

ORISSA ELECTRICITY REGULATORY COMMISSION

BIDYUT NIYAMAK BHAWAN,
UNIT – VIII, BHUBANESWAR – 751 012.

*** **

Present : Shri D. C. Sahoo, Chairman
Shri H. S. Sahu, Member
Shri B. C. Jena, Member

CASE NO. 62/2002

DATE OF HEARING : **07.04.2003**

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. Southern Electricity Supply Company of Orissa Limited, Courtpet, Berhampur (in short SOUTHCO), the holder of The Orissa Distribution and Retail Supply Licence, 1999 (No.2/1999) 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 category of consumers. Its application for determination of Retail Supply Tariff for the financial year 2003-04 has been registered as Case No. 62/2002. This case has been heard on 07.04.2003 and is being disposed off by this order of the Commission.

1 PROCEDURAL HISTORY

- 1.1 On examination of SOUTHCO'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 SOUTHCO 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 essayed to render 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 Tariffs 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 indicating the broad features of the licensee's proposed Revenue Requirement & Tariffs.
- 1.3.2 The intending objectors had exercised their the 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 15 objections from the following persons/associations/bodies:
 Grahak Panchayat, Friends Colony, Hospital Road, Paralakhemundi; (2) Orissa Consumers' Association, Biswanath Lane, Cuttack; (3) Ganjam District Electricity Consumers Protection Association, Hinjilicut; (4) Sri R.C. Padhi, Brit Colony, Nayapalli, Bhubaneswar; (5) M/s Aditya Aluminium, 333, Sahid Nagar, Bhubaneswar; (6) Citizen's Committee, New Colony, Rayagada; (7) Y. Madhusudan Rao, Advocate, Rayagada; (8) South Eastern Railway, Garden Reach, Kolkata; (9) Merchants' Association, Rayagada; (10) Technical Employees Union, Berhampur; (11) Orissa Small Scales Industries Association, Industrial Estate, Cuttack-10; (12) M/s Utkal Chamber of Commerce & Industry Ltd., Barabati Stadium, Cuttack; (13) M/s Jayshree Chemicals Ltd., P.O. Jayshree, Dist., Ganjam; (14) J.K. Paper Ltd., Jay Kay Pur, Rayagada; and (15) Orissa Industries Association, Industrial Estate, Berhampur.
 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 to the objectors.
- 1.5 The date of hearing was fixed on 7 April, 2003. Notices were published in leading English and Oriya daily newspapers and available in the Commission's website 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 has 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 7 April 2003. SOUTHCO's case was presented by the Managing Director, SOUTHCO, 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 of the Commission as well as the members raised certain queries to the licensee by way of clarification. Subsequently, the licensee submitted 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 Cases**
 - 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 objections regarding the maintainability of the case and prayed for rejection of the licensee's application.

- 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 licence 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 tariffs, 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 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. 23/1999 and again in Case No. 56/2001 & 7/2002 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 overruled.

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 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 have stated that till the base year tariff, i.e., for FY 2002-2003 is determined, any attempt to determine the tariff for the ensuing year, i.e., FY 2003-2004 is 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.

1.8.6 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 followed the principles governing the Long Term Tariff Strategy (LTTS). We now proceed to examine the present tariff filing of SOUTHCO and record our findings on the same.

2 SOUTHCO'S PROPOSAL

- 2.1 The Southern Electricity Supply Company of Orissa Ltd. (SOUTHCO) has been carrying out the business of distribution and retail supply of electricity in eight Districts of State of Orissa namely Ganjam, Gajapati, Kandhamala, Boudh, Rayagada, Koraput, Nawarangpur and Malkanagiri. The company receives bulk supply from GRIDCO at eighteen locations having forty-three interfaces at EHT and HT.
- 2.2 The profile of the company as on 31st March, 2003 gives an overview of its current activities:-
- | | | |
|--|---|---------------------------------|
| Total consumer strength | - | 4,26,960 nos. |
| Total input in MU | - | 1555.99 (April 02 to March,03) |
| Total billing in MU | - | 946.94 (April 02 to March,03) |
| Total billing to consumers in (Rs. in lakhs) - | | 27927.40 (April 02 to March,03) |
| 33 KV lines (in Kms.)- | | 2863.32 |
| 11KV lines (in Kms.) | - | 12885.31 |
| LT lines (in Kms.) | - | 10425.41 |
| 33/11KV Transformers | - | 190 nos. |
| No. of Distribution Transformers | - | 9141 nos. |
- 2.3 The comparative figures of consumption at different voltage levels as well as energy purchase in MU from FY 99-00 onwards with a projection for the future periods are taken from various filings with the Commission & tabulated to serve as an indicator of pattern of consumption in the area of the licensee.

Table-1
Energy Sale & Purchase

(ALL FIGS. IN MU)

Segment	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04 (Proposed)
LT Sales	520	519	553.22	577.53	584.09	638.05
HT Sales	208	185	192.75	192.22	202.33	215.43
EHT Sales	120	129	129.46	136.34	160.52	153.64
TOTAL SALES	848	833	875.43	906.09	946.94	1007.12
Energy Purchase	1494	1433	1522.70	1521.97	1555.99	1580.00

2.4 Sale Mix Analysis

- 2.4.1 The voltage-wise sale-mix of consumers indicating consumption being loaded in favour of LT category, slab-wise energy sales and category-wise consumer growth during 2002-03 and 2003-04 have been given in Table-2, Table-3 and Table-4 respectively.

Table-2
Sale mix variation (% of Total)

Segment	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04 (Proposed)
LT category	61.32	62.30	63.19	63.74	61.68	63.35
HT category	24.53	22.21	22.02	21.21	21.37	21.39
EHT category	14.15	15.49	14.79	15.05	16.95	15.26
Total	100.00	100.00	100.00	100.00	100.00	100.00

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

	FY 03 (proposed)		FY 04 (proposed)	
	MU	% of Total	MU	% of Total
Domestic	435.906	100.00	463.159	100.00
Kutir Jyoti	7.836	1.80	7.96	1.72
Others				
0 <=100 KWH	319.507	73.30	342.673	73.99
> 100<=200 KWH	96.42	22.12	99.149	21.41
> 200 KWH	12.143	2.79	13.377	2.89
Commercial	75.342	100.00	79.731	100.00
0 <=100 KWH	34.727	46.09	36.783	46.13
> 100<=300 KWH	21.859	29.01	23.169	29.06
> 300 KWH	18.756	24.89	19.779	24.81

Table-4
Category-wise Consumer Growth

(ALL FIGS. IN NUMBER)

Segment	FY 01 (As on 1st April 2000)	FY 02 (As on 1st April 2001)	FY 03 (As on 1st April 2002)	FY 04 (Proposed)	FY 04 (As on 1st April, 2003)
LT (Nos)	358121	381890	411510	432321	426860
% Rise		6.6	7.8	5.1	3.73
HT (Nos)	70	77	83	83	90
% Rise		10.0	7.8	0	8.43
EHT (Nos)	10	11	11	11	10
% Rise		10	0	0	-9.1
Total nos.	358201	381978	411604	432415	426960
% Rise		6.6	7.8	5.1	3.73

- 2.5 SOUTHCO expects a growth rate of 6 % in consumption in the domestic category for the year 2003-04 on the assumption that there may be a rise in the number of consumers due to regularisation of hooking as well as addition of new consumers and increase in surveillance of the meters installed.
- 2.6 The Licensee estimates a growth of 6% in respect of commercial consumption which shall be on account of increase in consumption of the existing consumers.
- 2.7 It also estimates a growth of 21% in consumption in respect of irrigation consumers for the year 2003-04 due to introduction of Pani Panchayat since the number of LI points and the consumption under irrigation will resume functioning again.
- 2.8 In respect of HT consumers, it estimates a growth rate of 6.33% in consumption for the year 2003-04 based on the trend of first half of the ensuing year and specific load growth expected from the existing consumers.
- 2.9 The estimated growth rate in consumption is 6% in respect of EHT consumers based on the consumption trend of the existing consumers and expected growth in Traction load.

