TARIFF ORDER
2005 - 06

22nd March, 2005

Andhra Pradesh Electricity Regulatory Commission
Singareni Bhavan, Red Hills, Hyderabad – 500 004.

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CHAIRMAN's FOREWORD

Background

This is the Sixth Tariff Order being issued by the Commission. The past few years have been quite eventful for the electricity sector in AP. The reform process which was inaugurated six years ago has resulted in the electricity sector and the APERC, attaining a level of maturity that has exceeded many of the original expectations. There has been great progress on many fronts including:

- Substantial enhancement of licensees' revenues.
- Improvement in quality of service to consumers, in general.

Today, the challenge is to transit from the first phase of reforms to the second.

Imperatives

The Electricity Act 2003 has brought about significant changes in the milieu in which the regulator has to function. Along with alterations in the legal framework, and the macro economic environment, we face three key imperatives:

1. The imminent exit of the transmission utility from all trading activity.
2. Introduction of the Open Access system
3. Arrival of the MYT scheme.

Exit of APTRANSCO from trading activity

Due to changes in the legal framework, it is necessary for APTRANSCO to exit all trading activity by June 2005. The alternative set up to take over this function from the transmission utility is under examination by the Government. This will require that all stakeholders adjust themselves to the new scheme in order to ensure that the transformation is seamless, successful, and well-received.

Introduction of the Open Access system

Another major change in the sector is that of the Open Access system which is expected to come into being from September 2005. This ERC has already issued a draft regulation in this regard. The transition to this system will test the skills of adjustment of all the concerned players. The successful implementation of the Open Access system will require a simple and transparent method of calculating tariffs and charges without which, the scheme may confront some resistance.

MYT (Multi-year tariff) scheme

A major change in philosophy, and approach to the design and determination of tariffs is the scheme of MYT, which the Commission has soon to embark upon. It was expected that a beginning in this direction would be made in 2005-06. However, this could not be achieved, and MYT is likely to become a reality only in the year 2006-07, but preparatory steps would require to be taken this year itself. The MYT regime will be of immense benefit to consumers, enabling them to plan for the long term; without any apprehension of regulatory uncertainty. The sector, as a whole will benefit from the benchmarking of important parameters to evaluate the functioning of the electricity system.

In the design of tariffs in general, it is important to bear in mind the fact that the Electricity Act mandates that the Commission should foster and encourage competition in the electricity industry. Such a competitive environment should ensure easy access to electric power for all classes of consumers.

Closing Thoughts – Managing Change

This year promises to be replete with activity. In addition to a new entity to take over trading activity from APTRANSCO, the Open Access scheme and MYT, the entry of many new players into the electricity system will call for a sea change in the approach to the regulation of the sector. Trading activity will get a fillip once the Open Access system is inaugurated, and one can expect traders from both the public and private sectors to take advantage of the new scheme of things. The new Tariff policy of the Govt of India, a draft of which has been communicated, suggests modifications in the approach to tariff regulation. In addition, short-term purchases of power and spot trading in electricity, both of them enabled by a facilitating environment, will usher in a new era of competition. TOD metering, and the introduction of the ABT regime intra-state, will mark a new beginning in the functioning of the electricity sector. Tariff may have to be fixed for both peak and non-peak hours separately.

The year, then is likely to be a harbinger of rapid transformation in the functioning of the electricity sector, which the regulator has to cope with. From a positive standpoint, the new regulatory role envisions encouragement and facilitation of desirable change.

The altered setting described above, and the unfolding of the reform process may be associated with some distress for some consumers. Steps have to be taken to minimize the discomfiture that might be experienced by vulnerable sections of the public. It is, therefore, necessary that an impact study of these changes is made in order, to analyse and deal with their consequences on the sector in general, and the common consumer in particular.

(K.SWAMINATHAN)
CHAIRMAN

ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION
Hyderabad

Present

Sri K. Swaminathan, Chairman
Sri. K.Sreerama Murthy, Member
Sri Surinder Pal, Member

Dated: 22-03-2005

O.P No. 30 of 2004
Transmission Corporation of Andhra Pradesh Limited

and

O.P No. 31 of 2004
Central Power Distribution Company
of Andhra Pradesh Limited

and

O.P No. 32 of 2004
Eastern Power Distribution Company
of Andhra Pradesh Limited

and

O.P No. 33 of 2004
Northern Power Distribution Company
of Andhra Pradesh Limited

and

O.P No. 34 of 2004
Southern Power Distribution Company
of Andhra Pradesh Limited ……. Applicants

These came up for public hearings before several consumers, the representatives of various consumer organizations, political parties, and other stakeholders, on 28.02.2005 and 01.03.2005 at Hyderabad (O.P.Nos. 30 and 31 of 2004), on 02.03.2005 at Warangal (O.P.No.33 of 2004), on 03-03-2005 at Visakhapatnam (O.P.No.32 of 2004) and on 05.03.2005 and 06.03.2005 at Tirupathi (O.P.No. 34 of 2004), and having stood over for consideration till this day, the Commission passed the following common O R D E R:

CHAPTER – I
INTRODUCTION

1. (a). The Electricity Act 2003 (Act 36 of 2003), hereinafter called "the Central Act", came into force with effect from 10-06-2003. While the previous Acts governing the electricity supply in the country Viz., the Indian Electricity Act 1910 (9 of 1910), the Electricity (Supply) Act 1948 (54 of 1948), and the Electricity Regulatory Commissions Act 1998 (14 of 1998) stand repealed as on the date of this order, the provisions of A.P. Electricity Reform Act 1998 (hereinafter called 'the Reform Act'), not inconsistent with the provisions of the Central Act, continue to apply to the State of Andhra Pradesh (A.P.).

(b). The Transmission Corporation of Andhra Pradesh Limited (APTRANSCO) is the holder of Transmission and Bulk Supply Licence (Licence No. 1/2000) to carry out the transmission and bulk supply business in Andhra Pradesh for a period of 30 years from 1-2-2000. The four Distribution Companies (DISCOMS) namely, the Eastern Power Distribution Company of A.P Limited (APEPDCL), the Central Power Distribution Company of A.P Limited (APCPDCL), the Northern Power Distribution Company of A.P Limited (APNPDCL), and the Southern Power Distribution Company of A.P Limited (APSPDCL), are the holders of Distribution and Retail Supply Licences (Licences No.12/2000, 13/2000, 14/2000 and 15/2000, respectively) to carry out distribution and retail supply business in their respective areas of Andhra Pradesh for a period of 30 years from 01-04-2001.

2. Each licensee is obliged to file, in terms of Sections 62 and 64 of the Central Act, read with Andhra Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations 1999 as adopted by the Andhra Pradesh Electricity Regulatory Commission (Transitory provisions for Determination of Tariff) Regulation 2004 (No.9 of 2004), the Guidelines for Revenue and Tariff Filings framed by the Commission and the provisions of the licence, its calculations related to each licenced business for the ensuing financial year regarding (i) its expected aggregate revenue from charges under its currently approved tariff; (ii) its expected cost of service; and (iii) its expected revenue gap (if any) and a general explanation on how it proposes to deal with the revenue gap and the application for tariffs for the ensuing financial year.

3. (a) The APTRANSCO submitted its filings on 30-11-2004 for the Aggregate Revenue Requirement and application for Tariff for the FY 2005-06, in respect of its existing licenced business, viz., (i) Bulk Supply Tariff (ii) Transmission charges,

and (iii) State Load Despatch Centre (SLDC) charges. Further, on 7.2.05, the APTRANSCO submitted addendum filings consequent to the new Agriculture power supply policy announced by Government of A.P.

(b). The four Distribution Companies separately submitted filings for their Aggregate Revenue Requirement (ARR) and / application for Tariffs for the FY 2005-06 for distribution and retail supply business on 30.11.2004. The four DISCOMs separately submitted on 07.02.05, addendum filings consequent to new agriculture power supply policy announced by Govt of A.P.

4. The Commission has to determine the tariffs for FY 2005-06 based on the filings of APTRANSCO and DISCOMS and considering the objections/suggestions received/heard from general public, on those filings.

5. Under section 61 of the Electricity Act, 2003, while specifying the terms and conditions for determination of tariff, the Commission has to be guided inter-alia by the provisions of clauses (a) to (i) thereof. One of these provisions refers to the National Electricity Policy and Tariff policy to be notified by the Central Government. The National Electricity Policy has been notified recently, on the 12th of February 2005. The draft tariff policy too has been received only a few days ago viz., on 19.03.2005, and is under examination of the Commission for communicating its comments to the GoI for consideration before its finalisation. For this reason, the Commission in determination of tariff and in issuing this tariff order is guided by the A.P.Electricity Regulatory Commission (Transitory Provisions for Determination of Tariff) Regulation 2004 (Regulation No.9 of 2004), the provisions of the Electricity Act, 2003, and the Commission’s Guidelines, in force.

CHAPTER – II
REVIEW OF TARIFF FILINGS FY 2004-05

6. The Commission approved Tariffs for FY2004-05 on 23-03-2004. This was the first Order consequent to the enactment of the Electricity Act, 2003. Taking cognizance of the need to provide open access, the Tariff Order for 2004-05 set out the principles for fixation of transmission and wheeling charges for use of the network of APTRANSCO and the DISCOMs. Other required changes for the second-generation reforms, namely, the cross-subsidy surcharge and introduction of ABT at intra–State levels were also initiated. Emphasis was also laid in the Tariff Order to strengthen the functioning of the incumbent utilities for meeting competition. In readiness for open access and multi-buyer model, performance-based regulation was emphasized through the Long-term Tariff Principles and by issue of a Regulation on Performance Standards.

7. APTRANSCO and the DISCOMS, filed both the ARR/ERC and FPT for FY 05 together on December 24, 2003. In their filings, APTRANSCO proposed an ARR of Rs.8383 crs which they proposed to recover through the Bulk Supply Tariff (BST) of Rs.1.96 / unit to the DISCOMS comprising, a fixed cost component of Rs.511.08/KW/month and energy charges of Rs1.81/kWh. APTRANSCO also proposed transmission charges of Rs.142.89/KW/month. Based on the ARR approved by the Commission for APTRANSCO, the average BST for FY05 is Rs.1.986 per unit with separate BST calculated for each DISCOM.

8. Against the total revenue requirement of Rs.10289.53 crores (net of non-tariff income), projected by APTRANSCO and DISCOMS, the Commission admitted Rs.9654.46 crores for the year 2004-05. With the expected revenue of Rs.8293.14 crores from the existing tariffs as on 31-03-2004, a gap of Rs.1361.32 crores remained to be covered. The Commission directed DISCOMS to achieve efficiency gains of Rs.300 crores leaving a gap of Rs.1061.32 crores to be covered on the basis of fully allocated cost.

10. The Government of Andhra Pradesh (GoAP) gave directions to reduce the tariff of certain categories (domestic, cottage industries, local bodies, LT agriculture, RESCOS, HT agriculture, sugarcane crushing and aqua-culture) and agreed to provide Rs.1303.27 crs as subsidy. Thereby the revenue from proposed tariffs after subsidy came to Rs.8051.18 crs. On 14th May, 2004, Government of Andhra Pradesh, announced its policy of free power to agriculture and sought the Commission's direction on the financial impact of the policy. The total subsidy payable on account of this policy during 2004-05 was Rs.433.24 crs including RESCOs, which was duly paid by the Government.

11. APTRANSCO in their filings had projected reduction in transmission losses to 6.25% from 7% fixed in the previous order. The Commission adopted these loss figures but directed APTRANSCO to take necessary steps to achieve the loss level of 6% for FY2004-05. As regards the DISCOMs, the overall target for loss reduction was projected at 18.52% distribution for FY2004-05, which enables the overall systems losses to come down to 23.61%. The Commission adopted the projections of the Licensees. The Commission however directed the Licensees to submit a consultation paper on the "Achievable level of distribution losses in the future years" within two months of the Order.

12. A number of measures were initiated in the Tariff Order for FY2004-05 in line with the policy reforms mandated by the Electricity Act, 2003. To start with, the Commission set forth the principles for determination of transmission tariffs and wheeling charges. The methodology adopted was the postage stamp method in accordance with the CERC methodology. The charges so fixed will be applicable to all users of the network till the appropriate Regulations are put in place. In the Tariff Order, however, the estimated Transmission and Wheeling charges are subject matters of court cases.

13. The introduction of the ABT pool at the State level applicable to all generators and the Discoms was another step taken by the Commission in furtherance of the reforms mandated under the Electricity Act, 2003. SLDC was entrusted with the responsibility of coordinating the ABT activities within the State and to develop a pool for Unscheduled Interchanges (UI), thereby encouraging larger participants in the pool.

14. Measures were also initiated to strengthen the finances of the Licensees to meet the impending competition consequent to the enactment of the Electricity Act, 2003. The measures included: i) Submission of Metering, Billing and Collection Efficiency Report on a monthly basis; ii) Regulatory treatment and true-up mechanism with well-defined concepts of controllable and non-controllable items of expenditure; iii) Inculcation of discipline through submission of monthly progress reports on the physical and financial progress of approved schemes; iv) Monthly levy of FSA in a more or less automatic manner; v) the possibility of introducing ToD tariffs.

15. On the tariff front, efforts to correlate tariff rates with cost-to-serve continued to remain an important concern of the Commission. Tariff rationalization was effected in the following categories:

1. **Non-Domestic/Commercial- LT-II**

The tariff for the second slab in this category was reduced and fixed at Rs.6.25 per unit as against Rs.6.60 per unit, the then prevailing tariff, proposed by the DISCOMS.

2. **Industry LT-III (A & B)**

The energy charges were reduced from the prevailing tariff of Rs. 3.85 per unit to Rs.3.75 per unit.

3. **HT-I: Industry**

The HT-I- Industrial tariff was reduced to Rs3.50 per unit from the existing tariff of Rs.3.60 per unit, which the Discoms had proposed to retain in their tariff filings.

4. **HT-II: Others**

The energy charges for this category were reduced from the existing and the proposed rate of Rs.4.50 per unit to Rs.4.40 per unit.

5. **HT-V: Railway Traction**

The Commission reduced the energy charges from Rs4.50 per unit to Rs. 4.40 per unit.

CHAPTER – III

FILING OF ARR/TARIFF PROPOSALS FOR FY 2005-06

16. The APTRANSCO as the Transmission and Bulk Supply Licensee in the State of Andhra Pradesh and the four Distribution Companies viz., APEPDCL, APCPDCL, APNPDCL and APSPDCL (hereinafter referred to as the DISCOMS) the Distribution and Retail Supply Licensees, filed separately their Expected revenue from existing charges (ERC), Aggregate Revenue Requirement (ARR), and tariff proposals for carrying out the Transmission and Bulk Supply Businesses and the Distribution and Retail Supply businesses respectively for the FY 2005-06. These filings were taken on record.

Notification calling for objections/suggestions

17. The APTRANSCO and the four DISCOMS were directed to serve public notices through publication on, 09.12.2004, in at least two daily newspapers in English and two in Telugu having the circulation in their respective areas informing the general public that they had filed their respective ARR and Tariff proposals for FY 2005-06 with the Andhra Pradesh Electricity Regulatory Commission, (hereinafter referred to as "the Commission" or “APERC”), and that copies of the filings (together with supporting materials) made by APTRANSCO, the Transmission & Bulk Supply Licensee (O.P.No. 30 of 2004) were available with Chief Engineer/ RAC, APTRANSCO, Vidyut Soudha, Hyderabad, and with the SEs/TL&SS at Visakhapatnam, Vijayawada, Cuddapah, Hyderabad and Warangal and the filings made by DISCOMS, the Distribution & Retail Supply Licensees (O.P.Nos. 31 to 34 of 2004) were available in the offices of the Chief General Manager, RAC, of the DISCOMS with headquarters at Visakhapatnam, Hyderabad, Warangal and Tirupathi and all Superintending Engineers incharge of Operation Circles, for inspection/perusal/purchase by interested persons and that objections/ suggestions can be filed on these proposals with The Secretary, APERC, by 10-01-2005

Objections/suggestions received

18. Following the public notice, 258 persons/organisations sent their objections/suggestions to Secretary, APERC, on the ARR/Tariff proposals of APTRANSCO/DISCOMS by due date i.e., 10-01-2005 and another 33 thereafter, raising the number of those responding to 291.

19. The Commission directed APTRANSCO and the four DISCOMS vide its letter dated:15-01-2005 to send replies to all the public objections by 22-01-2005 and submit a consolidated statement of replies to the Commission by 24-01-2005.

20. Notice of public hearings on 31st January 2005, 1st, 3rd, 5th, and 8th February 2005 was given to APTRANSCO, the four DISCOMS and the GoAP. All persons who had expressed their desire to be heard in person were also intimated in writing the dates on which they would be heard. General public were also informed of the dates of public hearings on 15.01.2005 through a press release. Meanwhile, the APTRANSCO and four DISCOMS filed a common petition on 27.01.05 seeking grant of time for filing additional information on the ARR/Tariff filings of 2005-06, pursuant to the revised policy announced on 25.01.2005 by GoAP on power supply to Agriculture sector. The Commission while granting 10 days' time to the licensees on 28.01.2005 to file additional information, also decided to postpone the aforementioned hearings.

21. The Commission notified the revised schedule of public hearings as follows:

Table No.1
Programme of public hearings on ARR/Tariff filings by Licensees

<table>
<tr><th>Date</th><th>Place of hearing</th><th>Time</th><th>Venue</th><th>Licensee (s) on whose filings the hearings were scheduled</th></tr>
<tr><td>28-02-2005</td><td>Hyderabad</td><td>9.00AM to 1.30PM and 2.30PM to 5.00PM</td><td rowspan="2">Ravindra Bharathi Auditorium</td><td>APTRANSCO</td></tr>
<tr><td>01-03-2005</td><td>Hyderabad</td><td>9.00AM to 1.30PM and 2.30PM to 5.00PM</td><td>APCPDCL</td></tr>
<tr><td>02-03-2005</td><td>Warangal</td><td>10:30 AM to 1: 30 PM and 2:30 PM to 5:00 PM</td><td>National Institute of Technology (formerly REC)</td><td>APNPDCL</td></tr>
<tr><td>03-03-2005</td><td>Vishakapatnam</td><td>10:30 AM to 1: 30 PM and 2:30 PM to 5:00 PM</td><td>Andhra Medical College Old Students' Association hall</td><td>APEPDCL</td></tr>
<tr><td>05-03-2005</td><td rowspan="2">Tirupathi</td><td>10:30 AM to 1:30 PM and 2:30 PM to 5:00 PM</td><td rowspan="2">Mahathi Auditorium</td><td rowspan="2">APSPDCL</td></tr>
<tr><td>06-03-2005</td><td>10AM to 2 PM</td></tr>
</table>

22. The Commission directed APTRANSCO vide its letter dated:02.02.05 to publish the gist of the additional filings in the press on the day immediately following the date of submission of the additional filings before the Commission. The licensees were also directed to state in the said press publication, inter-alia, that

i. the objections, if any, on the additional filings shall be submitted to the Commission by 19.02.2005 with copy to the CE(RAC),APTRANSCO (common officer for all Licensees for this purpose);

ii. the copies of these filings have been sent to the persons who purchased the documents against OP Nos. 30 to 34 of 2004;

iii. the new objectors, if any, who have not earlier responded to the earlier public notice issued on 09.12.2004 but respond to this notice and also want to be heard in person have to mention so in their written response; and

iv. those who have already filed objections/suggestions in response to the public notice issued on 09.12.2004 will be heard by the Commission on the relevant dates of hearing, irrespective of whether or not they respond to this notice.

23. The licensees submitted additional filings before the Commission on 07.02.2005 and published a public notice in the press on 08.02.2005 as directed by the Commission. Eleven persons/organizations responded to the public notice out of whom two had also responded to the earlier public notice issued on 09.12.04 on the original filings and 9 are fresh responses from persons/organizations out of whom 7 requested for being heard. Notices were issued to all these persons to attend the public hearings on the respective dates of hearing. Media was also invited to attend the public hearings. The replies of licensees on the objections/suggestions received against original filings and /or the additional filings as the case may be were sent to the objectors before commencement of the respective hearings.

24. The Licensee-wise break-up of objections received and, the number of objectors desiring to be heard in person are indicated hereunder:

Number of objections/suggestions received on ARR/Tariff filings

Table No.2

	Number of	
Name of the Licensees	Objections received	Objectors desiring to be heard
APTRANSCO	117	114
APCPDCL	23	20
APNPDCL	36	36
APEPDCL	15	8
APSPDCL	96	87
Common to all DISCOMS	15	15
Total	**302**	**280**

Hearings

25. During the hearings, as directed by the Commission vide its letter dated:15-01-2005.

(i). The licensees made brief opening presentations at the commencement of the public hearings on their respective filings at Hyderabad, Warangal, Vishakapatnam and Tirupathi.

(ii) After the presentation by Licensee, the Commission heard all the objectors who sought to be heard in person.

(iii). After hearing all the objectors, the Staff of the Commission made presentations on the issues and concerns relating to the filings of respective licensees.

(iv). At the end of the hearing on each day, the respective licensees responded on the issues raised by the objectors during the hearing, as directed by the Commission.

26. The Principal Secretary, Energy, GoAP, made a statement before the Commission on 01.03.2005 expressing the views of Government on the accomplishments of the power sector since introduction of the reforms, advent of the second generation reforms under the Central Act, Government's commitment to provide required financial assistance to the sector including subsidy, and the reform process being in synchronization with the Government objective to provide quality and affordable power to all consumers.

27. Many important issues relating to the ARR/Tariff proposals of Licensees were discussed in the State Advisory Committee (SAC) meeting held on 14.03.2005 and suggestions made by the members of SAC have been taken into consideration by the Commission while finalising the Tariff Order.

CHAPTER- IV
LEGAL AND OTHER IMPORTANT ISSUES RAISED DURING THE PUBLIC HEARING AND REPLIES BY LICENSEES

PART I - LEGAL ISSUES

Issue 1: **Wheeling charges**

28. As there is no stay of the order of the Commission fixing wheeling charges for 2004-05, the Commission may direct APTRANSCO to collect wheeling charges for 2004-05 and also for 2005-06 and account for the same while working out the revenue requirement.

APTRANSCO: Section 62(1) of the Electricity Act 2003, expressly authorizes APERC to fix wheeling charges. Appeals in Supreme Court are only on the question as to APERC had the power to determine these charges under the Reform Act. The Electricity Act, 2003, came into force on 10.06.2003 and the Tariff Order for 2004-05 was passed on 23.03.2004 under this Act. Based on legal opinion obtained, APTRANSCO requested the DISCOMs to bill the wheeling charges for 2004-05 on the basis of APERC Tariff Order for 2004-05.

Issue 2: **Review of PPAs with IPPS:**

29. Steps should be initiated to review the PPAs entered into by APTRANSCO with the IPPs to achieve reduction in their power purchase cost since these PPAs cast unduly high burden on the consumers and the directions of the APERC to APTRANSCO in this regard have not yielded results.

APTRANSCO: The Government of A.P. had constituted a Committee vide G.O.Ms.No.92 dated:20.07.2004 for review of PPAs entered into with M/s.GVK Industries Limited, M/s.Spectrum Power Gen. Ltd. and M/s.LANCO Kondapalli. That review is under way. APTRANSCO has also filed petitions before the Commission for review of fixed cost and variable cost parameters of these projects.

Issue 3: **Impact of Electricity Act, 2003**

30. How can APTRANSCO file ARR for Bulk Supply when it is prohibited from trading in electricity as per Electricity Act 2003?

APTRANSCO: As the last date for implementation of relevant provisions of Electricity Act, 2003, relating to the issue raised is postponed to 9.6.2005, APTRANSCO has filed the ARR for its Transmission and Bulk Supply businesses for 2005-06. APTRANSCO will disengage itself from the business of trading of electricity from 10.6.2005. In addition to two-part Bulk Supply Tariff (BST), tariffs for transmission charges and SLDC charges have also been proposed in ARR filing.

PART - II

OTHER IMPORTANT ISSUES RAISED BY THE PUBLIC & RESPONSE:

1. RESPONSES ON ISSUES RELATING TO APTRANSCO

Issue 4: Liquidated damages from short gestation projects

31. APTRANSCO has not collected liquidated damages from the IPPs with which it entered into PPAs in March 1997, though the projects could not commence operations within the stipulated periods of 13 to 26 months.

APTRANSCO: No response from APTRANSCO.

Issue 5: Fuel Surcharge Adjustment

32. Special appropriation claims for 2003-04 (Rs.237 cr.) and 2004-05 (Rs.275 cr.) are an indirect way of hiking the tariffs. This should be avoided by savings in power purchase cost which forms 90 per cent of the revenue expenses.

APTRANSCO: The claim for 2003-04 is to meet the additional fixed and other charges of APGENCO. For 2004-05, the claim is the result of the shortfall of 1366 MUs in hydel generation coupled with the increase in agricultural consumption by 2200 MUs which has resulted in an overall increase in power purchase cost by 2 paise per unit.

Issue 6: Merit Order Dispatch

33. The present method of merit order dispatch based on the variable cost of each station should be reviewed as it is resulting in loss to APGENCO. Merit order should instead be based on the pooled variable cost of APGENCO stations. Another suggestion is that it should be based on total cost including fixed cost. Still another suggestion is to resort to negotiations between the buyer and the seller to effect reduction in either fixed cost or variable cost so that the cheapest source(s) of power based on overall (total) cost are not kept idle. An alternate suggestion is to allow the lower order stations to sell power to 3rd parties even outside the State on payment of wheeling charges. Stations like LVS should be allowed 3rd party sales even without collection of wheeling charges.

APTRANSCO: The present method approved by the Commission is beneficial both to APGENCO and the consumers. Any other method would mean that costlier power would get dispatched resulting in higher tariff for consumers. Any sales of backed-down capacity can be done only by APTRANSCO as it meets the full fixed costs of such capacity.

Issue 7: Allocation of PPAs to DISCOMs

34. The proposals now under consideration of State Government would disturb the equity of allocation to DISCOMs from the pooled system now in vogue. Transfer of PPAs would result in duplication of functions, and complications of likely discrimination against APGENCO in the absence of long-term agreement with APGENCO. The ultimate aim of the 2003 Act is to facilitate privatization. It will increase tariff and subsidy burden respectively on consumers and Government. The likely imbalances due to DISCOM-wise variations in demand vis-à-vis availability of power from allocated plants would create complications requiring new institutions for settlement of such imbalances. A single State level trading entity would avoid all these complications. Another suggestion is to allow APGENCO to take up the trading activity by vesting all PPAs in APGENCO. Still another view is that the allocation of PPAs to DISCOMs is against the reform process as it will not create any competition among DISCOMs as the Bulk Supply Tariff would remain fixed. This will also result in loss of focus by DISCOMS on revenue collections, etc.

APTRANSCO: This is a policy matter to be decided by GoAP

Issue 8: PLF of non-conventional energy (NCE) projects

35. The period for which PLF is to be computed to arrive at the eligible energy delivered at 100% PLF of installed capacity should be clarified and settled since these projects are operating at over and above their contracted capacity, thereby claiming higher cost recovery. APTRANSCO should limit payments to the contracted capacity only. The generators should fix meters capable of recording generation for 15-minute block periods.

APTRANSCO: APERC issued orders on 15.11.2003 to incorporate an amendment in PPAs to provide for that whenever generation exceeds the installed capacity, the energy delivered by the NCE projects above 100%PLF, for such periods will not be accounted for the purpose of payment. On this, the APTRANSCO decided to restrict the delivered energy up to 100% PLF in 30-minute time blocks, the minimum time period available as per meter readings and payments were revised accordingly for the period December 2003 to May 2004. The developers represented that Commission’s order did not specify the 30-minute time block. The Commission has been requested for issue of suitable orders on this issue.

Issue 9: Reserve Margin and Load Forecast

36. APTRANSCO has projected total availability of 53,634 MU and proposed to purchase only 50,678 MU. The balance of 2956 MU works out to surplus of 5.51%.

37. Had the 29% reserve margin, as permitted by Commission, been added, the surplus would have been of the order of 18% (8120MU). Even after sale of some of this surplus power to other States during peak hours, the consumers of AP would have been saddled with huge burden of fixed costs running into hundreds of crores of rupees.

APTRANSCO: Excess energy available for 2005-06 is 2956MU, during off-peak hours and non-agriculture seasons, subject to availability of hydro power. This surplus is shown, as 5% spinning reserve is to be maintained as per the standards of performance prescribed by APERC. The 29% reserve margin is required to maintain 1% loss of load probability (LOLP) and 0.15% un-served energy as per guidelines of Central Electricity Authority (CEA).

Issue 10: 24-hour supply to rural areas

38. It is estimated that only 1500MU additional energy is required to supply power to rural areas on 24-hour basis. This facility is not allowed as segregation of agricultural feeders is not completed. Commission may direct the DISCOMs to complete the segregation work to ensure continuous supply to rural areas while simultaneously regulating agriculture supply to the specified hours. Power cuts if any ought to be imposed proportionately on both urban and the rural areas.

APTRANSCO: In rural areas, supply is being given for 12 hours (single-phase) in the night (6PM to 6AM) and 4 to 7 hours (3-phase) during day time along with the agricultural consumers. Separation of feeders for single-phase lighting supply has been completed. All efforts would be made to give 24-hour supply to rural areas depending on hydel availability.

Issue 11: Transmission losses

39. During 2004-05, APTRANSCO estimates that the losses will be reduced by 1.25% (from 6.75% to 5.50%) against the target of 0.5% fixed by the Commission. The losses for 2005-06 are projected at 5% with a reduction target of 0.5%. The transmission losses should not be more than 3.5%. It can therefore be presumed that commercial losses continue to exist in the estimated transmission losses.

APTRANSCO: Energy Audit is conducted and all HT services availing supply at 220KV and 132KV are counter-checked with parallel meters and thus the theft of energy in EHT services is efficiently monitored and controlled. Power flows are redistributed from overloaded feeders to lightly loaded feeders. Transmission system is strengthened by additional EHT lines and substations. With these measures, the transmission losses have come down.

Issue 12: **Use of un-authorized fuels by NCE projects**

40. Biomass plants are using firewood cut from forests on a large scale against rules. Appropriate authority should monitor the generation.

APTRANSCO: NEDCAP being nodal agency has to monitor this aspect.

Issue 13: **APGENCO issues**

41.(a) Backing down of APGENCO thermal units

(i). The Inter-State sales by APTRANSCO are projected as 300MU while surplus energy available is shown as 2640MU. If APTRANSCO cannot export the surplus energy, APGENCO may be allowed to do so from its total pool of thermal energy.

(ii). RTPP and NTS being the stations located at load centers, solve the low voltage problems, provide system stability and reduce losses. Total cost of power for these stations is less than the variable cost of some IPPs.

b). PPA between APTRANSCO and APGENCO should be based on pooled variable cost (Rs.1.06/unit), which compares favourably with many gas-based IPPs, apart from NCE projects.

c). The Commission should allow the interest on past liability of PF and pension of the employees of erstwhile APSEB as on 01.02.1999 in the fixed charges of APGENCO stations.

d). SLBPH to be included in the composite PPA between APTRANSCO and APGENCO.

e). O&M expenditure: The O&M expenditure during the past 5 years was less as major overhauls were not allowed by APTRANSCO due to grid demand / shortage of power (low hydel). Hence, the O&M expenditure should be allowed over and above that allowed for 2004-05, based on ground realities.

APTRANSCO:

(a) (i). The entire cost is paid for by APTRANSCO. Hence, APTRANSCO / successor entity alone is competent to sell power not required by AP grid.

(ii). As per filings, though the NTS and RTPP are shown as only partly dispatchable in 2005-06, it is likely that they would be fully dispatched in view of the increased sales to DISCOMs and shortfall in hydel generation.

b). The variable cost of individual stations is considered to ensure optimal utilization of the asset and efficient operation of each power station, since fixed cost has to be paid for, regardless of dispatch.

c). As per the PPA approved by the APERC, provisions for interest on pension and PF bonds is made in the depreciation and ROE allowed by the APERC, i.e. within the fixed cost itself.

d). The APERC in Tariff Order for 2004-05 stipulated that in fairness to the consumers, fixed capacity charges of SLBPH will be considered for inclusion in the PPA of APGENCO only after its pump mode operation is established. The Commission has also allowed variable charges for energy generated by SLBPH over and above the capacity of right bank power house and for peak energy.

e). O&M cost is allowed as per norms or actuals, whichever is less.

Issue 14: **Agricultural consumption**

42. There are no correct estimates of Agricultural connections in the State even now. The distortions are high. The consumption is inflated by 30 to 40% in the ARRs, which is not correct. Lakhs of pumpsets are not working due to drying of wells, land use change, surface irrigation, etc. The DISCOMs should be directed to publish the Agriculture consumption with correct details. The Agriculture consumption would be between 7500-8000MU and the number of running pumpsets 16-17 lakhs. Census reports are not yet published.

APTRANSCO: The agricultural consumption is assessed, based on LV side meter reading of DTRs feeding agricultural loads, adopting the methodology approved by APERC. The agricultural consumption for 2004-05 as per revised ARR is 13651MU against 11450MU in the Tariff Order, indicating an increase of 19.2%. For 2005-06, the projected agricultural consumption is 14030 MU, the increase being due to take-over of five of the RESCOs by DISCOMs and release of new agricultural connections during 2005-06.

