2003-04 is approved as per the details below.

**Table-21**  
**FY 2003-04**

<b>EXPECTED PURCHASE &amp; SALE OF POWER &amp; REVENUE BY DISTCOs</b>				
	Purchase (MU)	Loss (%)	Sale (MU)	Revenue. (Rs. Crore )
CESCO	3981.64	30.94	2749.72	765.24
NESCO	2721.96	34.84	1773.52*	460.00
WESCO	3773.58	31.08	2600.75	718.20

SOUTHCO	1580.00	30.89	1091.94	288.01
TOTAL	12057.18	31.86	8215.93	2231.45

\* Sale at LT & HT has been calculated applying OERC target level of loss on units purchased and with the additional sale to Ferro Alloys Industries at EHT, the loss level works out to 34.84%.

5.16.4 The Commission does not accept the figure of expected revenue calculated by the DISTCOs for the FY 2003-04 and determines the expected revenue for various DISTCOs for the aforesaid period as indicated in the table above, subject to any variation on account of change in direct sale to consumers at EHT.

#### 5.17 **Overdrawl of Power**

5.17.1 Overdrawl of Power by the Distribution Companies will be guided by the ABT principles. Overdrawl and underdrawl during under frequency condition will attract penalty and incentive respectively and vice versa during high frequency condition. The DISTCOs should notify their EHT, HT, and LT industrial consumers who are guided by two part tariff accordingly and should provide appropriate meters for the purpose.

#### 5.18 **Operating Expenses**

Operating Expenses include:

- a. Employees Cost
- b. Administrative & General Expenses (A&G)
- c. Repair & Maintenance Costs (R&M)

### 5.18.1 Employees Cost

5.18.1.1CESCO in its application for revenue requirement for 2003-04 has submitted break up of employees cost for FY 2003-04, FY 2002-03 and FY 2001-02. For the year FY 2003-2004 CESCO has estimated such cost amounting to Rs.109.19 crore chargeable to revenue.

5.18.1.2The Commission in its last tariff order allowed an amount of Rs.93.27 crore and Rs.95.63 crore towards employees cost for the FY 2001-02 and FY 2002-03 respectively. Since the accounts figures for FY 1999-00 onwards are not ready the Commission considers it prudent to take the approved figure of FY 2002-03 as base. While determining the basis pay for the year FY 2003-2004 the Commission considers it appropriate in giving a 3% rise over the approved basic pay for FY 2002-2003.

5.18.1.3As regards DA, Commission is aware of the fact that the rate of DA allowed by Govt. of Orissa is 49% with effect from 1 January 2002. In the last tariff order, the Commission has allowed DA of 41% on the basic pay with a rider that any increase in rate of DA in future will be allowed to be recovered through tariff with retrospective effect.

5.18.1.4Rate of DA revised from time to time by Govt. of Orissa is given below:

**Table : 22**

	Rate of DA
01.07.2000	41%
01.01.2001	43%
01.07.2001	45%
01.01.2002	49%

5.18.1.5After analysis of the DA rate revised from time to time it is found that the average rate of DA for the year 2001-02 and 2002-03 should have been 45% and 49% respectively. **Therefore, the Commission feels it prudent to allow arrear DA of 4% of the basic pay of 2001-02 and arrear DA of 8% of basic pay of 2002-03.**

5.18.1.6All other allowances claimed by licensee are found to be on higher side. As such Commission allows only 3% rise in respect of medical expenses, house rent and LTC over approved figure of 2002-03. As regards terminal benefits the Commission allows 10% rise over the approved figure of 2002-03. Keeping these observations in view, the Employees Cost has been recalculated as indicated in table below:

**Table: 23**  
**Details of Employees Costs**

*(Rs. Crores)*

Sl. No.	Particulars	Approved by Commission FY 2002-2003	Proposed by licensee FY 2003-2004	Approved by Commission FY 2003-2004
1	Salaries	50.87	55.78	52.40
2	Overtime	0.01	0.01	0.01
3	Dearness Allowance	20.86	20.79	31.72
	<b>Sub-Total (1 to 3)</b>	<b>71.74</b>	<b>76.58</b>	<b>84.13</b>
4	Other Allowance	1.10	1.28	1.12
5	Bonus	4.22	4.91	4.35
6	<b>Total Emoluments (1 to 5)</b>	<b>77.06</b>	<b>82.77</b>	<b>89.60</b>
<b>Other Staff Costs</b>				
7	Reimbursement of Medical Expenses	1.47	1.71	1.51
8	Leave Travel Concession	0.31	0.36	0.00
9	Reimbursement of HR	7.40	8.61	7.62
10	Interim Relief of Staff	0.01	0.01	0.01
11	Encashment of Earned Leave	2.99	4.34	3.08
12	Honorarium	0.00	0.00	0.00
13	Payments under Workmen Compensation Act	0.06	0.07	0.07
14	Ex-gratia	0.07	0.08	0.07
15	<b>Total Other Staff Costs</b>	<b>12.31</b>	<b>15.18</b>	<b>12.36</b>
16	Staff Welfare Expenses	0.00	0.00	0.00
17	Terminal Benefits (PF)	6.27	11.23	6.90
18	Gratuity			
	<b>Total ( 6+15+16+17+18)</b>	<b>95.64</b>	<b>109.18</b>	<b>108.86</b>
	Less: Employees Expenses Capitalised	0.00	0.00	0.00
	<b>Net Employee Costs</b>	<b>95.64</b>	<b>109.18</b>	<b>108.86</b>

#### 5.18.2 Repair and Maintenance (R & M) Expenses

5.18.2.1CESCO has proposed Rs.31.84 crore for FY 2003-2004 towards repair and maintenance expenses, calculated at the rate of 5.4% of Gross Fixed Asset at the beginning of the year.

5.18.2.2The Commission examined the licensee's proposal on R&M expenses. It is felt that preventive maintenance is very much required to avoid major break down of the assets inherited, which were in run down condition. The Commission therefore consider it reasonable to allow the rate of 5.4% of gross fixed asset as at the beginning of the year towards repair and maintenance expenses. **Commission approves an amount of Rs.24.12 crore towards R&M expenses for the year FY 2003-04.**

#### 5.18.3 Administration & General (A & G) Expenses

5.18.3.1CESCO has proposed Rs.18.62 crore towards A&G expenses for the FY 2003-04 in their Annual Revenue Requirement. These expenses include expenses on communication, professional charges, property related expenses, conveyance,

training and other expenses, which includes an amount of Rs.6.50 crore towards watch and ward.

5.18.3.2 The Commission examined the licensee's proposal on A&G expenses. The Commission in its last tariff order has allowed Rs.8.17 crore for FY 2001-02 and Rs.8.58 crore for FY 2002-03, considering an escalation of 5% over the previous year figure. The objectors also pointed out that the licensee should arrest the growing A&G expenditure and limit it within the amount approved by the Commission. CESCO in its reply has stated that it need to undertake vigorous field activities to achieve its targetted loss levels which invite additional cost.

5.18.3.3 The Commission is of the opinion that the licensee should not exceed the controllable expenses beyond the approved bench-mark. Any expenditure of controllable nature incurred beyond the benchmark fixed by the Commission should not be passed on to the tariffs.

5.18.3.4 The Commission finds the projected A&G expenditure proposed by the licensee is on higher side and considers it reasonable to allow an increase of 7% per annum over the approved figure of 2002-03 to take care of incremental expenses and factor in inflation.

**5.18.3.5 The Commission approves an amount of Rs.9.18 crore for the year FY 2003-04 towards A&G expenses.**

#### 5.19 Interest on Loan

5.19.1 CESCO, in its proposal has estimated an amount of Rs.55.09 crore towards interest on loan. Subsequently at the time of hearing CESCO revised the figure to Rs.51.74 crore. Sources of borrowing, interest rate, amount of interest as proposed by GRIDCO are given below:

**Table: 24**  
**Details of Interest Costs**

Sl. No.	Source	Average Rate per annum (%)	Amount (Rs. in Crores)
1	GRIDCO (Subsidiary loan agreement)	13.837 %	38.68
2	World Bank (after capitalisation)	30% grant + 70% loan @ 13% effective rate is 9.1% p/a	13.06
3	APDRP (after capitalisation)	11%	0.00
4	APDRP (after capitalisation)	4%	0.00
	<b>Total</b>		<b>51.74</b>

5.19.2 Regarding loan from GRIDCO (Back to Back loan), CESCO has estimated a balance of Rs.279.53 crore as on 31.03.04 as against GRIDCO's estimate of Rs.308.32 crore. A comparative statement of loan as per GRIDCO and CESCO is given below:

**Table: 25**  
**Loan Balance Statement**

	As per GRIDCO	As per CESCO
As on 01.04.1999	205.00	181.94
Received during 1999-2000 (excludes cash supports and WB loan)	94.50	95.08
Less repayment during FY 1999-2000	0.00	0.00
Receipt during FY 2000-2001 (excludes cash supports and WB loan)	8.83	2.51
Less repayment during FY 2000-2001	0.00	0.00
<b>Balance as on 31.03.2001</b>	<b>308.32</b>	<b>279.53</b>

5.19.3 No loan has been transferred from GRIDCO to CESCO after 31 March 2001. The Commission, in its order dated 19.04.2002, had directed the licensees to reconcile back to back loan with GRIDCO and find out the reasons of discrepancy. The licensee has not reconciled the figure yet. **As such, the Commission accepts the figure of loan submitted by GRIDCO for the purpose of calculation of interest on back-to-back loan.**

5.19.4 The licensee has calculated interest on loan from GRIDCO @ 13.837% instead of 8.5% which is in accordance with the existing contractual agreements.