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

Segment	FY 02	FY 03 (Proposed)	% Rise over Previous Year	FY 04 (Proposed)	% Rise over Previous Year
Domestic	268.413	281.240	4.8	285.634	1.6
Commercial	36.165	37.394	3.4	39.172	4.8
Irrigation	41.161	34.578	-16	42.538	23
Other LT	64.909	66.708	2.77	68.25	2.3
HT Consumer	62.137	62.129	0	62.129	0
EHT Consumer	61.778	61.778	0	61.778	0
TOTAL	543.563	543.827	0	559.50	2.9

Table-6
Category-wise Growth (In MU)

	FY 02	FY 03 (Proposed)	% Rise over Previous Year	FY 04 (Proposed)	% Rise over Previous Year
Domestic	411.225	435.096	6	463.159	6
Commercial	71.946	75.342	5	79.731	6
Irrigation	25.445	17.10	-33	20.741	21
Other LT	68.911	71.845	4	74.42	4
HT Consumer	192.217	202.597	5	215.428	6.33
EHT Consumer	136.336	145.080	6	153.641	6
TOTAL	906.08	947.06	5	1007.12	6

Table-7
Metering Position at the end of Mar, 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	426860	404368	22492	68787	335581
HT	90	90	Nil	1	89
EHT	10	10	Nil	Nil	10
TOTAL	426960	404468	22492	68788	335680

Table – 8
TARGET DATE FOR 100% METERING

(As per filing of SOUTHCO through affidavit in connection with the Business Plan & tariff 03-04)

Sl.No.	Items	Target for 100% metering
1	All consumers	31 st March,2004
2	33 kv feeders	October, 2003
3	11 kv feeders	October, 2003
4	33/11 kv transformer	October, 2003
5	11/0.4 kv transformer	31 st March,2004

2.10 REVENUE REQUIREMENT

2.10.1 The licensee is required to meet the cost of power to be purchased from GRIDCO, the cost of distribution, covering 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, the licensee is expected to earn a reasonable return on its capital base, based on the methodology prescribed in the Sixth Schedule to the 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.

2.10.2 The licensee earns 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 taken from the filings before the Commission is given in the table below.

Table : 9 **(Rs. in Crore)**

Power Purchase Cost	197.658
Distribution cost	187.150
Contribution to contingency reserve	1.422
Total revenue requirement	386.230
(-) Misc. Receipts	3.550
Reasonable return	1.192
Net revenue requirement	383.872
Past Losses	97.942
Net revenue receipt from sale of power	390.593
Deficit	91.221

2.10.3 SOUTHCO in its RST application of 2003-04 has stated that during its operation for the last three and half years, the tariff awards of OERC on 30 December 1999 were found to be notional as certain concessions allowed to industrial consumers by the Commission had completely nullified the effect of RST revision. Similarly, the increase granted in the RST order of 19.01.2001 was completely offset by steep increase in Bulk Supply Tariff. The Commission did not sanction retail supply tariff revision in the latest order of 19.04.02 due to Govt.'s acceptance of certain recommendations of High Power Committee. Certain legitimate and reasonable expenses were disallowed and power purchase expenses were underestimated. Under these circumstances, SOUTHCO has not only continued to incur losses from 1st April 1999 onwards but also losses boosted up during 1999-2003.

2.10.4 SOUTHCO in its application has stated that the Commission has initiated several measures for rationalization of tariff and reduction of cross-subsidies. The Licensee has adhered to the same principles while proposing tariff revision for the ensuing year.

2.11 **Distribution loss**

2.11.1 SOUTHCO has stated that, the Hon'ble Commission has prescribed a target of loss reduction by 5% during 2002-03 whereas it has achieved 1.3% reduction in distribution loss during 2002-03 and therefore system loss for the year 2002-03 would be 39% in the absence of positive load growth in HT/EHT sector. For the year 2003-04, SOUTHCO has targeted a reduction of the distribution loss of 3% to achieve a system loss of 36% during the year. Accordingly, SOUTHCO has requested OERC to accept the distribution loss level of 36% for calculating the revenue requirement of SOUTHCO for the year 2003-04.

2.11.2 SOUTHCO in its clarification to queries has also stated that loss reduction program envisages installation of LT less transformers, replacement of bare LT Conductors by AB Conductor, augmentation of conductor size, up-gradation of distribution transformers, installation of new sub-stations, etc. in identified loss-prone areas initially. Stricter vigilance and meter-checking raids have been intensified and squads have been organised for detection and de-hooking of unauthorised consumers, thereby controlling illegal abstraction of energy. The effect on account of each of these activities will result in reduction of the input of energy and thereby reduction of distribution loss.

2.11.3 So SOUTHCO has submitted that reduction in distribution loss can be achieved in steps and a target reduction of distribution loss by 3% during 2003-04 is quite challenging and realistic considering predominance of LT load in SOUTHCO. Accordingly, SOUTHCO has requested OERC to accept the distribution loss level of 36% for calculating the revenue requirement of SOUTHCO for the year 2003-04.

2.12 **Tariff Revision Proposal**

2.12.1 SOUTHCO has proposed an overall tariff rise of 30% to compensate for the shortfall in revenue requirement for the year 2003-04. It has also requested to carry forward a substantial portion of losses incurred by it for recovery in future tariffs.

2.12.2 SOUTHCO proposes to move towards a cost based tariff structure for which a minimum increase of 30 paise per unit has been suggested in EHT/HT categories and a significant increase varying between 70-230 paise per unit has been proposed for different consumers in LT category. No change has been proposed in tariff for Kutir Jyoti consumers. It also proposes modification to the monthly minimum fixed charges for various categories of consumers.

2.13 **Cross-subsidy**

2.13.1 SOUTHCO has submitted that in order to avoid sharp increases in tariff for LT consumers, the cross subsidies would continue to exist for some more time until LT consumers are in a position to pay economic price at the cost of supply. SOUTHCO further has submitted that if the Commission feels that either the cross subsidy is to be phased out faster or the pace of transfer of economic price to LT consumer is to be slower due to socio-economic considerations, it can ask the State Government for requisite subsidy to compensate SOUTHCO for the financial implications of the proposed measure.

2.13.2 SOUTHCO also has stated that, the State Government has significant role to play in balancing the varying interests of different classes of consumers and facilitating the reform process and payment of subsidy to the utility for achieving social objectives. SOUTHCO has requested OERC for appropriate directions in this regard.

2.14 **Prayer**

SOUTHCO has requested for

- ◆ Approval of the proposed retail tariff and charges.
- ◆ Confirmation of expected revenue from the proposed tariff.
- ◆ Permission to carry forward the gap between expected revenue and the revenue requirement in 2003-04 and the unabsorbed past loss for adjustment in future years.

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

3.1 The Commission has considered all the objections raised by the various 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 whereas 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:

3.2 **Availability and Reliability of Information**

3.2.1 Sri R C Padhi objected that despite objectors and the Commission raising queries and clarifications on the completeness and the reliability of the information filed by the licensee, most of the licensee's application and information formats are left incomplete or blank. This makes it difficult to objectively evaluate the licensee's proposal.