Issue15: **Giving up the AP share in NLC**

43. APTRANSCO is gradually giving up its share in Central generating stations. A recent case is that of AP's share of 420 MW in the Neyveli Lignite Corporation (NLC). The cost of

power from this project is Rs.1.92 / kwh, which is cheaper than that of many IPPs. This decision needs to be reviewed.

APTRANSCO: As informed by NLC, the levelised tariff for NLC Mine-I expansion project works out to Rs.2.69/kwh. APTRANSCO decided that purchase of high cost power from NLC Mine-I expansion project is not required.

Issue 16: **<u>Availability Based Tariff (ABT) and UI Charges – Impact at State level</u>**

44. The APTRANSCO is able to earn UI charges with efficient management of grid by SLDC. The generators should not be allowed any share of these earnings which should be passed on to consumers through DISCOMs.

APTRANSCO: There is a provision in CERC Regulations for Central generating stations (CGS) directly earning UI charges by regulating the generation depending upon prevailing frequency conditions. This has been opposed by APTRANSCO and a review petition filed with CERC that CGS may be made entitled to variable charges for generation beyond declared capacity instead of UI charges. APTRANSCO also requested CERC to direct CGS to pass on the profit earned through UI charges to the beneficiary States in the same proportion in which the fixed charges are paid by them.

Issue 17: **<u>Return on Equity (ROE)</u>**

45. APTRANSCO may be allowed ROE though it has not claimed the same in the filings. The ROE rate may be reduced from 16%. However, monthly payments (@ 1/12th) should not be made and only annual payment should be made at the end of the year. Similarly, depreciation payments should also be made annually.

APTRANSCO: The licensee would prefer to forgo the reasonable return for FY 2005-06 also since the licensee is presently in public ownership and the State Government has met the subsidy and financial needs of the sector emanating out of financial gap. It would be appropriate to exclude the reasonable return from the ARR computations for the present, thus passing on the benefit to end-consumers.

<u>Issue 18: Impact of Electricity Act, 2003</u>

46. Certain assets will become obsolete and some staff will be surplus. What will APTRANSCO do with them?

APTRANSCO: There will neither be any surplus staff consequent to the implementation of Electricity Act, 2003, nor any non-performing assets.

Issue 19: **Availability of gas for the gas-based projects in AP**

47. As the non-availability of gas has serious implications, PPAs recently entered into by APTRANSCO with 4 gas-based IPPs should be reviewed through public participation.

APTRANSCO: No reply.

Issue 20: **Procedure for hearings**

48. Only one copy may be asked to be filed before the Licensee, who can circulate copies to Commission. Spot registration of objections/suggestions may be allowed on the date of hearing.

APTRANSCO: The matter pertains to Commission.

Issue 21: **Closure of Nellore Thermal Station**

49.a). It is learnt that APGENCO has decided to close down NTS and APTRANSCO has communicated its acceptance. If this Station cannot be operated on the basis of merit order, APGENCO may be directed to explore the option of trading the NTS power on its own.

b). Gross injustice is done in the matter of pricing of energy from NTS.

c). NTS can be run with full efficiency with an investment of Rs.1 cr.

d). As per the report of STUP Consultants Pvt. Limited, Delhi, NTS complex can be run for another 15 years.

e). Thousands of families will be affected if NTS is closed down.

APTRANSCO:

a). Though only 22 MUs are provided in ARR filings for 2005-06 as per Merit Order Dispatch procedure, it is likely that all the generation at NTS will be dispatched as was the case in 2004-05 due to likely reduction in availability of hydro power. Any sale of backed-down power can be done by APTRANSCO alone as the full fixed costs are met by it.

b). It is not true that expenditure on R & M works and pension and PF liabilities are factored in the variable cost of the station. These are factored only in APGENCO's fixed cost. Only the costs of coal and oil are taken into account while arriving at the Station's variable cost on par with other generating stations.

c). APGENCO has examined all these aspects.

d). APGENCO has informed that though the Consultants have recommended certain major repairs to prolong the life of the structure of the building, they have not specified the life extension period.

e). APGENCO has informed that all NTS employees (numbering about 250) will be accommodated in its existing or proposed new stations and that there will not be any effect on their livelihood.

2. RESPONSES ON ISSUES RELATING TO ALL DISCOMs

Issue 22: Differences in method of filings by DISCOMs

50. There is no uniformity among the DISCOMs in the filing of material covered in the formats.

DISCOMs: The DISCOMs, being independent licensees, have prepared their filings on their own. There may be some differences in the explanations or the level of details provided by different DISCOMs in their filings, but the overall endeavour is to maintain conformity with all the requirements of the filings as per APERC guidelines.

Issue 23: Free power for single-bulb connections

51. DISCOMs to clarify whether the domestic consumers who have single-bulb connections are given any concession.

DISCOMs: At present, domestic consumers with connected load of up to 250 watts and consuming up to 15 units only are given a rebate of Rs.10 on the monthly bill amount as per GoAP policy. The licensee will abide by the decision of the GoAP and the directions of the APERC in future also.

Issue 24: Multi-year tariff structure

52. None of the DISCOMs has made tariff filings for a multi-year tariff structure which they are required to file.

DISCOMs: As the modalities for implementation of the proposed sector structure are yet to be finalized, and since the envisaged structure is likely to impact on the licensees' businesses, the licensees have sought permission from the Hon'ble Commission to file the same at a later date. The Commission had directed the licensees to file the Annual ARR and Tariff proposals for FY 2005-06 by November 30, 2004. The licensees have filed the current proposals accordingly.

Issue 25: **Power to levy wheeling charges under the Electricity Act 2003**

53. The Electricity Act 2003 clearly mentions about levy of wheeling charges and (cross-subsidy) surcharge by the Commission. Even if cross-subsidy surcharge issues are not finalized, the DISCOMs could suggest tentative figure. If this is not done, collection of arrears will be a big problem later.

DISCOMs: DISCOMs have proposed wheeling charges for the ensuing year. For the current year, wherever the charges are applicable and are not sub-judice, the Licensees are recovering these charges as per the Tariff Order. In case a favourable court decision (for charging with retrospective effect) is received and the Licensee is allowed to recover charges including the carrying cost from the consumers, the same can be incorporated in ARR(s) of the licensees in the subsequent years.

Issue 26: **Agriculture consumption**

54.(a). Methodology suggested by Commission and followed by the DISCOMs does not seem to be of much use in arriving at agricultural consumption figure. Estimate of consumption under Tatkal scheme is also questionable. The average units/HP/month for full year should be considered instead of the values for a single month. Metering at DTRs should be continued to cover more DTRs, if not 100%.

(b). Losses are shown in agricultural consumption. The pumpsets which are not working for various reasons like drying up of the well, change of land use, subsequent surface irrigation, etc. are not excluded from computations. DISCOMs have not published the census results even after issue of direction by the Commission.

DISCOMs:

(a). The present methodology based on readings from LV side of DTRs on a sample basis provides the best estimate in a situation where 100% metering is not available at the consumer level or at the DTR level. Under this methodology, the average units per HP per month are taken as the basis and applied on the total connected load in HP in a Mandal to estimate the agricultural consumption for the Mandal as a whole. The consumption for all the Mandals are, thereafter, aggregated to arrive at the circle/DISCOM consumption.

(b). The census reports have been submitted to the Hon'ble Commission as required. The present estimation method is as per the directions of the APERC. Consumption per HP is computed as per actual recorded consumption on the DTRs metered on LV side in a Mandal and the connected load under these DTRs as per record. This average consumption per HP is multiplied by the connected load of pumpsets in the Mandal as per records. Therefore, any non-use of pumps gets reflected in a lower consumption figure per HP.

Issue 27: **Regularization of unauthorized agricultural connections**

55.(a). It was declared earlier that 2.5 lakh connections were regularized. What was done was that only an amount of Rs.1000 / HP was collected and the connections were declared as regularized without laying poles or DTRs. Even after collection of these charges, these connections are being treated as unauthorized connections. Steps should be taken to regularize actual pending connections.

(b). The connections shifted to a different well in the same field is also treated as unauthorized connection.

DISCOMs:

(a). While CPDCL has stated that relevant guidelines for release and regularization of agricultural services are awaited from Government, the other DISCOMs have stated that the unauthorized connections for which necessary deposits were paid have been regularized.

(b). The concerned consumer has to submit an application for shifting of the connection, which will be permitted subject to feasibility and on payment of shifting charges.

Issue 28: **Rural Electrification Policy**

56. The National Electricity Policy and Rural Electrification Policy define village electrification as having been achieved only when a DTR is erected, public places in the village are electrified, 10% of households are electrified and have proper voltage for lighting at peak time. How many villages in AP are to be considered as not electrified under this definition and what are the plans to electrify them? What are the plans for electrifying 51 lakh unelectrified households by 2012?

DISCOMs: In NPDCL, all electrified villages and hamlets meet the requirement of village electrification except the villages electrified with SPV panels. In respect of other DISCOMs, the number of villages to be electrified as per the new definition, is being ascertained from field officers. On electrification of households, the NPDCL has stated that it is a continuous process and projection will be made to complete the target by 2012.

Issue 29: <u>**High Voltage Distribution System (HVDS)**</u>

57. The total planned investment of all DISCOMS in HVDS projects is Rs.5500 crores, to be completed by 2007. More details of the cost-benefit analysis should be presented in the public hearings. The licensees should also tell what they propose to do with the energy saved from these projects – an equivalent amount should be reduced in ARR.

DISCOMs: CPDCL has stated that on conversion of existing distribution system to HVDS for rural feeders feeding agricultural loads, there would be considerable reduction in peak power loss and energy loss in the various components of the system. A case study of conversion of one 100KVA DTR with lengthy LT lines into HVDS reveals that the peak power loss got reduced from 46KW to 8KW and energy loss from 0.8 lakh to 0.2lakh units. The SPDCL and EPDCL have stated that the loss reduction benefits expected have already been factored in the loss reduction targets proposed by DISCOMs.

Issue 30: <u>**Arrears**</u>

58. The names of consumers having arrears of more than Rs.50,000 have not been filed by CPDCL and EPDCL as per Directive no. 19 of the Commission. The names of the defaulters should be published in newspapers also.

DISCOMs: The CPDCL and EPDCL have stated that they submitted the data to APERC, but the same has not been included in the ARR filings on account of the large volume of the report. However, the data in respect of CPDCL has been posted on the website of CPDCL: www.apcentralpower.com.

Issue 31: <u>**Waiver of agricultural arrears as on 13.05.2004 by Government**</u>

59.(a). The Government has waived the agricultural arrears to the tune of Rs.1200 crores. It is learnt that Government has not paid this amount to licensees. What is the present status? One suggestion is that this amount should not be allowed to be written off as bad debts.

(b). The request of DISCOMs to permit provision for bad debts is nothing but penalizing honest consumers and hence should not be acceded to. The amount of Rs.1194 crs waived by Government should not be allowed to be written off as bad debt.

DISCOMs:

(a). For the current year, the GoAP is paying Rs.57crs (total amount for all the DISCOMs) as the carrying cost for the arrears. As the outstanding amounts continue to be projected in the books of the licensees for the ensuing year as well, the same level of carrying cost reimbursement has been projected for the ensuing year as non-tariff income.

(b). Three licensees have stated that they have not made any provision for bad debts in the filings. NPDCL has further stated that the bad debts are claimed only to the extent of un-collectable arrears after audit of receivables.

Issue 32: **Standards of Performance and Grievance Redressal Forums**

60. The licensees have not indicated their performance in the filings with reference to the standards specified by the Commission in the Regulations. The details of compensation are also not given. Licensees have to give wide publicity about the consumer grievance forums and standards of performance. They have to indicate their plans.

DISCOMs: NPDCL has stated that they have filed the details in ARR. Other DISCOMs have stated that they have provided significant details of parameters identified in the APERC Regulations as part of their filings. All efforts are being made by the DISCOMs for implementation of the provisions of Regulation No. 7 which became effective from 22.09.2004. Relevant data in this regard will be provided with ARR filings for the next year onwards.

61. The DISCOMs endeavor to maintain the specified standards and not incur any cost on this account. However, there may be isolated instances and it is too early to estimate the quantum of compensation for such cases. All the APERC regulations are public documents and are available on APERC website.

Issue 33: **Revenue gap for 2004-05**

62. The revenue gap of Rs.545 crs shown by 3 DISCOMs (NPDCL, SPDCL and CPDCL) for 2004-05 should not be allowed to be trued up for recovery through tariff as the same is (i) on account of agricultural consumption which should be made good by State Government, and (ii) on account of shortfall in wheeling charges which are due from respective consumers.

DISCOMs: DISCOMs have not provided a specific reply on this point.

Issue 34: **Internal efficiency**

63. Shortfall in achievement of internal efficiency for 2004-05 should not be made up through tariffs in 2005-06. The targets for internal efficiency should be fixed objectively on

the basis of identified aspects and not merely to bridge the balance of revenue gap after accounting for the Government subsidy.

DISCOMs: The internal efficiency targets are to be treated as additional targets only. While DISCOMs make all efforts to achieve these additional targets and are willing to pass on all benefits arising out of such achievements to consumers, it is not fair to penalize DISCOMs on partial achievements.

Issue 35: <u>Distribution losses and Energy Audit</u>

64.(i). Low percentage of metered sales in urban areas especially the city of Hyderabad, reflects high level of losses, which would be due to theft. The status of online monitoring of 11KV feeders may be intimated. The energy data should be submitted to the Commission and made available for public verification.

(ii): The impact of removal of two lakh unauthorized connections is not reflected in the agricultural consumption estimates in the filings. There is scope for further reduction in distribution losses, especially the commercial losses. Higher targets should be fixed for reduction of distribution losses.

(iii): The DISCOMS have spent Rs.1249 crs on system improvement, but the loss reduction is only 1.5%. This shows limitation of technical solutions in curbing distribution losses.

DISCOMs:

(i). Though losses in some circles are high, CPDCL is taking steps to reduce the same and expects to reduce them substantially as reflected in the ARR filings. It is proposed to shift the meters from the premises of consumers to the nearest pole to avoid theft in the theft-prone areas of the Hyderabad city.

(ii). All efforts are being made to meet the targets set by the Commission on distribution losses. The losses are decreasing. Higher targets may not be achievable fully. Licensee will, however, abide by decision of the Commission.

(iii). The amount spent on system improvements has resulted in better supply conditions which is not directly related to reduction in T & D losses. A part of the amount is also spent on arrangements which helped in regulation of power supply to agriculture consumers and extension of 24-hour supply for lighting load in the villages. The results of investments will be seen in the coming years.

Issue 36: **<u>Open access for direct supply to consumers</u>**

65. Open access should be made as unattractive as possible to prevent migration of subsidizing consumers. Reduction in cross-subsidy to be considered only when DISCOMs have a surplus over and above the reasonable return. The methodology adopted in determining cost-to-serve is in favour of HT consumers. Separate public hearing may be required on the cost-to-serve.

DISCOMs: The licensee have stated that they will abide by the decision of the Commission.

Issue 37: **<u>Tariff for film industry units</u>**

66. All the sectors of film Industry are recognized as industries for the purpose of incentives and other concessions provided by State Government for other industries (G.O.Ms.No. 686 dt: 13.11.82 and G.O.Ms.No. 102 dt: 01.03.83 and notification dt:16.10.2000). The present tariff is under LT Cat II and HT Cat II whereas these units should have been brought under LT cat III and HT cat I. Film industry cannot afford to pay high tariff of about Rs.7/unit for various reasons. Central Government has also approved Film Industry and Exhibition as industry. Government of Tamil Nadu has brought cinema theatres under special category from 16.03.03.

DISCOMs: The present categorization of film industry under Commercial category is done on the basis of the nature of the activity. The present category of LT commercial includes all premises like shops, business houses, offices, public buildings, hospitals, hostels, choultries, restaurants, clubs, theatres, cinema halls, railway stations, timber depots, photostudios and other similar premises. Thus the film studios cannot be put under industrial category. SPDCL has further stated that the request could be considered only if the Government comes forward to reimburse the difference in tariffs.

Issue 38: **<u>Tariff for Railway traction</u>**

67. Railway traction tariff should be reduced from Rs.4.40 / unit (with no demand charge) to a reasonable level, as the power purchase costs of TRANSCO and transmission losses have come down, and also as cost-to-serve of Railway traction has reduced from 313 paise/unit in 2003-04 to 304 paise/unit in 2004-05 and for other reasons.

DISCOMs: In spite of increase in procurement costs and other operating costs and the impact of inflation, the tariffs for railways have not been increased in the last 4 years, and on the other hand, a reduction of 10 paise/unit was allowed in 2003-04 and again in 2004-05. No increase is proposed for the ensuing year also.

3. RESPONSES ON ISSUES RELATING TO APCPDCL

Issue 39: Concessional tariff for religious places

68. The religious places like Mazjid, Mandir, Gurudwaras and Churches which are under LT Cat VII should be allowed concessional tariff.

APCPDCL: The licensee will abide by the decision of the Commission.

Issue 40: Tariff for educational institutions

69. The tariff for educational institutions was increased by 200% by changing the classification from category VII to category II. It is an indirect loss to student community. These institutions may be reclassified under LT cat VII.

APCPDCL: The present classification is as per Tariff Order of the Commission.

Issue 41: Tariff for hotels and restaurants

70. Manufacturing process and the service sector should be treated alike as service is continuation of manufacturing process. Both Central and the State Governments treat the activities in hotels and restaurants as "manufacturing process" and cover them under various labour welfare measures like ESI, EPF, etc. Tamil Nadu and Kerala also charge low electricity rates. Hence, these, being an integral part of tourism industry, may be classified under LT cat III – Industrial, for electricity tariff.

APCPDCL: The tariffs vary from State to State depending on generation cost, T&D network and consumption profile. Identical tariff structure/categorization is not possible across all States.

Issue 42: Tariff for the trading/commercial establishments

71. The commercial category (LT-II) consumes 929MU out of the total consumption of 17177 (i.e 5.4%) and contributes Rs.540 crs. of the total revenue of Rs.4151crs (i.e 22.4%). The commercial establishments which consume up to 250 units per month may be charged Domestic (LT-I) tariff.

APCPDCL: The classification is based on the purpose for which electricity is used. Even in commercial category, the first 50 units are charged at 395 paise/unit.

Issue 43: Cottage Industries

72.(i). The Tariff Order of Commission for 2004-05 which approved re-classification of blacksmithy, carpentry, pottery, etc under cottage industry (up to 5HP) is not being implemented at field level. Suitable instructions to be given for implementation.

(ii). The field officers are insisting for minimum contracted load of 3HP on the ground that minimum fixed charge are Rs.30/month relating them to the monthly fixed charge of Rs.10 / HP.

(iii). The ceiling on connected load for cottage industries may be enhanced from 5HP to 10HP. Tiny industries may be brought under cottage industry category.

APCPDCL:

(i). The change will be effected on the basis of the request of the consumer, and after field inspection.

(ii). Minimum contracted load is not 3HP. Necessary instructions are being issued to field officers.

(iii). No response from the Licensee on this point.

Issue 44: Security deposit

73.(i). Additional Consumption Deposit (ACD) should be collected at 2 months' charges instead of 3 months' charges. It may also be allowed to be paid in 6 equal monthly instalments without charging interest. Interest on these deposits may be increased from 3% p.a. to RBI rate.

(ii): Details for computation of ACD amount should be provided to the consumers while demanding ACD.

APCPDCL:

(i). For monthly billed consumers, only 2 months' deposit is being collected. Only for bi-monthly billing, 3 months' deposit is collected. Interest is already being allowed @6% p.a. as per Tariff Order, 2004-05. Instalment facility attracts interest as it involves delayed payment. Instalments will be considered on receipt of request from the consumer.

(ii). The practice got discontinued after introduction of spot billing. The licensee is taking steps to reintroduce the same.

Issue 45: **Reconnection charges**

74. When any consumer pays the bill after due date, even in the morning of the day following the due date, Rs.50 are being demanded towards reconnection charges. This is highly unjust and improper. The reconnection charges should be collected only when power supply is disconnected and consumer required reconnection.

APCPDCL: Reconnection charges are being collected only for those services which are disconnected.

Issue 46: **Wheeling charges**

75.(i): The wheeling charge of 2% (for Mini-Hydel) as per the pre-existing agreements entered into in pursuance of specific policy direction of GoAP, will continue to apply. The existing wheeling agreements are protected not only by statute u/s 185(2), but also under the doctrines of Promissory Estoppel and Legitimate Expectation. The proposal for levy of wheeling charges is contrary to the judgement of Hon'ble High Court of A.P

(ii): The guiding principle ought to be that the costs and network charges must be related to the network and /or parts that are actually used for wheeling. The network charges may be determined based on the assets used at different voltage levels.

(iii): The network losses proposed by APTRANSCO as well as DISCOMs are objectionable and quantification of wheeling losses for energy delivered at 33KV, 11KV or LT is not reasonable. It would appear that the losses at 33KV/11KV are overstated and losses at LT are understated.

APCPDCL:

(i). The filings are made in accordance with the provisions of Section 62(1) the Electricity Act 2003, read with Section 64 which require Distribution licensees to file proposals for wheeling of electricity.

(ii). It is not always possible to segregate the costs across all network elements.

(iii). The percentage losses at 33KV, 11KV and LT are based on overall projected system loss, segregated voltage-wise, based on the technical studies carried out by experts. The losses at 33KV are as per measurements while the segregation between 11KV and LT has been done based on pilot studies.

Issue 47: **Tariff for water works of HMWSSB**

76. Power charges form the major component of operating costs for supply of drinking water to twin cities and surrounding areas particularly after commissioning of the lift Krishna

drinking water supply project. Special consideration proposed for Government Lift irrigation schemes may also be extended to HMWS&SB and 50% further relief may be given considering the priority accorded to drinking water over irrigation, in the National Water Policy 2002 and the rate maybe fixed @120paise/unit.

APCPDCL: The tariffs are dependent on the costs of licensees rather than that of the consumers. The licensee will abide by the decision of the Commission.

Issue 48: <u>Restricted supply to rural areas</u>

77. Due to non-availability of 3-phase supply, life is becoming difficult in villages. The single-phase supply during non –3 phase timings, reaches high voltage levels, up to 270 volts.

APCPDCL: Tap changers at 132/33KV and 33/11KV supply are being operated to maintain uniform voltage throughout the day.

Issue 49: <u>Service line charges and Development charges</u>

78. Payment of costs of assets by consumers should be brought under Regulation to be made by the Commission u/s 46 of the Electricity Act, 2003. The consumers are paying twice, once through contribution by the concerned applicant, and later by way of depreciation through tariff. CPDCL gave misleading reply in the hearings on 2004-05 filings.

APCPDCL: It is true that the consumer pays the service line charges (SLC) and depreciation. Charging the depreciation on original nature of asset does not amount to charging the consumers twice for the same asset.

Issue 50: <u>Reduction in delayed payment surcharge</u>

79. In view of the drastic reduction in interest rates and in view of Government orders, there is need to bring down the delayed payment surcharge.

APCPDCL: This surcharge is not only to recover the interest cost, but is also aimed at discouraging such delays.

Issue 51: <u>Borrowings for redemption of previous borrowings</u>

80. The annual accounts show that APTRANSCO/DISCOMs are taking loans to redeem the previous loans. Schedule VI of the Electricity (Supply) Act permits meagre provision of 0.5% of the loans and does not provide for repayment of Government loans. The Electricity

Act, 2003, does not provide for any higher percentage of return to enable amortisation of loans. This issue has to be taken up with Government of India.

APCPDCL: The point is noted. The Schedule-VI allows recovery of loan redemption amounts over and above depreciation, through special appropriation and with the consent of the Commission.

Issue 52: **Tariff for BSNL transmission centers**

81. The BSNL falls in the category of industry under the Industrial Disputes Act as held by Supreme Court. The Finance Act, 2002-03, has accorded status of Industrial undertaking to Telecom Companies. Hence, BSNL should be classified under Industrial category instead of commercial category.

APCPDCL: The present categorization is done as per existing tariff classification based on the nature of activity.

Issue 53: **Load factor incentive for HT Industries**

82. The 5% reduction in the incentive level proposed by the Licensee nullifies the tariff advantage. The incentive level of 2004-05 may be retained for 2005-06 also.

APCPDCL: The licensee has explained the rationale for the proposed changes in the incentive schemes and will abide by the decision of the Commission.

Issue 54: **Incentive for high power factor**

83. The licensee will be the beneficiary of the higher power factor over the specified 90% level as it reduces losses. Hence, appropriate rebate may be given for maintaining higher power factor.

APCPDCL: For an ideal system, the power factor should approach unity. The penalty is imposed so as to ensure that power factor (PF) does not fall below a certain level. This does not mean that incentive should be paid if PF is above that level.

4. RESPONSES ON ISSUES RELATING TO APNPDCL

Issue 55: **Consumers having connected load below 250 watts**

84.(i). In Warangal district, there are over 1 to 2 lakh domestic consumers having connected load of less than 250 watts. But licensee has shown this figure as Nil.

(ii). The account to which amounts drawn by licensee under Kuteera Jyothi every year are adjusted and the reasons for such accounting have to be stated.

APNPDCL:

(i). There is no such mention of consumers in the ARR filings.

(ii). Rupees 403.8 lakhs received from 2000-01 to 2003-04 were adjusted in the bills of 27,178 beneficiaries @ Rs.1490 per beneficiary.

Issue 56: **Charges / Deposits from agricultural consumers**

85. Customer charges are being collected even for the pumpsets in areas declared as 'dark' by Government. Additional deposits are forcibly collected on the pretext of enhancement of pumpset capacity from 3 HP to 5HP.

APNPDCL: Only the energy consumption charges have been exempted and not the customer charges. Development charges for enhancement in capacity are collected after inspection by the Assistant Engineer.

Issue 57: **Cotton seed crushing units to be treated as seasonal industry**

86. Nearly 120 cotton seed crushing units are established as allied industries of cotton ginning mills. The seasonal benefits were given to one unit during 1996 to 1998 and then withdrawn. These units fulfill the conditions mentioned in TOO Ms. No. 50 dated 03.06.2000 applicable for seasonal industries.

APNPDCL: The APERC may be approached with necessary details.

Issue 58: **Categorisation of Rice Mills [under LT category III(B)]**

87.(i). The rice milling activity runs only 65% of the days in a year and is seasonal. These are mainly rural industries, which get supply only for 8 hours a day. These units cannot pay minimum charges i.e., 50 units per KVA and Rs.100/KVA contracted demand which works out to Rs.32,760 / month for 150HP load , during off-season. The tariff for LT III(B) units may be fixed on par with LT III(A).

(ii). Penalty for exceeding Contracted Maximum Demand (CMD) may be reduced to 50% from 100%. The condition of minimum charges @ 50 units/KVA is punitive and may be deleted.

(iii). In respect of rice mills where supply is given only for 7 to 9 hours, minimum demand charges and minimum energy charges may be scaled down proportionately.

APNPDCL:

(i). The minimum charges for HT consumers of 150KVA work out to Rs.44,400. Thus the minimum charges for LT III (B) are less. An LT III(B) consumer can declare lesser contracted demand than the connected load as per his demand requirement so that minimum charge burden gets reduced.

(ii). No reply by the Licensee on this point.

(iii). No specific reply

Issue 59: **<u>Engineering and iron works – tiny industries</u>**

88. Engineering and iron works belong to neither small scale industry nor large scale industry. They are tiny industries below 10HP. Those below 5 HP should be recognized as cottage industry and classified under LT category IV with a tariff of 175 paise / unit.

APNPDCL: Engineering and iron works cannot be treated on par with cottage industries.

Issue 60: **<u>Tariff for hair-cutting saloons</u>**

89. The classification of hair-cutting saloons under LT cat II Commercial, is not justified, while Dhobi ghats are classified under LT cat IV – cottage industry. The barbers are also providing community service and hence there is need to reclassify hair-cutting saloons as cottage industry on par with Dhobi ghats.

APNPDCL: Even though hair-cutting saloons are run by barbers performing community service, the activity is of commercial nature and hence present classification under LT Cat II is justified.

Issue 61: **<u>Tariff for street lighting</u>**

90. The tariff for street lighting in special / selection grade municipalities may be increased to 450 paise/unit and in corporations to 475paise/unit. Rent on fixtures may be increased to Rs.10/point as the municipalities are getting higher revenues through increased property taxes and collecting taxes from cable operators whose wires are placed on electric poles.

APNPDCL: The electricity tariff does not depend on the taxes collected by municipalities. It is instead based on cost to serve a particular category. The licensee has fixed rent for use of electric poles by cable operators.

Issue 62: **Tariff for crematoriums**

91. The crematoriums are now classified under LT Cat VII- General purpose and charged @ Rs.4/unit. These may be charged only 50 paise/unit as it is a spiritual and social activity.

APNPDCL: The crematoriums are maintained by the local bodies. It is a state activity and not private.

Issue 63: **Non-Tariff income**

92. The non-tariff income is shown as Rs.135crs in 2005 and Rs.138 crs in 2006, which shows a small reduction of Rs.11 crs and Rs.7.6crs when compared to 2004, but no measures are proposed for effective collection of current consumption (CC) charges in time eliminating the necessity of levying surcharge for belated payments.

APNPDCL: The licensee has detailed justification for reduction in non-tariff income which has been put forth before the Commission.

Issue 64: **Excess bills to Dalits**

93. The excess bills issued to Scheduled Caste residents of Satharam village of Mallapuram mandal in Karimnagar district, should be withdrawn.

APNPDCL: The licensee has not received any orders or guidelines waiving the electricity charges due from the Scheduled Caste consumers. Hence, the licensee requests the consumers to pay the bills and cooperate with it.

Issue 65: **Transformer repairs**

94. The Distribution transformer repairs can be done departmentally with less expenditure.

APNPDCL: In view of availability of limited repair centers of the Department, the repair work is entrusted to private persons. The suggestion is noted.

5. RESPONSES ON ISSUES RELATING TO APEPDCL

Issue 66: **Tariff for municipalities**

95. It has been contended by the municipal employees and workers union of a district that the municipalities are incurring losses due to high tariff fixed for street lighting and water supply services. They have pleaded that as the municipalities are serving the public by

supplying drinking water, providing street lighting at nights to avoid thefts, and caring for health and sanitation, the charges for electricity should be reduced. Municipalities are not collecting any charges for the assets of the licensee erected on the municipal places.

APEPDCL: EPDCL is not agreeable to the above suggestion.

Issue 67: Lighting load in shrimp hatcheries

96. Lighting load in shrimp hatcheries may be treated as falling under industrial category. Standby motors should be allowed.

APEPDCL: EPDCL is not agreeable to the suggestion.

Issue 68: Tariff conditions for LT Cat III (A)- Industrial

97.(i). The meters should be fixed on LT side of DTR instead of HT side (for 50HP to 75HP).

(ii). LT- industrial consumers should be permitted to derate their contracted load and restore again without having to pay development charges as allowed in case of CMD of HT consumers.

(iii). The limit of 5% for lighting load for LT industry may be raised to 10%.

APEPDCL:

(i). Not agreeable

(ii). Not agreeable

(iii). No reply on this point.

Issue 69: Captive power plant issues

98. The present practice of charging 15% of the consumption at higher rate (towards lighting) should be stopped as it can be logically concluded that the lighting load is met by the captive power plant of the consumer.

APEPDCL: Not agreeable

Issue 70: Visakhapatnam Steel Plant (VSP) issues

99.(i).The VSP should be permitted to wheel its captive power to its captive mines located elsewhere in the State.

(ii). Priority be given to introduce silicon rubber insulators in the vicinity of steel plant to avoid problems associated with saline pollution (iii). As the steel plant draws power from the grid only occasionally, a separate tariff as in the case of NALCO without demand charge needs to be prescribed.

APEPDCL:

(i). APERC has to respond to this.

(ii). The matter pertains to APTRANSCO.

(iii). No specific reply on this point.

Issue 71: **Incentives for industrial consumption**

100. The incentive for the industries using power at LF above 70% should be @ 30% instead of 20% as proposed by licensee. Incentive should be adjusted in the bill for the same month. Off-peak power should also be given incentive, as also the higher power factor.

APEPDCL: Increase of LF-based incentive is not feasible. Incentive amount cannot be adjusted in the same month's bill. Licensee welcomes the suggestion for incentive to off-peak power and will examine the same. The suggestion for allowing incentive for higher Power Factor is not acceptable.

Issue 72: **Open access**

101.(i). Open access system may be introduced in the State to ensure competition in DISCOMs. Nominal rates may be fixed as done by KERC.

(ii). The phasing of open access for 132KV consumers may be advanced from September 05 to April 05.

APEPDCL:

(i). This has to be done as per Electricity Act, 2003, and as may be decided by APERC.

(ii). The matter pertains to APERC.

Issue 73: **Wheeling charges**

102. The wheeling charges proposed by DISCOM are very much on the higher side. The actual losses of 3 to 4% at 132KV should be charged.

APEPDCL: Licensee has proposed cash compensation for related network cost only and the loss compensation as per projected loss levels.

Issue 74: **HT tariff in EPDCL**

103. As APEPDCL is earning profits, the HT industries in the purview of APEPDCL may be charged lower tariffs than those charged by other DISCOMs. A rate of

Rs.3 per unit may be fixed for 132KV supply. Demand charges may be reduced under the competitive scenario. Colony tariff may also be reduced.