5.19.5 The Commission is of the view that the decision of the State Govt. has been notified vide No.1068/E dated 29.01.2003 and all parties involved are under obligation to carry out such decision. The bilateral agreements made by the licensee with GRIDCO should be modified from retrospective effect in confirmation with the decision taken by the Govt.

5.19.6 **Accordingly, the Commission calculates the interest at 8.5% and allows Rs.26.21 crore towards interest for the year FY 2003-04.**

5.19.7 **World Bank Loan:**

5.19.7.1 Interest on the World Bank loan has been calculated by the licensee @ 13.5% without considering 30% of the loan as a grant.

5.19.7.2 The above proposal of CESCO is rejected by Commission as Govt. of Orissa in Notification No.1068 dated 29.01.03 has clearly stated that World Bank loan shall be passed on by State Govt. to GRIDCO and DISTCOs as 70% loan @ 13% interest per annum and balance 30% would be as grant.

5.19.7.3 **Accordingly, the Commission approves an amount of Rs.17.99 crore towards interest on World Bank loan for FY 2003-2004 at an interest rate of 13% per annum, treating 70% as loan and the balance 30% as grant. After capitalisation of Rs.9.18 crore, interest chargeable to revenue shall be Rs.8.81 crore in respect of World Bank loan.**

5.19.8 **APDRP**

5.19.8.1 During FY 2003-04, CESCO has proposed to receive an amount of Rs.100 crore under the APDRP scheme @ 11% per annum and Rs.50 crore under the same scheme @ 4% per annum. The interest liability of the loans taken under APDRP scheme before capitalisation, shall be Rs.6.50 crore as estimated by the licensee

for FY 2003-04. CESCO has proposed to capitalise the entire interest during the FY 2003-04.

**5.19.8.2 The Commission accepts the proposal of CESCO and approves an amount of Rs.6.50 crore of interest to be capitalised during the year 2003-04.**

#### **5.19.9 Interest Capitalised**

5.19.9.1 CESCO has proposed Rs.15.21 crore (Rs.8.71 crore WB + Rs.6.50 crore APDRP) for capitalisation in respect of interest during construction.

**5.19.9.2 The Commission has reassessed the interest to be capitalised as Rs.15.68 crore for the FY 2003-04.**

5.19.9.3 Interest on loan proposed by CESCO and approved by Commission is given as under:

**Table: 26**  
**Interest on Loans and Bonds**  
**(Rs. in Crore)**

<b>Loan</b>	<b>CESCO's Proposal for FY 2003-2004</b>	<b>Commission Approval for FY 2003-2004</b>
GRIDCO	38.68	26.21
World Bank (after capitalisation)	13.06	8.81
APDRP (after capitalisation)	0.00	0.00
<b>Total</b>	<b>51.74</b>	<b>35.02</b>

#### **5.20 Depreciation**

5.20.1 CESCO has proposed an amount of Rs.62.90 crore towards depreciation. The method adopted for calculating depreciation is Straight Line Method (SLM) and depreciation has been calculated in accordance with Govt. of India, Ministry of Power Notification No. SO-265 (E) dated 27.03.1994. At the time of hearing, CESCO revised the figure to Rs.60.57 crore. Along with the revenue requirement for FY 2003-04, CESCO filed its business plan upto FY 2006-07. The Commission vide letter No.865 dated 08.05.2003 raised certain queries on business plan. CESCO in complying to above queries further revised its business plan and submitted to Commission on 29.05.2003. The ARR for 2003-04 has been made compatible with the revised business plan. Accordingly the depreciation projected earlier by CESCO got revised to Rs.42.62 crore.

5.20.2 The Commission examined the submission made by CESCO. CESCO has been defaulter of submission of audited accounts from the FY 1999-00 to FY 2002-03. Statutory Auditors, in their report for the year 1998-99 commented that the company has not maintained records showing full particulars including individual break-up of fixed assets, quantitative details and Opening Balance. The Company has not carried out physical verification of fixed assets during that period. Formalities for legal transfer of ownership of freehold and leasehold land and sites are yet to be completed. Replying to a query raised by the Commission, CESCO has stated that steps have been initiated to assess the item-wise and location-wise details of all the fixed assets of the company so as to prepare the Fixed Assets Register for the assets acquired from GRIDCO and also for additions thereto. Independent firms have been engaged to take up physical verification and preparation of Fixed Assets Register of all the Accounting Units of the company. However, pending finalisation of method of valuation of the opening balance of individual



fixed assets transferred by GRIDCO, the preparation of fixed assets register has been delayed.

- 5.20.3 The Commission took note of the observations noted in the audit report for the year FY 1998-99. In the last tariff order dated 19.4.2002, the Commission categorically directed CESCO to comply with the observations raised by statutory auditors before 31.08.2002. But CESCO did not submit any report to the Commission. Once again, the Commission directs CESCO to comply with the observations raised by statutory auditors by 31.08.2003 without fail. Further non-compliance on the part of the CESCO will be seriously viewed by the Commission.
- 5.20.4 The depreciation was being calculated at post-94 rate as prescribed by Govt. of India on asset base that was revalued on 01.4.96. The Commission, in order to neutralize the impact of revalued cost on the tariff, had directed in the tariff order dtd.19.4.2002 to calculate depreciation at pre-92 rate which is substantially low as compared to post-94 rate linked to the life of the assets. The intention was to balance the interest of the consumers as well as the licensees. This would avoid front loading of the tariff but at the same time would ensure necessary cash flow for the licensee for loan repayment and funds for asset replacement.
- 5.20.5 **The Hon'ble High Court while deciding Misc. Case No. 7410 and 8953 of 2002 directed the Commission to make necessary calculation as per the Govt. Notification and depreciation shall be calculated on the pre-upvalued cost of assets as on 1.04 1996 at pre-92 rate.**
- 5.20.6 The assets of OSEB taken over by the Govt. of Orissa were revalued and vested with OHPC and GRIDCO vide SRO No.256/96 and SRO No.257/96 dtd.01.4.96, respectively. The assets have been vested with the aforesaid PSUs at upvalued cost to which subsequent additions of assets have been made at actual cost basis. The Original cost of the assets before upvaluation as per Staff Appraisal Report(SAR) prepared by the World Bank dtd.19.04.96 and value of the asset transferred to OHPC and GRIDCO as per Transfer Notification No.5210 dtd.01.04.1996 are presented in the table below :

**Table : 27**

**Rs. In crore**

	Gross Fixed Asset	Add : Interest and expenses capitalised	Less : Accumulated depreciation	Net fixed asset	Asset Value as per Transfer Notification
OSEB assets transferred	1375.80	105.30	444.90	1036.30	
GRIDCO	1103.20	97.50	363.00	837.80	1957.80
OHPC	272.60	7.80	81.90	198.50	
Add GoO to OHPC	199.4	0	41.30	158.10	
Total OHPC Asset	472.00	7.80	123.20	356.60	1196.80

5.20.7 The Balance Sheet of OSEB for the Financial Year 1995-96 has been prepared subsequently which shows different values of assets pertaining to Generation, Transmission and Distribution Business as compared to SAR.

**Table : 28**

**Asset Position as per Balance Sheet of OSEB for the Year 1995-96  
(As reported by GRIDCO/OHPC)**

	Gross Fixed Assets	Net Fixed Assets
Generation(OHPC)	314.00	226.87
Transmission(GRIDCO)	546.66	416.24
Distribution(DISTCOs)	625.90	379.74
Total	1486.56	1022.85

5.20.8 The Transfer Notification has been made on the basis of the SAR and the value of the assets of OHPC and GRIDCO has not been changed subsequently in accordance with the audited accounts for the year 1995-96. Further, as per the provision of the Section 25(1) and (2) of the OER Act, 1995 GRIDCO and OHPC had the option to alter, vary, modify, add or otherwise change the terms in such a manner as the State Govt. consider appropriate within a period of one year from the date of notification. Since neither GRIDCO nor OHPC has exercised their option, the Commission considers it proper to accept the value of the assets mentioned in SAR for the purpose of calculation of depreciation.

5.20.9 GRIDCO, again divested its distribution business to four DISTCOs on 26.11.98 and transferred Distribution Assets to them on aforesaid date. The crux of the problem is that OSEB and GRIDCO did not maintain the assets registers for segregating assets created on or before 01.4.1996 i.e. before upvaluation and assets created thereafter. In the absence of asset registers, it is very difficult to ascertain the share of the Transmission and Distribution assets pertaining to GRIDCO and DISTCOs respectively, which have been acquired prior to 01.4.96 and their corresponding pre-upvaluation cost to be considered for the purpose of depreciation calculation as per the directive of the Hon'ble High Court.

**5.21 Assumption adopted to comply with the orders of the Hon'ble High Court**

5.21.1 SAR also does not contain any statement of desegregation of assets between Transmission and Distribution Businesses, though figures of pre-upvalued cost of the assets allocated to GRIDCO as a whole including both Transmission and Distribution are available. Under these circumstances, pre-upvalued cost of the assets allocated to GRIDCO as per SAR can be bifurcated between Transmission and Distribution Business on the basis of the proportion of the assets as reported in the Balance Sheet of OSEB on 31.03.1996. Similarly, in the absence of proper asset register, the Commission decided to apportion the Distribution Assets between DISTCOs on the basis of their proportion of assets as notified

in the Transfer Scheme Notification dtd.26.11.98. The distribution and transmission assets, as reported in the balance sheet of OSEB as on 31.3.96 can be a reference for the purpose of segregating the assets of GRIDCO as reported by SAR.