3.3 **T & D Losses, Efficiency Improvement and Customer Service**

3.3.1 Objectors have generally expressed dissatisfaction over the prevailing level of distribution loss and felt that the Distribution loss is abnormally high. The Licensee has failed to arrest the distribution loss and also has not taken any sincere effort to improve it. They strongly submitted that the Commission should insist on the annual loss reduction of 5% as recommended by the Sovan Kanungo Committee Report and as followed by the Commission in their 2002-03 Tariff judgement. They stated that the licensee had not managed to reduce losses in spite of their repeated assurances before the Commission for the last three years.

3.3.2 Sri R C Padhi sought clarification from the Commission on the issue of loss computation for the distribution business. He proposed that the losses as decided and fixed by the Commission should be based on the HT and LT systems only, since EHT supply, which has negligible losses, combined together tends to mask the inefficiency of the licensee in LT&HT distribution.

3.3.3 Ganjam District Electricity Consumers Protection Association, Hinjilicut as well as the Utkal Chamber of Commerce and Industry Limited (UCCI) objected that the honest and paying customers were being encumbered with the losses being incurred in the system because of theft and inefficiency of the licensee.

3.3.4 Grahak Panchayat, Parlakhemundi, Orissa Small Scale Industries Association, Cuttack and the Merchants' Association, Rayagada submitted that the licensee had failed to provide electric supply round the clock with proper voltage and effective services. Sri Y Madhusudan Rao of Rayagda alleged that the licensee had not spent any funds to renovate the infrastructure and maintenance as most of the areas still suffered from ageing transformers leading to frequent interruptions. Both Jayshree Chemicals and South Eastern Railway, Kolkata argued for imposing fines and penalties on the licensee in case of failure of the licensee to meet the quality of supply and customer service standards.

3.3.5 Grahak Panchayat, Parlakhemundi enquired as to whether established complaint handling procedures were being followed by the licensee and prescribed procedure for bill preparation and collection was being carried out efficiently and accurately.

3.3.6 Citizens' Committee, Rayagada objected to the licensee's inability to carry out a pilot study and to file the report with the Commission.

3.4 Load Growth, Contract Demand and Sales & Revenue Forecast

- 3.4.1 Shri R.C. Padhi pointed out that the estimated sales in Domestic and Commercial categories in the LT segment was inflated, leading to a higher revenue requirement through a higher cost of power purchase. The Citizens' Committee, Rayagada, submitted that the Commission's present methodology of allowing power purchase amount in full and estimating the sales based on the applicable performance benchmark should be discontinued.

3.5 Metering and Meter Rent

- 3.5.1 Grahak Panchayat, Parlakhemundi objected to the wrongful harassment of consumers by the licensee in the name of meter changing, disconnection threats and un-declared power cuts and supply interruptions. They also prayed to the Commission to dissuade the licensee in insisting on the installation of a particular make or brand of consumer meter, especially in the case of replacing an existing working meter.
- 3.5.2 Sri R C Padhi pointed out that there was 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 revenue. He also reiterated that in spite of the Commission's earlier directives, the licensee had not yet metered all its HT points and hence had not been able to determine the losses in LT and HT separately and accurately.
- 3.5.3 Citizens' Committee of Rayagada submitted that the leasing of meters from BSES was not required since the new meters could be procured from the meter rent collected from the consumers.

3.6 Revenue Requirement

3.6.1 Audited Accounts

- 3.6.1.1 Orissa Consumers' Association, Cuttack along with the Grahak Panchayat, Parlakhemundi, Orissa Industries Association of Berhampur and the Orissa Small Scale Industries Association, Cuttack objected to the absence of audited accounts of the licensee for FY 2001-02 and FY 2002-03. As such, the entire filing of SOUTHCO had been based on un-audited and un-reliable data and was not maintainable. Sri R C Padhi stated that in the absence of audited financial statements, the financial loss / deficit as proposed by the licensee could not be ascertained.
- 3.6.1.2 Grahak Panchayat, Parlakhemundi prayed that SOUTHCO must submit its transparent Cost Audit Report instead of providing vague financial statements.

3.6.2 Bulk Supply Tariffs and Cost of Power Purchase

- 3.6.2.1 Grahak Panchayat, Parlakhemundi submitted that the Bulk Supplier (GRIDCO) should not enhance the tariffs for the next five years. Orissa has an abundance of hydel power sources and that the consumers in and around the area of production should enjoy this cheaper power. It also submitted that the OERC should ensure that the bulk licensee had followed its power purchase agreements faithfully and prudently in order to ensure maximisation of procurement of the cheapest power available.

3.6.3 Depreciation and Asset Register

- 3.6.3.1 Sri R C Padhi and the Merchants' Association of Rayagada objected that in spite of the Commission's earlier directives, the licensee had not made any

attempts to build up an asset register. He suggested that the licensee's claim for depreciation should be only allowed after thorough verification of its asset register.

3.6.4 Network Costs

3.6.4.1 Orissa Small Scale Industries Association, Cuttack submitted that the licensee had not even made the minimum effort to curtail excess and wasteful expenditure. Grahak Panchayat, Parlakhemundi submitted that SOUTHCO should take immediate steps to give voluntary retirement and retrenchment to the unscrupulous and inefficient employees to improve efficiency and to stop harassing innocent consumers.

3.6.5 Provisioning for Bad & Doubtful Debts

3.6.5.1 Sri R C Padhi submitted that the licensees should not be allowed any provisioning against Bad & Doubtful Debts (except as a token provision), which is solely on account of the licensees' inefficiency. He also submitted that no commercially oriented company could survive with a collection efficiency of anything less than 95%.

3.6.6 Interest and Financing Costs

3.6.6.1 The Orissa Industries Association, Berhampur submitted that the licensee had not invested any working capital for improvement of the system, which is essential for customer service.

3.6.7 Shareholders Returns

3.6.7.1 Sri R C Padhi reiterated that the licensee should only be allowed a return on its own investments if it performs efficiently and prudently.

3.7 Cost of Supply and Tariff Design

3.7.1 Since the cost of power constitutes the largest element in a DISTCO's cost structure, many objectors submitted that the Commission should first hear and fix the Bulk Supply Tariff (BST) and then the DISTCOs should prepare their Revenue Requirement based on that BST. Sri R C Padhi and the Orissa Industries Association, Berhampur also stated that the Kanungo Committee recommended that since the existing tariffs being higher it should be retained at the current level till FY 2004-05.

3.7.2 Cost of Supply and Tariff Structure Design

3.7.2.1 Sri R C Padhi submitted that the tariffs should be based on an "ability to pay" approach. He also suggested that since the domestic consumers have been the major contributors to the growing debt in the books of account of the licensee, the Commission should devise a penalty on delayed payment, which would incentivise the consumers to ensure timely payments of their electricity bills.

3.7.2.2 Orissa Small Scale Industries Association, Cuttack 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), Bhubaneswar proposed a uniform Retail tariff structure with a differential Bulk Supply Tariff.

3.7.2.3 Aditya Aluminium Project, Bhubaneswar submitted that the power tariffs should be fixed for a period of five years, and permitted to vary only to the extent of the variation of the BST.

- 3.7.2.4 Aditya Aluminium Projects, Bhubaneswar further submitted before the Commission to set a separate tariff for the construction industry by classifying it as a separate category and waive off demand charges for this category.
- 3.7.2.5 S.E. Railway, Kolkata pleaded for a single part tariff with reasonable energy charges, keeping in view the verdict of the Hon'ble Supreme Court on cross-subsidisation while determining tariff.
- 3.7.2.6 Jayashree Chemicals Limited pleaded that the tariff should be made cost based, , keeping in view the verdict of the Hon'ble Supreme Court on cross-subsidisation while determining tariff

3.8 Other Issues

3.8.1 Process of Tariff Hearing

- 3.8.1.1 A majority of the objectors pleaded that the time given by the Commission to file objections with the Commission was extremely short and very insufficient. They requested the Commission to give them more time to enable them to contribute significantly.
- 3.8.1.2 Many objectors pleaded to streamline the method and procedure of filing of objections and the entire tariff hearing process so as to make more simple and in-expensive.