APEPDCL: Licensee has already proposed a higher reduction in energy charge for 132KV supply. Not agreeable to reduce demand charges. In respect of colony tariff, licensee will abide by Commission's decision.

Issue 75: Security deposit for industries

104. Amount equivalent to two months' charges may be collected in the form of bank guarantee instead of 3 months' charges in cash.

APEPDCL: Two months' charges is acceptable, but in cash only.

Issue 76: Separate classification for power intensive industries

105. Power intensive industries may be classified separately and they may be charged separate tariff. Any tariff of more than 290 paise/unit will not be viable for caustic soda industry.

APEPDCL: Licensee does not agree but will abide by the decision of the Commission.

Issue 77: Tariff for educational institutions

106. The educational institutions may be reclassified under LT cat VII – General purpose, as they were earlier under that category and the recent change to LT cat II has resulted in 100% increase and burden on student community.

APEPDCL: Not agreeable.

Issue 78: Tariff for small commercial units

107. The first slab rate of 395 paise/unit may be allowed up to 300 units instead of the first 50 units.

APEPDCL: Sixty-three per cent of consumers under this category are using less than 50 units per month. Hence, maximum number of consumers are benefited with the rate of 395 paise/unit.

Issue 79: Tariff for LT cat III(B) – Rice mills

108. Rice mills work for 3 to 6 months in a year. Collection of minimum charges @50 units per KVA and demand charges @ Rs.100 per KVA may be withdrawn.

APEPDCL: These charges are collected as per Tariff Order of the Commission.

Issue 80: **Capacitor surcharge**

109. The conditions applicable in respect of fixing capacitors and levy of surcharge for failure should also be published as in the case of main tariff rates.

APEPDCL: No specific reply on this point.

Issue 81: **Meter testing charges**

110. For payment Rs.50 towards meter testing by way of demand draft (DD), the consumer has to pay another Rs.35 towards DD charges. Bill collectors may be authorized to collect cash and issue receipt.

APEPDCL: The suggestion is appreciated, but is not acceptable as it may lead to misuse.

Issue 82: **Additional charge (surcharge) for belated payment**

111. The interest on delayed payment @ 7 paise per Rs.100 per day, which works out to 25.5% p.a may be reduced to a reasonable level. The licensee is paying only 6% on security deposits, which may be increased in view of recent increase in interest rates on loans/deposits.

APEPDCL: Apart from recovering the interest cost involved, the surcharge is also meant to act as a deterrent against the delayed payments. Licensee is not agreeable to increase in the interest rates on security deposits.

6. RESPONSES ON ISSUES RELATING TO APSPDCL

Issue 83: **Procedural issues on public hearing**

112. The objectors may be allowed to file only one copy to the Licensee, who may be asked to make required copies and send to appropriate authorities. Government representative(s) should be asked to participate in the public hearings. Objectors should be allowed to cross-examine / seek clarifications from the representatives of the utilities at the end of public hearing. The list of the objectors / petitioners was not appended in the Tariff Order of 2004-05, though the Chairman agreed to it during the hearing. Such a list will enable cross-current discussion among the petitioners and foster enriched public participation.

APSPDCL: This has to be responded to by the Commission.

Issue 84: **Compensation for electrical accident victims**

113. Compensation of Rs.2 lakhs should be paid for persons who die in electrical accidents. In case of death of cattle, seven to ten thousand rupees should be paid as compensation.

APSPDCL: Presently, compensation is being paid as follows in the case of death in electrical accidents:

Adults -Rs.20,000; Minor children - Rs.10,000; Cattle - Rs.1,000.

Issue 85: **Line losses & Low voltages**

114. The line losses could not be reduced due to inefficiency of the Licensee resulting in tariff hike. To improve the low voltages, special funds should be allotted by State and Central Governments.

APSPDCL: Raids are being conducted and cases are being booked on consumers resorting to theft of electricity. Distribution system is being augmented to reduce line losses. Central and State governments are extending assistance for augmenting the electricity T&D networks.

Issue 86: **Replacement of failed DTRs**

115. Farmers are made to pay Rs.2,000 to Rs.3,000 and also bear the transport costs for replacement of failed DTRs. This is not justified.

APSPDCL: There are instructions to replace the failed DTRs in rural areas within 48 hours. The consumers need not pay anything for DTR replacements of DTRs.

Issue 87: **Agricultural consumption**

116. The stand of the Licensees that the agricultural consumption has shot up after announcement for free power scheme for Agriculture is baseless, as the growth rate had earlier been even higher (17.3% in 2002; 14% in 2003; 7% in 2004; 9.3 % (projected) for 2005 and 3.9 % (estimated) for 2006). The share of agriculture in total consumption continues to be around 30%. The sampling is inadequate and distorted. If the metered consumption under Tatkal connections is taken as the basis, the total Agricultural consumption would be only 2631.52 MU as against 3330.61 MU arrived at by the Licensee. Thus the Licensee has over-estimated the consumption by 21%.

APSPDCL: The present methodology based on meter readings of sample DTRs is the best estimate in a situation where 100% metering of DTRs is not available. Two RESCOs viz., Atmakur, and Rayachoti, have been merged with this DISCOM and their requirement of 184 MU is also included in the ARR filing.

Issue 88: **Single bulb subsidy Scheme**

117. The proposals do not contain any details about the single-bulb subsidy scheme. The Licensee may state how many consumers have availed this concession. Free supply should be given to the consumers using up to 15 units per month.

APSPDCL: Government is giving subsidy of Rs.10/ month for consumers using up to 15 units / month, with connected load up to 250 watts, on the basis of use of a 40-watt bulb for 6 hours a day.

Issue 89: **Metering to measure agricultural consumption**

118. Agricultural feeders ought to be separated and meters provided at substations for the feeders and at the DTRs. Meters should not be provided at the pumpsets of consumer.

APSPDCL: Segregation of agricultural feeders is very expensive. However, the domestic feeders are being segregated from Agricultural Lines. Proposal for providing meters for all agricultural connections is under consideration. This is being done as per Electricity Act, 2003, and is meant to compute agricultural consumption and the line losses.

Issue 90: **Adverse impact of unbundling**

119. The creation of multiple entities has resulted in excessive expenditure on additional officers and their facilities without any specific impact on efficiency and has become a burden on the consumers. APTRANSCO and GENCO may be merged and the erstwhile APSEB be restored.

APSPDCL: The unbundling of electricity sector was done as part of the Reform process.

Issue 91: **Discrimination against rural consumers**

120.(i). Rural consumers are given power supply of only 5 to 7 hours a day while 24-hour supply is given to urban areas.

(ii). Rural industries should be given 24-hour 3-phase supply to ensure investment in rural industries and to generate rural employment.

(iii). The bills in rural areas do not contain details as directed by the Commission.

APSPDCL:

(i). Single-phase transformers are being provided to extend single-phase supply. Soon after completion of this work and depending on availability of generation, single-phase supply will be provided on par with urban areas.

(ii). For 3-phase supply to rural industries, if a group of such units seek and pay a percentage of the required cost, a separate feeder can be provided from substations.

(iii). The rural bills also will be computerised and required details printed on these bills also in future.

Issue 92: **Non-Domestic / Commercial (LT-II) Tariff**

121. The concessional tariff of 395 paise / unit may be extended to petty shopkeepers and small business units using up to75 units / month.

APSPDCL: APERC will examine this issue.

Issue 93: **Tariff for Religious institutions**

122. The following three tariff slabs may be introduced for religious institutions:
Up to 75 units / month -- Rs.3 / unit, 75-150 units / month -- Rs. 4 / unit > 150 units / month -- Rs.5 / unit

APSPDCL: The Commission will decide this matter.

Issue 94: **Sugar cane crushing**

123. The Licensee is not fixing meters, but is collecting Rs.500 as development charges and Rs.635 towards one month charge for sugar cane crushing in violation of orders of the Commission in Tariff Order, 2004-05. As these farmers are mostly small and marginal farmers and heavily indebted, they should be allowed to avail free power from their existing agricultural connections.

APSPDCL: Meters are provided for sugar cane crushing operations and 50 paise / unit is charged for sugar cane crushers. Where, however, the consumer is using power simultaneously for irrigation and for sugar cane crushing, a flat rate of Rs.100 per HP is being charged.

Issue 95: **Long-term Tariffs**

124. It may be rational to lay down a long term tariff initially for 10 years and later reduced to every 5 years. Low tariff should be changed for various categories of consumes, duly localizing the losses both technical and pilferage.

APSPDCL: All DISCOMs and the Commission are in the process of conducting exercises for laying down Long-term tariff principles.

Issue 96: **Reservations for SC/ST categories and ladies in appointments**

125. The ARR filings of 2004-05 or for earlier years even prior to unbundling, do not contain the information on the percentages of SC/ST and minorities in the staff of the Licensee. Similarly, the percentage of lady employees is also not given. These details may be given.

APSPDCL: The Licensee is following the reservation rules and guidelines of the State Government in the appointment of its employees.

Issue 97: **HVDS and DSM measures**

126. The DISCOM has taken up HVDS schemes costing Rs.374 crores in Chittoor district and Rs.319 crores in Cuddapah district, but there is no mention in the ARR on the results of these schemes. Instead of taking up such expensive schemes, it would be wiser to go in for cheaper DSM measures with the co-operation of farmers. The suggestion is to supply capacitors, frictionless foot-volves and PVC pipes free of cost to the farmers so that the Utility effects savings in the transformer capacity up to 20–25%. The non-ISI pumpsets also may be replaced with ISI sets with attractive concessions.

APSPDCL: The results after implementation of the scheme were reported in the implementation report and energy audit report along with cost benefit analysis. Regarding consumer side DSM measures, the proposals will not be successful unless consumers are involved in the process and realize that these are to be implemented by them.

Issue 98: **Regularisation of unauthorised Agricultural connections**

127. It is reasonable and practical that all the existing unauthorised connections be regularized and to strictly follow the procedure for new bore wells.

APSPDCL: The unauthorised agricultural connections are regularized / removed as per the directions of Government of A.P. The unauthorised loads can be effectively checked with the co-operation of farmers.

Issue 99: **Pending applications for new agricultural connections**

128. The filings of ARR show that 93,397 applications have been pending for over 6 months, of which 35,696 are pending due to non-completion of formalities by consumes. The details of formalities may be stated. It is better to regularize these on payment of a modest sum.

APSPDCL: Pending applications are being processed as per the instructions of Government of A.P.

Issue 100: **Tariff for Ferro Alloys units**

129. The tariff for Ferro Alloys industries is proposed at 287 paise/unit. When these industries are performing well, why they should not be charged at the same rate as applicable for other HT industries?

APSPDCL: There are no Ferro Alloys units in the DISCOM. The Commission will look into this issue.

Issue 101: **Theft of electricity**

130. The progressive reduction in losses displayed by the Utilities is more of window-dressing by pushing much of the theft under un-metered agricultural consumption. The number of theft cases booked has come down sharply from 19,574 in 2003-04 to 4,056 in first 6 months of 2005-06.

APSPDCL: Constant checking of services is carried out to detect theft of energy and malpractices.

Issue 102: **Providing meters free of cost for poor consumers**

131. The consumers in Dalit Wadas and belonging to weaker sections do not have meters. They are using electricity without meters as they cannot afford to pay Rs.1,000 for a meter. The Licensee may provide meters to such consumers free of cost and thus arrest pilferage of energy.

APSPDCL: The Licensee will provide meters free of cost provided the applicants with connected load up to 250 watts pay the following charges.

S.C / S.T	Others
Application fees: Rs.25	Application fees: Rs. 25
Development charge: Rs.100	Development charge: Rs.300

Issue 103: **Arrears**

132. The figure of arrears pending more than 6 months is given in the ARR filings, but circle-wise and category-wise break-up of arrears is not given. Public have a right to know what steps are being taken to recover the arrears and also to look at the list of bad and doubtful debts. Commission may direct the Utility to make public the above information.

APSPDCL: All steps like disconnection of supply to the defaulting consumer and his other connections, recovery of dues through R/R Act, are being followed. The independent chartered accountant's firm which audited the Receivables recommended write-off of Rs.79.18 crores (Rs.24.5 crs. under Domestic category, Rs.36.6 crs. under Agricultural, and Rs.18.00 crs. pertaining to RESCOs) having been found to be irrecoverable.

Issue 104: Fuel Surcharge

133. The Commission did not agree to one suggestion made in 2004 hearings about levy of FSA on a graded scale according to the level of tariff rates (vide para 472 of the Tariff order 2004-05). When the tariff itself is decided considering the paying capacity of the consumers, slapping FSA on all consumers uniformly goes against this principle and become a backdoor method of increasing tariff.

APSPDCL: The suggestion is not acceptable to all consumers.

Issue 105: Power Purchase Agreements with IPPs

134.(i). In Gujarat, the power purchase costs have been reduced by about Rs. 495 crores by negotiating with IPPs. TRANSCO should adopt the same procedure at least in 2005.

(ii). APTRANSCO is paying Rs.33 crores every year without taking any energy from LVS power plant. Necessary steps should be taken to the cases in Supreme Court cleared expeditiously.

APSPDCL:

(i). This mater is in the purview of APTRANSCO and Government of A.P. A committee has already been constituted for this purpose.

(ii). This is in the purview of APTRANSCO

Issue 106: Overhead electricity lines

135. The electricity lines have become a grave risk for performing the Rathotsavam of Govindarajaswamin at Tirupathi. Hence, it may be treated as a special case and cable lines may be provided.

APSPDCL: Laying down of cable lines is an expensive proposition and will be taken up as and when the circumstances allow such investments.

Issue 107: Power supply to Agriculture

136. Power should be supplied for agriculture pumpsets for 10 hours during daytime.

APSPDCL: Presently, power supply is given for not less than 7 hours. The supply for 10 hours depends on generation and Government decision.

Issue 108: <u>Business organizations camouflaging as Trusts</u>

137. Organisations doing business in the name of Trusts should be identified and necessary action should be taken.

APSPDCL: Vigilance squads and engineers in Operation Circles are inspecting the services and booking cases for such malpractices.

Issue 109: <u>Horticulture</u>

138. Agricultural farms should not be segregated like Horticulture, Sericulture, etc. and should be treated as Agriculture only.

APSPDCL: This is in the purview of the Commission.

Issue 110: <u>Penalty for belated payment</u>

139. The penalty should be reduced from Rs.50 to Rs.5.

APSPDCL: The penalty cannot be reduced.

Issue 111: <u>Customer charges</u>

140. Customer charges for agricultural services may be reduced from Rs.20 to Rs.10 per month.

APSPDCL: This is to be examined by the Government.

Issue 112: <u>Domestic tariff</u>

141. Low tariff should be allowed for up to 100 units per month in rural areas.

APSPDCL: This is in the purview of the Commission.

Issue 113: <u>Lighting facility for Agricultural wells</u>

142. After separation of Agricultural Lines from Village Lines, the farmers are facing difficulties in attending to the fields at nights. Farmers may be allowed to have lighting supply for one bulb at the agricultural well.

APSPDCL: If separate connection is taken for lighting, additional transformer will be provided to release lighting connections.

Issue 114: <u>Fixed charges for LT industries</u>

143. The fixed charges for LT Industrial category may be reduced from Rs.37 / HP / month to Rs.15/HP/month.

APSPDCL: This in the purview of the Commission.

Issue No.115: **Fruit processing units**

144.(i).The stipulation of payment of Development charges and providing of own transformer for change of classification from LT Category III (A) to Category III (B) may be removed.

(ii). As per G.O.Rs.No.338 dated:14.11.03 the fruit processing industries have to pay only Rs.1.75 / unit. However, this concessional tariff is not yet allowed.

APSPDCL:

(i). For conversion of an LT III (A) connection to LT III (B) connection, the Development charges are payable only for the additional load over and above the existing load under LT III (A). The consumer has to provide own transformer as in the case of HT consumers as the connected load under LT III (B) is over 75 HP.

(ii). The matter will be taken up with the Sate Government for providing subsidy before seeking approval of APERC.

CHAPTER - V
STAFF PRESENTATION

INTRODUCTION

145. The Commission Staff, on behalf of the consumers made a presentation to the Commission on their analysis of the ARR/ERC filings and tariff proposals of APTRANSCO and the four DISCOMS at the public hearings. The analysis was done separately for APTRANSCO and each of the DISCOMS. The Staff presentation for APTRANSCO was made on 28.02.2005 and that for the DISCOMS on the following dates:

Table No.3
DATES OF STAFF PRESENTATION ON DISCOMS FILINGS

Central Power Distribution Company at Hyderabad	1.03.05
Northern Power Distribution Company at Warangal	2.03.05
Eastern Power Distribution Company at Visakhapatanam	3.03.05
Southern Power Distribution Company at Tirupathi	6.03.05

PART I – APTRANSCO

Highlights of the filings of APTRANSCO:

146. The Staff in their presentation on the highlights of the filings of APTRANSCO took note of the reduction in transmission losses from 6.25% to 5%, but observed that APTRANSCO expected a shortfall of 1366 MU in hydel generation. In this context, the Staff drew attention to the request of APTRANSCO for inclusion of short-term power purchases in the FSA formula, which only underscores the need for more realistic estimation of hydel availability in APTRANSCO's projections on power availability for the ensuing year. Similarly, the Staff pointed out that gas availability in the projections must be made on a more realistic basis These projections should also include sensitivity analysis on coal and gas prices thereby ensuring that projections on power availability and power costs of the Licensee are closer to reality. As regards the modification of FSA, the Staff expressed the opinion that the inclusion of short-term power purchases in the FSA formula could only be considered if these purchases are made in a structured manner. The Staff have suggested that Licensee should formulate a plan that ensures a standardised system and procedure for procurement of short-term power. The Staff have also pointed out that load forecast projections for the ensuing year need more realistic assessment of hydel availability and availability of gas in

order to ensure that power purchase costs during the year are closer to reality. As regards levy of transmission charges, the Staff are of the opinion that transmission charges should be levied on all the users.

Details of APTRANSCO's filings of ARR/ERC

147. APTRANSCO in its filings on Transmission and Bulk Supply Business made on 30th November, 2004, and in the Addendum thereto on the 7th February, 2005, projected its aggregate revenue requirement (ARR) for FY 2005-06 as to be Rs.9601 crs., to be recovered from the four Distribution Companies through the following tariffs:

1. **Transmissions Charges** at Rs.66.61/kW/month and **SLDC Charges** at Rs.4.38/kW/month;
2. **Two-part Bulk Supply Tariff:** Fixed Charges at Rs.501.48/kW/month and Energy Charges at Rs. 1.05/kWh.

Power purchases and Energy Balance

148. As per the filings, APTRANSCO projected energy availability at 53,673 MU with energy purchases of 51214 MU for sale to DISCOMs and for inter-State sales. These purchases have been based on the projected reduction in transmission losses from 5.50% to 5.0%. Availability of power as per Staff assessment, however, stands at 51,257 MU depicting a reduction of 2416 MU from the availability projected by APTRANSCO. The Staff estimates are based on

- Exclusion of all short-term power purchases
- The estimates of hydel availability taken as 4500MU based on the past four years' average
- Non-availability of energy from NTPC (ER)

149. The Energy Balance for FY2005-06 showing the difference between filings and the staff assessment is given in the table below:

Table No.4
Energy Availability 2005-06 (MUs)

Generation Station(s)	As proposed by APTRANSCO	As per Staff analysis	Difference
APGenco	26430	24950	-1480
Thermal	20450	20450	0
Hydel	5980	4500	-1480
Central Generating Stations	11254	10834	-420
Eastern Region	10834	10834	0
Southern Region	420	0	-420
NTPC (Simhadri)	6484	7446	962

Other State Electricity Boards	89	0	-89
AP Gas Power Corporation	424	424	0
Independent Power Producers	6253	5316	-937
Others (incl. Non Con. Energy Sources)	2738	2286	-452
Total	53673	51257	-2416

Capital Base

150. As per the filings, APTRANSCO projected a net capital base of Rs.1605 crs. As per Staff analysis, however, the net capital base works out to only Rs.346 crs. The difference of Rs.1259 crs has arisen on account of adjustments to the fixed assets on account of APTRANSCO's lower level of capitalisation than the Commission-approved amounts. Furthermore, the Staff, in line with the Commission 's directives, has excluded the Capital Works-in-Progress.

Reasonable Return

151. The Staff have included a sum of Rs.55 crs. on the net capital base @ of 16% and Rs.12 crs on approved loans @ 0.50%.

Expenditure items

152. The filings of APTRANSCO projected a total expenditure of Rs.9811 crs. but as per the Staff analysis, the expenditure is at Rs.9962 crs. The estimated excess expenditure is Rs.151 crs. The major variations in expenditure are on account of power purchase cost. As per the Staff analysis, the power purchase cost would be higher by Rs 124 crs. i.e. Rs.9018 crs. as against Rs.8894 crs projected by APTRANSCO. The differences between Staff assessment on major items of expenditure and APTRANSCO's proposal are given in the table below:

Table No:5

Expenditure Items FY 2005-06 (Rs.Crs.)

Items of Expenditure	As proposed by APTRANSCO	As per Staff analysis	Difference
Power purchase cost	8894	9018	124
Wages and salaries	102	99	-2
Interest	239	241	2
Depreciation	256	248	-8
Others	320	356	36
Total	**9811**	**9962**	**151**

153. The difference in power purchase cost is on account of the following modifications by Staff:

- Adoption of APGenco's fixed costs as per norms of the Commission
- Incorporation of higher gas prices

- Incorporation of higher coal prices on account of increase in railway freight charges in October 2004

The other items of differences in expenditure are:

- Wages & Salaries: Rs. (-) 2 crores
- Interest: Rs.52 crores
- Depreciation: Rs.(-) 8 crores
- Others : Rs.(-) 7 crores

154. Details of differences in power purchase costs are given in the table below:

Table No.6
Power Purchase Costs

SOURCES OF ENERGY	Filings of APTRANSCO				Staff			
	Fixed cost (Rs Crs.)	Variable cost (Rs/Kwhr)	Total costs		Fixed cost (Rs Crs.)	Variable cost (Rs/Kwhr)	Total costs	
			(Rs. Crs.)	(Rs./Kwhr)			(Rs. Crs.)	(Rs./Kwhr)
APGENCO	1,636.27	0.85	3,830.87	1.51	1,514.96	0.91	3,826.99	1.56
Thermal	1,636.27	1.06	3,733.09	1.93	1,237.75	1.07	3,457.66	1.72
Hydel	-	0.16	97.78	0.16	277.21	-	369.33	0.82
CGS	621.70	0.81	1,762.58	1.70	592.28	0.88	1,741.54	1.61
CGS (SR)	592.28	0.80	1,687.62	1.70	592.28	0.88	1,736.46	1.60
CGS (ER)	29.42	0.94	74.96	1.79	-	-	5.08	-
NTPC- Simhadri	445.31	0.86	1,010.52	1.56	445.31	0.93	1,141.36	1.53
SEBs	-	2.50	38.19	4.29	-	2.50	15.94	-
APGPCL	22.21	1.11	67.91	1.60	24.55	1.42	84.93	2.00
IPPs	807.82	1.08	1,505.30	2.44	808.11	1.17	1,461.94	2.75
OTHERS & (NEDCAP)	45.36	2.55	733.26	3.11	45.38	2.98	744.93	3.26
Total	**3,578.67**	**0.95**	**8,948.63**	**1.75**	**3,430.59**	**1.03**	**9,017.63**	**1.77**

Non-Tariff Income

155. APTRANSCO projected its non-tariff income at Rs.209 crs that includes inter-State sales and rebate on power purchases. As per Staff analysis, inter-State sales are unlikely to materialize on account of lesser availability of power than projected by APTRANSCO. Staff accordingly estimate a reduction of Rs.45 crs. in Non-tariff income and reckon it to be only Rs. 165 crs.

Revenue from Tariffs

156. APTRANSCO proposes to recover the Aggregate Revenue Requirement of Rs. 9601 crs. for FY2005-06 by way of sale of power to DISCOMs through a two-part bulk supply tariff. While APTRANSCO has segregated the costs associated with its related businesses, namely, transmission charges and SLDC charges, as of now these charges are applicable only to the DISCOMs. Tariffs proposed are applicable for the four DISCOMs. The Staff hold the view that

the transmission and SLDC charges should also be collected from all users of the grid rather than only from the four DISCOMs.

157. The ARR estimates of APTRANSCO as assessed by the Staff comes to Rs.9592 crs, which is higher by Rs. 272 crs than that proposed by APTRANSCO. To cover the additional deficit for FY2005-06, the Staff propose the alternate tariff as given below:

Table No.7
Tariff For Transmission and Bulk Supply

Tariff for Transmission and Bulk Supply	As proposed by APTRANSCO	As per Staff analysis
Transmission and SLDC Charges		
Transmission Charge(Rs./kW/Month)	66.61 (10816)	69.50 (11516)
SLDC Charge(Rs./kW/Month)	4.38 (10816)	4.10 (11516)
Two Part Bulk Supply Tariff		
Fixed Charge(Rs./kW/Month)	501.48(5972)	287.32(9916)
Energy Charge(Rs./kWh)	1.05	1.05

Figures within brackets are MW on which the tariff is computed

158. APTRANSCO computed the tariffs using the capacity allocated to DISCOMs only. In the Staff analysis, the capacity of other grid users is added subject to results of the appeals pending before the Hon'ble Supreme Court.

Reactive power incentive and penalties

159. APTRANSCO has proposed the introduction of incentive and penalties at Rs.0.04/kVAR with regard to Reactive power. The Staff are of the view that since the proposal is aimed at maintaining technical discipline on the grid, the same may be considered, provided the meters at interface points are capable of measuring the reactive power.

Compliance with Directives

160. It has been observed by the Staff that APTRANSCO has almost complied with all Directives except the Directive No. 4 which requires it to submit details of each loan, source-wise, year-wise, asset-wise, etc. These details are yet to be submitted by APTRANSCO.

Regulatory issues

161. APTRANSCO raised the following regulatory issues:

- Inclusion of short-term power purchases in the FSA formula along with a rider that FSA may be carried over to the subsequent years
- Retention of CWIP in Capital base
- Exclusion of Reasonable Return

162. With regard to FSA modification, the Staff are of the view that short-term power purchases cannot be part of a generalized formula and any power purchases can be made only with Commission's approval. As regards carrying over FSA to the subsequent years, the Staff opine that the suggestion has no relevance, as the intent of FSA is to ensure that FSA is collected during the relevant year itself, to avoid liquidity problems in the operations of the Licensees.

163. The exclusion of CWIP from the Capital base is part of the directives of the Commission mainly to act as an incentive for timely completion of projects. The Licensees have not been able to exercise control on completing their projects, resulting in time and cost overruns in the project implementation. The Staff going by the Commission's Directive hold the view that consumer should not pay for any uncompleted projects.

164. On the issue of reasonable return and its exclusion as proposed by APTRANSCO, the APTRANSCO's proposal is inconsistent with the ongoing reforms in the sector aiming at commercialization of operations. Hence, this request of the APTRANSCO should not be accepted.

Part II - DISCOMS

Staff presentations on DISCOMs' filings of ARR/ERC

165. The Staff presentations on the DISCOMs' filings as in the case of APTRANSCO examined in depth the components of the Aggregate Revenue Requirements filed on 30th November, 2004, followed by the Addendam thereto filed on 7th February, 2005. For FY 2005-06 CPDCL projected an ARR of Rs.4915 crs , NPDCL Rs. 1592 crs , EPDCL Rs. 2059 crs, and SPDCL Rs. 2594 crs .

166. The DISCOMs expect to recover part of the revenue requirements through tariffs. In their filings, the gap projected is on the basis of proposed tariffs, but BST is at current tariffs. The table below gives the revenue requirements and the existing gap:

Table No.8
ARRs and Revenue Gap for all DISCOMs (Rs. Crs)

Items	CPDCL	NPDCL	EPDCL	SPDCL	APT	Total of DISCOMs
ARR	4915.00	1592.00	2059.00	2594.00	9565.43	11159.63
Tariff revenue at CurentTarifs (CT)	4151	1181.00	1841.00	2010.00	9,595.01	9183.00
Revenue gap at CT	-763.00	-412.00	-217.00	-584.00	29.58	-1976.63
Tariff revenue at proposed Tariffs(PT)	3967.00	1074.00	1822.00	1886.00	9565.43	8749.00
Revenue gap at PT	-947.00	-518.00	-236.00	-708.00	0.00	-2410.63

167. Tariffs have been altered for three categories of consumers, namely, (a) HT-Industry; (b) Ferro Alloys and (c) LT-V Agriculture.

Energy Balance

168. The purchases and sales of the DISCOMs in their filings have been based on their projected losses and the projected sales under all categories. The Staff, while accepting their loss figures, have adjusted the sales projections for agriculture on the basis of LV side estimates.

169. CPDCL projected energy purchases at 20920MU and sales of 17173 MU, which put their projected distribution losses at 17.91%. NPDCL projected energy purchases at 8088 MU and sales of 6587 MU, which put their projected distribution losses at 18.56%. In the case of EPDCL, their losses have been projected at 14.44%, with energy purchases at 7922 MU and sales of 6778 MU. The loss figure projected by SPDCL is 17.02% and their energy purchases have been projected at 11423 Mu for sales of 9479 MUs.

170. As stated, the difference in the staff estimates is mainly on account of agricultural consumption as shown in the table below:

Table No.9

Agricultural Consumption Estimates for FY2005-06 (MUs)

	CPDCL	NPDCL	EPDCL	SPDCL
Licensee	6393	2983	1262	3566
Staff	5598	2731	1174	3042

171. However, for computational purpose, the Staff in their presentations adopted the sales figures as projected by the DISCOMs including estimates of agricultural consumption.

Capital Base

172. The net capital base assessed by Staff is lower than that projected by the DISCOMs. DISCOMs, unlike APTRANSCO, have excluded CWIP from their capital base projections in line with the Commission’s directive.

173. As per CPDCL estimates, the net capital base for FY05-06 is Rs. 93 crs, while as per Staff analysis it works out to Rs.15 crs. For NPDCL the net capital base as per Staff is negative at Rs. (-)21.39 crs, while the DISCOM has projected it at Rs16.74 crs. The net capital base for EPDCL is negative at Rs.(-) 203.24 crs, while the DISCOM has filed a net capital base of Rs.49 crs. In the case of SPDCL, the net capital base filed is Rs.(-) 28 crs as against Rs.(-) 90 crs. as per Staff analysis.

Reasonable Return

174. All DISCOMs have declined to claim reasonable return on their net capital base. The Staff provided the returns as per existing norms of 16% on net capital base and 0.50% on approved loans, the DISCOM-wise amounts being as follows:

- CPDCL:- Rs.6.63 (Rs.2.45 crs on net capital base plus Rs4.18 crs on loans)
- NPDCL:- Rs.3.23 crs on loans
- EPDCL:- Rs.1.57 crs on loans
- SPDCL:- Rs.2.88 crs on loans

Expenditure items

175. The major expenditure item for all DISCOMs is the power purchase cost. Power purchase cost has not been adjusted for reduced requirement of energy on account of lower estimates of agricultural consumption by the Staff. Other major differences are on account of (i) interest adjusted to loan drawals and (ii) depreciation adjusted to lower level of capitalisation. The differences in other expenditures are mainly due to the incorporation of the corrections carried out on the basis of audited accounts for FY2003-04 in respect of depreciation, interest, income-tax and reasonable return. Further, the contribution to employee funds has been provided @ 13% of gross expenditure under Wages and Salaries without considering any capitalization.

Table No.10
Details of Expenditure Items: FY2005-06 (Rs. Crs)

	CPDCL		NPDCL		EPDCL		SPDCL	
	Proposed	As per Staff	Proposed	As per Staff	Proposed	As per Staff	Proposed	As per Staff
Power Purchase Cost	4368.07	4267.93	1321.63	1650.18	1766.50	1616.17	2178.46	2330.51
Wages & Salaries	200.17	199.29	102.22	102.02	122.66	123.58	174.18	175.83
Interest	262.93	209.39	109.92	88.73	67.81	49.97	108.65	86.40
Depreciation	184.93	178.84	90.75	86.41	95.26	90.18	141.62	136.53
Others	206.12	247.16	106.05	84.66	85.59	104.20	118.83	130.78
Total	5222.22	5102.61	1730.57	2012.00	2137.82	1984.10	2721.74	2860.05

Non-Tariff Income

176. The DISCOMs have excluded wheeling charges (except for a small amount shown by CPDCL) from Non-tariff income but included Customer charges, Revenue from Surcharge for Late Payment and other receipts such as meter rentals, etc . The Staff have included the wheeling charges in non-tariff income subject to the outcome of writ petitions pending in Hon'ble High Court and writ appeals pending before the Hon'ble Supreme Court in this matter.

Table No.11
Non-Tariff Income (Rs. Crs)

	CPDCL		NPDCL		EPDCL		SPDCL	
	Proposed	As per Staff	Proposed	As per Staff	Proposed	As per Staff	Proposed	As per Staff
Non-Tariff Income	306.63	306.63	138.29	117.89	79.10	79.10	127.71	121.71
Wheeling Charges	0.99	57.97	0.00	1.53	0.00	38.84	0.00	17.67
Total	307.62	364.60	138.29	119.42	79.10	117.94	127.71	11.67

177. The Staff have recomputed wheeling charges based on the assessment of network charges with losses to be compensated in kind.