- 5.21.2 Apportionment of pre-upvalued cost of the Assets transferred to GRIDCO on 01.04.1996, between Transmission and Distribution Business are as below:

**Table : 29**

	Gross Fixed Assets As per Balance Sheet (in Crore)	Pre-Upvalued Cost of the Gross Fixed Assets as per SAR bifurcated (in Crore)
GRIDCO	546.66	514.32
DISTCOs	625.90	588.88
Total	1172.56	1103.20

- 5.21.3 Apportionment of pre-upvalued cost of the Assets transferred to Distribution Business as on 01-04-96, between DISTCOs is as under:

**Table : 30**

DISTCOs	Gross Fixed Assets transfer to DISTCOs as per Transfer Notification	Amount of Gross Fixed Assets apportioned
WESCO	267.16	139.88
NESCO	263.39	137.89
SOUTHCO	233.82	122.42
CESCO	360.43	188.68
TOTAL	1124.80	588.88

- 5.21.4 Accordingly, transmission and distribution assets as on 01.4.96 before upvaluation have been apportioned amongst GRIDCO and DISTCOs and depreciation has been calculated on the pre-upvalued cost of assets at pre-92 rate as per the order of the Hon'ble High Court. The total depreciation chargeable to Annual Revenue Requirement of GRIDCO and DISTCOs is as follows:-

**Table : 31**  
**Depreciation for the Year 2003-04**

Name of the company	Gross Fixed Asset as on 1.4.96	Average rate of Depreciation (pre-92) (%)	Depreciation on as on 01.04.1996	Asset added from 1996-1997 to 2003	Average rate of Depreciation (pre-92) (%)	Depreciation on asset added after 01.04.1996	Total depreciation for the year 2003-04
GRIDCO	514.32	3.13	16.10	637.36	3.13	19.95	36.05
WESCO	139.87	3.76	5.26	172.86	3.76	6.50	11.76
NESCO	137.89	3.76	5.18	187.93	3.76	7.07	12.25
SOUTHCO	122.41	3.76	4.60	180.99	3.76	6.81	11.41
CESCO	188.70	3.76	7.10	258.00	3.76	9.70	16.80
TOTAL DISTCOs	588.88		22.14	799.78		30.07	52.21
GRAND TOTAL	1103.20		38.24	1437.14		50.02	88.26

5.21.5 The weighted average rates of depreciation based on pre-92 rates and asset base of the 2002-03 as approved by the Commission have been adopted to find out Depreciation Expenses of GRIDCO and DISTCOs for the year 2002-03.

## 5.22 Bad & Doubtful Debts

5.22.1 CESCO has estimated an amount of Rs.16.50 crore towards provisioning for bad and doubtful debts for the FY 2003-2004, assuming 15% on incremental debtors. At the time of hearing CESCO revised the figure to Rs.20.22 crore.

5.22.2 The Commission analysed the proposal submitted by CESCO. It is a matter of great concern that the sundry debtors have mounted up to Rs.1077.12 crore at the end of 31.03.2002 and is estimated to go up to Rs.1214.61 crore at the end of 31.03.2003. The Commission is of the view that had this amount been collected in time, the licensee would not have faced any cash crunch during previous years. **The Commission directs the licensee to carry out detailed age-wise analysis of the accumulated arrears in order to identify the collectible and uncollectible arrears to begin with it should first segregate arrears before and after 01.04.1999. The licensee should take the necessary steps to write off these uncollectible receivables and to make all possible efforts to collect the remaining arrears. The Commission also directs the licensee to appoint separate agencies to carry out this task, if required.**

5.22.3 However, considering the reality of situation as approved in last tariff orders, the Commission allows a provision of 2.5% of gross sales towards bad and doubtful debt. Accordingly, it approves an amount of Rs. 19.13 crore for the FY 2003-2004.

## 5.23 Other expenses

5.23.1 CESCO has projected an amount of Rs.168 crore towards other expenses. Detailed break-up of such expenditure is not found in its proposal. Hence Commission disallows the same.

## 5.24 Past Losses

5.24.1 CESCO has proposed an amount of Rs.1135.10 crore for the FY 2003-2004 under special appropriation to recover the losses incurred during the FY 1999-2000, which forms a part of its revenue requirement. At the time of hearing, CESCO revised its figure to Rs.1133.37 crore. This was again revised to Rs.1110.10 crore by CESCO at the time of submission of the business plan.

5.24.2 The Commission opines that only those losses, which have been incurred due to the reasons beyond the control of the licensee, the Commission will consider the loss to be passed on to consumers through tariff. CESCO has not given any detailed break up & justification of incurring this loss. **Hence, the Commission disallows previous losses claimed under special appropriation.**

## 5.25 Capital Base

5.25.1 The purpose for calculation of capital base is to ascertain the amount of Revenue Requirement and clear profit admissible to the licensee in accordance with the provision of Sixth Schedule of Electricity (Supply) Act, 1948. CESCO has not proposed any amount towards reasonable return. However, the Commission in its order dated 18.06.2003 in regards to setting guiding principles for determination of Annual Revenue Requirement of Distribution Licensees in the State on a long-term basis, decided to depart from Schedule VI to the Electricity (Supply) Act, 1948 and allow 16% return on the equity instead of return on a capital base. Hence, calculation of capital base becomes infructuous as return is allowed on equity base. The equity capital of CESCO as on 31<sup>st</sup> March, 2004 as proposed in the format F-37 is Rs.72.72 crore. By applying 16% rate of return on equity capital, the reasonable return works out to Rs.11.64 crore. **Thus, the Commission approves an amount of Rs.11.64 crore towards reasonable return on equity for the purpose of calculation of revenue requirement.**

## 5.26 Miscellaneous Receipts

5.26.1 **CESCO in form F-13 has estimated Rs.26.22 crore towards miscellaneous receipt for the FY 2003-04. The Commission approves the same.**

## 5.27 Revenue Requirement

5.27.1 In the light of the above, the Commission approves an expenditure of Rs.740.39 crore for FY 2003-04 for the purpose of revenue requirement as against projection of Rs.2071.10 crore considering past losses amounting to Rs.1110.10 crore. **The reasonable return is approved at Rs.11.64 crore. The calculation of expenditure for revenue requirement and clear profit as approved has been reflected in Annex A and B respectively.**

## 5.28 TARIFF ISSUES

5.28.1 In addition to the above, the Commission addresses the various issues raised during the course of public hearing on other commercial matters which are dealt hereafter.

5.28.2 The Commission does not find it necessary to specifically comment on each one of the objections. The objections with regard to financial aspects and with regard to tariff design as well as various suggestions on these aspects shall be highlighted in the later part of the order. However, we may record our observations on a few issues which do not fit into the module of either revenue requirement or tariff.

- 5.28.3 In course of the hearing, consumers of different categories have highlighted the impact of tariff with reference to financial viability, commercial consideration and capacity to pay. While we have taken into account the overall interest of the consumers, we have also given equal consideration to the financial viability of the Licensee as per mandate of the OER Act and the necessity of the State's support for fostering a healthy electricity industry. Ability to pay, lack of funds or competitiveness of any particular industry cannot be the guiding factor in designing tariff. A balance has to be struck out to take care of conflicting interests. The Commission will take decision keeping in view the provisions of Section 26 (2) and (5) of the Reform Act, 1995.
- 5.28.4 The Reform Act, 1995 envisages a tariff structure that would bring about efficiency and economy in the supply and consumption of electricity. This Act envisages cost reflective tariff, ensurance of efficiency and elimination of inter-class and intra-class subsidies.
- 5.28.5 The Commission is also aware of its role in balancing the conflicting interests of various stakeholders, bringing about efficiency and economy in the use of electricity and designing a tariff structure that should be just, fair and reasonable. Whereas the low voltage consumers expect a tariff that is affordable, the high and extra high voltage consumers pleaded for a tariff that should reduce their burden of cross-subsidy. While taking note of these factors, we have to see that the licensee recovers the cost prudently incurred and to continue to provide expected service.
- 5.28.6 Many objectors had alleged that there should be no revision in tariff since licensees have not achieved desired improvements and had not been able to reduce the T&D loss substantially. We ourselves have been very much concerned with the performance of the licensees and have been suo moto monitoring in various ways like bimonthly review of performance of licensees.
- 5.28.7 Another recurring objection against tariff increase has been the constraint of affordability. The domestic consumers have urged not to be encumbered with any increase in tariff as they cannot afford any extra cost. On the other hand, commercial and industrial consumers have pleaded that their products cannot be competitive and therefore their tariff should be reduced rather than increased. Every category of consumers has pleaded that tariff, if at all to be increased, should be passed on to other categories. We cannot fully ignore the affordability factor because safeguarding interest of consumers is one of the main parameters in tariff fixation. But affordability cannot be the prime consideration. Sec. 11(1)(e) of Reform Act envisages that the supply and distribution industry cannot be maintained unless the charges for the electricity supplied are reasonably levied and collected. Licensees of electricity supply and distribution cannot be expected to forego their legitimate dues and charge low rate to any category of consumers or to ensure industrial consumers to be competitive in national and international market.
- 5.28.8 It is the duty of the Commission to scrutinise the claims of licensee with a fine tooth-comb and allow only useful assets for capital base and only properly/prudently incurred expenditure for revenue requirement. But after we do so, revenue requirement finally determined has to be allowed to be raised through tariff. This is the position in Law and has to be appreciated by the consumers of all categories. Keeping the above objective in view, the Commission has gone ahead in deciding the various parameters regarding determination of revenue requirement and tariff of the licensee in an endeavour to strike a balance between the interests of end consumers on one hand and financial viability of licensee on the other.
- 5.28.9 The Commission after analysis and scrutiny of CESCO's proposal has to give its considered findings with regard to reasonableness of various items of expenditure in accordance with the Sixth Schedule as well as other parameters stipulated in Section 26 of the Reform Act, 1995.