3.8.2 Consumers' Security Deposits

- 3.8.2.1 Citizens' Committee of Rayagada submitted that since the Consumer Security Deposit was caution money deposited in the name of the consumer, the licensee should pay interest on the same.

4 SOUTHCO'S REPLIES TO THE OBJECTIONS AND QUERRIES RAISED

4.1 T&D Losses, Pilot Loss Studies and Efficiency Improvement

4.1.1 In response to strong objections raised by some objectors against the licensee's inefficiency at reducing losses and its failure to control theft, SOUTHCO in its replies submitted that the licensee had been taking various measures to reduce losses, which included feeder and consumer metering, system improvement works, and regularisation of illegal hooking, consumer camps and regular vigilance checks. The licensee has also been carrying out metering and meter replacement activities on priority basis to cut down illegal power consumption. SOUTHCO also admitted that in spite of these efforts, the illegal abstraction of power had not been stopped totally.

4.1.2 The licensee had proposed a reduction of 3% in the overall distribution losses in FY 2003-04. This reduction had been proposed keeping in view the hard and difficult ground realities in cutting down losses.

4.2 Performance Improvement, Quality of Supply and Consumer Service

4.2.1 The licensee submitted that the various complaints on the quality of supply, namely interruptions and low voltage were being tackled through system improvement work. Once PMU works meant for system improvement are completed, it will go a long way in addressing these problems. In replying to the objections raised by the objectors in meeting consumer complaints and their redressal, the licensee submitted that it had been making continuous efforts to keep its consumers satisfied with its available resources and prevailing conditions. The licensee also holds regular Bijuli Adalats and consumer camps for prompt redressal of consumer complaints.

4.3 Feeder & Transformer Metering and Consumer Billing

4.3.1 The licensee submitted that it had taken up feeder and consumer metering on priority basis to reduce theft and illegal abstraction of energy and also to minimise the load factor or provisional billing.

4.4 Revenue Requirement and Proposal for Tariff Revision

SOUTHCO submitted that the licensee's proposal for the revision in tariffs was based on Section 26 of the OER Act 1995 and estimate of the licensee's Annual Revenue Requirement (ARR) for FY 2003-04 was reasonable and realistic in nature. The calculation of ARR had been made in accordance with provisions under Chapter VIII of the Reform Act, the OERC's Conduct of Business Regulations 1996, and the regulatory framework prevailing in the state. The licensee had also submitted that the recovery of the licensee's expenses along with the reasonable return from the tariffs charged to consumers was essential for the survival of the licensee.

4.4.1 Audited Accounts

4.4.1.1 Replying to the strong objections raised against the non-availability of audited financial figures of the licensee, SOUTHCO replied that its proposal for the approval of the revenue requirement for FY 2003-04 and revision of tariffs had been based on the Audited Accounts for FY 2001-02 submitted to the Commission. As such, the Audited Accounts for FY 2002-03 had not become due.

4.4.2 Operation and Maintenance (O&M)

4.4.2.1 In response to Merchants' Association, Rayagada's objection to the high incidence of O&M and interest costs, the licensee stated that the proposed O&M expenses for FY 2003-04 were reasonable and based on the audited accounts for the previous years.

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 The licensee had submitted that the proposal for the revision of tariff for FY 2003-04 has based on reasonably accurate estimate of the revenue requirement for FY 2003-04. It also added that the licensee had attempted to balance its own requirement of revenue and the same time, protect the consumers from stiff tariff hikes, without which the sector as a whole can never be viable.

4.5.2 Cost of Supply and Cross-Subsidisation

4.5.2.1 The licensee stated that the Commission had already initiated a number of steps for the gradual rationalisation of tariffs. The tariff structure itself had been significantly rationalised to reflect categorisation according to voltage classes. There had been clear demarcations of charges into fixed (demand) and variable (energy) components. However, a number of LT consumers still continue to enjoy the benefits of paying below the cost of supply and the State govt. have not provided any subsidy/convention from the day Orissa Power Sector Reform was initiated. The Commission is aware of this and is in the process of gradually moving towards a regime where this cross-subsidisation is progressively reduced in order to avoid sharp increases in tariffs.

4.5.3 Tariff Design

4.5.3.1 Ms. Aditya Aluminium, Bhubaneswar had requested for a single part tariff for power used for the purpose of construction. South Eastern Railways, Kolkata also requested for a single-part tariff for the consumption by the railways. The licensee has submitted that since it buys in bulk its entire requirement for power from GRIDCO and pays a two-part bulk supply tariff (BST) to GRIDCO, it has to necessarily recover its fixed costs through a fixed charge from its consumers. The fixed charge component in the retail tariff facilitates availability of power on demand to its consumers. Hence, the licensee clarified that there should be a two-part tariff.

4.5.4 Special Category Tariffs

4.5.4.1 Ms. Aditya Aluminium in its objections had prayed for a special tariff for industries with load factors of 80% and 90%. The licensee submitted that it had proposed continuation of the special tariff for industries with loads in excess of 100 MVA with a guaranteed monthly load factor of 80%.

4.5.5 Penalties and Rebates

4.5.5.1 The licensee clarified that in order to maintain a healthy Power Factor (PF) in the system, industrial consumers should maintain their PF very close to unity and that in no case, should it go below the level of 90%. To encourage such a

trend the Commission had recognised the importance of maintaining a high PF and hence, it had incentivised consumers maintaining a PF higher than 97% in their Tariff Order for FY 2000-'01.

4.5.5.2 Replying to South Eastern Railway's submission for giving incentive for increased power factor, the licensee submitted that it would be dealt with by the Commission during the process of tariff determination and design.

4.5.5.3 Some objectors including M/s Jayshree Chemicals Limited, Ganjam had raised objections to the high rates of DPS being charged. The licensee submitted that this matter would be looked into by the Commission during the process of tariff determination and design.

4.5.6 Long Term Tariff Framework

4.5.6.1 Replying to the queries raised on the multi-year tariff framework, the licensee submitted that the formulation and implementation of a long-term tariff framework is under active consideration of the Commission.

4.6 Other General and Miscellaneous Issues

4.6.1 Consumer Security Deposits

4.6.1.1 Some objectors objected to the licensee collecting additional security deposit from the consumers. The licensee submitted that the issue of consumer security deposit being collected by the licensee was in accordance with prescribed norms and that the issue itself was not directly related to the present proposal for approval of its revenue requirement and revision of tariff.

4.6.2 Restrictions on Supply of Power by the licensee

4.6.2.1 Many consumers and consumer groups and industry associations raised objections on the power cuts and restrictions on power supply in the state. The licensee in its replies clarified that it had been forced to resort to power cuts due to shortfall in the power availability arising out of monsoon failure.

4.7 SOUTHCO's response to issues raised by the Commission

4.7.1 There were certain queries raised by the Commission during the course of public hearing on SOUTHCO's Retail Supply Tariff Application, 2003-04, which have been addressed by SOUTHCO as given in the following paragraphs.

4.7.2 Query No: 1 – What steps SOUTHCO has taken to implement 100% feeder metering and sub-station metering?

Reply: SOUTHCO has already initiated an Action Plan for 100% metering of feeders and sub-stations, for which an estimate at a cost of Rs.18.748 crore has been framed and Division-wise/Month-wise programme has been drawn up for fixing of metering units within 6 months from the date of availability of funds and materials. The detailed programme is furnished below.