Table No.12
Wheeling charges (Re/kWh)

DISCOMS	As proposed	As per Staff
CPDCL	**0.40**	**0.43**
NPDCL	**0.58**	**0.60**
EPDCL	**0.60**	**0.56**
SPDCL	**0.55**	**0.46**

Loss in kind would also be added to the wheeling charges. Voltage-wise losses calculated are given below:

Table No.13

Voltage of supply	Loss compensation in kind			
	CPDCL	NPDCL	SPDCL	EPDCL
33kV	5.78%	6.07%	5.66%	7.71%
11kV	12.28%	12.90%	11.92%	13.11%
LT	20.50%	23.05%	20.44%	21.30%

Revenue from Tariffs

178. The revenue from proposed tariffs has been estimated to arrive at the projected gap for FY2005-06. DISCOM-wise analysis of the projections made in the filings and the Staff assessment are given below:

1. CPDCL projected Rs.3976 crs as the expected revenue from proposed tariffs. In Staff analysis, the revenue from tariff is estimated at Rs.3981 crs. The difference of Rs.14 crs is due to a calculation error in the submissions made by CPDCL.
2. NPDCL projected Rs.1074 crs as the expected revenue from proposed tariffs. In Staff analysis, the revenue from tariffs is Rs.1075 crs. The difference of Rs.1 cr is due to calculation error in the submissions made by NPDCL.
3. EPDCL projected its revenue at proposed tariffs at Rs.1822crs. The Staff have accepted the same.

4. SPDCL projected Rs.1886 crs as the expected revenue from proposed tariffs. In Staff analysis, the revenue from tariffs is Rs.1888 crs. The difference of Rs.2 crs is due to calculation error in the submission of SPDCL.

Annual Deficit/Gap

179. On account of variations in expenditure items and capital base adjustments, the Staff assessment of the ARRs differs from the projections made by the DISCOMs. The gap projections (at proposed tariffs) of the Licensees and the Staff assessment thereof are given below:

Table No:14

Annual Deficit /Gap at Proposed Tariffs for FY2005-06 (Rs. Crs)

	CPDCL	**NPDCL**	**EPDCL**	**SPDCL**
Licensees' projections	-947	-518	-236	-708
Staff assessment	-764	-821	-46	-835

CHAPTER – VI
RESPONSE OF LICENSEES TO COMMISSION STAFF's PRESENTATION

180. In their response to the Staff presentation, the Licensees - APTRANSCO and the four DISCOMs, responded as follows:-

PART A - APTRANSCO

Generation availability

Availability of 452 MU from short-term purchases

181. The APTRANSCO contended that the availability figures indicated in the ARR for FY 2005-06 from the captive power plants CPPs of M/s. Visakhapatnam Steel Plant, M/s.Nav Bharat Ferro Alloys and other short-term sources are based on the availability from the said sources in the past.

182. The APTRANSCO stated that it intended to utilize the power availability from these CPPs for inter-State sales and therefore requested the Commission to consider the availability from these sources towards the total availability and purchase of power.

Availability of gas - based IPPs

183. The analysis by the Staff has shown lesser availability of 937 MU from the gas based IPPs. On this, the APTRANSCO contended that the availability figures mentioned in the ARR for FY 2005-06 were based on the gas availability in the current year i.e. from April 2004 to January 2005. Based on the gas supply as presently available, the energy availability works out to 6391 MU as shown below:

Table No.15

Name of the generator	The average actual gas supplied per day during (the period) 04/04 to 01/05 (in MCMD)	The actual gas supplied during the period 04/04 to 01/05 (for 306 days) in MCM	* Gas expected to be available in MCMD	GCV. (KCAL/SCM)	Station Heat Rate (KCAL/KWH)	Energy Expected in MU (Ex-bus)
GVK	0.827	252.98	0.827	9580.48	2000	1402.12
Spectrum	0.826	252.84	0.826	9702	2000	1419.14
LANCO	1.293	395.65	1.293	9618	1900	2317.34
BSES	0.687	210.09	0.687	9745.5	1900	1253.25
Total						6391.85

(*) The average gas supply during the period 04/04 to 01/05 (MCMD) is taken as gas availability in future.

Inter-State Sales

184. The Staff analysis indicates that inter-State sales are unlikely to materialise due to lesser availability of power than projected by APTRANSCO. APTRANSCO on the other hand is of the view it would be possible to sell about 300 MU to other States.

Reduction in Hydro power availability

185. APTRANSCO projected higher availability of power on the assumption of normal monsoon. The actual hydel power generation up to 10.03.05 is 5049 MU as against the projected availability of 5056 MU for the current year in ARR filings for 2005-06. APTRANSCO has projected an availability of 5940 MU in the ensuing year, expecting normal monsoon. Staff analysis has assumed lower hydel availability of 4500 MU for 2005-06.APTRANSCOs projection is based on APGENCO's estimates.

Increase in NTPC (Simhadri) availability

186. APTRANSCO projected an availability of 6484 MU from NTPC, Simhadri, for the year 2005-06. The Commission Staff estimated the availability of 7446 MU from this source. APTRANSCO has requested the Commission to consider the availability as projected in the ARR only, in view of the following:

1. The 6484 MU availability projected by APTRANSCO corresponds to 80% PLF which is the target PLF for recovery of full fixed charges.

2. The availability projected by APTRANSCO is based on the information furnished by NTPC.

3. Achieving higher availability as in the previous years may not be possible this year because it was estimated by Government of India and NTPC that there would be shortage in supply of indigenous coal for power generation to Simahadri.

4). Since all the four 500 MW units of Talcher-II are under operation, coal supplies to NTPC Simhadri may be less.

Determination of Transmission charges and SLDC charges

187. The response of APTransco to Staff estimates of transmission and SLDC charges was submitted later on 17.3.05. For determination of Transmission charges and SLDC charges for

FY 2005-06, the capacity of 11516 MW was considered in the Staff analysis as against the capacity determination of 10816 MW by APTRANSCO. APTRANSCO understands the difference of 700 MW to be due to wheeled capacity having been considered by the Commission Staff.

188. The wheeled energy at 132 KV during the period April 04 to February 05 is 1208 MU. It is expected that during the FY2005 (i.e. post extrapolation for March 2005) the total wheeled energy at 132 kV shall be 1318 MU at 70% PLF which translates to 215 MW of wheeled capacity. Further, during the ensuring year FY 2006, the same quantity of energy is expected to be wheeled.

189. As per APTRANSCO's ARR for FY 2006 the transmission and SLDC charges were Rs.66.61/Kw/month and Rs.4.38/Kw/month respectively, based on the gross capacity of 10816 MW. In case the wheeled capacity is also to be added to the gross capacity (10816 MW + 215 MW = 11031 MW) then the transmission and SLDC charges shall be Rs.65.35/kW/month and Rs.4.31/kW/month respectively.

190. APTRANSCO submits that since energy wheeling to third parties is not a permanent phenomenon, and also as the cases relating to wheeling charges are pending in the Hon'ble Supreme court, APTRANSCO is unable to recover the wheeling charges in full. Hence, it has requested the Commission to consider 10816 MU only as gross capacity for determination of transmission and SLDC charges as submitted by it in the ARR filing.

PART B – DISCOMS

191. The following key differences have been observed between the figures filed in the ARRs by the Licensees and those projected by the APERC Staff in their presentation in respect of the following:

1. Estimates of agriculture consumption
2. Interest allowance
3. Inclusion of wheeling revenue in Non-Tariff Income

Estimates of agricultural consumption

192. The Licensees had filed revised agricultural consumption figures in the addendum to their ARRs based on new service releases. The original estimates in the ARR filings were based on LV-side DTR readings, which are filed with APERC every month. However, in the Staff presentation, the allowed agricultural consumption is much less. The individual DISCOM responses are as follows:

APCPDCL

193. Subsequent to Staff presentations, APCPDCL, informed the Commission that the consumption estimate is to depend upon 12 months' readings from 11/03 to 10/04 and the gross volume of consumption under Tatkal services. The Licensee objected to reckoning the 2004-05 Tariff Order figure as the base volume for determination of consumption in the Staff analysis.

APNPDCL

194. APNPDCL has expressed views similar to those expressed by APCPDCL.

APEPDCL

195. APEPDCL expressed the view that it has estimated the consumption based on the data from LV side meter readings and the same may be considered for FY 2005-06. The Licensee could not make comments on Staff estimate as the method of computation in Staff analysis was stated to be not available to it.

APSPDCL

196. APSPDCL submitted that the forecast consumption in its revised filing may be adopted as the same has been computed on the basis of sample DTR readings, RESCO consumption and consumption under Tatkal services. Accordingly, the Licensee has pleaded that the Commission may consider the forecast as submitted in its revised filings.

Interest allowance

197. All the DISCOMs have responded similarly on the Staff assessment of interest allowance, which varies from the projection made in the filings. This interest variation, they have stated, could be due to the following factors:

1) Disallowance of certain capital expenditure projected by the Licensees.
2) Interest adjustments on Capital Works-in-Progress (CWIP).

198. On the first point, the Licensees state that they are confident of achieving the level of capital expenditure projected both in the current year as well as in the ensuing year.

199. As regards the interest adjustments on CWIP, the Licensees state that their estimates represent net interest (total interest minus IDC) and hence no further adjustments are necessary.

200. The Licensees therefore, have requested the Commission to accept the interest expenditure as projected in the ARRs.

Inclusion of wheeling revenue in Non-Tariff Income

201. The Licensees contend that the inclusion of wheeling revenue in non-tariff income is not prudent from the view-point of their cash flow . Their response is based on the fact that collection of wheeling revenues has been stayed for FY 2002-03 and for the current year 2004-05. They apprehend that in the unlikely event of an adverse verdict of the Court, the implications for true-up could be immense.

CHAPTER VII
STATEMENT OF GOVERNMENT OF ANDHRA PRADESH

202. The Government of Andhra Pradesh (GoAP) presented its views before the Commission during the public hearing at Hyderabad on 1st March, 2005. At the outset, Sri Deepak Kumar Panwar, Principal Secretary to Government, Energy Department, highlighted some of the laudable accomplishments of the power sector, since the commencement of the reform programme in the State. He made a special mention of reduction of T&D loses from 36.91% in FY 2000 to about 24.11% in FY 2004, apart from improvement in the grid stability, growth in metered sales, reduction in distribution transformer failures, etc. While expressing the view that the consumers in the State have fully supported the various reform initiatives, he added that the improved performance of the Sector is acting as a catalyst for economic and social development of the State.

203. Sri Panwar stated that the State Government was cognizant of the fact the ongoing efforts of the utilities and the series of measures taken by the Commission would need to be supplemented by support from Government as in the past, in the shape of availability of timely financial support, policy guidance, etc. and assured Government's continued support in future as well.

204. Sri Panwar pointed out that the power sector today stands at a crucial phase with the unveiling of the second generation reforms by the enactment of the Electricity Act, 2003. Lauding the progress made so far, he acknowledged that the reforms had so far been in line with achieving the Government objective to provide "quality & affordable" power to all consumers in the State. He reiterated Government's commitment to provide the requisite financial assistance to the sector, including subsidy to the utilities in accordance with the provisions of Section 65 of the Electricity Act, 2003.

205. While recalling that the State Government had announced free power to all farmers in May 2004, Sri Panwar stated that in light of the experiences gained during the implementation of free power policy, the Government considered it necessary to review the policy and carry out marginal modifications to sustain the system while the benefits under the scheme reach the needy farmers. Accordingly, he added, the Government has recently announced some modifications in the free power scheme to all farmers. He stated that this is expected to improve the effectiveness and long term sustainability of the subsidy policy.

206. While concluding, he reiterated the stand of the Government in undertaking all steps to provide " quality & affordable" power to consumers in the State and requested the

Commission to factor in the various efficiency improvement measures undertaken by the utilities while determining the retail tariffs and pass on the benefits of the enhanced efficiencies to the consumers.

CHAPTER - VIII
COMMISSION'S ANALYSIS ON SUBSTANTIVE ISSUES

PART I - LEGAL ISSUES

Wheeling charges

207. While some of the objectors contended that despite the fact that the Commission had fixed wheeling charges under Electricity Act, 2003, the APTRANSCO and DISCOMs have failed to collect them and have also not taken them into account in their ARRs, another contention made, on the other hand, is that the Commission does not have the jurisdiction to fix wheeling charges for those persons who have existing wheeling arrangement because section 174 of the Electricity Act 2003 clearly establishes that the terms and conditions of the existing wheeling agreements remain very much in force, their terms and conditions not being inconsistent with provisions of Electricity Act 2003.

208. APTRANSCO in its reply has stated that though it made an attempt to collect the wheeling charges as fixed in the Tariff Order for FY 2004-05, many of the developers had approached the Hon'ble High Court, which stayed the collection of these charges as fixed by the Commission.

209. Fixing of wheeling charges by the Electricity Regulatory Commission is a statuary function as per Section 62 of the Electricity Act 2003. Such fixation of wheeling charges by the Commission as per the provisions of section 62 read with section 64 of the Electricity Act 2003 is not prohibited by any of the orders of the Hon'ble Supreme Court or the Hon'ble High court.

210. In the Tariff Order for FY 2004-05, while fixing the wheeling charges, the Commission had specifically mentioned that the charges are fixed subject to the orders of the Supreme Court in the pending appeals regarding wheeling charges, payable by the existing users of wheeling facility. Since those appeals in Supreme Court are still pending disposal, and in view of the interim stay orders passed by the Hon'ble High Court in writ petitions filed by some of the developers, the Commission makes it clear that the wheeling charges now specified are also subject to the orders of Hon'ble Supreme Court in the appeals pending before it and orders of Hon'ble High Court in the writ petitions regarding wheeling charges pending before it in respect of all those existing users of wheeling facility, who are parties in the appeals before Hon'ble Supreme Court and /or writs in the Hon'ble High Court regarding wheeling charges.

Review of PPAs of IPPs

211. Some of the objectors have contended that the Commission should review and modify suitably the terms and conditions of the PPAs of IPPs like M/s.GVK Industries Ltd, M/s.Spectrum and M/s.LANCO Kondapalli, for the benefit of the consumers at large, and that it has the power to do so.

212. On applications filed by APTRANSCO for modification of certain clauses of above referred PPAs, the Commission issued notices on those applications to the above-mentioned developers before admission. However, on receipt of notices, the said developers filed Writ Petitions No.7484, 7838 and 8701 of 2004 in the Hon'ble High Court challenging the jurisdiction of the Commission to reconsider the terms and conditions of their PPAs and prayed for stay of the proceedings initiated by the Commission. The Hon'ble High Court issued interim orders directing stay of all further proceedings pending disposal of these writ petitions. Consequently, the Commission has not been able to proceed further, in respect of PPAs of IPPs.

Irregularities in Spectrum Power Project

213. A specific demand is made by an objector that action should be taken against Spectrum Power Project on the irregularities alleged to have been committed by it and that the PPA with it be cancelled

214. The Commission understands that APTRANSCO has filed a complaint with the appropriate authorities for investigation into the irregularities alleged to have been committed by its (M/s Spectrum's) management. The Commission is not directly concerned with these irregularities which call for action under Companies Act, 1956, Criminal Laws etc.

Impact of Electricity Act, 2003, at State level

215. Some objectors have raised the point that when the APTRANSCO is prohibited from trading in electricity as per the Electricity Act, 2003, how can it file the ARR for Bulk Supply.

216. The Commission clarifies that the last date for implementation of the segregation of trading function from the transmission functions as notified by the Central Government is 09.06.2005. APTRANSCO filing the ARR for its bulk supply business along with its transmission business and the transmission and SLDC charges is not therefore illegal or invalid.

PART II - SUBSTANTIVE ISSUES RAISED BY PUBLIC AND THE STAFF

Steps to increase people's participation in the Regulatory process

217. The public have raised a concern that more steps need to be taken by the Commission to increase people's participation in the Regulatory process.

218. The Commission is alive to the need for increased participation of the public in the Regulatory process. It has invariably allowed the consumer groups and others representing the interests of the consumers / public at large to act as interveners in all its hearings. At the demand of the consumer groups, the Commission permitted submission of objections to ARR filings in duplicate instead of the erstwhile six copies.

219. Further, the Commission has held, this year, the public hearings for determination of tariff at the headquarters of all the four DISCOMS, including Warangal and Visakhapatnam, where these were either not held earlier or were discontinued.

220. In its latest draft Regulation, the APERC (Fees) Regulation, 2005, too, while specifying the fees for filing petitions, etc. before it, the Commission has proposed a nominal fee of Rs.100 only for NGOs / consumer groups, etc. The Commission will also shortly be initiating steps to encourage participation of NGOs / consumer groups to represent the consumer interests at its hearings and will be inviting suggestions in this regard. The Commission clarifies that the nominal fee of Rs.100 mentioned above does not apply to any objections / suggestions submitted pursuant to a public notice inviting comments / suggestions on ARR / tariff proposals or any other proceedings initiated by the Commission in discharge of its functions which are legislative in character. Further, even the quantum of this token fee is subject to reconsideration before final issue of Regulation.

221. This year, for the first time, all the objections and representations received have been put on the website of the APERC.

222. The analysis by the APERC staff on the filings was presented, for the first time in Telugu in all the public hearings.

Procedural issues on public hearing

223. The main procedural issues raised by the objectors are:

(1). The objectors may be allowed to file only one copy of their objections to the licensees who may be asked to make required number of copies and send to appropriate authorities;

(2). Government representative should participate in all the public hearings;

(3). Consumer-petitioners should be allowed to cross-examine / seek clarifications from the Utilities at the end of the public hearing;

(4). The list of objectors / petitioners should be appended to the Tariff Order to facilitate consultations among the consumer-petitioners and help better public participation; and,

(5). On-the-spot registration of objectors for participation in the hearings be allowed.

224. On these points, the Commission's analysis is as follows, ad-seriatum:

(1). There are only two bodies, viz., the Licensee who has to respond to and the Commission who has to consider the objections filed. The Commission has already allowed the filing of only two copies of the objections, one each with the Licensee and the Commission. The suggestion made would render the Commission dependent on the Licensee for receiving a copy of the objections. This is neither desirable nor in the interest of the consumer-participants.

(2). Some of the objectors seem to be under the impression that it is the representative of the State Government who has to reply to the objections raised by them on the issues pertaining to Government. The Commission would like to make it clear that the public notice is issued by the licensees calling for objections on their filings from the general public and hence it is basically the licensees who have to answer the objections and not the State Government. Nevertheless, the Commission had requested the GoAP to depute their representative(s) to attend all the public hearings during the proceedings for the Tariff Order for 2005-06. While the Principal Secretary to GoAP, Energy Department, personally attended the hearing at Hyderabad, the Additional Secretary, Energy Department, attended all the hearings at Hyderabad, Warangal, Visakhapatnam and Tirupathi.

(3). Cross-examination is a feature of adversarial proceedings which the hearings before the Commission are not. As to seeking clarifications from the representatives of the Utilities at the end of the public hearing, a few can be sought, with the permission of the Chairman depending upon the availability of time.

(4). There are already complaints about the Tariff Order being too bulky a document. However, the Commission would arrange to supply a complete list of the objectors / petitioners to each one of them, to facilitate the envisaged consultations among them,

(5). While the Commission has generally been taking a liberal view for encouraging public participation in the hearings and allowing even those who submitted their objections, a number of days after the last date prescribed for doing so, the Commission does not find much merit in allowing on-the-spot registrations. Such a procedure will make it extremely difficult, if not impossible, for the licensees to respond to the objections raised. It will also have the demerit of discouraging the objectors from filing their objections well in time.

225. Some of the objectors have expressed the view that education of ryots is essential to enable them to effectively participate in the Regulatory process, and that has not been done so far despite the availability of the vast network at the disposal of the Licensees. In this context they have desired Commission to study the Karnataka experience.

226. The Commission appreciates the suggestion and notes that it is a fact that the farmers, by and large, have not directly involved themselves in the process of public hearings except in Chittoor district, falling within the jurisdiction of APSPDCL where farmers have substantial awareness of the problems and the need for their resolution. The Commission would take upon awareness campaign in the other Discoms, especially the APCPDCL and the APNPDCL, to improve farmers' participation in the regulatory proceedings. The Commission will also study the procedure adopted in Karnataka.

Levy of fees for the applications / petitions before the Commission

227. Some of the objectors have taken the opportunity to respond to the draft Regulation on Levy of fees formulated by the Commission specifying the fees payable for taking up the proceedings on the petitions filed before it. They have stated that the levy of fees for the petitions to be made in the public hearings is not justified.

228. The Commission clarifies that the draft Regulation in question is not applicable to the objections / suggestions made by the public in response to the public notices issued by the Licensees or by the Commission, seeking their objections and suggestions in the nature of a consultative process, on tariff proposals, framing of regulations, etc. To allay any apprehensions, the Commission will incorporate a clarification to this effect in the Regulation itself, before its finalisation.

Problems in securing the documents of filings of Licensees

229. Some of the objectors have pleaded for simplifying the procedure of filing the objections and also commented on the non availability of the documents even much after the issue of the public notice. He also expressed the view that the cost of these filings may be fixed at a lower price in the interest of educating the consumers.

230. The Commission is of the view that the documents being bulky, it would be difficult for a normal consumer to purchase the whole set and examine the data. For better

understanding of the normal consumers, a simplified document of summary of "ARR/Tariff proposals" is made available at a nominal cost of Rs.10. However, the Commission observes that the response of the public to purchase even this simplified document is lukewarm. It is also pointed out that the complete sets of the filings are available on the websites of the Licensees.

Free power for single-bulb connections

231. Many objectors have mentioned that there is no mention in the ARR filings of the licensees of the subsidy of Rs.10 presently being provided by GoAP on the monthly bill amounts of domestic consumers with connected load of 250 watts and consuming up to 15 units per month. The Commission had taken up the matter with the Government and the Government have clarified that the subsidy would be available for the year 2005-06 also.

Non-availability of Electricity Act, 2003, in Telugu

232. Some objectors have raised the issue of non-availability of the Electricity Act, 2003, in Telugu. The Act is a Central enactment. The Commission will be taking up the matter with the GoAP for arranging a Telugu version of the Act in case the same is already not available.

Tariff Order in Telugu

233. One objector, apparently not aware that the Commission had brought out the Tariff Order for FY 2004-05 in Telugu, has pleaded for printing of the Tariff Order in Telugu also. While re-assuring him that Telugu version of the Tariff Order would henceforth be brought out on a regular basis, the Commission is separately forwarding a coy of the Telugu version of the Tariff Order for FY 2004-05, to the objector with its compliments.

List of defaulters

234. The licensees were directed in paragraph 325 of Tariff Order for FY 2004-05 to file along with their ARR filings, the list of defaulters whose dues are more than Rs.50,000 along with the reasons for non-collection and details of litigation involved, if any. While two of the DISCOMs (NPDCL and SPDCL) have duly filed these lists, the other two have not, stating that though they submitted the data to the Commission, the same has not been included in the ARR filings on account of the large volume. CPDCL, however, added that it had posted the data on its website. The Commission appreciates the difficulty of CPDCL and EPDCL. In modification of the earlier directive, therefore, the Commission directs that,

The Licensees shall henceforth post on their website, the list of all those defaulters whose dues exceed Rs.50,000, along with the reasons for non-collection and details of litigation involved, if any. This data shall be updated every six months and will be displayed on the first of the second month following the end of the previous half-year. Thus, the data pertaining to the dues as on 31st March shall be posted by 1st May and that as on30th September by 1st of the following November.

Request for free supply to domestic consumers up to 50 units

235. Some of the objectors have pleaded that the domestic consumers consuming electricity up to 50 units a month should be given free supply of power.

236. The Commission would like to clarify that such free supply can be allowed only if the GoAP provides the requisite subsidy.

Refund of Additional Consumption Deposit (ACD)

237. Some objectors have complained about the amount of security deposit becoming surplus with them due to lowering of tariffs, etc.

238. In this connection, the Commission would like to invite the attention of the DISCOMs as well as the affected consumers to clauses 6(2)(b), 7(4) and 9 of Regulation 6 of 2004, which makes it mandatory on the part of the licensees to refund any such excess amounts.

Extension of tariff for ferro alloys to caustic soda industry

239. It has been pleaded that the concessional tariff charged from ferry alloys units should also be extended to caustic soda industry, for which too, power is a major input. The matter has been dealt with in the earlier Tariff Orders also, e.g. in para 392 of the Tariff Order for FY 2004-05. It was also a subject matter of a petition (Nos. 1 to 13 of 2004) before the Commission and as explained earlier and as decided in the aforementioned petition, the concessional tariff was extended to ferro alloy units on the basis of certain specific criteria which the caustic soda units do not fulfill. As such, the Commission does not find any justification to apply the same tariff as applicable to ferro alloy units to caustic soda units.

Issue of Passbooks to consumers

240. Some of the objectors have expressed concern at the absence of records at the revenue offices of DISCOMs on the consumption deposits paid by consumers from time to

time and suggested that the DISCOMs should maintain a passbooks at the consumer premises and record these payments also in the passbook.

241. The Commission welcomes this suggestion and accordingly directs,

The Licensees to issue passbooks to all consumers, if not already issued as per the earlier practice. The Licensees shall make necessary arrangements at the customer service centers set up by them at sub-division level to update the pass books, as and when requested by the consumers.

<u>Expenditure on e-seva centres</u>

242. Some of the objectors have taken objection to the payment of Rs.5 by DISCOMs to e-seva centres for collection of each bill while the DISCOMs themselves are able to collect the same at Re.1 per bill through departmental counters as well as through certain NGOs.

243. The Commission notes that this expenditure, being not prudent, has been disallowed in the earlier ARRs. However, the fact remains that the Company cannot be allowed to continue with such expenditure in the absence of any substantial benefits accruing to the consumers from such high cost of service. The Commission directs the Licenses to submit the reasons for continuing with the practice of collection of electricity bills through e-seva in spite of the expenditure being disallowed by the Commission and also report how this expenditure is accounted for in their accounts. The report may be submitted by the 30^{th} June 2005.

<u>Interest on ACD</u>

244. A few of the objectors have complained about interest on customer deposits being allowed at 3% per annum instead of at the (present) RBI rate of 6%. This is brought to the notice of all concerned that the Commission has already issued a Regulation No.6/2004 specifying the interest rate of 6% per annum.

<u>Reasonable Return</u>

245. A number of objectors have represented that the four DISCOMS should be allowed reasonable return. APTRANSCO and DISCOMS have not claimed in the filings the Reasonable Return that they are eligible for as per the Sixth Schedule of the Electricity (Supply) Act, 1948. This matter is dealt with in Chapter IX.

<u>Supply to rural areas</u>

246. Several objectors expressed their unhappiness over lack of continuous power supply for rural areas, especially for the domestic consumers. Their primary concern is that the consumers in both rural and urban areas pay similar tariff but the continuity of supply is

more in urban areas. The objectors are of the view that the rural areas also should have the same continuity of supply. The issue here refers to supply of electricity to non-agricultural rural services.

247. Historically, the same distribution network had been supplying power to all categories of consumers including agricultural. Restriction of supply to agriculture automatically resulted in non-supply to other categories of consumers connected to the network. Segregation of agricultural feeders and extending single phase distribution to serve domestic consumers are some of the measures adopted by the licensees to maintain continuity of the supply to non-agricultural services.

248. It is indicated by APTRANSCO that with the above measures having been taken, infrastructure is ready for 24-hour supply and all efforts will be made to supply power for 24 hours a day depending on hydel availability.

The Commission directs that,

The DISCOMs should estimate the additional power requirement to provide 24-hour supply to rural areas and identify the generation sources to procure the additional energy and include the same in the next ARR / Tariff proposals along with financial implications.

<u>Clarifications on agricultural power policy</u>

249. A number of objectors have sought clarifications on the modified power policy introduced by GoAP. A few of them have pointed out certain anomalies especially in regard to the DSM measures and a few suggestions have also been made for modification thereof. Since GoAP itself is the most appropriate authority to provide clarifications, remove anomalies, etc., the Commission advises the Licensees to appropriately take up the matter with the State Government and ensure proper implementation of the policy.

<u>Reckoning the second crop in Nellore and Chittoor districts as first crop</u>

250. A number of farmers / farmers' Organisations have contended that the restrictions stipulated in the New Agricultural Power Supply Policy in respect of second crop being paddy should not be applied to Nellore and Chittoor districts as these districts experience delayed monsoon which coincides with the Rabi season and there is no Khareef crop in these districts. Hence, they pleaded to treat the second crop in these two district as the first crop.

251. The Commission will take up this matter with the Government for appropriate direction.

Regularisation of unauthorized connections

252. A number of objectors have pleaded strongly for regularization of unauthorized agricultural connections. Some have suggested that this could be done on payment of a nominal fee and a few others have suggested that it be done in a phased manner. In this connection, the Commission would like to clarify that supply of power to agriculture is highly subsidized by GoAP. As such, any decision on regularization or otherwise of the unauthorized agricultural connections lies within the domain of GoAP alone.

Supply to agriculture during daytime

253. Several objectors have pleaded before the Commission for supply of electricity to agricultural consumers during daytime. The request has been made in view of the problems faced by them in operating the pump sets during nights. It was also mentioned that it is even more difficult for the women farmers to operate the pump sets during nights in the present social structure.

254. The electricity supply to agriculture has evolved over time through release of the off-peak surplus power to agriculture. With the supply constraints, supply of electricity during daytime may not be feasible without effecting cuts in the supply to other categories of consumers. This will give rise to a number of attendant problems, such as, higher revenue requirement for licencees, higher subsidy payments and lower utilization of electricity generation capacity.

255. Even presently, the supply to agriculture at some places is provided in one or two spells, partly in daytime, according to local conditions in consultation with the farmers. However, until the supply constraints are eliminated, supply to agriculture completely during the daytime may not be feasible in the near future.

Agricultural consumption estimates

256. Many objectors have questioned the quantum of agricultural consumption projected by licensees. They have contended that the figures are highly inflated and the disconnections due to factors like drying up of wells, change of land use, subsequent switching over to surface irrigation, etc. are not excluded from the computations. It is further contended that the methodology suggested by the Commission and followed by DISCOMs does not seem to be of much use in arriving at correct agricultural consumption figures.

257. The Commission is of the view that while there is always scope for improvement, the present methodology of estimating agricultural consumption based on the readings of meters

installed on the LV side of distribution transformers on sampling basis is the best available, as the estimates so arrived at would take into account all the resultant impacts arising out of non-use or disconnection or abandonment of dried-up wells, etc. inasmuch as in such a case, meters will record lower consumption readings. Similarly, in case of the consumption going up due to unauthorized upgrading or unauthorized use of pump sets, the meter readings will go up. A detailed analysis, is also made at the level of the Commission on the consumption figures projected by the licensees and only consistently admissible readings are taken into account. It is only as a result of such scrutiny that during the latest three-year period 2003-04 to 2005-06, the consumption figures accepted by the Commission are different from those projected by the licensees, as depicted in the Table below:

Table No.16

Financial Year	Projected Volume	Approved Volume (MU)
2003-04	10998	11350
2004-05	11800	11450
2005-06	14204	12647

258. It is worth a mention here that this Commission, for the first time in the country, has made an effort to measure the consumption of unmetered agricultural pump sets following a consistent procedure. The Commission has also posed this issue for commissioning of a study on an all-India basis by the Forum of Indian Regulators (FOIR) for coming up with some better alternatives for more accurate estimation of the consumption.

259. The DISCOMs are computing the agricultural consumption for each mandal for every month based on data from metered DTRs and connected load in each mandal. Earlier, the Commission directed the DISCOMs to publicize this information and the DISCOMs complied with this directive. Since the issue is again coming up during public hearings, the Commission feels that there should be continuous flow of information on agricultural consumption volumes from DISCOMS to general public. For this purpose, the Commission directs that,

> ***The DISCOMs shall fix a permanent display board at every circle/district headquarters and also at their corporate headquarters and post the details like number of services, metered DTRs, DTRs producing valid meter readings and estimated consumption for the previous month by 15th of every month. The details at circle/district headquarters should be for each mandal and at corporate headquarters for each circle/district. The DISCOMs shall also maintain the relevant records and should disclose the details to public on specific request.***

DSM measures under New Policy

260. A number of objectors have strongly pleaded that the DSM measures may be taken up by the Licensees without burdening the consumers as these will finally benefit the Licensees.

261. The DSM measures, especially the capacitor compensation for the inductive load of the agricultural sector has been the biggest techno operational problem encountered in the power sector especially in Andhra Pradesh. Past experience appears to indicate that the initiatives taken earlier for providing the capacitors departmentally through APSEB did not achieve the results as the consumers have not been made a party to the scheme and hence did not involve themselves in proper upkeep of the DSM equipment. Similarly any other scheme to provide balance DSM measures like ISI mark pumpsets, friction less foot-valves etc, that does not involve consumer participation is not likely to succeed especially in the scenario of free power supply or flat rate supply. The Commission would like to examine this proposal in greater detail through the assistance of the other agencies and would advise the Govt. suitably in due course of time.

Tariff for educational institutions and small religious places

262. Some consumers have requested the Commission that the tariff for religious institutions like temples, mosques, churches and gurudwaras is very high, especially for the small temples, etc. Similar requests have been made in regard to the tariff for educational institutions stating that they are being charged LT Category II: Non-Domestic tariff and should instead be charged LT Category VII: General tariff.