## 5.29 **Multi-year Tariff**

5.29.1 The Commission in its tariff order dtd.19.04.2002 stated that the Commission is conscious of the need for greater certainty in the regulatory treatment of a host of issues having direct impact on tariff setting. It shall be our endeavour to set in motion a multi-year tariff regime effective from April, 2003 for FY 2003-04 after wide publicity and valued consultation with all the stakeholders.

5.29.2 The utilities have to improve upon their own performance within a stipulated time frame by upgrading their managerial skills and efficiency by scrupulously adhering to certain operational norms like reduction in the level of loss, attaining certain level of billing and collection efficiency, setting a target for investment and avoiding time and cost overruns in execution of projects, etc. This calls for fixing a target to be achieved over a “Control period” than a target confining to a single year to provide a kind of predictability to the consumers, their own shareholders and to the Regulatory Commission.

## 5.30 **Implementation of a Long Term Tariff Framework**

5.30.1 The Commission, in its Tariff Order dated 19 April 2002, had stated that it was conscious of the need for greater certainty in the regulatory environment and in the treatment of a number of critical issues which have a direct impact on the tariff setting process and also on the performance of the licensee. The Commission in the Order dated 19 April 2002 also had stated that it would be its endeavour to set in motion a multi-year tariff regime effective from 1 April 2003, after detailed a consultative process with all the stakeholders of the sector.

5.30.2 **Accordingly the implementation of LTTS has been brought out through the Commission’s order dt 18. 06. 2003 in Case No. 8/2003 separately.**

## 5.31 **Performance Targets**

5.31.1 For the first control period, the Performance Targets shall relate to the system losses and the collection efficiency for different consumer categories, along with the AT&C Losses. The licensee will be expected to perform and improve its efficiency as per the overall AT&C targets fixed by the Commission here in. The targets for the first Control Period for the four Distribution Licensees is given in the Table below:

**Table No. : 32**  
**Aggregate Technical and Commercial Loss Targets for the first Control Period**

	FY 2003-'04	FY 2004-'05	FY 2005-'06	FY 2006-'07
<b>WESCO</b>				
Distribution Losses (%)	31.08%	26.08%	21.08%	18.87%
Collection Efficiency (%)	90.00%	92.50%	95.00%	97.50%
AT&C Losses (%)	37.97%	31.62%	25.03%	20.90%
<b>NESCO</b>				
Distribution Losses (%)	36.98%	31.98%	26.98%	24.77%
Collection Efficiency (%)	90.00%	92.50%	95.00%	97.50%
AT&C Losses (%)	43.28%	37.08%	30.63%	26.65%
<b>SOUTHCO</b>				
Distribution Losses (%)	30.89%	25.89%	20.89%	18.68%
Collection Efficiency (%)	90.00%	92.50%	95.00%	97.50%
AT&C Losses (%)	37.80%	31.45%	24.85%	20.71%
<b>CESCO</b>				
Distribution Losses (%)	30.94%	25.94%	20.94%	18.73%
Collection Efficiency (%)	90.00%	92.50%	95.00%	97.50%
AT&C Losses (%)	37.85%	31.49%	24.89%	20.76%

- 5.31.2 The Performance Targets shall also include the Quality of Supply and Customer Service standards. In addition, the Performance Targets shall cover the various elements of network costs.
- 5.31.3 **Uniform Retail Tariff :** Most of the objectors advocated in favour of uniform retail tariff throughout the state . Historically, uniform tariffs have been adopted in Orissa, and indeed in many states of India, in spite of significant cost differences to serve different geographical areas. The Commission feels that although the geographically cost-based tariff are more efficient, to avoid immediate tariff shock to the consumers, it would be desirable to give some more time to shift away from geographically uniform retail tariff. **Accordingly for the year 2003-04, the Commission decides to adopt uniform Retail Tariff for the entire State.**
- 5.31.4 **Cross Subsidy :** Some objectors suggested reduction in cost of subsidies. The tariff structure inherited by the Commission was undoubtedly a distorted one. In the past years, the Commission has attempted rationalisation of tariff structure with a view to effect progressive increase in tariff for those category of consumers who are paying less than the average cost of the supply. Some of the objectors cited the recent example of WBERC tariff order for the year 2002-03 in which they have introduced cost based tariff for all categories of consumers in terms of Hon'ble Supreme Court order passed in Civil Appeal No. 4037 of 2002. The Commission is of the opinion that introduction of cost based tariff will give a severe tariff shock to the consumers of subsidised categories in Orissa and also were lead to widespread resentment and unrest among the consumers. Thus, the Commission will adopt uniform tariff to all categories of consumers gradually, thereby eliminating cost of cross-subsidy all together in future.



### 5.32 **Industrial policy framed by Government of Orissa**

5.32.1 The issue raised by the Orissa Small Scale Industries Association was that the proposed amendment in tariff by the licensee is directly against the Industrial Policy Resolution (IPR) of Government of Orissa and against the interest of the small and medium scale industries. It further submitted that the Govt. is in the quest of setting up of industries for which it has been providing various concessions to the small and medium scale industries for their very survival and sustenance. It is clarified that Industrial policy differentiating categories and conferring benefits, change from time to time on various considerations. Electricity charges are to be non-discriminatory from economic point of view and it is neither desirable nor possible to synchronise the pricing in keeping with changes from industrial and financial angle. **However, if the State Government desires to extend any benefit to a class or group of consumers, they can do so under Section 12(3) of OER Act, 1995 by providing subsidy.**

### 5.33 **Charging of Security Deposit by licensee**

5.33.1 Some of the objectors pleaded that the licensee may be directed by the Commission not to ask for Security Deposits from the consumers on account of enhancement of tariff. The objection raised is not valid one, since as per the OERC regulation the security deposit payable is limited to 2 months electricity charges. Licensee may ask for additional security deposit only when security deposit already paid falls short of two months electricity charges.

5.33.2 Further, the security deposit amount is an interest free fund available to the licensee, which can be utilised for meeting working capital requirements and the licensee is allowed return on working capital as per the provisions of the Schedule-VI while calculating the reasonable return on capital base.

### 5.34 **Demand charges during statutory power cut**

5.34.1 Some of the objectors showed concern on the increasing number of outages on the higher voltages and requested the Commission to set into the tariff schedule penalties for load shedding, excursions in voltage and frequency of supply, power failures and statutory power cut.

5.34.2 It is clarified that the issues of outages, voltage & frequency excursions and other deficiencies in service have to be dealt in accordance with complaint handling process and OERC Condition of Supply Code as approved by the Commission for the time being, since utilities have not developed requisite MIS yet to handle these elements.

### 5.35 **Quality of Supply & Service**

5.35.1 Interruption, low voltage and unreliable supply are a matter of serious concern to the Commission. The Commission has been taking appropriate steps to verify the data furnished by the licensee through affidavits in this regard to the Commission. Further, the Commission has been monitoring the performance parameters for meeting the supply standards as prescribed by it.

### 5.36 **Unauthorised and Illegal abstraction of electricity**

5.36.1 The issue of unauthorised abstraction of electricity is one of the principal causes of high commercial losses in the licensee's system which is being monitored every month at the Directors' Level Meeting. The licensees must take the help of law and order authorities. The Commission is committed to allow any additional expenditure on account of curbing the theft and unauthorised abstraction of electricity.

## 6 **DETERMINATION OF TARIFF**

- 6.1 **No changes in the existing tariff structure both in terms of rates and stipulations have been envisaged by the Commission in the tariff order 2003-04 except the followings, mentioned in the paragraphs 6.2 to 6.20 . The rates applicable to the various categories of consumer have been detailed in the Annex – C.**
- 6.2 **Kutir Jyoti Consumers**
- 6.2.1 Some objectors protested that a significant number of consumers masquerading themselves as Kutir Jyoti consumers have got service connection with load far in excess of the single point supply for lighting envisaged under Kutir Jyoti programme. They also submitted that the State Govt. should extend subsidy to compensate for the loss sustained by the distribution company on account of supply of power at a rate cheaper than the average cost of supply to this category of consumers. As no subsidy has been made available by the State Govt. despite protracted correspondence with Govt., **the Commission, therefore, directs that all Kutir Jyoti consumers should be invariably metered. The tariff applicable in this case will be upto consumption of 30 units per month fixed at Rs.30.00. In case consumption exceeds 30 units per month, the entire consumption will be charged at the prevailing domestic tariff.**
- 6.2.2 **Load factor billing**
- 6.2.3 Some objectors took serious exception to the bills being continued for months together on load factor basis in case of defective meters. Thus, the authenticity of the past bills in such cases could hardly be vouchsafed. It is, however, the statutory obligation on the part of the licensee to replace meters. As stated in the previous orders, load factor billing has been prescribed for a limited purpose/period, as and when the meter remains defective/or the consumer goes without meter to serve as a means to have the meter installed by consumers. Further CESCO in its reply to queries raised by the Commission relating to tariff for 2003-04 has committed to complete all feeder metering and LV side of Transformers metering by 31.03.2004 and consumer end metering by 31.12.2004. In view of the aggressive metering activities undertaken by CESCO, the Commission considers that billing on the basis of load factor will be dispensed with from 1<sup>st</sup> April 2004. Many objectors pleaded that billing based on load factor should not be allowed. The Commission is also wary of load factor billing to consumers for months together. It is licensee's obligation to ensure that each consumer gets supply only through correct meters. Load factor billing was allowed under para 60 of OERC Distribution (Conduct of Supply) Code, 1998 for a limited purpose/time but the licensee has systematically abused the regulation on some pretext or other.
- 6.2.4 **The Commission, therefore, directs that the load factor billing should continue as per the provision in the existing tariff for the year 2003-04 and be withdrawn from 1<sup>st</sup> April, 2004, subject to amendment of the OERC Distribution (Condition of Supply) Code, 1998, to that extent. All billing will be based on actual meter reading showing actual consumption of consumers. In case of defective meters the provisions of Indian Electricity Act, 1910, Section 26 and Regulation 58, 59, and 60 of OERC Distribution (Condition of Supply) Code, 1998 will apply. Further, the licensee is directed to complete 100% consumer metering by 31<sup>st</sup> March, 2004 and feeder metering by 31<sup>st</sup> October, 2003.**
- 6.3 **Incentive for maintaining high power factor**
- 6.3.1 For the first time, the Commission in its tariff order dt.30.12.99 introduced an incentive to encourage improvement in power factor above 90%. Subsequently, the limit was raised to 97% in the RST order dt.19.01.2001. CESCO estimates that the rebate alone on this account to HT/EHT consumers will be of the order of Rs.3.84 crore during the FY 2003-04 with the existing tariff.