Sl. No.	Description of work	Total	1 st Month	2 nd Month	3 rd Month	4 th Month	5 th Month	6 th Month
1.	33 KV feeders	137	45	46	46			
2.	33/11 KV Tr.	176	58	59	59			
3.	11 KV feeders	378	126	128	124			
4.	33/0.4 KV S/Ss	69	13	14	11	11	10	10
5.	11/0.4 KV Dist. Tr. (above 200 KVA)	299	48	51	49	52	109	44
6.	11/0.4 KV dist. Tr. (below 200 KVA)	4833	1276	1276	1213	616	227	225

Besides, a Short-Time Plan has been made for installation of 2822 Numbers of Meters for 25 KVA Transformers in different divisions within 3 months with the available meters.

- 4.7.3 Query No: 2 – What measure has been adopted by SOUTHCO to implement the programme of Govt. of Orissa to provide power to people below poverty line under ‘Kutir Jyoti Scheme’?

Reply: Government of Orissa had programmed for providing electricity connections to 400 Kutir-Jyoti consumers for each Assembly constituency during the year 2002-03. The present cost for single Kutri Jyoti connection is Rs.1500.00 including the cost of meters. Selection of beneficiaries under the Scheme is made by the concerned M.L.A. from the BPL list duly certified by the concerned Block Development Officers. Department of Energy on receipt of the list of such beneficiaries will allocate the same to the concerned distribution companies for execution of works.

There are 33 Assembly Constituencies falling within the jurisdiction of SOUTHCO. As such, Kutir Jyoti connections are to be given with the estimated cost of Rs.198 lakhs. Accordingly, Government have released Rs.111 lakhs during April, 2003 for execution of such works. However, no BPL list duly recommended by the Government has been received, on receipt of which, these works will be undertaken by SOUTHCO.

- 4.7.4 Query No: 3 – What steps SOUTHCO have been taken towards implementation of remunerative scheme introduced by OERC?

Reply: OERC has approved guidelines vide its letter dated 26.06.2001 for determination of remunerative norms for execution of new construction/extension/upgradation of lines and sub-stations etc to start from 1st July, 2001. The same has been circulated to all the field units for taking necessary action.

- 4.7.5 Query No: 4 – What measures SOUTHCO have been taken for improvement of quality in supply in rural areas?

Reply: SOUTHCO has introduced HVD system by extending H.T. lines up to the load centre of village. Further, to cater the needs of beneficiaries supply can be made by installing small capacity transformers like 10 KVA, 16 KVA, 25 KVA. They propose to use AB Conductor for extension of LT lines to distant consumers.

- 4.7.6 Query No: 5 – Whether meters supplied by SOUTHCO are ISI marked and are inspected/tested by a standard test bench?

Reply: Meters have been procured after following the World Bank tendering procedures and obtaining due approval of the World Bank. Pre-delivery inspection has been rigorously carried out at the factory premises in standard test bench and properly sealed.

- 4.7.7 Query No: 6 – Whether PMU works after execution, have been charged with the approval of Electrical Inspector?

Reply: PMU works are being executed by contractors on turnkey basis who have been awarded 33 KV/11 KV & LT works as per World Bank contracts even before privatisation. Drawings and inspections have been approved by the concerned Electrical Inspector before charging all lines and sub-stations.

- 4.7.8 Query No: 7 – Whether depreciation should be allowed without assets register?

Reply: Asset register for the assets transferred from GRIDCO to SOUTHCO as on 26.11.1998 had not been made available to SOUTHCO. However, steps have been taken to build up Fixed Assets Register on the basis of the physical verification and valuation with the approval of the Hon'ble Commission. As such, depreciation on assets should be allowed.

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 1st 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 1st April 1999 and the fourth one on 1st September 1999 after disinvestment 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 privatization 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 31st 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 Crs 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 31st 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 3rd 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 dt. 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.

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. 1st 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 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 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 28th of February 2001 is given below :

Table : 10
(Rs. in Crore)

Power Purchase Payables (As on 28 th Feb,2001 without March,01 bill)				
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	583.63	136.62	54.65	638.28

- 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 in stead 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 SOUTHCO, the arrears as on 31st March 2003 is around Rs316 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**

5.11.1 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 to GRIDCO. In other words, the State Govt. will pay the amount to GRIDCO/OHPC to that extent the payables of the utility to GRIDCO will reduce.

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)

	FY 00	FY 01	FY 02	FY 03
WESCO				
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
NESCO				
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
SOUTHCO				
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
CESCO				
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
TOTAL				
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

	FY 2001-02			FY 2002-03		
	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 9th 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 yet seriously taken any initiatives on metering of 33/11 KV feeders and on LV side of transformer and at consumers' end to ascertain the actual level of loss and identify loss prone areas. However, SOUTHCO in the course of hearing of Case No.54/2002 in the matter of Escrow Relaxation and also in its Business Plan submitted to OERC and in subsequent compliance to the queries raised by the Commission relating to the tariff for FY 2003-04 has committed to complete all feeder metering by end of October, 2003, LV side of Transformers and consumer end metering by 31.03.2004.
- 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 Kanungo Committee 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 Kanungo Committee

Name of the company	FY 01-02	FY 02-03	FY 03-04	FY 04-05
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

Name of the company	FY 02-03	Target level of distribution loss set by the Commission for FY 2002-03
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 a distribution level 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. 19th 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

	FY 2001-02			FY 2002-03		
	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 SOUTHCO has committed to complete all the feeder metering by October 2003 and LV side of transformer metering by 31st 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 31st March, 2003 are as under

Table : 18

	33/11 Transformer (In Nos)	33KV Feeders(InNos)	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, 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).** The difference between the units input and the units realised are 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
Target fixed for 2002-03				
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
Target fixed for 2003-04				
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 the proposed sale indicated by WESCO 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

	FY 2003-04		
	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 permitted to sell 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 gap 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 level 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

EXPECTED PURCHASE & SALES OF POWER & REVENUE BY DISTCOs				
	Purchase (MU)	Loss (%)	Sale (MU)	Rev. (Rs. Cr)
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

5.18.1.1 SOUTHCO in Form No. TRF-21 (FY 2003-2004 RST filing) has submitted break up of employees cost for the ensuing Financial Year FY 2003-2004, Current year FY 2002-2003 and previous year FY 2001-2002. SOUTHCO has filed the audited accounts of FY 1999-2000 and FY 2000-2001, as per which employees cost amounts to Rs.44.30 crore and Rs.45.61 crore respectively. During FY 2001-2002 as per the accounts prepared for income tax purposes employees cost amounts to Rs.46.73 crore only. For the year FY 2003-2004 SOUTHCO estimates an amount of Rs.54.41 crore. SOUTHCO assumed nothing towards capitalisation. Hence, the employee costs chargeable to revenue is estimated at Rs.54.41 crore.

5.18.1.2 Commission in its last tariff order allowed an amount of Rs.47.53 crore and Rs.48.53 crore towards employees cost for the FY 2001-2002 and FY 2002-2003, respectively. Since the accounts figures for FY 2001-2002 is close to the figure approved in the last tariff order, Commission considers it prudent to take the approved figure of FY 2002-2003 as base. While determining the basis pay for the year FY 2003-2004 Commission consider it appropriate in giving a 3% rise over the approved basic pay for FY 2002-2003.

5.18.1.3 As 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 Commission has allowed DA of 41% on the basic pay with a provision that any increase in rate of DA in future would be allowed to be recovered through tariff with retrospective effect. SOUTHCO has claimed arrear DA of 13% to be recovered during FY 2002-2003, over and above the current D.A. of 49% on Basic Pay.