263. The religious places and government educational institutions fall under LT category VII:General Purpose. Educational institutions run by charitable institutions (Public Charitable Trusts on a no-profit basis) also fall under this category. At present, single tariff is applicable for all consumers of this category irrespective of volume of consumption. However, there is some differentiation with regard to minimum charges based on type of supply, i.e. LT Single phase or LT Three-phase.

264. The educational institutions run by private persons other than the Public Charitable Trusts fall under LT Category II: Non-Domestic and are accordingly charged tariff applicable for that category. The Commission feels that the differentiation between the two categories of educational institutions is justified and requires no change. The Commission also does not find any merit in the request for lower tariff for religious places based on their size or location.

Load factor incentive for HT Category-I (A) consumers

265. Some HT-Category – I (A) consumers have requested the Commission to ensure the reflection of load factor incentive amount due to them in the billing month itself rather than in the subsequent month as practiced by the DISCOMs. The consumers' concern is that it is

helpful for them to relate the incentive to the consumption apart from the monetary advantage of receiving the eligible incentive amount without the delay of a month.

266. The load factor incentive at present is computed, ex-poste, i.e.upon completion of the billing month, when the DISCOMs compute it with reference to load factor obtained in the billing month vis-à-vis the load factor for the base year (2000-01). As per the modifications effected in this Tariff Order, the base year's load factor would no longer be required to be reckoned for computation of the incentive and the entire relevant data would be available in the details available in current month's bill itself. There should accordingly be no difficulty in computing the incentive amount, concurrently with the raising of the bill. However, this may require a change in commercial procedures including the billing software.

The Commission sees merit in the request and directs that,

There should be no lag in passing on the load factor incentive amount to HT Category-I (A) consumers, effective from the billing month of October 2005. Any request/prayer by DISCOMs relating to their inability to implement this directive for whatever reason shall be made not later than by 31st July 2005.

Cotton seed crushing units as seasonal industry

267. Some objectors have pleaded that cotton seed crushing units should be treated as seasonal industry.

268. The cotton seed crushing units are essentially oil mills. The Commission does not find any justification in treating these mills in any manner different from the other oil mills. The Commission, however, has an open mind and will undertake an exercise to examine whether or not these mills possess the requisite seasonal characteristics.

Engineering and iron works as tiny (cottage) industries

269. Some objectors have represented that engineering and iron works are tiny industries with connected load of below 10 HP. They have pleaded that such works with connected load up to 5 HP should be recognized as cottage industry and accordingly classified under LT Category IV.

270. The Commission is unable to accept that engineering and iron works industry has the attributes of a cottage industry. The request is, therefore, not acceded to.

Rice mills as seasonal industry

271. It has been pleaded that the rice milling activity runs only for 65% of the days in a year and is seasonal. It has also been requested that the minimum charges for this industry with higher connected load and placed under Category LT III (B) may be fixed on par with

those applicable to Category LT III (A) instead of Category LT III (B). Another request made is that penalty for exceeding the Contracted Maximum Demand (CMD) may be reduced to 50% from the presently applicable penalty @ 100%.

272. The Commission has carefully considered the pleadings and finds no merit in classifying the rice milling activity as seasonal industry. As regards the minimum charges, to reduce their minimum charge burden the LT III(B) consumers can declare lesser contracted demand than the connected load as per their requirement. The request for reduction in the quantum of penalty for exceeding the CMD cannot be acceded to, since the rate of penalty is uniformly applicable across the board to all LT III (B) consumers and the licensees can reasonably expect the consumers to remain within their CMD.

Hair-cutting saloons as cottage industry

273. It has been represented that hair-cutting saloons provide community service and hence there is need to re-classify them as cottage industry on par with dhobi ghats.

274. The Commission recognizes that the barbers do perform community service but the activity of hair-cutting saloons is of commercial nature and hence there is no justification for its re-classification as cottage industry.

Tariff for crematoriums

275. Some objectors have pleaded that the service provided by the crematoriums is of spiritual and social nature and hence they may be charged tariff @ 50 paise / unit instead of being classified under LT Category VII – General Purpose. The Commission does not find any merit for concessional tariff of 50 paise / unit for the crematoriums as requested.

Waiver of electricity charges due from SC, ST domestic consumers

276. Some of the objectors have represented that though the SC, ST domestic consumers had been promised waiver of electricity charges due from them, they are still receiving bills on this account.

277. The Commission clarifies that it has received a communication on 07.03.2005, after conclusion of the hearings, from APTRANSCO about the decision of the GoAP to waive the surcharge of Rs. 22 crs., the arrears of Rs.180.53 crs. due from such consumers as on 31.12.2004 subject to certain conditions like payment of the principal amount in 24 instalments. The Commission is examining the request and will shortly be indicating its decision to the Government about the manner of compensating the licensees for the consequential loss incurred by them.

Reconnection of supply to SC/ST colonies

278. Some of the objectors have pleaded that the power supply to the SC / ST colonies should be restored by waiving the electricity charges as promised by the Government earlier.

279. The Commission recently received, on 07-03-2005 (after conclusion of hearings), a communication from APTRANSCO intimating that the GoAP has since agreed to waive the surcharge of Rs. 22.13 crores if the principal amount of Rs. 180.51 crores due as on 31-12-04 is paid in 24 installments, and subject to certain other conditions. The APTRANSCO has requested the Commission to specify the manner of compensation in terms of Section 65 of the Act and also communicating the Commission's approval to the waiver of interest charges for the instalment facility. This request is under examination of the Commission.

Tariff for municipalities

280. It has been pleaded by a municipal employees and workers' union that as the municipalities are serving public by providing various essential services, the tariff charged from them should be reduced. In support of the plea, it has also been mentioned that municipalities are not collecting any charges for the assets of the licensees erected on municipal lands. On the other hand, some objectors have made a plea for increasing the street lighting tariff for special and selection grade municipalities to Rs.4.50 / unit and the municipal corporations to Rs.4.75 / unit as they are collecting higher revenues by increasing property taxes, etc.

281. The Commission does not find any merit in either of the two proposals to reduce or enhance the tariff for the municipalities since the electricity tariff does not depend upon the taxes collected by the municipal bodies. As regards the issues, if any, of siting of the licensees' assets on municipal property, these should be sorted out by the municipalities concerned directly with the licensees.

Lighting load in shrimp hatcheries

282. It has been pleaded that the lighting load in shrimp hatcheries may be treated as falling under industrial category and standby motors should also be allowed.

283. The Commission while not agreeing to treat the entire lighting load in any industry as falling under the industrial category, is inclined to enhance the present ceiling on lighting load as indicated in paragraph 285 under LT Categories III(A) and III (B). The Commission does

not, however, find any justification for allowing standby motors, without being accounted for in the contracted load.

Tariff conditions for LT Category III - Industrial

284. Some objectors have requested that in regard to the captioned category, the meters should be installed on LT side of the distribution transformers instead of HT side, the consumers should be permitted to derate their contracted load and restore again without having to pay development charges as allowed in case of CMD of HT consumers and the limit of 5% for lighting load for LT industry may be raised to 10%.

285. The Commission has carefully considered the representations made and while it does not find any justification in acceding to the first two requests, it agrees to raise the ceiling of 5% on lighting load for this category of consumers to 10% of the total connected load.

Restriction on lighting loads in industrial premises

286. Some of the industrial consumers have expressed difficulty with the existing limit of 5% or the lighting load with reference to total contracted load. They have pleaded for raising this limit to 10%.

287. The Commission agrees to this request, being in consonance with the corresponding stipulation under HT Category–I, Industrial and where the lights & fans consumption is allowed up to 10% of the total consumption at industrial tariff.

Exhibition of capacitor surcharge in the Schedule of retail tariffs

288. One of the objectors has requested that the conditions applicable for installation of capacitors and the levy of surcharge for failure to do so should also be published in the Schedule of tariff rates.

289. The Commission appreciates the point raised and is accordingly exhibiting the surcharge leviable for failure to install the capacitors in Part 'D' of Annexure 'D' to this Tariff Order. The conditions applicable are already being exhibited.

Difficulties in payment of meter testing fees

290. One of the objectors has pointed out a difficulty about payment of meter testing fees by means of demand drafts (DD). He has stated that to obtain a DD for Rs.50, a consumer has to incur expenditure of another Rs.35 towards DD charges. He has requested that the bill collectors may be authorized to collect the meter testing charges and issue a receipt therefor.

291. The Commission appreciates the difficulty pointed out by the objector and directs that,

> ***The Licensees shall make necessary arrangements to receive payments for meter testing fees at the bill collection centers of the Licensees or make suitable other arrangements by 31st July 2005, under report to the Commission.***

Concessional tariff for petty shopkeepers and small business units

292. Some of the objectors have represented that petty shopkeepers and small business units using up to 75 units a month may be extended a concessional tariff of 395 paise / unit.

293. The lowest slab of 395 paise / unit under LT Category-II : Non-domestic / Commercial is available to all shopkeepers and business units up to 50 units per month. The Commission does not find any justification for extending this lower tariff to the units using power beyond 50 units per month.

FSA on graded scale

294. One of the objectors has shown his disagreement with the decision of the Commission communicated in paragraph 472 of the Tariff Order 2004-05 declining to levy FSA on a graded scale i.e., the consumers paying higher tariff should be levied the surcharge at a higher rate and those paying lower tariff to be levied the charge at a lower rate for the stated reasoning that such a step would mean the subsidizing categories being asked to provide still higher cross-subsidy which would be against the letter and spirit of the Electricity Act, 2003.

295. The Commission has examined the plea and finds no reasons to modify its earlier decision.

Lower tariff for domestic consumers in rural areas

296. It has been pleaded that low tariff should be allowed in rural areas for domestic consumers using up to 100 units per month.

297. The domestic category is a subsidized category, all the more so in case of the lower slabs. The consumption pattern in rural areas shows that 70 to 75% of the domestic consumers are using energy only up to 50 units a month. The Commission therefore does not find any justification for providing further subsidized tariff for those consuming 51 to 100 units a month especially when it would involve further subsidy from the Government. Otherwise too, since the tariff structure is telescopic, the consumers using power above 50 units have to pay higher tariff only for the units used in excess of 50 units per month.

Reduction in fixed charges for LT industries

298. Some objectors have pleaded that the fixed charges for LT Category III (A) – Industrial may be reduced from Rs.37 / HP / month to Rs.15 / HP / month.

299. The Commission does not find any justification for reducing the charges, as requested.

Liquidated damages from short gestation projects

300. Some of the objectors have represented (para 31) that APTRANSCO has not collected liquidated damages (LD) from the IPPs with which it entered into PPAs, though the projects could not commence operations within the stipulated periods of 13 to 26 months. No response has been received from APTRANSCO on the point raised.

301. The Commission has already given it's decision on the issue after the public hearing in OP No.02 to 05 of 2002 in orders dated:12.04.2003.

Categorization of hotels and restaurants, film industry units and BSNL as industries

302. It has been represented that hotels and restaurants should be categorized as industries being a part of tourism industry and lower tariffs fixed as has been done in Tamil Nadu and Kerala and may be classified under LT Cat III – Industrial. It has also been stated that they are covered under various labour welfare measures like ESI, EPF, etc. normally applicable to industries.

303. On behalf of film industry it has been represented that all the sectors of film industry are recognized as industry for the purpose of incentives and other concessions provided by the State Government for other industries. It has also been represented that Tamil Nadu has brought cinema under a special category from March 2003. It has accordingly been requested that the film industry may be recategrosied from the LT Cat II – Non-Domestic / Commercial to LT Cat III – Industrial and HT Cat I - Industrial.

304. The Bharat Sanchar Nigam Limited (BSNL) has represented that as per a judgement delivered in November 2000 by the Hon'ble Supreme Court, the Telecommunication Department of the Union of India is industry under the Industry Disputes Act, 1947. The Finance Act 2002-03 had also accorded the status of 'industrial undertaking' to any undertaking engaged in the business of providing telecommunication services. It has accordingly been pleaded that HT & LT connections given to BSNL and presently categorized as HT II – Non-Industrial and Category II Non-domestic / Commercial be recategorised as HT Category – I (Industrial) and Category III (A) – Industrial, respectively.

305. The electricity consumer classification and categorization for the purpose of electricity charges are made on the basis of the purpose of use of the electricity, and are not related to the classification made by different departments of State Government or Central Government for some other purpose. Thus the classification followed either in State Government, or in other States is not a guiding principle for fixation of tariff for any particular class of consumers. The Commission, however, recognizes the cardinal principle that any reasonable classification should have a rationale that has nexus to the objective sought to be achieved by such classification. From this point of view, the Commission believes that activities of all the three classes of consumers have to be treated only as a commercial activities and classified as such.

Sugar cane crushing

306. Some of the objectors have protested for classifying the sugar cane crushing under industrial category and has asserted that sugar cane crushing is not an industrial activity. He pleaded for classifying this under agricultural category.

307. The Commission is unable to agree with the contention of the objector that the sugar cane crushing is not an industrial activity. The Commission has no doubt that it is a part of the process of manufacture of Jaggery for sale in the market. This activity therefore, very much deserves to be classified under industrial category. However, the consumer are requested to pay only 50 paise per unit for this activity while the Government is paying the balance Rs.3.25 per unit and also the fixed charges of Rs. 37/HP/month, as subsidy. Thus, these consumers are already highly subsidised.

Horticulture

308. Some objectors have represented that agricultural farms should not be segregated like Horticulture, Sericulture, etc. and should be treated as Agriculture only. The plea appears to have been made with reference to the earlier classification of Horticulture as a separate sub-category of Agriculture, with metered tariff being compulsory.

309. The Commission notes that in the modified policy of agricultural power supply of GoAP, there is no mention of Horticulture. From this, the Commission considers Horticulture as having been merged with the corresponding sub-categories under Agriculture, as proposed by the Licensees. Accordingly, no separate classification is assigned to Horticulture in this Tariff Order.

Reconnection charges

310. It has been represented that the licensees are collecting reconnection charges of Rs.50 even when the payment is delayed by a single day i.e. even when no disconnection actually takes place. Another submission made is that these charges be reduced to Rs.5.

311. While the request for reduction in reconnection charges is not acceded to, being devoid of merit, the Commission is unable to endorse, if correct, the practice of the DISCOMs in collecting the reconnection charges without actually effecting disconnection and directs that,

> ***The Licensee shall not collect any reconnection charges unless the connection has actually been disconnected.***

Subsidized tariff for fruit processing industries

312. It has been pleaded before the Commission that as per G.O.Ms.No.333 dated: 14.11.2003, issued by Industries & Commerce Department, GoAP, the fruit processing industries should pay only Rs.1.75 per unit but this concessional tariff has not yet been extended to them.

313. The Commission clarifies that on receipt of a petition to this effect from the Industries & Commerce Department in October 2004, the Commission had examined the issue and suggested the following two options to the Government on 20.11.2004:

(i). The Government may disburse the subsidy directly to the beneficiaries on production by them of receipts for the payment of the energy bills,

OR

(ii). The Government may disburse the subsidy through the DISCOMs by providing subsidy to them, in advance, as required under Section 65 of the Electricity Act, 2003, in quarterly instalments.

314. The Commission also pointed out that in case the procedure as at (ii) above is adopted, the Commission would require data like the number of consumers eligible for the benefit, district-wise, along with their contracted demand / connected load, the average monthly consumption, etc. to enable it to determine the quantum of subsidy required to be paid to the DISCOMs. Government response is awaited. The Commission assures the objectors that it will take all necessary actions required of it, immediately on receipt of a response from the Government.

Tariff for HMWS & SB

315. A fervent plea was made by the Managing Director of Hyderabad Metropolitan Water Supply & Sewerage Board (HMWS & SB) for a special tariff of 120 paise / unit i.e. at par with the tariff for Government Lift Irrigation schemes with a further 50% relief thereon. It has been represented that power charges form the major component of HMWS & SB's operating cost for supply of drinking water to the twin cities and the surrounding areas, particularly after commissioning of the Krishna drinking water supply project'.

316. While appreciating the efforts being made by HMWS & SB, for augmenting the drinking water supply for the twin cities and the surrounding areas, the Commission does not find it possible to accede to the request as there are many other local bodies in the State which may even be worse-off than HMWS & SB in the matter of supply of drinking water to their population. Further, considering the resources available with the licensees, any concession can be granted only if GoAP provides them with additional subsidy for the purpose. As such, the better course of action would be for HMWS & SB to directly approach the Government for providing subsidy to it for its water supply projects.

Availability based Tariff (ABT), UI charges and trading of backed-down power of APGENCO

317.(a).Some of the objectors have represented that the generators should not be allowed any share in the UI charges which the APTRANSCO is able to earn with efficient management of grid by SLDC. It is also contended that the UI charges earned should be passed on to consumers through DISCOMS.
(b). The public at large have been supportive of the APGENCO and express their distress as and when APGENCO's stations do not get dispatched fully. They have represented that if APTRANSCO cannot dispatch the full generation of APGENCO, the latter may be allowed to trade its surplus power itself.

318. As regards (a) above, the Commission is in agreement with the suggestion made and this is already in practice. However, if still higher UI charges can be earned by utilizing the capacity not scheduled by APTRANSCO / DISCOMs at the risk of the generators as is being permitted by CERC in respect of Central Generating Stations, the Commission does not consider it justified to deny the consumers of the benefit of the additional UI charges earned, while a fraction of these earnings is shared with the generators for the risk taken by them. **The APTRANSCO is directed to submit a discussion paper on the methodology of putting this in practice by 30th June 2005.**

319. As to (b) above, APTRANSCO is correct that any trading of APGENCO's power can be done only by APTRANSCO since it meets the full fixed cost of the APGENCO's generating stations. However, the proposed course of action in para 318 above should largely take care of the concerns expressed.

Merit Order Dispatch

320. Many of the objectors have raised the issue that the Merit Order should be based on total costs i.e. fixed cost plus variable cost, and not on variable cost alone, as the former would ensure that old stations of APGENCO, for which the capital costs are already depreciated get dispatched. It is their contention that merit order based on total costs will i) reduce the power purchase costs and ii) ensure full dispatch of all APGENCO plants.

321. In the Tariff Order for FY2004-05, this issue was addressed in para 360 and the Commission had then observed that by shifting the merit order to total costs, the power purchase costs could increase by another Rs.60 crs at the minimum which will have to be passed on to the consumers. The suggestion to shift to total costs may therefore neither enable any reduction in power purchase costs nor result in any benefit to APGENCO as fixed costs of all its stations in any case get fully paid. The present methodology for Merit Order Dispatch based on the variable cost, which has been in vogue in respect of the generating stations for which APTRANSCO has entered into PPAs based on two-part tariff, is thus the least-cost methodology available.

322. The Commission is however sensitive to the aspect that all APGENCO plants should be dispatched. To explore the possibility of factoring in the benefit of lower transmission losses of generating stations located at load centers, therefore, the Commission has vide paragraph 366 of the Tariff Order for 2004-05 directed the Licensees to examine the extent of such benefits likely to accrue, by identifying the linkages between generating stations and the load centers. They have conducted some studies but have met with some reservations on the part of APGENCO and NTPC. The Commission will examine the issue in detail on receipt of their final response.

323. Another suggestion made in this regard during the public hearing was for negotiations between the buyer (APTRANSCO) and seller (APGENCO) to effect reduction in the fixed and/or variable costs. The suggestion is well taken and APTRANSCO and APGENCO may take note and act accordingly. Separately, the Commission has advised APGENCO to explore the possibilities for modification of coal linkage for its RTPP, Stage I, to achieve some reduction in the coal cost of the plant which forms a major portion of its variable cost.

Targets for internal efficiency gains

324. Some of the objectors have expressed reservations about the targets for 'efficiency gains' being fixed by the Commission for the licensees. They have termed these targets as arbitrary and have desired that the basis for fixing targets should also be mentioned. The licensees (DISCOMs) have also requested that no efficiency gains / targets should be fixed for FY 2005-06.

325. Commission would like to emphasise that considerable thought goes into fixation of efficiency gains targets for the licensees. That the targets fixed are not arbitrary or excessive is borne out from the assertion of the Licensees during the hearings for FY 2005-06 that the aggregate target of Rs.300 crs. for FY 2004-05 set out for them was not only achieved but was exceeded.

326. The Commission is of firm belief that there is still scope for achieving further efficiencies and there is no reason why the licensees should not be exhorted to perform better and better and pass on the benefits of the efficiencies achieved to consumers. Accordingly, during the ensuing year, i.e. 2005-06 too, the Commission has fixed an aggregate target of Rs.125 crs. for the four DISCOMs towards efficiency gains. As regards the areas where the efficiencies can be achieved, the Commission can only indicate but not provide an exhaustive list of the areas where the efficiencies can be achieved. Some of such areas are: exceeding the targets for reduction of losses, prompt replacement of defective meters especially of high value consumers, increase in metered sales, identification of high loss areas, vigilance and prompt action against theft of electricity, prompt collection of dues thereby reducing interest costs, timely execution of projects to avoid cost overruns, etc.

Multi-buyer Model – Allocation of PPAs

327. Some of the objectors have stated that the Multi-buyer model (MBM) proposed in the Electricity Act, 2003, is not a good idea. They have contended that the allocation of PPAs to the DISCOMs will not achieve the objective of MBM in its true spirit. They suggested that the PPAs may be allocated to APGENCO. Another objector has stated that the PPAs may be allocated either to the GENCO or to a State level trading entity. Yet another objector has stated that the MBM model is in the offing and wanted to know whether the Commission will conduct public hearings again in June 2005.

328. One of the objectors while responding to the Multi-buyer scheme envisaged in the Act had submitted a separate note for the information of the Commission explaining the implication of the MBM.

329. This issue is within the purview of the State Government which is presently examining the matter. These suggestions will be forwarded to the State Government for their consideration. As this matter is under the purview of State Government, the Commission is not required to conduct public hearings on the issue.

330. The Commission has forwarded objector's note to the Government for their consideration.

PLF of non-conventional energy (NCE) projects

331. APTRANSCO in its response (paragraph 35) to the concern expressed by some objectors about some of the NCE projects delivering energy for sale to APTRANSCO over and above their installed capacity and thereby claiming higher cost recovery, refers to the orders issued by this Commission on 15.11.2003 and also that further orders on the subject have been sought from the Commission.

332. The Commission likes to clarify that the Hon'ble High Court has since struck down the two communications of the Commission dated:18.08.2003 and 15.11.2003 according approval to a proposal of APTRANSCO for incorporation of an amendment in the PPAs to the effect that whenever generation exceeds the installed capacity, the energy delivered by the project above 100% PLF during such periods will not be accounted for the purpose of payment. The High Court also has allowed APTRANSCO the liberty to modify the terms of the existing PPAs, if it so intended, through mutual consent or by initiating proceedings before appropriate Court of Law or this Commission. The APTRANSCO has not filed so far any petition before this Commission in pursuance to the aforementioned orders of the Hon'ble High Court.

Use of unauthorized fuels by NCE projects

333. Many objectors have complained that the biomass power generation plants are using firewood cut from forests and other prohibited species of wood on a large scale. They have pleaded that this should not be allowed and the appropriate authority should monitor and stop the use of unauthorized fuels in generation of power.

334. The Commission will be addressing the Forest Department in this regard, keeping NEDCAP, the nodal agency for non-conventional energy (NCE) projects in the picture, for taking appropriate action under intimation to the Commission.

Transmission losses:

335. Some of the objectors suggested that transmission losses for FY 2005-06 be fixed at 3.5% while APTRANSCO has projected these at 5%.

336. This issue has been examined by the Commission. The load flow studies based on computer techniques indicate a loss figure varying from 3.5% to 4% excluding transformation losses. The transformation losses account for around 1%, putting the total losses at 5%.

337. The transmission system of PGCIL in the Southern region, primarily comprising 400 kV system, itself is suffering a transmission loss of 3.5%. It is therefore reasonable to expect that the transmission system of APTRANSCO, comprising predominantly of 220 kV and 132 kV networks besides a small segment of 400 kV system, will naturally suffer higher transmission losses. The Commission therefore is inclined to accept the transmission losses at 5% as projected by APTRANSCO to estimate the power purchase requirement for the ensuing year 2005-06.

> However **considering the fact that the transmission losses in APTRANSCO are close to 5% during the period from April 2004 to February 2005 and considerable investment has been permitted for system improvements during the years FY 2005 and FY 2006, the Commission directs APTRANSCO to endeavour to achieve a loss level of not exceeding 4.5%.**

Fuel Surcharge on Annual basis

338. One Objector has stated that Fuel Surcharge may be collected only once in a year.

339. The Commission feels that annual collection of FSA will cast a heavy one-time burden on the consumers. However, the Commission has decided to restore the earlier procedure of quarterly, instead of monthly, collection of FSA.

Second Licensee in the same area

340. There has been a view from some objectors that the provisions in the Act enabling the Commission to issue second licence in the same area is a retrograde step.

341. This is a provision in the 'E Act2003'. The Commission cannot comment on it.

Procedure for measurement of LT line losses

342. Some of the objectors have pointed out that the guidelines formulated by the Commission on distribution losses are defective. He has suggested that meters be installed at all pump-sets under the Distribution transformers where metering is provided on LV side, so as to have the correct LT Line losses

343. Though provision of meters to individual pump-sets will give a more precise data on the LT line losses, the Commission considers it not economical as it involves huge

expenditure, considering that there are about 4 lakh pumpsets under about 25,000 metered DTRs. The DISCOMs have engaged the services of CPRI for conducting a study on line losses at one DISCOM for adoption by other DISCOMs with appropriate correction factor, may be as required considering their system characteristics. Further, as and where HVDS is extended, the incidence of LT line loss is almost negligible.

Exclusion of inter-State transmission costs

344. Some of the objectors have stated that the transmission tariff cannot include the expenses on the inter-State transmission network, as certain consumers (like wheeling consumers) do not use the inter-state network for purchase of energy from generating companies within the state. He has stated that the results of pilot study made by CPDCL on distribution losses has not been made available to the public

345. The Commission will examine the matter relating to exclusion of inter-State transmission cost for wheeling consumers within the State while finalising the terms and conditions of open access u/s 42 of the Electricity Act, 2003. Regarding the results of the pilot study, the Commission directs CPDCL to make available the results to the public by putting it on its website.

Malpractice cases

346. Some of the objectors have brought to the notice of the Commission that while booking malpractice cases for using power for other than sanctioned purposes, the DISCOM officials are not recording the statement of the consumer and the assessment is being made for 12 months with penal tariff (3 times the normal tariff) without giving opportunity to the consumer to present his side of case in his defence.

347. He also stated that as per Section 126 of the Act, the assessment is to be made only for three months instead of one year.

348. The Commission in the Tariff Order of 2004-05 vide sub-clause (i) under clause –V *miscellaneous charges* in part *'C'* of Annexure – D prescribed the ' Special rates chargeable for pilferage and malpractice cases' at 3 times the Tariff applicable for the purpose for which power is used till 09-06-2004 and thereafter as provided in the Electricity Act, 2003. Hence Licensee is authorised to collect the charges as per Section 126 of the Electricity Act, 2003 only, effective from 10-06-2004. As provided in Section 127 of the Electricity Act, 2003, any person aggrieved by the final order made u/s 126 can prefer an appeal to an appellate authority prescribed by the appropriate Government. In view of the foregoing, the

Commission considers that the issues raised by the objectors are adequately addressed. The Licensees are required to follow these provisions from 10-6-04 onwards.

Incentive for higher power factor

349. Some of the objectors have requested for incentive to be allowed for higher power factor.

350. The Commission is of the view that there is already substantial reduction in the HT tariff by way of reduction in the energy charge and load factor incentive.

LVS project

351. Many objectors have raised the issue of payments of fixed charges to the LVS project without drawing even a single unit of electricity.

352. The Commission has sought a report from TRANSCO on the subject.

Electrification of DalitWadas and Weaker Section colonies

353. Some of the objectors have bought to the notice of the Commission that there are many villages where Dalits have no access to electricity supply. He also wanted the details of the Dalit wadas and SC/ST colonies and also the details of households to be electrified.

354. The Commission notes from the written notes furnished by the CMD, SPDCL that there are 760 Dalitwadas and 404 weaker section colonies without the electricity facility. The Commission understands that the DISCOMs have drawn up a plan for electrificaction of the balance Dalit wadas and weaker section colonies in a phased programme.

Consumer agreement form in Telugu

355. Some of the objectors have pleaded to direct the Licensees to collect the agreement form in Telugu from consumers so, that the consumers can understand the provisions of such agreement.

356. We are inclined to agree with this suggestion and direct,

> ***The DISCOMs to initiate appropriate action for execution of agreements by Licensees in Telugu also. The consumer may be given the option to execute the agreement in Telugu or in English.***

Open Access:

357. One of the objectors while making a reference to an order of the Kerala State Electricity Regulatory Commission (KSERC) sought for fixation of surcharge / cross-subsidy in line with KSERC and the wheeling charges to the extent of actual transmission losses.

358. He also pleaded for advancing the introduction of Open Access for loads of 5 MW and above from the presently-scheduled September 2005 to April 2005.

359. Some other objectors on the other hand have pleaded for Open Access being made as unattractive as possible to prevent migration of subsidising categories. They have also submitted that reduction of cross-subsidy be considered only when DISCOMs have a surplus over and above the reasonable return.

360. The basis on which the KSERC has fixed the parameters is not known. The transmission cost / unit and cross-subsidies are specific to every State depending on the development of T & D network, consumer profile, etc. The Electricity Act, 2003, mandates the State Commission to fix surcharge in addition to the wheeling charges, for utilisation to meet the requirements of current level of cross-subsidy which is required to be progressively reduced and eliminated.

361. APERC notified a draft Regulation on "Terms and Conditions of Open Access" and objections / comments received from the stakeholders / public are being examined by the Commission. The comments on the levy of cross-subsidy are also under examination. APERC will be issuing the Regulation on "Terms and Conditions of Open Access" shortly following the required procedure.

362. The phasing of the introduction of Open Access is to be aligned with the development of the necessary infrastructure like special metering required, putting in place the rules for balancing and settlement code and necessary software etc., which are being addressed by the licensees. It is possible to introduce the Open Access when the above requirements are met. Advancing the schedule therefore, for introduction of Open Access at this stage is not a feasible proposition.

Incentive Scheme for HT I Industrial Consumers

363. At present, HT-I Industrial consumers are eligible for incentive on energy consumption in excess of the base energy consumption. The base is the energy consumption equivalent to

30 percent load factor or monthly average for FY2000-01, whichever is higher. The scheme ends on 31st March 2005. The DISCOMs have stated that the prescription of base year consumption prevents the consumers with high load factors in the base year from availing the incentive scheme. Accordingly, the DISCOMs have proposed a modified incentive scheme in which the eligibility for incentive, on a non-telescopic basis as at present, is based only the levels of load factor. Further, the DISCOMs have proposed a reduction of incentive on energy consumption by 5 percentage points, as follows:

Table No.17

Load Factor band	Existing incentive rates	Proposed incentive rates
Over 30% and up to 50%	10%	5%
Over 50% - 60%	15%	10%
Over 60% - 70%	20%	15%
Over 70%	25%	20%

364. The Commission while designing the present incentive scheme had given due importance to protecting the revenues of Licensees since this category of consumers provide cross-subsidy. The DISCOMs too confirm that the scheme, introduced to attract industries that had moved away from the grid to captive and other sources of power, has yielded good results. In view of the impending introduction of open access, the DISCOMs deem it all the more important to continue with the scheme after removing the base year stipulation.

365. In their filings, they have stated that even with the reduction of incentive rates, the proposal is almost revenue neutral for the State taken as a whole. The modified scheme, coupled with the reduction in energy charges, is further expected to boost the sales volume for this category and consequently, increase the revenues. The Commission has approved the HT Incentive scheme as proposed by DISCOMs for FY 2005-06.

366. With this approval, and the reduction in energy charges, the Commission expects the Licensees to attract more subsidizing consumers to their fold. It also trusts that these approvals will be complemented by better service and supply of quality power by the Licensees.

367. The issue of continuity of the scheme would be dealt with in the next Tariff Order(s) i.e. for FY 2006-07 onwards. For this, Commission directs that,

> ***The DISCOMs shall make a detailed review of working of the incentive scheme for the first six months of FY2005-06 and present the results to the Commission by end-November 2005. Upon receipt of the results of this review, the Commission will examine the need for any modifications to the scheme before approving its continuation for a longer period.***

The Second Generation Reforms: Initiatives for FY2005-06

368. The Electricity Act, 2003, has ushered in the second generation of reforms in Andhra Pradesh whereas the AP Reform Act, 1998, guided the earlier reform initiatives. The major difference between the two generations of reforms is the legal mandate to provide for choice in supply of electricity to consumers by way of open access. The Commission has already issued a draft regulation for according open access to consumers on payment of transmission and wheeling charges, and subject to payment of cross-subsidy surcharge to be fixed for this purpose. It is expected that new players including pure power traders would emerge for supply of electricity to open access consumers in FY05-06.

369. The Electricity Act, 2003, differentiates between electricity transmission and distribution functions from that of supply. DISCOMs are likely to take over this function currently performed by APTRANSCO as a single buyer of power, leading to a regime of multi-buyers with the DISCOMs sourcing their additional power, requirements, over and above the existing generation capacities, from the market through competitive bidding. Purchase of power on competitive bidding basis and the emergence of spot markets are developments that are anticipated in the coming years. It is likely that with competition among generators in the supply of electricity to DISCOMs, better discovery of prices may emerge.