- 6.3.2 Some of the objectors pleaded for restoring incentive for improvement in power factor from 90% and above and penalty at the same rate for low power factor.
- 6.3.3 Some objectors opined that for the health of electrical machinery, it is risky to maintain power factor between 97% because there is every chance of spurt in voltage when all on a sudden some load gets thrown off from the circuit.
- 6.3.4 It should be kept in view that the industries for better protection of their installation should follow prudent operational practice installing protective devices, so as to isolate the equipment during abnormal transient condition arising out of sudden load throw off or tripping of feeders.
- 6.3.5 Further, the KVA demand of the industry decreases as the power factor (PF) improves, thereby benefiting the consumer on account on demand charge.
- 6.3.6 Similar provision of power factor incentive/rebate has been recommended by other State Regulatory Commissions such as Gujarat Electricity Regulatory Commission, U.P. Electricity Regulatory Commission, Maharashtra Electricity Regulatory Commission where incentive is allowed for maintaining PF above 95%. **Hence, the Commission does not consider it necessary to make change in the existing provision with regard to power factor incentive and penalty.**

#### 6.4 Incentive for prompt payment

- 6.4.1 Some of the objectors pointed out that 48 hours of rebate period is very short and consumers may not be able to avail the rebate due to paucity of time. They suggested that the rebate period should be extended to 15 days. It is expected that to avail such heavy amount of rebate, consumers should put extra efforts and make payment of bills in time.
- 6.4.2 As per earlier order of the Commission, certain categories of consumers are entitled to a rebate of 1% of the amount of the monthly bill (excluding arrears and electricity duty) if payment is made within 48 hours of the presentation of the bill. Considering the difficulties of the consumers, the Commission feels that three days time for availing rebate is reasonable and allows that the consumers are entitled to get rebate of 1% if the bills are paid within 3 days from the date of presentation of the bill. **The Commission decides that as a measure of incentive for prompt payment there will be a rebate @1% for payments made within 3 days from the date of presentation of the bill. This incentive will be applicable to all the categories of consumers excepting Domestic, Commercial, Irrigation and Small Industry, for whom, a rebate of 10 paise/unit shall be allowed on energy charges if the payment of the bill (excluding arrears and electricity duty) is made by the due date indicated on the bill or within a period of 7 (seven) days from the date of receiving the bill**
- 6.4.3 Shri R.C. Padhi suggested that a DPS may also be levied on domestic and commercial consumer. **The Commission appreciates the suggestion and orders that a DPS of 2% will also be levied on domestic, commercial, irrigation and small industries categories of consumer if payment is not made within the due date.**

#### 6.5 Industrial Colony Consumption

- 6.5.1 The Commission in its tariff order dated 19.01.2001 directed that the units consumed for the industrial colony should be separately metered and the total consumption should be deducted from the main meter reading and billed for supply at HT and EHT. The energy consumed in industrial colony in excess of 10% of the total consumption shall be billed at the rate of Energy Charge applicable to the appropriate class of industry. Some objectors like MCL pleaded that the consumer whose load factor is less than 50% would only enjoy the benefit and the consumer whose load factor is more than 50% would lose heavily. As such, the consumer would have been benefited more under the incentive scheme for higher

consumption had there been no separate tariff for colony consumption. **Since the purpose of incentive scheme is to encourage for higher consumption by the EHT & HT consumers, the Commission after reviewing the scheme directs that for the purpose of determining the incentive amount, the energy consumed in Industrial colony limiting to maximum of 10% should be included in the first slab of 50% and billed for supply at HT and EHT. The energy consumed in industrial colony in excess of 10% of the total consumption shall be billed at the rate of Energy Charge applicable to the appropriate class of industry..**

## 6.6 Railway Traction Tariff

- 6.6.1 The question of providing a reasonable tariff for Railway Traction raised by the S.E. Railway was also considered by OERC. The Commission would like to clarify that the railway traction tariff in Orissa is at par with that of HT or EHT consumers depending upon the voltage of supply as the tariff structure has been totally linked to the voltage of supply. Railway traction tariff is lower in Orissa. Therefore, railways should have no grouse on this account.
- 6.6.2 The railways had also raised the issue of a single part tariff which is today applicable only to very large industries with a guaranteed off-take to which category the railways does not belong.
- 6.6.3 The South Eastern Railway's further concern about recording and charging of maximum demand for individual supply points as per the existing system turned out to be totally unrealistic as the railways were moving loads for all substations along the track. It may be mentioned that the railway traction supply is from the EHT network of the GRIDCO and the billing is done by the various supply companies to the railways in their area of license. The Commission in its tariff order dated 19.04.2002 opined that the issue should be mutually discussed by the railways with the four distribution companies and their views in the matter may be placed before the Commission for taking a holistic view. In this connection S.E. Railway had discussion with the Distribution Companies but no meaningful agreement emerged out of the discussion. **The Commission observes that since separate agreements are executed for individual traction loads, it will not be possible to adopt SMD for billing on the basis of simultaneous maximum demand recorded in contiguous substations.**
- 6.6.4 The railways also pleaded that the integration period of 30 minutes for measurement of maximum demand in respect of railway traction has been changed to 15 minutes. The railways requested that the OERC should consider restoration of integration period 30 minutes as per the earlier method which is also in conformity with the clause No.2(8) of Electricity Supply Act, 1948.
- 6.6.5 The Commission deliberated on this issue and observed that 30 minutes integration period for all categories has been provided in the Regulation of ASEB, Ahmedabad Electricity Company, MPSEB, HSEB, DVP, Gujarat, Maharashtra, Tamil Nadu. Fifteen minute integration period has been provided by UPERC, APERC for loads more than 4000 KVA, and for railway traction by WBSEB. Some SEBs have introduced one hour integration period.
- 6.6.6 Further, with implementation of ABT in Eastern Region with effect from 1st April, 2003 which calls for recording of Maximum Demand with fifteen minutes integration period it will not be possible to change over to integration period of thirty minutes for Railways. **The Commission further decides to adopt fifteen minutes integration period in near future for all the categories of industrial consumers. This will require amendment of the supply regulation OERC Distribution (Condition of Supply) Code, 1998 and**

**installation of appropriate metering system in consumers' premises. Till such time, the present arrangement shall continue.**

**6.7 Construction Power**

- 6.7.1 Objection was raised by M/s. Aditya Aluminium that the industries under construction may be classified separately and no demand charge should be levied on construction power. There seems to have no logic behind the objection as the licensee is to arrange/book, the quantum of power as per the contract demand and pay fixed charge against the said quantum of power which it has to recover from the consumer.

**6.8 Penalty for over drawal of power above the contract demand**

- 6.8.1 The commission emphasises that with the implementation of ABT in the Eastern Region the problem of Over Drawal has automatically been addressed, as the principal aim of ABT is to enforce grid discipline with an objective for consistence in frequency and efficient use of available energy resources.
- 6.8.2 The special feature of the above commercial mechanism is UI Charge. Under this scheme, any deviation of drawal from the scheduled shall be liable to UI charges Payable/Receivable to the utility concerned. This UI is to be worked out for each 15 minutes blocks period and there shall be 96 Blocks period in each day of operation. The charges for unscheduled drawal shall be based on average frequency of the relevant block period. The UI rate varies with maximum 420 paise/KWH at 49.0HZ and minimum of 0 Paise/KWH at 50.5HZ. The UI Charge at different frequency is linear in the step size of 0.02HZ. During under frequency condition overdrawal beyond schedule will attract disincentive in the form of a higher charge which can go up to 420 p/u at a 49 HZ and incentive for underdrawal will be available during low frequency condition. Vice versa is applicable during high frequency condition. This being the principle during ABT regime, no separate charge needs to be specified for overdrawal or underdrawal. During ABT operation, a DISTCOs overdrawing during under frequency condition will be liable to pay UI charges as per rule. There may be a situation when one DISTCOs is overdrawing and another is underdrawing so that net effect of GRIDCO drawal is nullified. In that case cost recovery of UI charges for overdrawing DISTCOs will not be appropriated by GRIDCO and will be kept in a separate account. Such cases need to be referred to Commission for direction on appropriation of the funds. The DISTCOs in turn need to bring to the notice of the consumers particularly industrial one of EHT and HT category about the impact of the overdrawal during underfrequency condition and have a back to back arrangement for passing on the extra burden due to UI charges. The meters in the consumer premises should be capable to record the 15 minutes interval load drawal with a memory retention of at least 60 days.
- 6.8.3 ABT is a new concept with three elements of charges. In initial years they might be some problems. The utilities need to remain alert to avoid financial burden arising out of overdrawl during under frequency regime.
- 6.8.4 The UI Charge is payable when the utility does not support the system and receivable when the Utility support the system to maintain the prescribed frequency. In other words the UI Charge payable /receivable depending upon who has deviated from the schedule and also subject to the Grid condition at that point of time. This element, which is expected to bring discipline in the system takes care of the over drawal by licensees.
- 6.8.5 **In view of implementation of ABT in Eastern Region, the Commission decides that there would be penalty on overdrawl as stipulated in the para above.**