5.18.1.4 Rate 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%

5.18.1.5 After 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, 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.**

5.18.1.6 **All other allowances claimed by licensee are found to be reasonable and accepted by the Commission.** 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	25.18	26.97	25.94
2	Overtime			
3	Dearness Allowance	10.33	15.94	15.70
	Sub-Total (1 to 3)	35.51	42.91	41.64
4	Other Allowance	0.46	0.41	0.41
5	Bonus	0.02	0.02	0.02
6	Total Emoluments (1 to 5)	35.99	43.34	42.07
Other Staff Costs				
7	Reimbursement of Medical Expenses	0.80	0.53	0.53
8	Leave Travel Concession	0.09	0.00	0.00
9	Reimbursement of HR	1.57	2.00	2.00
10	Interim Relief of Staff	0.39	0.00	0.00
11	Encashment of Earned Leave	1.48	0.24	0.24
12	Honorarium	0.88	0.00	0.00
13	Payments under Workmen Compensation Act	0.06	0.06	0.06
14	Ex-gratia	0.10	0.06	0.06
15	Other Staff Costs			
16	Total Other Staff Costs	5.37	2.89	2.89
17	Staff Welfare Expenses	0.36	0.38	0.38
18	Terminal Benefits (PF)	5.49	6.49	6.30
19	Gratuity	1.32	1.31	1.27
	Total (6+16+17+18+19)	48.53	54.41	52.92
	Less: Employees Expenses Capitalised	0.00	0.00	0.00

5.18.2 Repair and Maintenance (R & M) Expenses

5.18.2.1 SOUTHCO has proposed Rs.16.28 crore for the FY 2003-2004 towards repair and maintenance expenses, calculated at the rate of 5.4% of Gross Fixed Asset beginning of the year.

5.18.2.2 As per audited accounts for FY 1999-2000 and FY 2000-2001, the total Repair and Maintenance expenses was Rs.13.39 crore and Rs.7.31 crore respectively. The expenses during 2001-02 as per income tax audit amounts to Rs.9.98 crore.

5.18.2.3 The 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. **The Commission approves an amount of Rs.16.38 crore towards R&M expenses for the year FY 2003-04.**

5.18.3 Administration & General (A & G) Expenses

5.18.3.1 SOUTHCO proposes Rs.7.14 crore towards A&G expenses for the FY 2003-2004 in their Annual Revenue Requirement. These expenses include expenses on communication, professional charges, property related expenses, conveyance and travelling, training and other expenses and other material related expenses.

5.18.3.2 SOUTHCO in its submission has stated that the Commission had disallowed the lease rent in their order dated 19.04.2002 on the ground that metering have been taken on financial lease. In this regard, SOUTHCO clarified that due to delay in release of fund from World Bank, meters were obtained on lease to expedite metering programme. The relevant lease agreements are in an operative lease terms for which the lessor is entitled to claim depreciation. Further, SOUTHCO gave justification that had the meters been purchased out of loan fund, interest cost would have been claimed by SOUTHCO in its revenue requirement. In the application SOUTHCO submitted that lease rent payable by the company should be allowed under A&G expenses.

5.18.3.3 The Commission examined the licensee's proposal on A&G expenses. As per the audited accounts, the licensee has incurred A&G expenses for the year FY 1999-2000 and FY 2000-2001 of Rs.4.51 crore and Rs.6.43 crore respectively. For the FY 2001-2002, the expenditure as per the accounts prepared and submitted for income tax purpose amounts to Rs.6.29 crore. The Commission in its last tariff order allowed Rs.3.33 crore for FY 2001-2002 and Rs.4.42 crore for FY 2002-2003, considering an inflation 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.

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

5.18.3.5 The Commission finds the projected A&G expenditure proposed by the licensee is at 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.

5.18.3.6 The Commission approves an amount of Rs.3.56 crore for the year FY 2003-2004 towards A&G expenses.

5.19 Interest on Loan

5.19.1 SOUTHCO, in its proposal, estimates an amount of Rs.65.54 crore towards interest on loan. 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 %	13.98
2	World Bank	30% grant + 70% loan @ 13% effective rate is 9.1% p/a	14.82
3	Power Bond	12.5%	16.25
4	APDRP	12% on 50% of the project cost	Fully capitalised
5	Interest on Working Capital (DPS)	24%	20.49
	Total		65.54

5.19.2 Regarding loan from GRIDCO (Back to Back loan), SOUTHCO estimates a balance of Rs.101.04 crore as on 31.03.04 as against GRIDCO's estimate of Rs.126.32 crore. A comparative statement of loan as per GRIDCO and SOUTHCO is given below:

Table: 25
Loan Balance Statement

	As per GRIDCO	As per SOUTHCO
As on 01.04.1999	124.11	124.11
Received during 1999-2000	17.49	13.60
Less repayment during FY 1999-2000	NIL	NIL
Receipt during FY 2000-2001	1.04	1.98
Less repayment during FY 2000-2001	16.32	16.31
Balance as on 31.03.2001	126.32	132.38

5.19.3 No loan has been transferred from GRIDCO to SOUTHCO after 31 March 2001. Though the balance of loan as on 31 March 1999 in the books of GRIDCO has been reconciled with that of SOUTHCO, the loan balance as on 31 March 2004 of the respective licensee's books do not tally. Even the loan balance given by SOUTHCO in Form F-3 do not match with the figures given in Form F-27. 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. GRIDCO in turn, submitted in support of its initiatives, letters issued to DISTCOs with balance of loans borrowed by them for reconciliation. **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. In their clarification filed with the Commission, the licensee stated that as the required modification to the concerned agreements arising out of the decision of the Govt. of Orissa communicated vide letter No.10211 dt.23.07.2002 are pending, calculation of interest on the World Bank loan and NTPC bond during FY 2003-2004 have been made as per the existing contractual agreements.

5.19.5 The Commission is of the view that the decision of the Govt. has been notified vide No.1068/E dated 29.01.2003 and all parties involved are under obligation to carry out

the decision taken by the Govt. The bilateral agreements made by the licensee with GRIDCO should be modified from retrospective effect in line of the decision taken by the Govt.

5.19.6 Accordingly Commission calculates the interest at 8.5% and allows Rs.10.74 crore towards interest for the year FY 2003-2004.

5.19.7 World Bank Loan

5.19.7.1 Interest on the World Bank loan has been calculated by the licensee @ 13% without considering 30% of the loan as a grant with a plea that no direction to this effect have yet been received from the Govt.

5.19.7.2 The above proposal of SOUTHCO is rejected by Commission as Govt. of Orissa in Notification No.1068 dated 29.01.03 clearly stated that 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.

5.19.7.3 Accordingly, Commission approves an amount of Rs.10.37 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.2.13 crore, interest chargeable to revenue shall be Rs.8.24 crore in respect of World Bank loan.

5.19.8 NTPC Bond

5.19.8.1 SOUTHCO have issued bonds worth Rs.130 crore in favour of GRIDCO for reassignment to NTPC w.e.f. 1 October 2000 @ 12.5% per annum. SOUTHCO has stated that no reduction in the interest rate as suggested by the Commission have been considered due to non-receipt of any instruction to this effect.

5.19.8.2 The Commission examined the proposal & considered it prudent to calculate interest at 8.5% (Tax-free) in accordance with the recommendations of the Ahluwalia Committee for the restructuring of the dues of the Central Power Sector Undertakings (CPSUs). **Accordingly, Commission approves an amount of Rs.11.05 crore towards interest on power bonds of Rs.130 crore @ 8.5% for FY 2003-04.**

5.19.9 APDRP Assistance

5.19.9.1 SOUTHCO proposes to receive an amount of Rs.4.90 crore under the APDP scheme and Rs.20 crore under APDRP scheme during FY 2003-2004. As per the terms and condition of the scheme, 50% of the amount sanctioned is grant and the licensee needs to service the balance 50% at 12% rate of interest per annum. The interest liability of the loans taken by SOUTHCO under APDRP scheme after capitalisation, is estimated as NIL.