370. APTRANSCO on the other hand, is likely to cease to be a supplier of bulk power and concentrate only on network business. In terms of tariff implications, the present Order ensures that APTRANSCO continues to be entitled to recover its revenue requirement for the network business through the transmission tariff set by the Commission.

371. The Electricity Act, 2003, provides for multiple players in transmission and distribution of electricity and this is likely to exert pressure on the incumbent utilities to prepare themselves to meet the competition. APTRANSCO and DISCOMs are required to file the long-term tariff filings for tariff determination based on MYT principles as envisaged in the Act. These filings and determination of principles that govern the tariff making on long-term basis should enable the licensees to draw action plans for improving their efficiencies, being assured of the regulatory certainty.

372. A larger role for the stakeholders to influence development of the sector is envisaged in the second-generation reforms. The formation of consumer grievance forums in DISCOMs and the likely formation of the Office of Electricity Ombudsman, should spur the DISCOMs to further improve the efficacy of their interface with the consumers. This institutional framework should lead to further discovery of ways and means for better customer service.

373. The Act enables the regulators to help develop the market for electricity in course of time through defining the rules, both administrative and technical, in accordance with the stated polices. Primarily, emergence of competitive markets in the power sector hinges on the fulfillment, chiefly of basic economic, commercial and technical preconditions. Economic and commercial preconditions define the steps that ultimately will result in the availability of pure price quotations for electricity for different consumers at different voltages, operating as prices in any other product market. Consistent, relevant and acceptable data, such as, losses at different voltage levels, metered sales, etc, are the required information flows for development of market institutions like spot markets, wholesale power markets, trading contracts, to be in place before a regime of competitive prices can emerge. In order to facilitate the required institutional arrangements, technical preconditions of grid support, basic networks with minimal transmission and distribution losses are the minimum conditions which would ensure smooth flows of electricity to consumers at all quoted prices. The present Tariff Order attempts to initiate the foundation- laying process of these preconditions for the second-generation reforms.

374. In the previous Tariff Order, the Commission did discuss some of the expected changes of the second-generation reforms, which included transmission and wheeling charges and surcharges. The Order also discussed the required complementary changes such as introduction of ABT pool at the State level between DISCOMs and generators. The imperatives of Second Generation Reforms are, however, much more wide and demanding.

Costing of power generated from SSLBPH

375. The Commission has issued directions in paragraph 475 to 477 of Tariff Order, 2004-05, for pricing of power generated from SSLBPH. However, APTRANSCO proposed to attribute 40% of power generated from Srisailam complex to SSLBPH and balance 60% to SSRBPH which is not in line with the directions of the Commission. No reasons are furnished for the proposed accounting of the energy generated in Srisailam complex. The Commission vide its letter dated 31-01-2005 required APTRANSCO to furnish the details of generation at SSRBPH and SSLBPH in a prescribed proforma. A response thereto is still awaited. The Commission directs

> ***APTRANSCO to work out the power purchase cost from SSLBPH for the year 2004-05 as per the directions issued in Tariff Order 2004-05 supported by the data captured as per the prescribed proforma by 15th May 2005.***

GoAP support to regulatory processes

376. The Commission would like to place on record, its appreciation of the unstinted support extended by GoAP to the Commission, the regulatory processes and for regular payments of subsidy amounts to the Utilities, as determined by the Commission from time to time.

Status of compliance with Commission's Directives

APTRANSCO

377. The Commission notes that APTRANSCO has generally complied with its Directives. The compliance status is as given in the table below:

Table No.18
Compliance of Directives of FY2004-05 : APTRANSCO

	Directive	Status
1	**Global Energy Account**	The directive is complied with and a consolidated energy audit report up to March 2004 submitted to the Commission
2	**SLDC -** To coordinate ABT activity in Andhra Pradesh	The process has been initiated.
3	**FSA -** To bills on monthly basis only	APTRANSCO has complied with this directive partly. APTRANSCO has raised FSA bills up to October 2004.
4	**Loan details -** To submit details, source-wise, year-wise, asset-wise, etc.	Part compliance as the details required by the Commission on loans for creation of assets have not been fully provided.
5	Energy accounting reconciliation	Partly complied. Financial reconciliation yet to be done.
6	**Capital Expenditure-** a) Exclusion of CWIP; b) Monthly report on physical and financial progress of all schemes included in Tariff Order 2004-05	a) Not Complied. b) Monthly progress reports are being submitted.
7	**Installation of meters**	Partly complied
8	**Transmission losses**	Complied
9	**Merit Order procedure**	Complied

DISCOMS

378. The Commission notes that the track record of DISCOMs with regard to the compliance of Directives leaves much to be desired and even among DISCOMs, the level of compliance varies. The compliance status is as given in the table below:

Table No.19
Compliance of Directives of FY2004-05 : DISCOMS

S.No.	Directive	SPDCL	EPDCL	NPDCL	CPDCL
1	FSA	Complied	Complied	Complied	Complied
2	Loan details	Partly complied	Partly complied	Partly complied	Partly complied
3	Energy accounting reconciliation	Partly complied	Partly complied	Partly complied	Partly complied
4	Capital Expenditure- a) Exclusion of CWIP; b) Monthly report on physical and financial progress of all schemes included in Tariff Order 2004-05	a) Partly complied b) Not complied	a) Partly complied b) Not complied	a) Partly complied b) Not complied	a) Partly complied b) Not complied
5	Capital Expenditure- Absorption of excess fund available on capital account	Complied	Complied	Complied	Complied
6	Distribution Losses- Submission of report on achievable level of losses	Not complied	Not complied	Not complied	Not complied
7	Efficiency gains	Partly complied	Partly complied	Partly complied	Partly complied
8	Sales Database: Agricultural sales	Complied	Complied	Complied	Complied
9	Sales Database: Revenue and Arrears	Complied	Complied	Complied	Complied
10	Metering and billing - To reduce the percentage of assessed sales to total metered sales to 2%.	Partly complied	Partly complied	Partly complied	Partly complied
11	Interest on security deposit	Complied	Complied	Complied	Complied
12	Details to be shown on bills	Complied	Complied	Complied	Complied
13	Defaulters list	Partly complied	Partly complied	Partly complied	Partly complied
14	Load survey	Not complied	Not complied	Not complied	Not complied
15	TOD – Report to be submitted	Complied	Complied	Complied	Complied

379. The compliance of the DISCOMs on some of the directives which impact on operational efficiency are discussed below:

1. Assessed sales

380. The Commission in its Tariff Order for FY 2004-05 had directed the DISCOMS to reduce the ratio of assessed sales to total sales to a maximum of 2 to 3 percent and indicated that the same would be cross-verified with the sales database. The Commission examined the ratio of assessed to total bills issued and units billed to LT metered categories for the period 04/03 to 11/04 from the sales databases filed by the Discom. The details are given in the tables below:

Table No.20
Bills issued : Ratio of assessed to total bills

Category	CPDCL		EPDCL		NPDCL		SPDCL	
Billing months	04/03 to 03/04	04/04 to 11/04	04/03 to 03/04	04/04 to 11/04	04/03 to 03/04	04/04 to 11/04	04/03 to 03/04	04/04 to 11/04
LT - I : Domestic	11.53	5.11	6.68	2.55	25.82	7.70	7.36	4.77
LT - II : Non Domestic	12.69	4.47	8.01	2.77	21.11	4.37	11.31	4.03
LT – III : Industry	30.40	8.99	11.00	8.51	20.56	12.77	19.36	18.14
LT - IV : Cottage Industry	18.96	6.74	13.97	12.73	13.33	17.14	7.82	4.98
LT - VI : Public Lighting	62.66	52.82	60.04	42.64	60.35	51.65	88.77	54.17
LT - VII : General	14.75	8.00	7.79	3.77	30.53	10.95	55.43	50.24
LT - VIII : Temporary	28.88	4.76	75.00	0.00	3.57	0.00	18.36	0.00
Total	12.48	5.62	7.35	3.02	25.63	8.29	9.34	5.65

Table No.21
Units billed: Ratio of assessed to total units

Category	CPDCL		EPDCL		NPDCL		SPDCL	
Billing months	04/03 to 03/04	04/04 to 11/04	04/03 to 03/04	04/04 to 11/04	04/03 to 03/04	04/04 to 11/04	04/03 to 03/04	04/04 to 11/04
LT – I : Domestic	10.78	3.35	4.19	1.97	21.94	6.85	4.93	3.84
LT - II: Non Domestic	23.05	2.98	6.03	3.14	14.80	4.94	4.67	4.99
LT – III : Industry	31.11	6.85	9.91	7.65	19.23	24.26	16.70	15.97
LT - IV: Cottage Industry	20.02	3.37	5.73	3.32	3.13	9.12	2.75	2.32
LT - VI: Public Lighting	66.39	59.39	55.49	37.11	54.85	53.47	57.80	52.09
LT - VII : General	17.57	4.79	6.17	18.48	20.13	9.73	52.93	49.91
LT - VIII: Temporary	71.97	0.66	81.18	0.00	0.00	0.00	5.96	0.00
Total	19.21	7.89	7.96	4.57	22.44	14.16	10.23	9.48

381. The Commission notes that ratio has come down from that achieved last year. The Commission feels that the ratio can be further brought down to fully meet the target set out in the directive.

2. Capital expenditure details

382. The Commission had directed the Licensees to submit monthly reports on physical and financial progress of all the schemes included in Tariff Order, FY 2004-05. As these reports covering all aspects of physical and financial progress of the projects were not submitted regularly, the Commission has issued specific formats for submission of the required information in order to monitor the physical and financial progress of the projects. Such

monitoring is necessary to ensure that consumers pay through tariffs only for investments that are 'used and useful' for the business. The Licensees are therefore directed once again to adhere to this directive scrupulously.

3. Audit of receivables and pending arrears

383. The Commission had directed the DISCOMs to vigorously pursue the review of receivables and collect the outstanding arrears on priority basis and submit monthly progress reports thereof. As pursuance and collection of arrear amounts is a continuous process, the DISCOMs must ensure that no additional sales are effected in respect of the consumers who failed to pay for the electricity consumed. Further, the DISCOMs had appointed independent professional firms of Chartered Accountants for audit of receivables basically to ascertain the quality of receivables and certainty of recovery thereof. The complete reports from these agencies are still awaited. The Commission directs the DISCOMs to expedite the reports so as to ascertain the recovery position of the arrears and clean up their balance sheets instead of continuously showing an absurd balance of outstanding receivables.

384. Most of the directives for DISCOMs are continuous in nature and their regular implementation is necessary. It is through the issue of Directives and monitoring of their implementation that the Commission has been able to ensure operational efficiencies of the Licensees. No doubt, there is always scope for further improvement and efficiency gains, but a stock-taking on the performance of Licensees from a broad macro perspective reveals that it is creditable, as may be discerned from the table below. The table shows the Commission's regulatory initiatives in the Tariff Orders to narrow the gap between revenue and expenditure. The tariff rationalisation in turn, has enabled a reduction in cross-subsidy from 26% in Tariff Order for FY 2000-01 to 18% in Tariff Order for FY 2004-05. This has also enabled a reduction in GoAP subsidy in the same period from 19.44% to 13.50%.

Table No.22
Macro Indicators of Performance

Particulars	2000-01	2001-02	2002-03	2003-04	2004-05
Expenditure	8365.17	8284.80	8243.36	9780.76	9654.45
Efficiency gains	500.00	501.00	300.00	295.00	300.00
Net ARR allowed	7865.17	7783.80	7943.36	9485.76	9354.45
Revenue	6239.39	6222.38	6433.97	7972.26	8051.18
Subsidy	1626.26	1561.42	1509.38	1513.49	1303.27
Cross-subsidy	2177.38	1938.54	1970.32	2109.87	1754.54
Percentage of efficiency gains	5.98%	6.05%	3.64%	3.02%	3.11%
Percentage of revenue	74.59%	75.11%	78.05%	81.51%	83.39%
Percentage of cross-subsidy	26.03%	23.40%	23.90%	21.57%	18.17%
Percentage of revenue minus cross-subsidy	48.56%	51.71%	54.15%	59.94%	65.22%
Percentage of subsidy	19.44%	18.85%	18.31%	15.47%	13.50%

CHAPTER - IX
PARAMETERS FOR ANALYSIS OF THE AGGREGATE REVENUE REQUIREMENTS OF APTRANSCO AND THE FOUR DISCOMS

385. Before analyzing the ARRs of APTRANSCO and the four DISCOMs in the Chapters X to XIV that follow, we consider it appropriate to discuss herein some of the broad financial parameters used for analyzing the ARRs.

PART I - CAPITAL BASE

386. The Capital Base of the Licensees is divided into two parts - the positive part and the negative part, to derive the net capital base on which a return is provided. The positive part consists of the original cost of fixed assets (OCFA) excluding consumer contributions; intangible assets; the original cost of Capital Works-in-Progress (CWIP); compulsory investments, and working capital. On the negative side are depicted, the matching financials of the assets created, like Accumulated depreciation, loans from Government and other approved institutions, consumer deposits by way of security and amounts outstanding in the Tariffs and Dividends Control Reserve and Development Reserve at the close of the year. Treatment of the major items of capital base is as given below:

Positive Side of the Capital Base

1. Original Cost of Fixed Assets (OCFA):

387. The methodology adopted for estimating the OCFA for the projected year is to take the opening balance of the Gross Fixed Assets as on the commencement (1st April) of the year under consideration, from which the Consumer Contributions and Capital Grants / Subventions are deducted and the assets proposed to be capitalized during the year are added. On this basis, taking the value of Gross Fixed Assets as on 01.04.2005 less Consumer Contributions, the OCFA of each licensee for FY2005-06 is estimated and to this amount is added the expected capitalization on Capital expenditure as on 31.03.2006. The OCFA, net of Consumer Contributions and grants so calculated, is taken on the positive side of the Capital base.

2. Capital Works-in-Progress

388. The CWIP reckoned as part of the capital base is the residuary amount that is expected to remain after capitalization of the works that get completed by the year-end. But what has been observed is that the Licensees have tended to project higher capital works for

the current and the ensuing years than on a realistic basis taking note inter-alia of their past performance in execution of capital works. As a result, the Licensees have been projecting higher capital expenditure, which invariably did not materialize, resulting in claw back of interest in the subsequent year(s). The Commission has , therefore, preferred to exclude CWIP from the capital base inter-alia for considerations mentioned in para 462 of the Tariff Order FY 2004-05 that *"by excluding CWIP from the computation of the Capital Base, financial and physical discipline is brought on to bear on the Licensees, encouraging the licensees to put in extra efforts to complete the project on time or even ahead of schedule. Only then, the concept of used and usefulness of the assets would have true meaning and relevance."*

389. Further, in paragraph 671 of the Tariff Order, 2004-05, the Commission had inter-alia directed that from the filings for FY 2005-06, the CWIP along with the corresponding loans and consumer contributions would be excluded for calculating the capital base. This has now been done.

390. With the exclusion of the CWIP from the computations of the Net Capital Base, however, further additions to OCFA i.e. the capitalization of the capital works becomes a still more important element of the Capital base. ***Considering the importance, therefore, of capitalization of works, the Commission lays down the following requirements to be fulfilled before accepting inclusion of the value of a capitalized work in the OCFA:***

a) On completion of a capital work, a physical completion certificate (PCC) to the effect that the work in question has been fully executed, physically, and the assets created are put to use, to be issued by the concerned engineer not below the rank of Superintendent Engineer.

b) The PCC shall be accompanied or followed by a financial completion certificate (FCC) to the effect that the assets created have been duly entered in the Fixed Assets Register by transfer from the CWIP register to OCFA . The FCC shall have to be issued by the concerned finance officer not below the rank of Senior Accounts Officer.

c) The above-mentioned certificates have to be submitted to the Commission within 60 days of completion of work, at the latest.

391. **The Commission may also inspect or arrange to inspect, at random, a few of the capitalized works included in the OCFA to confirm that the assets created are actually being used and are useful for the business.**

392. In the filings made for FY2005-06, APTRANSCO alone among the Licensees, has requested the Commission to allow it to continue with the inclusion of CWIP for one more year while calculating the capital base. The request has been made on the consideration that with the exclusion of CWIP, APTRANSCO would lose a portion of return on equity, and on internal resources, utilized for CWIP till the date of capitalization, which the licensee apprehends, will somewhat reduce its ARR and also the cash flows. As an alternative, APTRANSCO has suggested that the Commission may consider compensation towards arrears of return, along with interest, as equivalent working capital as and when the asset is capitalized.

393. The Commission finds no worthwhile justification to extend this indulgence and after due analysis of investment patterns feels that exclusion of CWIP would strengthen the financial discipline of the Licensees. At the same time, the Commission would expect the Licensees to project capitalization of capital works on a more realistic basis in the ensuing years along with justification that the assets proposed to be capitalized would be used and useful to the business. Further, for claiming return on equity and on internal surplus, if any, used during construction period, the Licensee has to satisfy the Commission that the funds utilized for the capital works are from equity and / or internal accruals while claiming capitalization of the capital works.

394. In this Tariff Order, the Commission has estimated the amounts that could be taken towards capitalization out of the CWIP projected for FY2004-05 based on the actual expenditure incurred up to December 04, and what would be feasible in the remaining three months and during April 2005-March 2006for FY 2005-06, on the basis of clarifications provided by the Licensees. This treatment of CWIP has been uniformly followed for all Licensees.

3. Compulsory Investments:

395. Compulsory investments appear as a separate item in the positive elements of the capital base. These investments arise out of the contributions towards Contingencies Reserve and are to be invested in securities authorized under the Indian Trusts Act, 1882, within six months of the close of the accounting year in which the appropriation is made. Details of investments in approved securities have to be submitted. As an item on the positive side of the Capital Base, these compulsory investments earn returns. However, the Licensee can utilize the accumulations in the Contingencies Reserve with prior approval of the Commission In accordance with the directive issued by Commission in this regard in Tariff Order 2002-03 and as incorporated as item no. 12 in Annexure ‘A’ to this Order.

4. Working capital requirements:

396. The requirement of working capital as incorporated in the Guidelines of the Commission take into account 1/12th of the sum of the stores materials and supplies at the end of each month of the year and 1/12th of the sum of cash and bank balance (whether credit or debit) and call and short term deposits at the end of each month of the year. The Licensees however, have always been requesting for more working capital largely on the plea that there are significant mismatches in their schedule of receivables and payables resulting in cash flow problems. While the Commission has been sensitive to the working capital needs of the Licensees, it found that the need was not substantiated from the lead-lag study of receivables and payables undertaken by the Licensees. The plea of the Licensee for more cash infusion into the business was simply a transitory phenomenon arising out of their past operational deficits. As a temporary reprieve, therefore, the Commission in the Tariff Order for FY2003-04 agreed to relax the permissible limits for estimating the working capital requirements and to allow two months' level of eligible items of expenses instead of one month's as hithertofore with a trajectory of gradual reduction reverting back to the original one month's level in FY2006-07.

397. For FY 2005-06, one-and-a-half months' total expenses less power purchase costs towards average cash and bank balance and two months' R&M expenses towards average costs of stores are taken as working capital requirements for purpose of Capital Base estimation.

Negative Side of the Capital Base

1. Accumulated Depreciation:

398. Accumulated Depreciation on the assets capitalized is taken on the negative side of the capital base. The manner of calculation is to take the accumulated depreciation as on the commencement (1st April) of a year to which is added the depreciation on assets as on 1st April of the ensuing year.

399. In this Tariff Order, the accumulated depreciation as on 01.04.2005 is adjusted to the extent of capitalization done during the preceding year (FY 2003-04) and to this is added the depreciation to be provided during FY 2004-05 for arriving at the accumulated depreciation for FY 2005-06. The amount so arrived at is shown in the Capital base on the negative side.

2. Loans from Government and approved institutions:

400. All loans required to the extent of assets capitalized are the next item for deduction taken on the negative side of the capital base. The loan requirements of the assets

capitalized is estimated by taking into account the opening balance of the loans as on 01.04.2005 plus additional loan requirement to the extent of capitalized value of project expenditure during the year minus the loan repayments during the year. The amount so arrived is taken to the Capital base- Negative side.

3. Consumer Security Deposits

401. Consumers contribute to the extent of the tariff equivalent of 2/3 months' consumption of energy as consumption (security) deposit. These funds are available for the business and interest on these deposits is allowed to the consumers. To adjust for this contribution, the opening balance of consumer security deposits as on 01.04.2004 is adjusted with the additional security deposits estimated to be collected and also those to be refunded during FY 2004-05 and additions (net of refunds) expected in FY 2005-06 for arriving at the closing balance and the same is taken to the Capital base on the Negative side.

Net capital base

402. The net capital base is the sum of the positive items minus the negative items, and the reasonable return is provided on the net capital base, so arrived at.

PART - II
Expenditure items of ARR

1. Purchase of energy

403. Cost of power is the most important item of expenditure for the Licensees. The Commission examines in detail the projected availability of power from different sources and the requirement of sales. In the ARR, power purchases that are reckoned are only from those sources which have long-term contracts with APTRANSCO. The rates of power purchases from individual generators are on the basis of their respective agreements. As of now, the entire power is purchased by APTRANSCO on behalf of the DISCOMs. The detailed analysis of power purchase cost per se is given in Chapter X on APTRANSCO. As regards energy costs for DISCOMs, the methodology adopted is to take the total energy cost, commonly known as Bulk Supply Tariff (BST), comprising

- i) energy costs;
- ii) transmission costs;
- iii) SLDC charges.

2. Wages, salaries and other allowances

404. Wages, salaries and other allowances is estimated after due consideration of the actual expenditure incurred during FY 2003-04, the latest year for which the full-year data is available and the impact of additions to/retirement, etc. of employees and the increases in

the basic pay and dearness allowance, etc. for the current and the ensuing years. As per the Licensees' accounting policies of capitalization of employee cost, the expenditure to be capitalized is deducted from the gross amount so arrived at and the resultant figure is taken to the Aggregate Revenue Requirement (ARR).

3. Administration and general expenses, Repairs and maintenance, Rent, rates & taxes, Legal charges, Audit and other fees

405. The expenditure figures as indicated in Form 1.3 of the filings by the Licensees are reviewed with reference to the past trends and the size of the business to arrive at a reasonable amount to be allowed. The expenditure to be capitalized is deducted from the gross amount (wherever applicable) and the net amount so arrived at is taken to the ARR.

4. Interest on loans (including lease rentals and other finance charges):

406. The interest on loans corresponds to the loans taken in the Capital base. The interest rates to be provided by the Commission are computed on the basis of the rates on loans filed by the Licensees for the current year and the ensuing year. Lease rentals and other finance charges are also included under this heading. Other finance charges include discounts to consumers, such as, incentive, etc. The interest so worked out is taken to the ARR.

5. Interest on consumer security deposits

407. Interest at the prevailing bank rate of 6% per annum on the average security deposits is provided for all the distribution companies and taken to the ARR.

6. Depreciation

408. Depreciation on the opening gross fixed assets is provided at the rates prescribed by the Ministry of Power from time to time. The depreciation for FY 2005-06 is provided on the assets as on 01.04.2005 and taken to the ARR.

7. Contribution to employee funds

409. Pending the receipt of Actuarial Valuation Report, the provision towards contribution to employee funds is made at 13% of basic pay plus D.A. for all Licensees and taken to the ARR. Each Licensee is expected to make the provision as per the Actuarial Valuation Report. The Licensees have to expedite the Actuarial Valuation Reports from the consultants appointed in this regard.

8. Special Appropriations- Contribution to Contingencies Reserve:

410. The amount is computed at 0.25% of the OCFA provided in the Capital base and taken to the ARR. In regard to its investment and utilization, the licensees are required to follow the directive issued in Tariff Order for FY2002-03 and as incorporated as item no. 12 in Annexure 'A' to this Order.

9. Reasonable Return

411. The Licensees, have not claimed in the filings the Reasonable Return that they are eligible for as per the guidelines issued by the Commission. They have submitted that since they are under public ownership and the State Government meets the subsidy and financial needs of the sector emanating out of the financial gap, it would be appropriate to exclude the reasonable return from the ARR computations for the present. The Commission, however, considers that from the point of view of enabling these entities to operate commercially, it would be in the interest of both the Licensee and the consumers to allow reasonable return they are eligible for. The Commission, therefore, decides to allow the reasonable return calculated @ 16% on Net Capital Base and 0.50% on the approved loans taken in the Capital base of the Licensees.

10. Non-tariff income

412. Non-tariff income, as suggested by the terminology itself, is income earned by the Licensees other than as revenue from sale of electricity to consumers within their areas of operation as defined in their Licences and termed as tariff income. In the case of APTRANSCO, non-tariff income is largely from inter-State sales, income from the securitisation scheme of CGS, rebates on power purchases and income from other investments. Non-tariff income for DISCOMs includes meter rentals, customer charges, delayed payment surcharges (net of attendant costs, if any), and income from other investments. The income so earned is adjusted against the total revenue requirement, thereby adjusting the revenue requirement to be collected by way of tariffs from consumers. The Licensees file details of non-tariff income in Form 1.4. Review of this category is made more in relation to the size of the business and its operations than through detailed examination of all records. The non-tariff income is deducted from the ARR to arrive at the Net Aggregate Revenue Requirement

PART - III
REGULATORY TREATMENT AND TRUE-UP MECHANISM

413. The treatment of capital base and items of expenditure explained above is on projections made on the basis of actual data of the previous year, that for the first six months of the current year and expenditure expected to be incurred in the next six months of the current year. It is but natural that some of the items of expenditure will undergo a change. This poses the issue whether all changes that occur in the items considered for estimation of revenue requirement will be permitted to be revised and the resultant increases or decreases in cost adjusted in the ARR/ERC filings of the subsequent year(s). In the Tariff Order for FY2004-05, the Commission had outlined the principles for true-up in a two-stage approach. As detailed in the Order, the adjustment is done, depending upon the controllability or otherwise of the expenditure . It may be appropriate to briefly sum up here, the principles of true-up and the related regulatory treatment.

414. At the outset, there is need to reiterate that Regulatory accounts are different from the Profit and Loss (P&L) Account and the Balance Sheet. The Commission determines the expected revenue from charges to be recovered from consumers by way of tariffs, on the basis of expenditure prudently incurred only for regulated business of APTRANSCO and the DISCOMs. The regulatory accounts accordingly relate to only the regulated business, in contrast to the P&L accounts which cover the total business of a Licensee and are not directly regulated in the sense that these also include items relating to income as well as expenditure, not approved / regulated by the Commission. With this clear-cut distinction, the Commission proceeds to define controllable and uncontrollable items, as only uncontrollable items may be permitted to be considered in case of any change from the projected numbers as qualifying for true-up. In the Tariff Order for FY04, the uncontrollable factors had been broadly defined to cover the following:-

- Vagaries of nature;
- Changes in laws of the land and judicial pronouncements;
- Government policies; and
- Wide market and economic influences beyond the direct influence of the Licensees.

415. A two-step correction methodology was set out for correcting the financial losses or gains arising out of factors beyond the control of the licensees. The First Correction would be based on the best information made available to the Commission. The Second and Final correction would be based on audited accounts for the year with the condition that the

Commission reserves the right to forfeit the Licensees' claims in case the accounts are not submitted by the due date. In appropriate cases, however, the Commission may otherwise also disallow such claims in part or full.

416. Defining an item in the ARR as controllable or non-controllable has been dealt with in detail in paragraphs 437 to 458 of Tariff Order FY2004-05. The tabular representation of the discussion in that Tariff Order is depicted here, mainly with a view to highlighting those items of expenditure that the Licensees consider as uncontrollable rather than controllable or have sought a change in the categorisation.

Table No.23
Controllable and non-controllable items of expenditure

Items	Controllable / non-controllable	Need for true-up
Power purchase cost	Non-controllable	Generally through FSA*
Other Expenses		
Wages & Salaries -PF	Controllable	True-up not normally required
Administration & General Expenses	Controllable	
Rent, Rates and Taxes	Controllable	True-up on filing of tax returns
Repairs	Controllable	No true-up
Interest	Controllable	True-up linked to capitalization of capital works
Depreciation	Controllable	
Other Expenses	Controllable	No true-up
Special appropriations: Debt Redemption Obligation	Controllable	
Income Tax	Non-controllable	True-up on filing of income tax returns / after finalisation of assessment
Working Capital	Controllable	No true-up
Reasonable Return	Non-controllable	Variations on account of net capital base and loans

*FSA = Fuel Surcharge Adjustment

Power purchase cost

417. Power purchase cost is normally considered as an uncontrollable item and variations in these costs during the year are covered by Fuel Surcharge Adjustment (FSA) as mentioned in the Table above. The variations will rarely require true-up, as the FSA formula issued by the Commission attempts to capture both the price variance and the fuel variance during the course of the year itself. In a sense, the first true-up for power purchase cost is the FSA itself. Any further variations would arise mainly on account of purchases exceeding the limits approved in the Tariff Order. All extra purchases of power do not automatically

qualify for true-up. Such purchases shall be regulated in accordance with the principles enunciated in paragraph 863 of Tariff Order for FY05 as reproduced below:

"The GoAP obligation towards subsidy payments to DISCOMs is limited to the quantities mentioned in this order. If the DISCOMs exceed tariff order quantities and thus the subsidy requirement, the Commission will not entertain any request for additional quantities of energy to subsidized categories unless the permission of the GoAP is taken for additional subsidy if the excess consumption relates to agriculture. In other categories, if there is excess consumption, no additional subsidy will be recommended by the Commission to GoAP."

418. The final correction to power purchase cost would be carried out after the audited annual accounts for the year are made available within a reasonable period of time by the licensee.

PART IV - GENERAL

Audited Accounts

419. For the first time since its inception, the Commission has received the audited accounts for the immediately preceding year for which these were due, from all the five Licensees, and these have been made use of in analyzing the ARRs filed by Licensees . The Commission wishes to place on record its appreciation for the efforts put in by the Licensees in this regard.

CHAPTER - X
ERC / ARR 2005-06
TRANSMISSION AND BULK SUPPLY

420. APTRANSCO, the Licensee for transmission and bulk supply of electricity in the State, filed its ARR / ERC and Filing of Proposals for Tariff (FPT) for FY 2005-06 on 30.11.2004, followed by an addendum thereto on 07-02-2005. The Commission has examined the Licensee's proposals and indicates herein the areas where the computations of the Licensee are found to be incorrect or unacceptable, with reasons therefor and the Commission's alternative computations.

Capital base – Positive elements:

Capital Base Analysis

421. The Licensee in the filings has made the following projections of capital expenditure for FY 2005-06:

Table No.24
Proposed capital outlay for FY 2005 -06 (Rs. Crs.)

Base capital expenditure	Expenditure capitalisation	IDC*	Total
500.75	39.77	22.64	563.16

*IDC = Interest during construction.

422. The Base capital expenditure of Rs.500.75 crores is for transmission expansion schemes to strengthen the System, the details of which are examined later. The Licensee has assumed Rs. 39.77 crores towards expenditure capitalisation and Rs.22.64 crores have been shown as IDC, raising the aggregate capital expenditure to Rs.563.16 crores.

423. Before dealing with the projections of capital expenditure for FY 2005-06, it is necessary to advert to the capital expenditure during FY 2003-04, the latest year for which audited figures are available. The Commission has noted that there was a shortfall of Rs.132.47 crores in capital expenditure vis-à-vis the outlay of Rs. 380.48 crores approved for APTRANSCO in the Tariff Order for FY 04 as indicated in the Table below:

Table No.25
Capital outlay Performance during 2003-04 (Rs. Crs)

Filing	Tariff Order	Actuals	Shortfall
644.38	380.48	248.01	132.47

(Figures include IDC and expense capitalisation)

424. This shortfall has resulted in significant variation in the Capital Base calculations for FY 2003-04, as detailed in the Table below:

Table No.26
Capital Base for FY 2003-04
Comparison of actual costs with Tariff Order figures on the basis of the audited accounts (Rs. Crs.)

Particulars	Filing	T.O.	Actuals	Variance
Original Cost of Fixed Assets	4144.60	3721.33	3648.90	(72.43)
Capital Works-in-Progress (CWIP)	660.60	540.58	472.51	(68.07)
Investments	19.60	0.00	10.11	10.11
Avg. Cost of Stores	6.60	4.72	6.38	1.66
Avg. Cash & Bank Balance	9.50	18.90	18.90	0.00
TOTAL (A)	**4840.90**	**4285.53**	**4156.80**	**(128.73)**
Accumulated depreciation	1273.10	1259.93	1259.34	(0.59)
Borrowings	2135.40	2893.70	2549.30	(344.40)
Other no-cost funds	-	-	49.86	49.86
TOTAL (B)	**3408.50**	**4153.63**	**3858.50**	**(295.13)**
Capital Base (A-B)	**1432.40**	**131.90**	**298.30**	**166.40**

Note: The amounts within brackets denote minus figures.

425. The adjustment, due to this variance in the Capital Base necessitates recalculation of the Reasonable Return initially taken into account in the computation of the ARR for FY 2003-04, for necessary correction in the Tariff Order for FY 2005-06.