**6.9 Observation on incentive for higher consumption**

- 6.9.1 Some objectors pleaded that load factor as per standard nomenclature should be based on Maximum Demand without having any relation with Contract Demand.
- 6.9.2 The said issue has been clearly dealt in the OERC Retail Supply Tariff order dtd. 19.04.2002 and the reason for adopting the term “consumption ratio” in place of “load factor” and “higher of contract demand or maximum demand” has been explained in the following paragraphs.
- 6.9.3 For the purpose of calculation of incentive energy, instead of load factor the term consumption ratio i.e. the total number of units consumed during a given period to the total number of units that would have been consumed had the contract demand or the maximum demand, whichever is higher was maintained throughout the same period has been used.
- 6.9.4 It may be noted that the incentive tariff for HT/EHT category of consumers was introduced in the OERC RST order dt.30.12.99 where incentive energy was considered above the load factor of 50% of contract demand. Further, as mentioned in the OERC RST order dt.19.01.2001 “Some objectors objected to recording of load factor during FY 1999-00 in excess of 100% in the filing made by the licensee on the ground that it had an element of absurdity. As prescribed in OERC Condition of Supply Regulation, 1998 load factor of a consumer under no circumstances can exceed 100%”. Therefore, consumption ratio was adopted in place of load factor for determination of incentive energy.
- 6.9.5 Some objectors pleaded that for the purpose of calculation of incentive slab, energy slab calculation should be considered on Peak hour maximum demand only and not on the off-peak maximum demand As directed by the Commission in its tariff order dtd. 19.04.2002, for the purpose of calculation of maximum demand, there should not be any differentiation between peak and off peak hours. **As such, the Commission is not inclined to bring about any charge in the existing provision excepting deletion of the clause - “Incentive shall be available to those consumers who will not reduce their contract demand during the next three financial years”.**

#### 6.10 Meter Rent

- 6.10.1 Some objectors submitted that meter rent and the cost of metering / lease should be maintained separately from the general revenue and expenses of the licensee. The Commission examined the issue of rent chargeable for the meters supplied by the licensee. Section 26 of the Indian Electricity Act, 1910 reads as follows :
- 6.10.2 “In the absence of an agreement to the contrary, the amount of energy supplied to a consumer or the electricity quantity contains in the supply shall be ascertained by means of correct meters and the licensee shall if required by the consumer cause the consumer to be supplied with such meter.
- 6.10.3 Provided that the licensee may require the consumer to give him security for the price of the meter and enter into an agreement for the hire thereof unless the consumer elect to purchase the meter.”
- 6.10.4 Hence, the consumer has to be allowed to exercise first option to purchase an appropriate meter. If the consumer wants to take the meter on hire, the licensee can charge meter rent. **The licence is directed to allow the consumer to own the meter by paying its legitimate cost if he/she so desires, in one instalment or can pay meter rent till the landed cost is recovered.** In such a case, if the meter becomes defective or lost, the case should be dealt with in accordance with provisions under OERC Condition of Supply Regulation.
- 6.10.5 In regard to calculation of meter rent, the Commission examined the estimates submitted by the licensee. The cost of the Electro-magnetic meters including TP box and installation

charges comes to around Rs.1050/-. The life of the meter has been estimated as 10 years with a discount rate of 12% per annum. The amount recoverable on account of Landed Cost of meter including interest will come to Rs.15.00 approximately per month. **The Commission is convinced that the meter rent charged by the licensee is reasonable. Any consumer who does not want to pay the meter rent can exercise his/her first option to purchase the appropriate meter.**

#### 6.11 Rural Electrification

- 6.11.1 The Commission is aware of the fact that the State Government is planning to take up Rural Electrification work in a massive scale in consonance with the national agenda to achieve 100% Rural Electrification by 2007 and providing electricity to all households by 2012. While extending power facilities to every nook and corner of the State necessary precautionary measures have to be taken to avoid further loss to the power system. In fact, extension of lines would mean additional technical loss apart from commercial loss which can be prevented by taking the following measures as detailed below:-
- 6.11.2 Off grid supply/distributed generation should be encouraged in remote villages situated away from GRID.
- 6.11.3 In case the electrification is done by extending the grid supply then the extension should be on High Voltage Distribution System (HVDS) by extending the HT lines up to the load centre of the village. Then LT distribution can be done by installing small capacity transformers like 10 KVA, 16 KVA, 25 KVA to cater to the needs of the villagers. Service connections can be extended directly from the LV side of the transformers to the consumer's premises. If deemed necessary, Aerial Bunched Conductors (ABC) can be used for extending LT supply to distant points which cannot be reached through normal service connection wires.
- 6.11.4 Village Committees may be set up to look after load development, load management, billing and collection in the village.
- 6.11.5 On the LV side of the transformer, a meter is to be installed which will record the total energy supplied by the transformer. The village committee can be billed based on this meter reading on a suitable tariff to be approved by OERC depending on the mix of load in the village.
- 6.11.6 The extension of lines in the village should be done only after firm commitment from the consumers by way of giving advance security deposit/paying for the cost of extension etc.
- 6.11.7 The Commission is of the view that aforesaid precautionary measures will reduce commercial loss substantially. **The Commission, therefore, directs DISTCOs to adopt measures mentioned above while taking up rural electrification.**
- 6.11.8 The capital investment required for rural electrification will be fully funded by the State Govt. through various schemes such as APDRP, PMGY, MPLAD, MLALAD etc. as 100% capital subsidy to DISTCOs.

#### 6.12 Tariff for Emergency Supply to CPP at HT

- 6.12.1 In the existing Tariff Schedule there is no provision for separate tariff in respect of Emergency Supply to CPP at HT category. NESCO in its tariff proposal has indicated consumption of 2.84 MU against Emergency Supply to CPP at HT and as such, there are some consumers who avail power supply as Emergency Supply to CPP at HT.
- 6.12.2 **In view of the above the Commission decides a tariff at a rate of 400 paise/unit as energy charge and Rs. 250 per month as Customer Service Charge for Emergency Supply to CPP at HT.**

### 6.13 Emergency power supply to CPPs/Generating stations

- 6.13.1 Some of the industries having captive power plants requested the Commission to raise the present level of emergency power (25% of the highest unit) to 75% to 100% of the capacity of power plant. **The Commission examined their request and in principle, agreed to raise the above level to 100% of the largest unit in the CPP or Generating Stations, subject to amendment of the provisions under OERC Distribution (Condition of Supply) Code, 1998, with the following stipulations.**
- 6.13.2 **“Such industries owning CPP / Generating Stations have to enter into an agreement with DISTCOs subject to technical feasibility and availability of required quantity of power/energy in the system. For them, a flat rate of 420 paise/kwh at EHT and 440 paise/kwh at HT would apply while for others who draw only 25% of capacity of highest unit would pay @ 380 paise/kwh and 400 paise/kwh at EHT and HT respectively. In case of over drawl beyond 25% of the rated capacity they will have to pay @ 420 paise/kwh and 440 paise/kwh at EHT and HT respectively for the period of over drawl.”**

### 6.14 Tariff for Ferro Alloys Industries

- 6.14.1 The Ferro Alloys Industries of the State filed a petition before the Commission jointly and also severally for a composite tariff for their industries at a rate of 182 P/KWH against an off take guarantee of 70% of their contract demand. They have also pleaded that their plant would operate at very high load factor resulting in additional annual consumption thereby ensuring higher level of cross subsidy and easing the burden of surplus power of the state. They have further pleaded that they have a substantial presence in the industrial scene of Orissa, that they are power intensive and export oriented, that the high cost of production is making them un-competitive in the international market and that a special, concessional rate of tariff would make the industries viable, increase their production and thereby enhance the revenue flow to distribution companies. They have further stated that the APERC has allowed a concessional tariff for the Ferro Alloys units considering their problem of viability.
- 6.14.2 The Government of Orissa in their letter No.1585 dated 14.02.2003 has recommended the proposal of these industries for consideration of the Commission. However, the govt. has also clarified that this endorsement is not a policy directive under Section 12(3) of OER Act, 1995 which means Govt. would not be able to provide subsidy as required under the above section.
- 6.14.3 CESCO has opposed the composite tariff of 182 paise/kwh proposed by the Ferro Alloys Industries and has prayed that the State Govt. should provide necessary subsidy to make good the loss on account of the cheaper tariff.
- 6.14.4 During public hearing of Tariff proceedings, vehement opposition came from some of the objectors against the proposal of a concessional tariff for Ferro Alloys Industries. They apprehended that since Government of Orissa is not forthcoming with any subsidy, a concessional tariff for these industries is likely to adversely affect the subsidised category of consumers & lifeline rate. It is understood that, Orissa Consumers' Association have challenged the proposed special tariff of 182 p/u in the Hon'ble High Court of Orissa.
- 6.14.5 The Commission has given a careful consideration to this proposal because of its wider ramifications in terms of collection level & cross subsidy level of DISTCOs which need to be reviewed for its impact and views as under :-
- 6.14.5.1 All the Ferro Alloys Industries are now under Power Intensive category and a graded tariff is available to all the categories of consumers under OERC schedule based on load factor under which they operate. Further, the DISTCOs have



entered into special agreement with the Ferro Alloys Industries and extended a concessional tariff.