5.19.9.2 The Commission going by the proposal of SOUTHCO is of the view that entire amount of interest on APDRP loan should not be capitalised. Only interest on loan drawn during the year for capital works is to be capitalised. This has been proposed by SOUTHCO. **Accordingly Commission assess an amount of Rs.0.60 crore to be capitalised and balance Rs.0.29 crore to be taken for the purpose of calculation of revenue requirement.**

5.19.10 Interest Capitalised

5.19.10.1 SOUTHCO proposes an amount of Rs.3.04 crore (Form F-2) for capitalisation in respect of interest during construction. In para 7.2.8 of the application licensee stated that the interest on loan outstanding at the beginning of the year has been charged to profit and loss account. Only the interest on loans taken for capital works during the financial year has been capitalised.

5.19.10.2 As the rate of interest and the amount of loan from various agencies get changed due to aforesaid decision **the Commission recalculates the interest to be capitalised and approves an amount of Rs.2.73 crore for the FY 2003-04.**

5.19.11 Interest on Working Capital as proposed by the licensee

5.19.11.1 SOUTHCO, in their revenue requirement for FY 2003-2004, claimed an amount of Rs.19.30 crore towards interest on working capital. The licensee tried to justify its claim with reasons that they have not been able to pay full amount of BST during 2001-2002 due to non-availability of working capital loan from their bankers. As per BST, Delayed Payment Surcharge (DPS) @2% per month is to be charged on the outstanding amount of the power purchase bill, which has been estimated at Rs.19.30 crore for FY2003-04 payable to GRIDCO.

5.19.11.2 The Commission does not accept the proposal of the licensee in regards to interest on working capital. So far arrears of BST bills pertaining to FY 2001-2002 are concerned, the licensee can easily make the arrear payments by liquidating its huge arrear of Rs.269.29 crore as on 31.03.2002 lying uncollected with consumers (reported by SOUTHCO in Form F-17). Moreover, the licensee is collecting security deposit to the extent of two months energy charges on the basis of contract demand and the balance as on 31.03.2002 was Rs.36.04 crore which have gone up to Rs.37.29 and Rs.38.62 as on 31.03.2003 and 31.03.2004 respectively. This security deposit amount is an interest free fund available to SOUTHCO, which can be utilised for meeting working capital requirements. However as discussed in para 6.10.3 above **the Commission would allow the servicing of any working capital finance, raised to meet the revenue shortfall of 10% as recognised by the Commission.**

5.19.11.3 **Interest on loan proposed by SOUTHCO and approved by Commission is given as under:**

Table: 26
Interest on Loans and Bonds

Loan	SOUTHCO's Proposal for FY 2003-2004	(Rs. in Crore)
		Commission Approval for FY 2003-2004
GRIDCO	13.98	10.74
World Bank (after capitalisation)	14.82	8.25
Power Bond	16.25	11.05
APDP/APDRP (after capitalisation)	-	0.29
Interest on working capital	20.49	-
Total	65.54	30.33

5.20 Depreciation

- 5.20.1 SOUTHCO has proposed an amount of Rs.29.45 crore towards depreciation. The method adopted for calculating depreciation is Straight Line Method (SLM) and the rates of depreciation are as prescribed by Govt. of India, Ministry of Power Notification No. SO-265 (E) dated 27.03.1994.
- 5.20.2 Commission examined the submission made by SOUTHCO and the audited report for the year FY 1999-2000 and FY 2000-2001. Statutory Auditors, in their report, commented that the company has not maintained records showing full particulars including individual break-up of fixed assets, quantitative details and situation thereof relating to the 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, SOUTHCO 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 of consultants have been engaged to take up physical verification and preparation of Fixed Assets Register of all the Accounting Units of the company, who have already completed physical verification. 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 Commission took note of the observation noted in the audit report for the year FY 1999-2000 & FY 2000-2001. In the last tariff order dated 19.4.2002 (Para 6.14.6), Commission categorically directed SOUTHCO to comply with the observations raised by statutory auditors before 31.08.2002. But SOUTHCO did not submit any report to the Commission. **Once again, Commission directs SOUTHCO to comply with the observation raised by statutory auditors by 31.08.2003 without fail. Further, non-compliance on the part of the SOUTHCO 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) (%)	Depreciated 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 SOUTHCO has estimated an amount of Rs.14.31 crore towards provisioning for bad and doubtful debts for the FY 2003-2004, assuming 3% of the entire billing amount. In Form F-25, they have submitted the age-wise analysis of debt up to 31.03.2002.

5.22.2 Commission analysed the proposal submitted by SOUTHCO. It is a matter of great concern that the gross receivables have mounted up to Rs.269.29 crore at the end of 31.03.2002 and is estimated to go up to Rs.316.30 crore at the end of 31.03.2003. The Commission is of the view that had this amount of debt 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-debtor analysis of the accumulated arrears in order to identify the collectible and uncollectible arrears to begin with it should first segregate arrear before and after 01.04.1999. The licensee should take the necessary steps to write off these uncollectible debts and to make all possible effort to collect the rest of the arrears. The Commission also directs the licensee to appoint separate agencies, if necessary, to carry out division-wise audit to ascertain collectible and uncollectible arrears .**

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.7.20 crore for the FY 2003-2004.

5.23 Past Losses

5.23.1 SOUTHCO has proposed an amount of Rs.97.94 crore (Form F-12) 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.

5.23.2 Commission opines that only those losses, which have been incurred due to the reasons beyond the control of the licensee and in spite of the licensee having performed as per the benchmark fixed by the Commission, then Commission will consider the loss to be passed on to consumers through tariff. SOUTHCO has not given any detailed break up & justification of incurring this loss of Rs.97.94 crore. **Hence, Commission does not consider previous losses claimed under special appropriation at this stage.**

5.24 Contribution of Contingency Reserve

5.24.1 **SOUTHCO has proposed an amount of Rs.1.42 crore towards contributions to Contingency Reserves, calculated at 0.375% on opening gross block for FY 2003-2004. The Commission approves the same.**

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. SOUTHCO has proposed an amount of Rs.1.19 crore 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 SOUTHCO as on 31st March, 2004 as proposed in the format F-37 is Rs.37.66 crore. By applying 16% rate of return on equity capital, the reasonable return works out to Rs.6.03 crore. **Thus, the Commission approves an amount of Rs.6.03 crore towards reasonable return on equity for the purpose of calculation of revenue requirement.**

5.26 Miscellaneous Receipts

5.26.1 **SOUTHCO in form F-13 has estimated Rs.3.55 crore towards miscellaneous receipt for the FY 2003-2004. Commission approves the same.**

5.27 Revenue Requirement

5.27.1 In the light of above decisions and calculation, the Commission approves expenditure for the purpose of revenue requirement of Rs.320.79 crore for FY 2003-2004 against a projection of Rs.384.80 crore. **The Commission approves a special appropriation of Rs.1.42 crore towards contribution to Contingency Reserves. Reasonable Return is approved at Rs.6.03 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 SOUTHCO'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.

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
WESCO				
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%
NESCO				
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%
SOUTHCO				
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%
CESCO				
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.