Capital Works - in - Progress (CWIP):
Capital outlay – Progress during FY 2004- 05:

426. In the ARR for FY 2005-06, the APTRANSCO has projected a revised capital outlay (Base expenditure) of Rs. 428.05 crores for FY 2004-05 along with IDC of Rs. 39.49 crores and expenditure capitalization of Rs.34.79 crores, which aggregate to Rs. 502.34 crores as total capital expenditure expected to be incurred during FY 2004-05 as against Rs.310.43 crores reckoned in the Tariff Order for FY 2004-05. The Commission considers this projection to be on the higher side keeping in view the progress of expenditure during the first eight months of the year, up to November 2004, and the past track record and allows an amount of Rs.327.09 crores towards base expenditure, as detailed in the Table below:

Table No.27
Estimated capital outlay for FY 2004-05 (Rs. Crs)

Sl. No.	Name of Scheme	APTRANSCO	Actual expenditure up to November 2004	APERC
1	Srisailam Transmission Scheme	0.50	0.00	0.50
2	Simhadri - Vizag Transmission Scheme	50.00	31.10	50.00
3	BPL - Ramagundam Transmission Scheme			
	(a) Dichpally 400kV Sub-station	1.50	0.03	1.00
	(b) Gazvel 400kV Sub-station	0.00	0.00	0.50
4	Erection of 400 KV Sub-station in Mahaboobnagar.	35.00	16.30	30.00

5	Erection of 400 KV Sub-station in Nellore and Chittoor	60.00	24.61	45.00
6	Short Gestation Transmission Project	43.00	13.98	25.00
7	APL-1 Main (WB/PFC)	0.08	0.08	0.08
8	APL-1 Supplementary (WB/PFC)	4.84	5.89	5.89
9	REC schemes for system improvements	119.36	50.93	91.80
10	PFC schemes & Parwada	11.03	7.26	10.27
11	DFID schemes	1.60	2.36	2.36
12	APL-2 (PFC)	46.18	8.85	15.00
13	Normal plan (*)	38.27	0.00	35.00
14	Transformers rolling stock	11.80	8.00	11.80
15	Silicon rubber insulators	3.50	0.00	1.50
16	Gudivada 33kV features	0.50	0.00	0.50
17	IT-Pilot Project	0.89	0.00	0.89
	TOTAL	**428.05**	**169.39**	**327.09**

(*) Comprises a number of schemes, each costing less than Rs.5 crores

427. The amount to be taken to CWIP in respect of the above schemes works out to Rs.392.06 crores as detailed in the Table below:

Table No.28
Amounts taken for CWIP for FY 2004-05
(Projected CWIP as on 31.3.2005) (Rs. Crs)

Particulars	APTRANSCO	APERC
Base capital expenditure	428.05	327.09
Expenses capitalized	34.79	34.79
Interest (IDC) capitalized	39.49	30.18
Total	**502.33**	**392.06**

428. The projected CWIP as on 31-3-2005 would constitute the Opening Balance for FY 2005-06.

Capital outlay – Projections for FY 2005-06:

429. As regards FY 2005-06, the ARR filings project a Base capital expenditure of Rs.500.75 crores for FY2005-06, which together with the expenditure capitalization of Rs.39.77 crores and IDC of Rs.22.64 crores aggregates to Rs.563.16 crores. Based on a review of the schemes, the Commission allows an estimated amount of Rs.304.13 crores as base capital expenditure as against Rs.500.75 crores projected by the Licensee mainly due to consideration of meager amount in respect of 400 kV substations at Dichpally and Gazvel. Similarly REC schemes and PFC schemes have been moderated keeping in line with past trends. The details of schemes are shown below:

Table No.29
Estimated Base capital expenditure for FY 2005-06 (Rs. Crs)

S.No.	Name of Scheme	APTRANSCO	APERC
1	Simhadri - Vizag Transmission Scheme	16.00	16.00
2	BPL - Ramagundam Transmission Scheme (a) Dichpally 400kV Sub-station (b) Gazvel 400kV Sub-station	 87.00 44.00	 2.00 2.00
3	Erection of 400 KV Sub-station in	6.00	4.00

	Mahaboobnagar.		
4	Erection of 400 KV Sub-station in Nellore and Chittoor	13.00	28.00
5	Short Gestation Transmission project-I	13.00	31.00
6	Short Gestation Transmission Project-II (Modified as 400 KV Narasaraopet Sub-station)	1.00	1.00
7	APL-1 Supplementary (WB/PFC)	1.85	1.85
8	REC schemes	137.49	92.76
9	PFC schemes	11.24	10.52
10	APL-2 (PFC)	110.13	60.00
11	Normal plan	30.00	30.00
12	Second circuit stringing of transmission lines (PFC)	20.00	15.00
13	Group control breakers for R & M	2.00	2.00
14	Silicon rubber insulators for R & M	0.00	2.00
15	Gudivada 33 kV feeders	7.04	**5.00**
16	Twin cities Transmission Project	1.00	**1.00**
TOTAL		**500.75**	**304.13**

430. The APTRANSCO shall submit monthly progress reports on physical and financial progress on each of the Schemes as directed earlier in paragraphs 390 to 391.

431. There are differences between the audited Accounts for FY 2003-04 and the filings in respect of CWIP as on 31-03-04. While the Accounts show a figure of Rs.472.51 crores, the filings show the CWIP as Rs.625.46 crores. The figure as per the audited Accounts has been adopted to arrive at the projected CWIP as on 31-03-06.

432. As already stated above, the Commission has decided to reckon outlays of Rs.327.09 crores for FY 2004-05 and Rs.304.13 crores for FY 2005-06 as Base capital expenditure (paragraphs 426 and 429). These, together with the expenses and the IDC capitalized, work out respectively to Rs.392.06 crores and Rs. 357.65 crores; consequently, the amounts reckoned for CWIP work out to Rs.564.56 crores for FY 2004-05 and Rs.422.22 crores for FY 2005-06, as detailed in the Table below:

Table No.30

Statement of estimated Capital Works- in-Progress for FY 2005-06 (Rs. Crs)

Items	APTRANSCO	APERC
Closing balance of CWIP as on 31.03.2004 as per audited Accounts	625.46	472.51
Outlay during the year (FY 2004-05)	428.06	327.09
Expenses capitalized during the year	34.79	34.79
Interest during construction charged to Capital (IDC)	39.49	30.18
Total additions: Capital expenditure	502.34	392.06
Total (OB + Additions)	1127.80	864.56
LESS: Works anticipated to be completed in FY 2004-05	494.95	300.00
Closing Balance of CWIP as on 31.03.05 and Opening balance as on 01.04.2005	**632.85**	**564.56**
Additional Investments during the year (FY 2005-06)	500.75	304.13
Expenses during the year capitalized	39.77	39.77
Interest during construction charged to Capital (IDC)	22.64	13.75
Total Additions: Capital expenditure	563.16	357.65
Total (OB + Additions)	1196.01	922.22
LESS: Works anticipated to be completed in FY 2005-06	965.76	500.00
Closing Balance of CWIP as on 31.03.06	**230.25**	**422.22**

Original Cost of Fixed Assets (OCFA):

433. The Licensee has proposed an amount of Rs.5137.01 crores as OCFA (excluding consumer contributions) to be reckoned in the Capital Base calculations for FY 2005-06. As against Licensee's projection of Rs. 494.95 crores, an amount of Rs.300.00 crores has been allowed after detailed analysis for transfer to OCFA from CWIP for FY 2004-05 as shown in the above Table. Similarly, for FY 2005-06, an estimated amount of Rs. 500.00 crores has been taken for transfer to OCFA from CWIP as against Rs.965.76 crores reckoned by the Licensee.

434. The estimated amount to be reckoned under OCFA in the Capital Base as on 31-03-2006 is therefore as calculated in the Table below:

Table No.31

Statement of estimated of fixed assets as on 31.3.2006 (Rs. Crs)

ITEM	APTRANSCO	APERC
Gross Fixed Assets as on 31-03-2004 as per audited Accounts LESS: Consumer contributions and grants for Capital Assets	3698.56 22.26	3698.56 49.66
Original Cost of Fixed Assets (OCFA) as on 31-03-2004	3676.30	3648.90
ADD: Works likely to be completed during 2004-05	494.95	300.00
OCFA as on 31-03-2005	4171.25	3948.90
ADD: Works likely to be completed during 2005-06	965.76	500.00
OCFA as on 31-03-2006	**5137.01**	**4448.90**

435. Accordingly, OCFA taken to Capital Base amounts to Rs.4448.90 crores.

Compulsory investments:

436. The Licensee has projected the compulsory investments (Contingencies Reserve) at Rs. 33.49 crores for FY 2005-06 and the same are considered in the computation of the capital base by APERC.

Working capital requirements

Average cost of stores:

437. The APTRANSCO has proposed an amount of Rs.7.63 crores towards Average Cost of Stores for inclusion in the Capital Base calculations. As per the Directive given in paragraph of 339 of Tariff Order for FY 2003-04, however, an amount of Rs.7.28 crores calculated at two months' requirement of Rs.43.68 crores for Repairs and Maintenance expenses, as claimed by the Licensee and admitted by the Commission in paragraph 484 infra, is provided.

Average cash and bank balance:

438. The Licensee has proposed Rs.21.46 crores towards Cash and Bank Balance. In accordance with in paragraph 397, however, the provision under this Head is to be calculated at one-and-a-half months' level of eligible items of expenses for FY 2005-06.

Accordingly, the provision for average cash and bank balance works out to Rs.21.20 crores and has been provided.

Capital base - Negative elements:

Accumulated Depreciation

439. The accumulated depreciation as projected by the Licensee in the filings is Rs.1740.72 crores against which Rs.1733.13 crores is admitted. The difference is due to lower capitalisation of works, as indicated in paragraph 433 on OCFA.

Loans from government and approved institutions:

440. For FY 2005-06, the Licensee has projected Rs.93.03 crores as Government loans, Rs. 1968.36 crores as Institutional loans and Rs. 22.93 crores as Other Market Borrowings aggregating to Rs. 2084.32 crores.

441. The Licensee has taken the lower amount of loan in the Capital base instead of the amount indicated in form 1.1g (Rs.2735.65 crores). However, the Commission has reckoned the loan amount required for capitalised value of the projects along with the opening balance of the loans and all repayments during FY 2005-06. Thus the amount admitted by the Commission works out to Rs. 2431.28 crores as detailed in the following Table:

Table No.32

Details of loans (Rs. Crs)

Closing balance of loans (excluding CWIP) as per audited accounts as on 31-03-2004	2076.79
ADD: Net additions considered after taking into account the capitalization of capital expenditure, loan repayments, other sources of funding (depreciation, consumer contribution etc.) for: FY 2004-05 FY 2005-06	 74.32 280.17
Total loans considered in the Capital Base as on 31-03-2006	**2431.28**

Net capital base:

442. With the above changes in the positive and negative elements of the Capital Base, the net capital base works out to Rs.346.46 crores as detailed in the following Table as against Rs.1604.79 crores projected by the Licensee:

Table No.33

Capital Base calculations for FY 2005-06 (Rs.Crs.)

ITEM	APTRANSCO	APERC
Positive elements of capital base		
Original cost of Fixed Assets	5137.01	4448.90
Capital Works-in-progress	230.24	0.00
Investments	33.49	33.49
Working capital		

a) Average cost of stores	7.63	7.28
b) Average cash and bank balance	21.46	21.20
A - Total of positive elements of capital base	**5429.83**	**4510.87**
Negative elements of capital base		
Accumulated Depreciation	1740.72	1733.13
Approved Loans	2084.32	2431.28
B - Total of negative elements of Capital Base	**3825.04**	**4164.41**
Net Capital Base (A-B)	**1604.79**	**346.46**

EXPENDITURE:

Purchase of energy

443. APTRANSCO has projected an expenditure of Rs.8,948.63 crs in its ARR filings for FY 2005-06, for the purchase of 51,214 MUs to meet the requirement of sales of 48,353.37 MU to DISCOMs and the inter-State sales of 299.93 MUs. Against this, the Commission has approved a quantum of 48,886.50 MU (excluding inter-State sales) at a total cost of Rs. 8,629.25 crs including Transmission Charges. APTRANSCO in their filings has projected transmission losses of 5% inclusive of PGCIL losses.

444. At present APTRANSCO is the single buyer of energy and the bulk supply Licensee in Andhra Pradesh. It estimates the requirement of energy, month-wise, as per the sales forecast of the DISCOMs. Losses projected for each DISCOM are added to arrive at the monthly power purchase requirement. The energy balance table below summarizes the above process of aggregation by APTRANSCO to arrive at the power purchase requirement for FY 2005-06.

Table No.34
Energy Balance (TRANSCO)

	Filing
Availability (MU)	53,672.72
Purchase by TRANSCO (MU) [Incl. inter-State Sales]	51,214.00
Purchases for inter-State Sales (MU)	315.72
Purchase for DISCOM (MU)	50,898.28
Purchase by DISCOM (MU)	48,353.37
Sales by DISCOM (MU)	40,018.00
Inter-State Sales (MU)	299.93
Transmission Losses (MU)	2,545.00
Distribution Losses (MU)	8,335.00
Total Energy Losses (MU)	10,880.00
Transmission Losses (percent)	5.00%
Distribution Losses (percent)	17.24%
Total System Losses (percent)	21.38%

445. The Commission accepts the sales forecast of the DISCOMs except in the case of Agriculture. Sales is a normal business risk and as observed by the Commission in paragraph 432 of Tariff Order, FY 2004-05, it does not merit a true-up. Only in the case of agriculture where GoAP subsidy is involved, a cap is fixed till such time when all agricultural connections are metered. Consumption estimates for agriculture are based on the growth rate observed based on the LV side DTR meter readings and additional consumption estimated on account of new loads. The estimates of sales for FY 2005-06 are:

Table No.35

Sales Forecast for FY 2005-06 (MUs)

DISCOMS	EPDCL	CPDCL	NPDCL	SPDCL	Total
Non-Agricultural	5,517.39	10,780.45	3,597.34	5,900.23	**25,795.41**
Agricultural	1,231.73	5,453.06	2,908.41	3,053.60	**12,646.80**
Total	**6,749.12**	**16,233.51**	**6,505.75**	**8,953.83**	**38,442.21**

446. Against the filed requirement of 40,018.22 MU, the Commission approved sales of 38,442.21 MU. Details of sales forecast have been discussed in Chapter XVI. It has been clarified by APTRANSCO that these projections do not take into account the provision of 24-hour supply to rural areas.

447. In the ensuing year, DISCOMS have projected losses of 14.44% (EPDCL), 17.02% (SPDCL), 17.91% (CPDCL) and 18.56% (NPDCL), respectively. These loss estimates have been used by the Commission for computing the power purchase requirements. The power purchase requirement of each DISCOM is worked out taking into account the approved sales and losses as shown in the table below:

Table No.36

Power purchase requirements of DISCOMS in FY 2005-2006

DISCOM	Sales (MU)		Losses (%)		Purchases (MU)	
	Filed	Approved	Filed	Approved	Filed	Approved
EPDCL	6,777.98	6,749.12	14.44%	14.44%	7,921.54	7,888.17
SPDCL	9,479.13	8,953.83	17.02%	17.02%	11,423.48	10,790.35
CPDCL	17,173.73	16,233.51	17.91%	17.91%	20,919.88	19,775.26
NPDCL	6,587.38	6,505.75	18.56%	18.56%	8,088.31	7,988.39
Total	**40,018.22**	**38,442.21**	**17.24%**	**17.23%**	**48,353.21**	**46,442.18**

448. All the DISCOMS have provided details of sales forecasts, month-wise and category-wise, as part of their filings. For scheduling and drawal of energy, month-wise, APTRANSCO submitted availability of sources of energy, month-wise, against the demand projected. Category-wise quarterly consumption estimates approved by the Commission for all DISCOMS are shown in the Table below for FY 2005-06. Details for each DISCOM are set out in the Annexure – E.

Table No.37

Category-wise quarterly sales projections for all DISCOMS in FY 2005-06 (MU)

CATEGORY	Qtr 1	Qtr 2	Qtr 3	Qtr4	TOTAL
HT					
HT Industrial – General	1,988.96	2,026.70	2,021.47	2,144.90	8,182.03
HT Industrial – Others	239.66	238.10	224.20	234.06	936.01
Irrigation and Agricultural	19.67	56.74	59.20	94.04	229.65
Railway traction	291.89	297.22	307.73	308.69	1205.53
Colony lighting	58.46	57.90	63.57	64.39	244.32
RESCOs	155.63	166.43	161.35	182.68	666.09
Temporary	1.76	0	0	0	1.76
HT total	**2,754.27**	**2,843.08**	**2,837.52**	**3,030.51**	**11,465.39**
LT					
Domestic	2,265.54	2,195.23	2,126.39	2,010.19	8,597.36
Non-domestic	527.41	501.34	480.62	461.07	1,970.44
Industrial	577.89	527.52	546.82	638.17	2,290.40
Cottage industries	13.66	10.13	11.16	11.07	46.02
Agriculture	2469.66	3,260.32	3214.31	3,702.50	12,646.80
Local bodies	326.15	316.40	326.61	335.53	1,304.68
Gen purpose	25.36	27.37	30.34	29.56	112.63
Temporary	2.22	1.47	2.53	2.26	8.49
LT total	**6,207.89**	**6,839.78**	**6,738.79**	**7,190.35**	**26,976.82**
Total sales	**8,962.16**	**9,682.86**	**9,576.31**	**10,220.86**	**38,442.21**
DISCOM losses (MU)	1,865.06	2,015.04	1,992.87	2,127.00	7,999.97
DISCOM input (MU)	10,827.22	11,697.91	11,569.18	12,347.87	**46,442.18**
DISCOM loss (%)	17.23%	17.23%	17.23%	17.23%	**17.23%**
Purchase for DISCOMS by APTRANSCO (at 5 % transmission loss)	11,397.08	12,313.58	12,177.49	12,998.35	**48,886.50**

449. The LT – Agriculture and total sales projections on a quarterly basis as approved by Commission for each DISCOM are as follows:

Table No.38

Quarterly LT - Agriculture and total sales projections for all DISCOMs in FY 2005-06 (in MU)

	EPDCL		CPDCL		NPDCL		SPDCL		All DISCOMS	
	LT Agri-culture	Total	LT Agri-culture	Total	LT Agri-culture	Total	LT Agri-culture	Total	LT Agricult ure	Total
Qtr 1	292.91	1,676.15	1,054.85	3,778.24	481.41	1,366.39	640.50	2,141.39	2,469.66	8,962.16
Qtr 2	286.81	1,685.50	1,401.82	4,054.14	812.24	1,700.12	759.45	2,243.10	3,260.32	9,682.85
Qtr 3	302.17	1,701.58	1,397.32	3,970.28	775.58	1,685.90	739.24	2,218.54	3,214.31	9,576.31
Qtr 4	349.85	1,685.90	1,599.07	4,430.85	839.19	1,753.34	914.40	2,350.81	3,702.50	10,220.89
Total	1,231.74	6,749.13	5,453.06	16,233.51	2,908.42	6,505.75	3,053.59	8,953.84	12,646.80	38,442.21

RESCOs

450. The four Rural Electric Supply Co-operative Societies (RESCOs) are supplying power to the consumers in their respective territory. Category-wise sales forecasts made by the RESCOs are given in the following table.

Table No.39
Category-wise sales forecasts of RESCOS for FY 2005-06

Sl. No.	Name of the RESCO	Cat - I Domestic	Cat - V Irri & Agrl	Balance LT Categories	Total LT Sales	Power purchases	Distribution losses (%)
1	Anakapalli (MU)	32.33	28.75	14.89	75.97	90.00	15.59
	% of Sales	42.55	37.85	19.60	100.00		
2	Chipurupalli (MU)	9.19	11.50	4.47	25.16	30.00	16.00
	% of Sales	36.53	45.71	17.76	100.00		
3	Sircilla (MU)	45.39	244.53	37.60	327.52	385.30	15.00
	% of Sales	13.86	74.66	11.48	100.00		
4	Kuppam (MU)	13.01	112.00	10.32	135.33	160.79	15.83
	% of Sales	9.61	82.76	7.63	100.00		
	Total (MU)	**99.92**	**405.42**	**67.28**	**572.63**	**666.09**	**15.33**
	% of all Sales	**17.45**	**70.80**	**11.75**	**100.00**		

451. The Commission approves a total power purchase of 48,886.50 MUs for retail supply by the DISCOMS and RESCOs based on sales of 38,442.21 MU to end-consumers during FY 2005-06.

452. DISCOMS have entered into Bulk Supply Agreements (BSA) with APTRANSCO for the supply of energy. Under the present single buyer system, APTRANSCO, the Transmission and Bulk supply licensee alone, is authorized to supply the entire requirement of the DISCOMS which is required to be suitably amended on or before 10th June 2005 in line with the Electricity Act 2003. APTRANSCO has projected transmission losses of 5 % (inclusive of PGCIL losses external to AP Grid) for the ensuing year and the same has been accepted by the Commission for estimation of power purchases.

453. Total system losses are 10,444.29 MU (21.36%), consisting of transmission losses of 2,444.33 MU (5 %) and distribution losses of 7,999.97 MU (17.23 %). This translates into power purchase requirement of 48,886.50 MUs by APTRANSCO for the DISCOMS.

Availability of power:

454. As per the filings, APTRANSCO has projected an availability of 53,672.72 MU. The Commission has determined the same at 52,736.57 MU as shown in the table below:

Table No.40
Availability of energy from different sources for FY 2005-06

Source of power	APTRANSCO (MU)	APERC (MU)	Remarks
APGENCO	**26,430.06**	**26,430.06**	
Thermal	20,450.46	20,450.46	
Hydel	5,979.60	5,979.60	
CGS	**11,254.08**	**10,834.37**	
CGS (SR)	10,834.37	10,834.37	
CGS (ER)	419.71	0.00	NTPC – ER not considered

Source of power	APTRANSCO (MU)	APERC (MU)	Remarks
NTPC – Simhadri	6,484.25	7,446.00	Based on current years' actual generation
SEBs	88.89	0.00	Purchase from other SEBs/PTC not considered
APGPCL	424.31	424.31	
IPPs	6,253.00	5,315.71	
Others & NEDCAP	2,738.12	2,286.12	Short term sources excluded
TOTAL	***53,672.72***	***52,736.57***	

455. Details of the power available from each of the sources are provided in the following paragraphs:

A. APGENCO:

456. With the exception of the current year, absence of good monsoon in the catchment areas of river Krishna has been one of the major factors for shortfalls in hydel generation in recent years. This in turn changes the estimated Hydro-Thermal mix of the power purchases from APGENCO stations. Hydel generation in the recent past shows a marked deviation from the historical trends. Such uncertainties render the accurate estimation of hydel availability a difficult task. The decision of Government of Karnataka to raise the height of Almati Dam and the decision of GoAP to maintain the Minimum Draw Down Level (MDDL) of Srisailam reservoir at +854 feet instead of +834 feet further complicates the process of hydel estimation.

457. Hydel generation for the last four years shows that hydro availability has been decreasing. The variation between hydel estimation in Tariff Order and the actual generation increased from 17% in FY01 to 58% in FY04. This variation is 21.29% (estimated) for the current year. It is observed that compared to previous 3 years, the gap between the estimation in the Tariff Order for the current year and the actual generation based on 1st half of the year has come down considerably. This is mainly due to better inflows into the Srisailam Reservoir during 2004-05. If the same trend continues, it is expected to realize the estimate of 5979.60 MU approved in the Tariff Order for 2005-06. The comparative position is set out in the table below:

Table No.41
Hydro availability in the recent years

	Filing MU	Tariff Order MU	Actual MU*	Variation between Tariff Order and Actuals
FY2000-01	8,541	8,538	7,048	-17%
FY2001-02	8,994	8,694	5,647	-35%
FY2002-03	7,494	6,999	3,803	-46%
FY2003-04	6,757	6,757	2,839	-58%
FY 2004-05*	6,423	6,423	5,057	-21%

*** Based on actuals for 1st half and estimates for 2nd half as filed by APTRANSCO**

The station-wise hydro availability is shown in the table below:

Table No.42
APGENCO availability – Hydel Power Stations

Name of Unit	Capacity (MW)	PLF Percentage (Net)	APTRANSCO (MU)	APERC (MU)
Machkund (AP share)	84.00	67.41	480.15	480.15
Tungabadra Dam (AP share)	57.60	26.76	130.68	130.68
Upper Sileru	240.00	21.40	435.60	435.60
Donkarayi	25.00	56.04	118.80	118.80
Lower Sileru	460.00	30.46	1188.00	1188.00
Srisailam Complex	1670.00	14.89	2108.70	2108.70
N'Sagar (NSPH)	815.00	17.69	1222.65	1222.65
NS RCPH	90.00	14.66	111.87	111.87
NS LCPH	60.00	8.76	44.55	44.55
PABR	20.00	5.84	9.90	9.90
Pochampad PH	27.00	39.78	91.08	91.08
Nizamsagar PH	10.00	10.51	8.91	8.91
Singur	15.00	9.34	11.88	11.88
Mini Hydel	14.00	14.18	16.83	16.83
TOTAL	**3587.60**	**19.66**	**5979.60**	**5979.60**

458. The thermal generation from generating stations of APGENCO is estimated as under:

Table No.43
APGENCO Thermal Stations Availability

Name of Unit	Capacity (MW)	PLF percentage (Net)	APTRANSCO (MU)	APERC (MU)
VijayawadaTS-I (VTS-I)	420.00	83.39	2,768.22	2,768.22
VijayawadaTS-II (VTS-II)	420.00	91.03	3,022.11	3,022.11
VijayawadaTS-III (VTS-III)	420.00	89.55	2,972.97	2,972.97
RayalaseemaTPS (RTPS)	420.00	89.01	2,926.77	2,926.77
KothagudemTS-D(KTS-A)	240.00	79.92	1,517.99	1,517.99
KothagudemTS-D(KTS-B)	240.00	83.21	1,580.48	1,580.48
KothagudemTS-D(KTS-C)	220.00	93.15	1,621.80	1,621.80
KothagudemTS-D(KTS-D)	500.00	88.66	3,523.17	3,523.17
Ramagundam-B (RTS-B)	62.50	80.46	393.12	393.12
NelloreTS (NTS)	30.00	56.37	123.84	123.84
Total	**2972.50**	**87.14**	**20,450.46**	**20,450.46**

B. Central Generating Stations:

459. Power generated by Central Generating Stations (CGS) is available to Andhra Pradesh from three sources.

460. The first source is the Southern Regional Pool, CGS(SR), consisting of NTPC Ramagundam, Neyveli Lignite Corporation's Thermal Station II, Stages I & II, Madras Atomic Power Station, Kaiga Atomic Power Station and Talcher Stage-II exclusively built for Southern Region. Ramagundam Stage III, 7th unit of 500 MW is also expected to come into commercial operation in the year FY 2005-06 and hence APTRANSCO's share at 34.35% has been considered. The prevailing arrangement is to allocate shares to each State; thereafter, the

unallocated energy is further distributed among the needy States as per their share and with special allocations, if any. Andhra Pradesh has commercial arrangements with all the power generating stations and the details are shown in the following Table. At present, allocation for AP from Kaiga Power Station is nil.

Table No.44
AP share in Central Generating Station (Filing)

Station	Capacity (MW)	AP share allocated (%)	AP share (MW)	AP share-Unallocated (MW)	AP share including unallocated (% of capacity)
NTPC- Ramagundam	2600	32.60	849	-	32.60
NLC TPS-2 Stage – I	630	16.70	105	-	16.70
NLC TPS-2 Stage – II	840	22.80	192	-	22.80
NPC – MAPS	340	9.30	32	-	9.30
Sub Total	**4410**	**26.71**	**1178**	**-**	**24.29**
Talcher Stage-2*	2000	24.10	482	**-**	24.10
NTPC – Simhadri	1000	100.00	1000	-	100.00
Grand Total	7410		2660	-	

(*) Three Units of 500 MW each are in commercial operation, Unit-4 of 500 MW is expected to be in commercial operation during 2005-06.

461. The second source of energy is from NTPC (Eastern Region). In the filings, APTRANSCO has submitted that as per existing PPAs, its share in the Eastern Region is 60 MW. The total availability from NTPC (ER) based on APTRANSCO's share of 60 MW is 420 MU.

462. As per latest information, no allocation has been made to Andhra Pradesh by Government of India from NTPC (ER). Hence, the availability from NTPC (ER) has not been considered by the Commission.

463. The third source is Simhadri Power Station which is exclusively meant for Andhra Pradesh. As per the filing, the availability from Simhadri has been projected at 6,484 MU. This has been revised to 7,446 MU based on the actual generation in the current year.

464. To summarize, Central Generating Stations are expected to contribute 18,280.37 MU i.e., nearly 35% of the energy requirement in the ensuing year, as detailed in the following table:

Table No.45
Power availability from Central Generating Stations (MU)

Name of Station	APTRANSCO	APERC
Southern Region (SR)		
NTPC – Ramagundam	5,817.94	5,817.94
NLC Stage I	624.33	624.33
NLC Stage II	1,131.51	1,131.51

Name of Station	APTRANSCO	APERC
NPC – MAPS	136.25	136.25
Talcher Stage 2	3,124.35	3,124.35
(SR) Sub-Total	**10,834.37**	**10,834.37**
Eastern Region (ER)		
Talcher Stage 1	62.90	0.00
Farakka	140.16	0.00
Kahalgaon	216.65	0.00
(ER) Sub-Total	**419.71**	0.00
(SR + ER) Total	***11,254.08***	***10,834.37***
NTPC – Simhadri	**6,484.25**	**7,446.00**
Grand Total	**17,738.33**	**18,280.37**

C. APGPCL:

465. Availability of 424.31 MU from APGPCL has been projected by the Licensee. The same has been accepted by the Commission.

D. Independent power producers (IPPs):

466. The power availability from IPPs is estimated as under after taking into account lower availability of gas.

Table No.46
Power availability from IPPs

SOURCE	**Filed capacity (MW)**	**Accepted capacity (MW)**	APTRANSCO filing **(MU)**	**APERC (MU)**
GVK	216.00	216.00	1,330.00	1,220.86
Spectrum	208.00	208.00	1,443.00	1,209.18
Kondapalli*	368.00	368.00	2,437.00	2,099.87
BSES Andhra	220.00	220.00	1,043.00	785.80
TOTAL	**1,012.00**	**1,012.00**	**6,253.00**	**5,315.71**

(*)In a separate filing, APTRANSCO has filed a petition with the Commission to consider the installed capacity as 351 MW. Till the disposal of the petition, the proceedings of which are stayed by the Hon'ble High Court of A.P., the installed capacity considered in FY 04 has been adopted.

467. The Licensee has projected an aggregate availability of 6,253 MU from Spectrum, GVK, Lanco Kondapalli and BSES Andhra gas power stations. The availability from these sources has been determined taking into consideration the actual generation for the current year till January 2005 and lower gas availability at 70% of firm and fall-back allocation for FY2005-06. These power stations are to be dispatched on merit order. Merit order variable costs have to be revised on the basis of the fuel costs revisions from time to time. Tariff order calculations are on the basis of least cost using merit order principles.

E. (i) Other sources:

468. The Licensee has filed availability of surplus energy from the captive stations of Visakhapatnam Steel Plant and Nava Bharat Ferro Alloys. Since there are no approved PPAs,

the Commission has not considered the availability from these stations. M/s. LVS and Srivathsa have, however, been considered as available as per the Licensee's filings.

Table No.47

Power availability from Other Sources (in MU)

SOURCE	FILING	APERC	Remarks
VSP	212.00	0.00	Availability not considered
NBFA	174.00	0.00	Availability not considered
RCL and Short Term Sources (such as CPPs of Kesoram, Sponge iron etc.)	66.00	0.00	Availability not considered
Non-Conventional	2180.52	2180.52	
LVS	0.00	0.00	Plant shut down due to highest generation cost
Srivathsa	105.60	105.60	
TOTAL	**2,738.12**	**2,286.12**	

E. (ii) Non-Conventional Energy Sources:

469. Licensee has projected 2,180.52 MU power purchases from non-conventional energy (NCE) sources. The Commission has considered the same quantum of energy in the availability for FY 2005-06.

470. The Commission approved power purchase of 2,180.52 MUs from the NCE sources which constitutes 4.28 % of the total approved power purchase of 48,886.50 MUs for sale to DISCOMS by APTRANSCO.