6.14.5.2 The AP case cited by the Ferro Alloys Units is not comparable to this case because a rate of 212 P/KWH for the Ferro Alloys Units approved by APERC was recommended to the Commission by AP Transco. Secondly, the Govt. of A.P. for the year 2003-04 provided a subsidy of Rs.1513.49 Crore to be made available to the distribution companies to make good loss of revenue from the subsidised category like LT domestic, agriculture etc. The Government of Andhra Pradesh has further assured the Commission that this amount would be available to DISTCOs in 12 equal monthly installments.

6.14.5.3 Further an exercise by Commission staff reveals that collection level & cross subsidy level DISTCOs would be adversely affected in case consumption as envisaged in their proposal do not materialise.

6.14.6 In view of the facts stated above, Commission feels it appropriate to advise DISTCOs concerned to review this proposal once again and enter into mutually acceptable agreement, if deemed necessary and put up the same before the Commission for consideration, in accordance with Regulation 81 of OERC Distribution Code, 1998.

#### 6.15 Re-connection Charge

6.15.1 The rates of reconnection charge should be as below:-

Single Phase Domestic Consumer	-	Rs.50/-
Single Phase other consumer	-	Rs.100/-
3 Phase line	-	Rs.200/-
HT & EHT line	-	Rs.1000/-

6.16 The Commission is aware of the gaps in the overall computation of the realization from tariffs and the consequent Clear Profit computations among the four distribution licensees. The Commission expects to use the plans of the four distribution licensees as well as GRIDCO, to rationalise these differences in its next tariff judgement for FY 2004-'05. **In this manner, the Commission hereby deviates from the provisions of the Sixth Schedule of the E S Act, 1948.**

6.17 **Finally, the Commission orders as follows with reference to the prayers of the applicant. The Commission does not approve the Revenue Requirement for the FY 2003-04 and also the Retail Supply Tariff as proposed by CESCO for 2003-04 and rejects the Tariff Revision Proposal.**

6.18 **No changes in the existing tariff structure both in terms of rates and stipulations have been envisaged by the Commission in the tariff order 2003-04 except those mentioned in the paragraphs 6.2 to 6.20. The rates applicable to the various categories of consumer have been detailed in the Annex – C.**

6.19 **The Commission has approved GRIDCO's revenue requirement for 2003-04 at Rs. 2045.00 crore (applying correctives) which GRIDCO is allowed to recover at an approved tariff in accordance with Deptt. of Energy, Govt. of Orissa notification No.1068/E dtd.29.01.03 and Parekh Committee recommendations duly accepted by Govt. of India. In case Govt. of Orissa does not accept the Parekh Committee recommendations, as advised by the Commission, the revenue requirement of GRIDCO for FY 2003-04 would increase by Rs. 94.10 crore and thereby BST would rise by 7.81 p/u over a period of 12 months, with an all Orissa average RST rise of 11.45 p/u; as per the Tariff Schedule given in Annex (C1) w.e.f 01.11.2003. It is made clear that the tariff hereby made effective from 01.11.2003 shall not be construed as an amendment of this tariff order and there shall be no fresh proceeding u/s 26 (6) of the OER Act. However, in the event of such non-acceptance by the State Govt. on or**

before 22.10.2003, tariff as per (Annex C-1) shall be published for giving effect thereto after 7 days from the date of publication. The amount left unrecovered due to shorter tenure of recovery or partial acceptance of the Parekh Committee recommendation, would be carried forward to 2004-2005 for adjustment.

- 6.20 In line with the Commission's order on its LTTS, the Commission expects the utilities to file their Aggregate Revenue Requirements for the period from 1 April 2004 to 31 March 2007 (i.e., for the financial years FY 2004-'05, FY 2005-'06 and FY 2006-'07) by December 2003 in order to enable the Commission finalise and operationalise its Long Term Tariff Framework for Orissa. Though the first Control Period is from 1 April 2003 to 31 March 2007 covering four financial years (FY 2003-'04, FY 2004-'05, FY 2005-'06 and FY 2006-'07), the Commission decides that the first year (i.e., FY 2003-'04) will be treated as the Transition Period, during which the LTTS will be introduced.
- 6.21 The Commission directs the licensee to implement the Retail Supply Tariff as determined by the Commission in this order to become effective after expiry of seven days of the publication under section 26(5) of the OER Act 1995.
- 6.22 Pursuant to order dated 14.03.2003 of the Hon'ble High Court of Orissa, passed in Misc. Case No. 414/2003 and 580/2003 arising out of OJC No.6751 of 2001, the order is not being notified to CESCO in terms of section 26(6) but is submitted to the Hon'ble High Court of Orissa in sealed cover. The same shall not be given effect to without leave of the Hon'ble High Court of Orissa.

The application of M/s CESCO is disposed off accordingly.

(B. C. JENA)  
M E M B E R

(H. SAHU)  
M E M B E R

(D. C. SAHOO)  
C H A I R M A N

## ANNEXURES

Licensee ..CESCO.....

7

REVENUE REQUIREMENT FOR THE FINANCIAL YEAR  
2003-04

Expenditure(Rs in Crs)

ANNEX-A

			Proposed	Approval(with Parekh Comittee)	Approved(without Parekh Comittee)
I.		Purchase of Energy	518.76	527.29	559.15
II.		Distribution & Sale of Energy	159.65	142.17	142.17
	(a)	Employees cost	109.19	108.86	108.86
	(b)	Material cost	31.84	24.12	24.12

	(c)	Admn. & General Expenses	18.62	9.18	9.18
III.					
		<b>taxed on income &amp; profits</b>			
IV.		<b>Interest on loans, advanced by Gridco</b>	<b>51.74</b>	<b>35.01</b>	<b>35.01</b>
	(a)	Interest on loan borrowed from organisation	51.74	35.01	35.01
	(b)	Interest on debenture issued by licensee	-		
V.		<b>Interest on security deposit</b>	-		
VI.		<b>Legal charges</b>			
VII.		<b>Bad debt</b>	<b>20.22</b>	<b>19.13</b>	<b>19.13</b>
VIII.		<b>Auditor's fees</b>	-		
IX.		<b>Management including managing agents remuneration</b>	-		
X.		<b>Depreciation</b>	<b>42.62</b>	<b>16.80</b>	<b>16.80</b>
			-		
XI.					
		<b>Other expenses</b>	168.00		
XII.		<b>Contribution to P.F., Staff pension, Gratuity</b>			
	(a)	Expenses on training & other			
		training scheme	-		
	(b)	Bonus			
<b>A</b>		<b>(Total expenses I</b>		<b>740.40</b>	<b>772.26</b>

		to XII)	960.99		
<b>Special appropriation to cover</b>					
<b>Para XVII Clause 2(c)</b>			<b>TOTAL</b>	<b>TOTAL</b>	
			<b>1,110.10</b>	0.00	0.00
<b>I.</b>		<b>Previous loss</b>	1,110.10	<b>0.00</b>	<b>0.00</b>
<b>II.</b>		<b>All taxes on income &amp; profits</b>			
<b>III.</b>		<b>Installments of written down account</b>			
		<b>in respect of intangible assets and</b>			
		<b>new capital issue expenses</b>			
<b>IV.</b>		<b>Contribution of contingency reserve</b>			
<b>V.</b>		<b>Contribution towards arrear depreciation</b>			
		Contribution to development reserve			
	(a)				
		Debt redemption and obligation			
	(b)				
<b>VI.</b>		<b>Other special appropriation permitted</b>	-		
		<b>by State Government</b>			
<b>B</b>		<b>Total of (I to VI)</b>	<b>1,110.10</b>	0.00	0
		<b>Total (A+B)</b>	<b>2,071.09</b>	<b>740.40</b>	<b>772.26</b>

Licensee CESCO.....				<u>OERC</u>	
<u>CALCULATION OF CLEAR PROFIT FOR THE ENSUING FINANCIAL YEAR (2003-04)</u>					
<u>AS PER THE SCHEDULE VI OF ELECTRICITY SUPPLY ACT, 1948</u>					
PARA - XVII (2)				<u>ANNEX-B</u>	
				Rs. in Crs	
(A)		Income derived from :	PROPOSED	App With Parekh Committee	App Without Parekh Committee
	i)	Gross receipt from Sale of energy less discounts applicable thereto.	898.54	765.24	765.24
	ii)	Rental of meters and other apparatus hired to consumers.	26.22	26.22	26.22
	iii)	Sale & repair lamps and apparatus			
	iv)	Rents			
	v)	Transfer fees			
	vi)	Interest on investment			
	vii)	Other general receipts accountable for income tax and arising from and ancillary or incidental to business of electricity supply.			
		Total of (A) (i to vii)	924.75	791.46	791.46
(B)		Expenditure properly incurred on :			
	i)	Generation & purchase of energy	518.76	527.29	559.15
	ii)	Distribution and sale of energy	159.65	142.17	142.17
		a) Employees cost	109.19	108.86	108.86
		b) Material	31.84	24.12	24.12
		c) A&G expenses	18.62	9.18	9.18
	iii)	Rents, rates & taxes, other than all taxed on income and profit			
	iv)	Interest on loan advanced by Board			
	iv.a)	Interest on loan borrowed from Organisation	51.74	35.01	35.01
	iv.b)	Interest on debenture issued			

		by licensee			
	v)	Interest on security deposit			
	vi)	Legal charges			
	vii)	Bad debts	20.22	19.13	19.13
	viii)	Auditors fees			
	ix)	Management including managing agents remuneration			
	x)	Depreciation	42.62	16.80	16.80
	xi)	Other expenses	168.00		
	xii)	Contribution to P.F., staff pension and gratuity			
	xii.a)	Expenses on apprentice & other training scheme			
	xiii)	Bonus			
		<b>Total expenditure i.e. total of (B) (i to xiii)</b>	<b>960.99</b>	<b>740.40</b>	<b>772.26</b>
(C)		Special appropriation to cover :			
	i)	Previous losses	1,110.10	0	
	ii)	All tax on income and profits			
	iii)	Instalments of written down amounts in respect of intangible asset and new capital issue expenses			
	iv)	Contribution to contingency reserve			
	v)	Contribution towards arrear depreciation			
	v.a)	Contribution to Development Reserve, referred to in para			
	v.b)	Debt redemption obligation			
	vi)	Other special appropriation permitted by the State Govt.			
		<b>Total of (C)</b>	<b>1,110.10</b>	<b>-</b>	<b>-</b>
		<b>CLEAR PROFIT (A-B-C)</b>	<b>(1,146.34)</b>	<b>51.06</b>	<b>19.20</b>
		<b>Reasonable Return (Form No. F.14)</b>	<b>(46.95)</b>	<b>11.64</b>	<b>11.64</b>
		<b>Excess or deficit of clear profit over reasonable return</b>	<b>(1,193.29)</b>	<b>39.43</b>	<b>7.57</b>