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 6.19 . 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. SOUTHCO in its Business Plan and queries relating to tariff for 2003-04 submitted to the Commission has committed to complete all feeder metering by end of October, 2003, metering in LV side of Transformers and consumer end metering by 31.03.2004. In view of the aggressive metering activities undertaken by SOUTHCO, the Commission considers that billing on the basis of load factor will be dispensed with from 1st 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 1st 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 31st March, 2004 and feeder metering by 31st 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. SOUTHCO estimates that the rebate alone on this account to HT/EHT consumers will be of the order of Rs.0.21 crore and Rs.0.24 crore during the FY 2003-04 with the existing and proposed tariff respectively.
- 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. SOUTHCO in its RST application for the year 2003-04 has estimated that the rebate on account of prompt payment within 48 hours of presentation of bill during the FY 2003-04 will be order of Rs.0.88 crore & Rs.0.96 crore with the existing and proposed tariff respectively. Hence, it is expected that to avail such heavy amount of rebate, consumers should put in 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 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 overdrawal during under frequency condition will be liable to pay UI charges as per rule. There may be a situation when one DISTCOs is overdrawal and another is underdrawal so that net effect of GRIDCO drawal is nullified. In that case cost recovery of UI charges for overdrawal 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 overdrawl 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 Re-connection Charge**
- 6.14.1 **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/- |

- 6.15 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.**
- 6.16 **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 SOUTHCO for 2003-04 and rejects the Tariff Revision Proposal.**
- 6.17 **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 6.19. The rates applicable to the various categories of consumer have been detailed in the Annex – C.**
- 6.18 **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.**
- 6.19 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.
- 6.20 **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.**
- 6.21 **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 SOUTHCO 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 SOUTHCO is disposed off accordingly.

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

(H. SAHU)
MEMBER

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

ANNEX-A

REVENUE REQUIREMENT FOR THE ENSUING FY.2003-04

Expenditure

Para XVII Clause-2 (b) of Schedule VI of Elec. (Supply) Act 1948

		Rs in Crore		
		PROPOSED	Approval (With Parekh Committee)	Approval(Without Parekh Committee)
I.	Purchase of Energy	197.66	199.00	211.64
II.	Distribution & Sale of Energy			
	(a) Employees cost	46.59	52.92	52.92
	(b) Material cost	16.28	16.38	16.38
	(c) Admn. & General Expenses	5.05	3.56	3.56
III.	Rent, rates and taxes other than all taxed on income & profits	1.79		
IV.	Interest on loans, advanced by Gridco	13.98	10.74	10.74
	(a)			
	I) From World Bank	14.82	8.25	8.25
	APDP/APDRP		0.29	0.29
	Interest on debenture issued by licensee	16.25	11.05	11.05
	(.c) Interest on Working Capital	20.49	0.00	0.0000
V.	Interest on security deposit			

VI.	Legal charges	0.09		
VII.	Bad debt	14.31	7.20	7.20
VIII.	Auditor's fees	0.05		
IX.	Management including managing agents remuneration			
X.	Depreciation	29.45	11.41	11.41
XI.	Other expenses	0.11		
XII.	Contribution to P.F., Staff pension	6.49		
	Gratuity	1.31		
	(a) Expenses on training & other training scheme	0.05		
	(b) Bonus	0.03		
A	(Total expenses I to XII)	384.81	320.80	333.44
Special appropriation to cover Para XVII Clause 2(c)				
TOTAL				
I.	Previous loss	97.94		
II.	All taxes on income & profits			
III.	Installments of written down account in respect of intangible assets and new capital issue expenses			
IV.	Contribution of contingency reserve	1.42	1.42	1.42
V.	Contribution towards arrear depreciation			
	(a) Contribution to development reserve			
	(b) Debt redemption and obligation			
VI.	Other special appropriation permitted by State Government			
B	Total of (I to VI)	99.36	1.42	1.42
	Total (A+B)	484.17	322.22	334.86

Licensee:-SOUTHCO LTD.

CALCULATION OF CLEAR PROFIT FOR THE FINANCIAL YEAR 2003-04
AS PER THE SCHEDULE VI OF ELECTRICITY SUPPLY ACT, 1948

RS. IN CR

PARA - XVII (2)

ANNEX - B

		Approved(W ithout Parekh Comittee)	
(A)	Income derived from :	Proposed	Approved(With Parekh Comittee)
i)	Gross receipt from Sale of energy less discounts applicable thereto.	390.59	288.01
ii)	Rental of meters and other apparatus hired to consumers.	3.55	3.55
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)	394.14	291.56
(B)	Expenditure properly incurred on :		
i)	Generation & purchase of energy	197.66	211.64
ii)	Distribution and sale of energy		
	a) Employees cost	46.59	52.92
	b) Material	16.28	16.38
	c) A&G expenses	5.05	3.56
iii)	Rents, rates & taxes, other than all taxed on income and profit	1.79	
iv)	Interest on loan advanced by GRIDCO and others	30.23	10.74
iv.a)	Interest on loan borrowed from Organisation	14.82	19.59
iv.b)	DPS	20.49	
v)	Interest on security deposit		
vi)	Legal charges	0.09	
vii)	Bad debts	14.31	7.20
viii)	Auditors fees	0.05	
ix)	Management including managing agents remuneration		
x)	Depreciation	29.45	11.41
xi)	Other expenses	0.11	
xii)	Contribution to P.F., staff pension and gratuity	7.80	

xii.a)	Expenses on apprentice & other training scheme	0.05		
xiii)	Bonus	0.03		
	Total expenditure i.e. total of (B) (i to xiii)	384.81	320.80	333.44
(C)	Special appropriation to cover :			
i)	Previous losses	97.94	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	1.42	1.42	1.42
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.			
	Total of (C) (i to vi)	99.36	1.42	1.42
	CLEAR PROFIT (A-B-C)	(90.03)	(30.66)	(43.30)
	Reasonable Return (Form No. F.14)	1.19	6.03	6.03
	Excess or deficit of clear profit over reasonable return	(91.22)	(36.68)	(49.32)

ANNEX-C								
TARIFF EFFECTIVE FROM 1st. December 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
	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		140		20	10	

	(Consumption >100, <=200 units/month)	LT		230		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
HT Category								
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	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 1st. January 2004

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 additional KW or part (Rs.)	Rebate (P/KWh) /DPS
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/R 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/R rebate
7	Specified Public Purpose (Public Institution)	LT		320		80	50	DPS/R rebate
8	Public Water Works <100 kW	LT		320		80	50	DPS/R rebate
9	Public Water Works >= 100KW	LT	200	320	30			DPS/R rebate
10	General Purpose	LT	200	320	30			DPS/R rebate
11	Large Industry	LT	200	320	30			DPS/R rebate
HT Category								
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/R ebate
15	H.T General (Commercial)	HT	50	300	250	10 /DPS
16	H.T.Industrial (M) (Medium Industry)	HT	50	300	250	DPS/R ebate
17	General Purpose	HT	200	300	250	DPS/R ebate
18	Public Water Works	HT	200	300	250	DPS/R ebate
19	Large Industry	HT	200	300	250	DPS/R ebate
20	Power Intensive Industry	HT	200	300	250	DPS/R ebate
21	Ministeel Plant	HT	200	300	250	DPS/R ebate
22	Emergency Supply to CPP	HT	0	400	250	DPS/R ebate
23	Railway Traction	HT	200	300	250	DPS/R ebate
24	Colony Consumption	HT	0	230	0	DPS/R ebate
EHT Category						
25	General Purpose	EHT	200	290	700	DPS/R ebate
26	Large Industry	EHT	200	290	700	DPS/R ebate
27	Railway Traction	EHT	200	290	700	DPS/R ebate
28	Heavy Industry	EHT	200	290	700	DPS/R ebate
29	Power Intensive Industry	EHT	200	290	700	DPS/R ebate
30	Ministeel Plant	EHT	200	290	700	DPS/R ebate
31	Emergency Supply to CPP	EHT	0	380	700	DPS/R ebate
32	Colony Consumption	EHT	0	230	0	DPS/R ebate
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.						