## TARIFF EFFECTIVE FROM 1st . , 2003

Sl. No.	Category of Consumers	Voltage of Supply	Demand Charge (Rs/KW/Month )/ (Rs/KVA/Month)	*Energy Charge (P/KWh)	Customer Service Charge (Rs./Month)	Monthly Minimum Fixed Charge for first KW or part (Rs.)	Monthly Fixed Charge for any additional KW or part (Rs.)	Rebate (P/KWh) /DPS
	<b>LT Category</b>							
<b>1</b>	Domestic							
<b>1.a</b>	Kutir Jyoti < 30U/month	LT	FIXED MONTHLY CHARGE ---->			30		
<b>1.b</b>	Others							10 /DPS
	(Consumption <= 100 units/month)	LT		140		20	10	
	(Consumption >100, <=200 units/month)	LT		230		20	10	
	(Consumption >200 units/month)	LT		320		20	10	
<b>2</b>	L.T General (Commercial)							10 /DPS
	(Consumption <=100 units/month)	LT		320		30	20	
	(Consumption >100, <=300 units/month)	LT		410		30	20	
	(Consumption >300 units/month)	LT		450		30	20	
<b>3</b>	Irrigation	LT		110		20	10	10 /DPS
<b>4</b>	Public Lighting (Street Lighting)	LT		320		20	10	DPS/Rebate
<b>5</b>	L.T.Industrial (S) (Small Industry)	LT		320		40	30	10 /DPS
<b>6</b>	L.T.Industrial (M) (Medium Industry)	LT		320		80	50	DPS/Rebate
<b>7</b>	Specified Public Purpose (Public Institution)	LT		320		80	50	DPS/Rebate
<b>8</b>	Public Water Works <100 kW	LT		320		80	50	DPS/Rebate
<b>9</b>	Public Water Works >= 100KW	LT	200	320	30			DPS/Rebate
<b>10</b>	General Purpose	LT	200	320	30			DPS/Rebate
<b>11</b>	Large Industry	LT	200	320	30			DPS/Rebate
	<b>HT Category</b>							
<b>12</b>	Bulk Supply - Domestic	HT	10	230	250			10 /DPS

13	Irrigation	HT	30	100	250			10 /DPS	
14	Specified Public Purpose (Public Institution)	HT	50	300	250			DPS/Rebate	
15	H.T General (Commercial)	HT	50	300	250			10 /DPS	
16	H.T.Industrial (M) (Medium Industry)	HT	50	300	250			DPS/Rebate	
17	General Purpose	HT	200	300	250			DPS/Rebate	
18	Public Water Works	HT	200	300	250			DPS/Rebate	
19	Large Industry	HT	200	300	250			DPS/Rebate	
20	Power Intensive Industry	HT	200	300	250			DPS/Rebate	
21	Ministeel Plant	HT	200	300	250			DPS/Rebate	
22	Emergency Supply to CPP	HT	0	400	250			DPS/Rebate	
23	Railway Traction	HT	200	300	250			DPS/Rebate	
24	Colony Consumption	HT	0	230	0			DPS/Rebate	
	EHT Category								
25	General Purpose	EHT	200	290	700			DPS/Rebate	
26	Large Industry	EHT	200	290	700			DPS/Rebate	
27	Railway Traction	EHT	200	290	700			DPS/Rebate	
28	Heavy Industry	EHT	200	290	700			DPS/Rebate	
29	Power Intensive Industry	EHT	200	290	700			DPS/Rebate	
30	Ministeel Plant	EHT	200	290	700			DPS/Rebate	
31	Emergency Supply to CPP	EHT	0	380	700			DPS/Rebate	
32	Colony Consumption	EHT	0	230	0			DPS/Rebate	
	D.C. Services		RATE FOR D.C. SUPPLY						
33	Domestic	LT	SAME AS RATE AT SL. 1						10 /DPS
34	L.T General (Commercial)	LT	SAME AS RATE AT SL. 2						10 /DPS
35	L.T.Industrial (S) (Small Industry)	LT	SAME AS RATE AT SL. 5						10 /DPS
	* Consumption in excess of 50% and up to 60% by EHT and HT consumers shall be payable @180 paise/kwh								
	& 200 paise/kwh respectively and consumption above 60% by EHT & HT consumers shall be payable								
	@ 150 paise/kwh &170 paise/kwh respectively.								



TARIFF EFFECTIVE FROM Ist. 2003							ANNEX-C(1)	
Sl. No.	Category of Consumers	Voltage of Supply	Demand Charge (Rs/KW/Month)/ (Rs/KVA/Month)	*Energy Charge (P/KWh)	Customer Service Charge (Rs./Month)	Monthly Minimum Fixed Charge for first KW or part (Rs.)	Monthly Fixed Charge for any additional KW or part (Rs.)	Rebate (P/KWh) /DPS
	7.1 LT Category							
1	Domestic							
1.a	Kutir Jyoti < 30U/month	LT	FIXED MONTHLY CHARGE ---->			30		
1.b	Others							10 /DPS
	(Consumption <= 100 units/month)	LT		180		20	10	
	(Consumption >100, <=200 units/month)	LT		260		20	10	
	(Consumption >200 units/month)	LT		320		20	10	
2	L.T General (Commercial)							10 /DPS
	(Consumption <=100 units/month)	LT		320		30	20	
	(Consumption >100, <=300 units/month)	LT		410		30	20	
	(Consumption >300 units/month)	LT		450		30	20	
3	Irrigation	LT		110		20	10	10 /DPS
4	Public Lighting (Street Lighting)	LT		320		20	10	DPS/Rebate
5	L.T.Industrial (S) (Small Industry)	LT		320		40	30	10 /DPS
6	L.T.Industrial (M) (Medium Industry)	LT		320		80	50	DPS/Rebate
7	Specified Public Purpose (Public Institution)	LT		320		80	50	DPS/Rebate
8	Public Water Works <100 kW	LT		320		80	50	DPS/Rebate
9	Public Water Works >= 100KW	LT	200	320	30			DPS/Rebate
10	General Purpose	LT	200	320	30			DPS/Rebate

11	Large Industry	LT	200	320	30			DPS/Rebate
	<b>HT Category</b>							
12	Bulk Supply - Domestic	HT	10	230	250			10 /DPS
13	Irrigation	HT	30	100	250			10 /DPS
14	Specified Public Purpose (Public Institution)	HT	50	300	250			DPS/Rebate
15	H.T General (Commercial)	HT	50	300	250			10 /DPS
16	H.T.Industrial (M) (Medium Industry)	HT	50	300	250			DPS/Rebate
17	General Purpose	HT	200	300	250			DPS/Rebate
18	Public Water Works	HT	200	300	250			DPS/Rebate
19	Large Industry	HT	200	300	250			DPS/Rebate
20	Power Intensive Industry	HT	200	300	250			DPS/Rebate
21	Ministeel Plant	HT	200	300	250			DPS/Rebate
22	<i>Emergency Supply to CPP</i>	HT	0	400	250			DPS/Rebate
23	Railway Traction	HT	200	300	250			DPS/Rebate
24	Colony Consumption	HT	0	230	0			DPS/Rebate
	<b>EHT Category</b>							
25	General Purpose	EHT	200	290	700			DPS/Rebate
26	Large Industry	EHT	200	290	700			DPS/Rebate
27	Railway Traction	EHT	200	290	700			DPS/Rebate
28	Heavy Industry	EHT	200	290	700			DPS/Rebate
29	Power Intensive Industry	EHT	200	290	700			DPS/Rebate
30	Ministeel Plant	EHT	200	290	700			DPS/Rebate
31	8 <b><u>EMERGENCY SUPPLY TO CPP</u></b>	EHT	0	380	700			DPS/Rebate
32	Colony Consumption	EHT	0	230	0			DPS/Rebate
	<b>D.C. Services</b>		RATE FOR D.C. SUPPLY					
33	Domestic	LT	SAME AS RATE AT SL. 1					10 /DPS
34	L.T General (Commercial)	LT	SAME AS RATE AT SL. 2					10 /DPS
35	L.T.Industrial (S) (Small Industry)	LT	SAME AS RATE AT SL. 5					10 /DPS

	* Consumption in excess of 50% and up to 60% by EHT and HT consumers shall be payable @180 paise/kwh	
	& 200 paise/kwh respectively and consumption above 60% by EHT & HT consumers shall be payable	
	@ 150 paise/kwh &170 paise/kwh respectively.	