Energy Balance:

471. Energy Balance for the ensuing year is as shown in the Table below:

Table No.48

Energy Balance (MU)

	Filings	Approved by APERC
EPDCL	6,778.01	6,749.12
SPDCL	9,479.14	8,953.83
CPDCL	17,173.20	16,233.51
NPDCL	6,587.35	6,505.75
DISCOM sales	40,017.69	38,442.21
DISCOM losses (%)	17.24%	17.23%
Power purchase by DISCOMS	48,353.37	46,442.17
Inter-state Sales	299.93	0.00
Transmission losses (%)	5.00 %	5.00 %
Power purchase for DISCOMS	50,898.28	48,886.50
System losses (%)	21.38%	21.36%
Total power purchase	**51,214.00 ***	**48,886.50**

(*) Inclusive of inter-State sales

Source-wise power purchases:

472. For the approved total power purchases, the per quarter generator-wise break-up is shown in the Table below:

Table No.49
Summary of generating station-wise power purchases as approved by APERC
FY 2005-06 (MU)

	Apr - Jun 05	Jul - Sep 05	Oct - Dec 05	Jan - Mar 06	Total
APGENCO					
Thermal	4,766.94	4,374.73	4,000.29	4,797.86	**17,939.82**
Hydel	830.96	1,513.20	2,193.49	1,441.94	**5,979.60**
CGS – SR					
NPC-MAPS	28.05	29.05	26.05	53.10	**136.25**
Talcher Stage II	690.64	800.58	825.56	807.57	**3,124.35**
NTPC-Ramagundam	1,498.98	1,454.98	1,394.99	1,468.98	**5,817.93**
NLC Stage – I	68.69	89.33	107.40	130.52	**395.94**
NLC Stage – II	106.05	193.46	89.32	207.09	**595.92**
	2,392.41	**2,567.40**	**2,443.32**	**2,667.26**	**10,070.41**
CGS – ER	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
NTPC- Simhadri	1,678.65	2,049.52	1,721.13	1,996.70	**7,446.00**
APGPCL (Stn I & Stn II)	107.83	109.82	108.81	97.85	**424.31**
IPPs (BSES, GVK, Spectrum and Kondapalli)	1,084.76	1,150.00	1,170.65	1,353.46	**4,758.87**
Others & NEDCAP	535.52	548.91	540.38	642.68	**2,267.48**
GRAND TOTAL	**11,397.08**	**12,313.58**	**12,178.08**	**12,997.75**	**48,886.50**

Power purchase cost:

473. Given the energy requirement as above, power purchase cost has been determined by following the economic merit order dispatch principles. Load dispatch is carried out on the basis of station-wise costs.

474. The total cost of power purchases is estimated after taking into consideration the following changes:

A. Fixed costs

Table No.50
Power purchases fixed costs in FY 2005-06

Sources	APTRANSCO Filing (Rs. Crs.)	APERC (Rs. Crs.)	Remarks
APGENCO			
Thermal	**1,636.27**	**1,535.19**	APGENCO fixed costs determined on the basis of norms as decided by the Commission
Hydel			For SSLBPH, instead of fixed cost, infirm variable cost has been considered.
CGS	**621.70**	**592.28**	
CGS (SR)	592.28	592.28	
CGS (ER)	29.42	0.00	No allocation from ER
NTPC – Simhadri	445.31	445.31	

Sources	APTRANSCO Filing (Rs. Crs.)	APERC (Rs. Crs.)	Remarks
SEBs	0.00	0.00	
APGPCL	22.21	24.55	As per additional information submitted by APTRANSCO
IPPs	807.82	808.11	
Others & NEDCAP	45.36	45.38	
Total	**3,578.68**	**3,450.82**	

B. Variable costs

475. Variable cost as submitted in the filings has been adopted for individual stations except for gas based IPPs and NTPC-Simhadri. As the price of gas is expected to go up, the variable charges have been revised upwards for the IPPs which use gas as fuel. In view of the impending coal shortage, the variable charge for NTPC-Simhadri has also been revised as it requires to procure coal from alternate sources also. The weighted average cost for the ensuing year is estimated as Rs.1.77 per kWh as against Rs.1.75 per kWh projected by APTRANSCO.

476. For Srisailam Left Bank, instead of fixed cost, infirm differentiated variable cost for surplus energy and peak energy has been considered.

477. Details of the power purchases from different sources as filed by the Licensee and adopted by the Commission for estimating the power purchase costs during FY 2005-06 are summarized in the following tables:

Table No.51

Power purchase costs as filed by APTRANSCO

Stations	Power purchases (MU)	Fixed costs (Rs Crs)	Variable costs (Rs Crs)	Income Tax, Incentive and other charges (Rs. Crs)	Total cost (Rs Crs)	Rs/Kwhr
APGENCO	25,342.79	1,636.27	2,152.60	42.00	3,830.87	1.51
Thermal	19,363.19					
Hydel	5,979.60					
CGS	10,355.57	621.70	836.58	304.29	1,762.58	1.70
CGS (SR)	9,935.86	592.28	797.16	298.18	1,687.62	1.70
CGS (ER)	419.71	29.42	39.42	6.11	74.96	1.79
NTPC – Simhadri	6,484.25	445.31	555.64	9.58	1,010.52	1.56
SEBs	88.99	0.00	22.25	15.94	38.19	4.29
APGPCL	424.31	22.21	47.00	0.00	67.91	1.60
IPPs	6,162.23	807.82	666.54	30.94	1,505.30	2.44
Others & NEDCAP	2,355.35	45.38	600.27	87.61	733.26	3.11
TOTAL	51,213.50	3,578.68	4,880.89	490.35	8,948.63	1.75

Table No.52
Power purchase costs as approved by APERC

Stations	Power purchases (MU)	Fixed costs (Rs. Crs)	Variable costs (Rs. Crs)	Income Tax, Incentive and other charges (Rs. Crs)	Total cost (Rs. Crs)	Rs/Kwh
APGENCO	**23,919.42**					
Thermal	17,939.82	**1,535.19**	**1,947.42**	**42.00**	**3,524.61**	**1.47**
Hydel	5,979.60					
CGS	**10,070.41**	**592.28**	**845.73**	**58.60**	**1,496.61**	**1.49**
CGS (SR)	10,070.41	592.28	845.73	58.03	1,496.04	1.49
CGS (ER)	0.00	0.00	0.00	0.57	0.57	0.00
NTPC - Simhadri	7,446.00	445.31	696.05	9.52	1,150.87	1.55
SEBs	0.00	0.00	0.00	0.00	0.00	0.00
APGPCL	424.31	24.55	60.37	0.00	84.92	2.00
IPPs	4,758.87	808.11	554.77	30.94	1,393.82	2.93
Others & NEDCAP	2,267.48	45.38	586.35	87.61	719.34	3.17
Total Energy Cost	**48,886.50**	**3,450.82**	**4,690.71**	**228.67**	**8,370.19**	**1.71**
Transmission Cost excluding APTRANSCO		**224.72**			**224.72**	
ULDC* Charges		**34.34**			**34.34**	
Total	**48,886.50**	**3709.88**	**4690.71**	**228.67**	**8629.25**	**1.77**
**** Unified Load Despatch Centre***						

Table No.53
Summary of power purchase costs

	Fixed cost filed & revised (Rs. Crs.)	Fixed cost approved (Rs. Crs.)	Variable cost filed (Rs/Kwh)	Variable cost approved (Rs/Kwh)	Power purchase cost as filed (Rs/Kwh)	Power purchase cost as approved (Rs/kWh)
Generation	3578.68	3450.82	0.95	0.96	1.75	1.77
Transmission	224.72	224.72	-	-		

478. The Commission directed licensees to charge FSA every quarter in accordance with the existing formula. The allowable power purchases for each quarter of the ensuing year and the variable cost to be adopted for this calculation have been provided in the following table:

Table No.54
Quarterly Power purchase requirement for FY 2005-06

Month	DISCOMS power purchase (MUs)	APTRANSCO power purchase (MUs)	Total dispatch excluding inter-state sales	Total Variable Cost (Rs. Crs)	Variable cost (Rs per unit)
Apr-05	3,725.63	3,921.72	3,921.72	396.17	1.01019
May-05	3,472.56	3,655.33	3,655.33	352.85	0.96530
Jun-05	3,629.03	3,820.03	3,820.03	382.32	1.00083
QRT 1	**10,827.23**	**11,397.08**	**11,397.08**	**1,131.34**	**0.99266**
Jul-05	3,738.67	3,935.44	3,935.44	397.65	1.01042
Aug-05	4,001.52	4,212.13	4,212.13	409.21	0.97150
Sep-05	3,957.72	4,166.02	4,166.02	372.28	0.89361
QRT 2	**11,697.90**	**12,313.58**	**12,313.58**	**1,179.13**	**0.95759**
Oct-05	3,871.55	4,075.32	4,075.32	354.50	0.86987
Nov-05	3,881.92	4,086.24	4,086.24	382.86	0.93696

Dec-05	3,815.70	4,016.53	4,016.53	368.91	0.91849
QRT 3	**11,569.18**	**12,178.08**	**12,178.08**	**1,106.28**	**0.90842**
Jan-06	3,993.70	4,203.89	4,203.89	401.74	0.95564
Feb-06	4,015.72	4,227.07	4,227.07	417.68	0.98811
Mar-06	4,338.45	4,566.79	4,566.79	454.52	0.99528
QRT 4	**12,347.87**	**12,997.75**	**12,997.75**	**1,273.95**	**0.98013**
Total	**46,442.17**	**48,886.50**	**48,886.50**	**4,690.70**	**0.95951**

479. The Commission noted that APTRANSCO has adopted the same maintenance schedule as proposed by generating companies without optimizing the power purchase cost based on monthly despatches corresponding to monthly power purchase requirement for DISCOMs. For example: - *Simhadri Unit - II overhaul from 01-04-05 to 30-04-05 = 30 days as proposed by NTPC was considered in the ARR of APTRANSCO while power purchase requirement for the month of April'05 is higher than that of May'05. APTRANSCO could have required NTPC to shift this schedule by one month or more till surplus low cost power is available to optimize the power purchase cost in the month of April, 2005.* Similar changes in maintenance schedule can be effected, wherever possible, in case of other low cost stations, not to coincide with the periods of higher quantum of power purchase requirement.

> ***The Commission directs APTRANSCO to optimize power purchase cost through re-drawing of the maintenance schedule in consultation with the generating companies wherever cheaper source is proposed for maintenance during periods of higher power requirement.***

480. Similarly, there is a need to optimize the generation from Srisailam complex, as units both at Srisailam Right Bank and Left Bank Power Houses operate utilizing the water drawn from a common reservoir.

481. APGENCO contends that the head available at Left Bank Power House is more than that at the Right Bank Power House when Nagarjuna Sagar reservoir level is below 541 feet. Hence, it appears advantageous to run the Left Bank Power House units only to the extent possible at Srisailam whenever Nagarjuna Sagar level is below 541 feet.

> ***The Commission directs APTRANSCO to develop an operational regime for Srisailam complex to optimize the generation, utilizing the waters from Srisailam reservoir at different conditions obtained at Srisailam and Nagarjuna Sagar, in collaboration with APGENCO. Such operational regime developed and put into practice shall be furnished to the Commission before 15th May, 2005.***

Wages, salaries and other allowances:

482. The Licensee has projected an amount of Rs. 101.60 crores towards Wages, salaries and Other Allowances (net of capitalisation) for inclusion in the ARR of

FY 2005-06. However, the amount taken for Revenue Requirement towards wages, salaries and allowances is Rs. 99.23 crores (net of capitalisation) as calculated in the Table below:

Table No.55

Revenue Requirement - Net Salaries, wages and allowances (Rs. Crs)

Wages, salaries & allowances	131.72
Less: Expense capitalization	32.49
Net of capitalisation- Wages and salaries	**99.23**

Administration and general expenses (excluding Rent, rates & taxes, Legal charges, Audit fees, Lease rentals, etc.):

483. The Licensee has claimed (in Form 1.3 of the filing) Rs.12.92 crores towards Administration and General Expenses (net of capitalization). This is considered reasonable and is provided.

Repairs and maintenance:

484. APTRANSCO has projected Rs.43.68 crores (net of capitalization) towards Repairs and maintenance for FY 2005-06 for inclusion in the computation of the Revenue Requirement. This is considered reasonable and has been provided.

Rent, rates and taxes:

485. APTRANSCO has projected (in Form 1.3) Rs.1.49 crores for inclusion in the computation of the Revenue Requirement for FY 2005-06 towards Rent, rates and taxes. This is accepted and is accordingly provided.

Interest on Loans and other Finance Charges (including lease rentals):

486. APTRANSCO has projected Rs.238.76 crores (net of capitalisation of IDC) towards interest on loans and other finance charges for the calculation of the Revenue Requirement for FY 2005-06.

487. Insofar as loans are concerned, the Commission has provided interest on all loans of Rs. 2431.28 crores taken into account on the negative side in the computation of the Capital Base as computed in the Table No.32 below paragraph 441.

488. The amount of Rs.11.64 crores claimed in the ARR towards 'Other Finance Charges' (including Lease rentals) is considered reasonable and is allowed in full.

489. The licensee has proposed an amount of Rs.22.64 crores for FY 2005-06 towards IDC. Due to lower levels of capitalization of works expenditure as detailed in Table below paragraph 432, an amount of Rs. 13.75 crores has been admitted and included in the CWIP.

490. The amount reckoned towards Interest and Other Finance charges in the computations of the Revenue Requirement for FY 2005-06 therefore works out to Rs.240.76 crores as detailed in the Table below:

Table No.56
Interest (net) and other finance charges for FY 2005-06 (Rs.Crs)

Particulars	APTRANSCO	APERC
Interest on loans	249.76	229.12
Other finance charges	11.64	11.64
Total	261.40	240.76
LESS: IDC capitalized	22.64	*0.00
Amount taken for ARR computation	238.76	240.76

(*) IDC is directly included in the CWIP.

Legal charges:

491. The Licensee has claimed (in Form 1.3) Rs. 1.06 crore (net of capitalisation) towards Legal charges. This is accepted as reasonable.

Audit and other fees:

492. The Licensee has claimed Rs.0.38 crore (net of capitalisation) towards Audit and other fees. This is accepted as reasonable.

Depreciation:

493. The Licensee has projected Rs. 255.90 crores and the amount admitted is Rs. 248.31crores. The difference is due to lower level of capitalisation for FY 2004-05 as explained earlier under OCFA.

Contribution to employee funds:

494. The Licensee has projected the Contribution to employee funds at Rs.10.52 crores (net of capitalisation). An amount of Rs.12.31 crores (gross) has been included on this account in the computation of the Revenue Requirement for FY 2005-06.

Special Appropriations

Contribution to Contingencies Reserve:

495. APTRANSCO has proposed Rs.12.90 crores as Special Appropriation towards contribution to Contingencies reserve to be provided in the computation of the Revenue Requirement. The amount has been calculated at 0.25% of OCFA projected in the filing. As the OCFA has undergone a change due to the reasons mentioned in the paragraphs 433 and 434 on OCFA, the amount accepted towards Contingencies Reserve is Rs.11.12 crores (0.25% of Rs. 4448.90 crores). The Licensee shall follow the Commission's directive, as incorporated as item no. 12 in Annexure 'A' to this Order, with regard to investment of and withdrawals from the Contingencies Reserve.

Adjustments pertaining to previous years:

(a) Interest:-The interest adjustment amount of Rs.7.58 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(b) Depreciation:- The depreciation adjustment amount of Rs. (-) 1.76 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(c) Income Tax:- The income tax adjustment amount of Rs.4.97 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(d) Reasonable Return:- The reasonable return adjustment amount of Rs. 21.39 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(e) Power purchase cost adjustment:

(i). The APTRANSCO paid the supplementary power purchase cost bills of APGENCO and other power suppliers for the period FY 2001-02 to 2003-04 amounting to Rs.237.24 crores in FY2003-04. The payments have been shown in the Annual Accounts of APTRANSCO for 2003-04 as Prior period expenses. The amount has now been claimed by APTRANSCO in its ARR filings for FY 2005-06.

(ii). As per the correct procedure, the APTRANSCO should have claimed the amount, if admissible, from the consumers through the DISCOMs as FSA, instead of through the ARR for a subsequent year. This departure from the normal procedure has resulted in certain distortions. For one, the accounts of DISCOMs would not reflect the FSA transactions. This would also have distorted the cost to serve for all categories for FY 2005-06.

(iii). More importantly, the APTRANSCO while settling the supplementary power purchase cost bills through the FSA route is expected to exercise certain checks to determine the admissibility of each cost item. In the case of the APGENCO, however, any deficit on account of liability of interest on pension bonds discharged by APGENCO is also to be allowed as a pass-through in the tariff of APGENCO on a year-to-year basis, in accordance with the Commission's Order dated 24th March, 2003 in O.P.No.402/2002. In other words, this liability too is also to be recovered through FSA.

(iv). The checks to be exercised by APTRANSCO would be aimed inter-alia to ensure that each item of FSA bills relates to fuel and price-related costs alone. The Commission expects APTRANSCO to exercise all these checks with due diligence, so that inadmissible costs are not passed on to the consumer.

(v). During analysis by Commission, it appeared that the aforementioned checks had not been exercised. Therefore, the Commission to satisfy itself about the correctness of the claims, requested APTRANSCO to provide information on discharge of pensionary liabilities by APGENCO, the payment mechanism for generation over and above the capacity of Srisailam Right Bank Power House for determining the extent of payments due in respect of hydel power generation by Srisailam Left Bank Power House, the details of depreciation claimed by APGENCO and paid for by APTRANSCO, etc. The requisite details are still awaited.

496. In the light of the above, the claim for power purchase cost adjustments for as preferred by APTRANSCO, has been kept in abeyance, and the APTRANSCO, APGENCO and DISCOMs are directed to furnish full details of payments made during FY 2003-04 by 31st July 2005. They are also directed to evolve a suitable mechanism for verification of such claims in future.

Total expenditure:

497. In view of the above changes, the total expenditure works out to Rs.9332.69 crores for 48886.50 MU energy as against Rs. 9810.72 crores for 51214 MU energy projected by the Licensee as summarised in the following Table:

Table No.57
Statement of expenditure and special appropriations (Rs. Crs)

Expenditure items	APTRANSCO	APERC	Bulk Supply	Transmission	SLDC
Purchase of energy	8894.27	8629.25	8370.19	0.00	0.00
ULDC charges		0.00	0.00	0.00	34.34
PGCIL charges		0.00	0.00	224.72	0.00
Wages and salaries	101.60	99.23	2.74	80.83	15.66
Administration and general expenses	12.92	12.92	0.39	11.08	1.45
Repairs and maintenance	43.68	43.68	0.00	38.98	4.70
Rent, rates and taxes	1.49	1.49	0.10	1.29	0.10
Approved loan interest	238.76	240.76	4.36	236.40	0.00
Legal charges	1.06	1.06	0.00	1.06	0.00
Audit & other fees	0.38	0.38	0.00	0.38	0.00
Depreciation	255.90	248.31	0.00	248.31	0.00
Contribution to employee funds	10.52	12.31	0.33	11.63	0.35
Special Appropriations					
Contribution to contingencies reserve	12.90	11.12	0.00	11.12	0.00
Sub total	**9573.48**	**9300.51**	**8378.11**	**865.80**	**56.60**
Adjustments pertaining to previous years:					
Interest	0.00	7.58	0.00	7.58	0.00
Depreciation	0.00	(1.76)	0.00	(1.76)	0.00
Income Tax	0.00	4.97	0.00	4.97	0.00
Reasonable Return	0.00	21.39	0.00	21.39	0.00
Fuel surcharge adjustment	237.24	0.00	0.00	0.00	0.00
Sub total	**237.24**	**32.18**	**0.00**	**32.18**	**0.00**
TOTAL EXPENDITURE	**9810.72**	**9332.69**	**8378.11**	**897.98**	**56.60**

Note: The amounts within brackets denote minus figures.

Reasonable return:

498. APTRANSCO has not claimed the Reasonable Return in its filings. However, in accordance with the principles enunciated in paragraph 411, the Commission provides an amount of Rs. 67.59 crores (16% of the capital base of Rs. 346.46 crores and 0.50% of the loans of Rs.2431.28 crores) as Reasonable Return in the calculation of the Revenue Requirement.

Non-tariff income:

499. The Licensee has projected an amount of Rs.209.44 crores as Non-Tariff income (Form 1.4). Against this, the Commission has reckoned an amount of Rs.164.64 crores as detailed below:

Table No.58 (Rs. Crs)

Items	APTRANSCO	APERC		
		Bulk supply	Transmission and SLDC	Total
(a) Interest on contingencies reserve	0.00	0.00	0.00	0.00
(b) Interest on investments	0.84	0.00	0.84	0.84
(c) Incidental income	5.95	0.00	5.95	5.95
(d) Transmission charges	1.40	0.00	1.40	1.40
(e) Inter-State sale of power	16.80	0.00	0.00	0.00
(f) Incentive on securitisation scheme	97.40	97.40	0.00	97.40
(g) Rebate on power purchase	86.61	58.61	0.00	58.61
(h) Other rebates	0.44	0.00	0.44	0.44
TOTAL	**209.44**	**156.01**	**8.63**	**164.64**

Grid support charges:

500. No income has been estimated by the Commission as accruing from grid support charges for FY 2005-06 as the Commission's Order on this matter was set aside by the Hon'ble High Court and the appeals against the orders of the High Court are pending in the Hon'ble Supreme Court.

Inter-State sales of power:

501. After careful consideration, the Commission has not assumed any surplus power as being available in the State as against 300 MU filed by the APTRANSCO. The net revenue from the Inter-State sales of power, therefore, reckoned for tariff purpose is, therefore, nil as against Rs.16.80 crores projected by the Licensee.

Aggregate Revenue Requirement:

502. The ARR accordingly works out to Rs.9235.64 crores as against Rs.9601.28 crores projected by the Licensee, as detailed in the Table below:

Table No.59

	(Rs. Crs)
Total expenditure	9332.69
Reasonable return	67.59
Total	9400.28
Minus: Non-tariff income	164.64
Total net Aggregate Revenue Requirement	**9235.64**

CHAPTER- XI

ERC / ARR 2005-06: DISTRIBUTION AND RETAIL SUPPLY
Andhra Pradesh Central Power Distribution Company Limited
(APCPDCL)

503. APCPDCL, the Licensee company for distribution and retail supply of electricity in the territory assigned to it in Andhra Pradesh as per the licence granted by the Commission, filed its ARR / ERC and FPT for FY 2005-06 on 30.11.2004, followed by an addendum thereto on 07-02-2005. The Commission has examined the Licensee's proposals and indicates herein the areas where the computations of the Licensee are found to be incorrect or unacceptable, with reasons therefor and the Commission's alternative computations.

Capital base – Positive elements:

Capital Base Analysis

504. The Licensee in the filings has made the following projections of capital expenditure for FY 2005-06:

Table No.60
Proposed capital outlay for FY 2005 – 06 (Rs. Crs)

Base capital expenditure	Expenditure capitalisation	IDC*	Total
425.00	42.50	19.58	487.08

* Interest during construction (IDC)

505. The Base capital expenditure of Rs.425.00 crores is for HVDS and other schemes to strengthen the System, the details of which are examined later. The Licensee has assumed 10% of the Base capital expenditure towards expenditure capitalisation and Rs.19.58 crores have been shown as IDC, raising the aggregate capital expenditure to Rs.487.08 crores.

506. Before dealing with the projections of capital expenditure for FY 2005-06, it is necessary to advert to the capital expenditure during FY 2003-04, the latest year for which the audited figures are available. The Commission has noted that there was an excess of Rs.230.83 crores in capital expenditure vis-à-vis the outlay of Rs. 203.38 crores approved for APCPDCL in the Tariff Order for FY 04 as indicated in the Table below:

Table No.61
Capital outlay-Performance during 2003- 04 (Rs. Crs)

Filing	Tariff Order	Actuals	Excess
557.13	203.38	434.21	230.83

(Figures include IDC and expense capitalisation)

507. This excess has resulted in significant variation in the Capital Base calculations for FY 2003-04, as detailed in the Table below:

Table No.62
Capital Base for FY 2003-04
Comparison of actual costs with Tariff Order figures
on the basis of the audited accounts (Rs. Crs)

Particulars	Filing	Tariff Order	Actuals	Variance
Original Cost of Fixed Assets	2142.07	1650.22	2017.45	367.23
Capital Works-in-Progress (CWIP)	303.88	283.15	245.25	(37.90)
Investments	0.00	0.00	4.16	4.16
Avg. Cost of Stores	63.57	13.20	11.53	(1.67)
Avg. Cash and Bank balance	25.38	55.85	59.61	3.76
Total (A)	**2534.90**	**2002.42**	**2338.00**	**335.58**
Accumulated depreciation	1069.49	1047.72	1015.79	(31.93)
Borrowings	997.81	416.58	926.86	510.28
Other no-cost funds	0.00	479.68	487.80	8.12
Total (B)	**2067.30**	**1943.98**	**2430.45**	**486.47**
Capital Base (A-B)	**467.60**	**58.44**	**(92.45)**	**(150.89)**

Note: The amounts within brackets denote minus figures.

508. The adjustment, due to this variance in the Capital Base, necessitates recalculation of Reasonable Return initially taken into account in the computation of the ARR for FY 2003-04, for necessary correction in the Tariff Order for FY 2005-06.

Capital Works - in - Progress (CWIP):
Capital outlay – Progress during FY 2004- 05:

509. In the ARR for FY 2005-06, the DISCOM has projected a revised capital outlay (Base expenditure) of Rs. 400.00 crores for FY 2004-05 along with IDC of Rs. 13.64 crores and expenditure capitalization of Rs.40.00 crores (taken at 10%), which aggregate to Rs. 453.64 crores as total capital expenditure expected to be incurred during FY 2004-05 as against Rs.374.65 crores reckoned in the Tariff Order for FY 2004-05. The Commission considers this projection to be on the higher side keeping in view the progress of expenditure during the first six months of the year, up to September 2004, and allows an amount of Rs.377.93 crores towards base expenditure as detailed in the Table below:

Table No.63
Estimated capital outlay for FY 2004-05 (Rs. Crs)

Sl. No.	Name of Scheme	APCPDCL	Actual expenditure up to September 2004	APERC
1	APL-1 Suppl.	2.89	2.89	2.89
2	SI (Existing)	13.64	3.75	13.64
3	SI (New)	38.28	1.44	28.21
4	Pump-set energisation	10.10	5.42	10.10
5	Metering	11.67	2.02	11.67
6	Rural electrification (P:IE)	43.88	2.05	43.88
7	Distribution works-Release of services	45.00	0.00	35.00
8	SI Transformers	39.60	13.69	37.60
9	Hyderabad (North-South-Central) PFC	40.00	2.21	40.00
10	Material schemes	19.20	14.63	19.20
11	HVDS Hyderabad City	15.00	5.12	15.00
12	HVDS Rural areas, Agriculture	15.36	3.07	15.36
13	T & D	45.00	0.00	45.00
14	Town schemes in 6 operation circles	60.38	14.05	60.38
	Total	**400.00**	**70.34**	**377.93**

510. The amount to be taken to CWIP in respect of the above schemes works out to Rs.428.61 crores as detailed in the Table below:

Table No.64
Amounts taken for CWIP for FY 2004-05 (Rs. Crs)

Particulars	APCPDCL	APERC
Base capital expenditure	400.00	377.93
Expenses capitalized	40.00	37.79
Interest (IDC) capitalized	13.64	12.89
Total	**453.64**	**428.61**

511. The projected CWIP as on 31-03-2005 would constitute the Opening Balance for FY 2005-06.

CAPITAL OUTLAY – Projections for FY 2005-06:

512. As regards FY 2005-06, the ARR filings project a Base capital expenditure of Rs.425.00 crores for FY2005-06, which together with the expenditure capitalization of Rs.42.50 crores (10% of Base capital expenditure) and IDC of Rs.19.58 crores aggregates to Rs.487.08 crores. Based on the progress, the Commission allows an estimated amount of Rs.306.00 crores as base capital expenditure: the major difference is due to non-consideration of HVDS Rural Areas, Agriculture (New) Schemes, as they have not been submitted to the Commission for approval. The details are as follows:

Table No.65
Scheme-wise details for Base capital expenditure for FY 2005-06 (Rs. Crs)

S.No.	Name of Scheme	APCPDCL	APERC
1	SI (New)	31.00	19.00
2	Pump-set energisation	19.00	15.00
3	Metering	60.00	50.00
4	Distribution works-Release of services	40.00	40.00
5	SI Transformers	28.00	5.00
6	Hyderabad (North-South-Central) PFC	90.00	50.00
7	Material schemes	15.00	15.00
8	HVDS Hyderabad City	12.50	12.50
9	HVDS Rural areas, Agriculture (New)	30.00	0.00
10	T & D	50.00	50.00
11	Town schemes in 6 operation circles	49.50	49.50
	Total	**425.00**	**306.00**

513. The DISCOM shall submit monthly progress reports on physical and financial progress on each of the schemes as directed earlier in paragraphs 390 to 391.

514. As already stated above, the Commission has decided to reckon outlays of Rs.377.93 crores for FY 2004-05 and Rs.306.00 crores for FY 2005-06 as Base Capital expenditure (paragraphs 509 and 512). These, together with the expenses and the IDC capitalized, work out respectively to Rs.428.61 crores and Rs.350.70 crores; consequently,

the amounts reckoned for CWIP work out to Rs.373.86 crores for FY 2004-05 and Rs.324.56 crores for FY 2005-06, as detailed in the Table below:

Table No.66

Statement of estimated Capital Works-in-Progress for FY 2005-06 (Rs. Crs)

Item	APCPDCL	APERC
Closing Balance of CWIP as on 31.03.2004 as per audited Accounts	240.17	245.25
Outlay during the year (FY 2004-05)	400.00	377.93
Expenses capitalized during the year	40.00	37.79
Interest during construction charged to Capital (IDC)	13.64	12.89
Total additions: Capital expenditure	453.64	428.61
Total (OB + Additions)	693.81	673.86
LESS: Works anticipated to be completed in FY 2004-05	456.19	300.00
Closing Balance of CWIP as on 31.03.05 and Opening balance as on 01.04.2005	**237.62**	**373.86**
Additional investments during the year (FY 2005-06)	425.00	306.00
Expenses during the year capitalized	42.50	30.60
Interest during construction charged to Capital (IDC)	19.58	14.10
Total additions: Capital expenditure	487.08	350.70
Total (OB + Additions)	724.70	724.56
LESS: Works anticipated to be completed in FY 2005-06	483.00	400.00
Closing Balance of CWIP as on 31.03.06	**241.70**	**324.56**

Original Cost of Fixed Assets (OCFA):

515. The Licensee has proposed an amount of Rs.2817.80 crores as OCFA (excluding consumer contributions) to be reckoned in the Capital Base calculations for FY 2005-06. As against Licensee's projection of Rs. 456.19 crores, for transfer to OCFA from CWIP for FY 2004-05, only an amount of Rs.300.00 crores has been allowed after detailed analysis. Similarly, for FY 2005-06, as against Rs.483.00 crores reckoned by the Licensee, an amount of Rs. 400.00 crores has been taken for transfer to OCFA from CWIP.

516. The estimated amount to be reckoned under OCFA in the Capital Base as on 31-03-2006 is, therefore, as calculated in the Table below:

Table No.67

Statement of estimated fixed assets as on 31-03-2006 (Rs. Crs.)

ITEM	APCPDCL	APERC
Gross Fixed Assets as on 31-03-04 as per audited Accounts **LESS**: Consumer contributions for capital assets	2496.51 479.06	2496.51 479.06
Original Cost of Fixed Assets (OCFA) as on 31.03.04	2017.45	2017.45
ADD: Works likely to be completed during 2004-05	456.19	300.00
Gross OCFA as on 31.03.05	2473.64	2317.45
LESS: Consumer contributions as filed in ARR	78.85	78.85
OCFA as on 31.03.2005	2394.79	2238.60
ADD: Works likely to be completed in FY 2005-06	483.00	400.00
Gross OCFA as on 31.03.2006	2877.79	2638.60
LESS: Consumer contributions as filed in ARR	60.49	60.48
OCFA as on 31.03.2006	**2817.30**	**2578.12**

517. Accordingly, OCFA taken to Capital Base amounts to Rs.2578.12 crores.

Compulsory investments:

518. The Licensee has projected the compulsory investments (Contingencies Reserve) at Rs. 13.18 crores for FY 2005-06 and the same are considered in the computation of the capital base by APERC.

Working capital requirements
Average cost of stores:

519. The DISCOM has proposed an amount of Rs.46.60 crores towards Average Cost of Stores for inclusion in the Capital Base calculations. As per the Directive given in paragraph of 339 of Tariff Order FY 2003-04, however, an amount of Rs.12.11 crores calculated at two months' requirement of Rs. 72.65 crores for Repairs and Maintenance expenses, as claimed by the Licensee and admitted by the Commission in paragraph 528 infra, is provided.

Average cash and bank balance:

520. The Licensee has proposed Rs.44.13 crores towards Cash and Bank Balance for FY 2005-06. In accordance with paragraph 397, however, the average cash and bank balance at one-and-a-half months' level of eligible expenses, which works out to Rs.44.95 crores, has been provided.

Capital base-Negative elements:

Accumulated Depreciation

521. The accumulated depreciation as projected by the Licensee in the filings is Rs. 1356.74 crores for FY 2005-06 against which Rs.1350.64 crores is admitted. The difference is due to lower capitalization of works, as indicated in paragraph 515 on OCFA.

Loans from government and approved institutions:

522. For FY 2005-06, the Licensee has projected Rs. 408.24 crores as Government loans, Rs. 480.14 crores as loans from approved institutions and Rs. 37.33 crores Other Market Borrowings aggregating to Rs. 925.71 crores. However, the total loan amount admitted by the Commission works out to Rs.736.59 crores as detailed in the following Table:

Table No.68
Details of loans (Rs. Crs)

Closing balance of loans (excluding CWIP) as per audited accounts as on 31-03-2004	681.62
ADD: Net additions considered after taking into account the capitalization of capital expenditure, loan repayments, other sources of funding (depreciation, consumer contribution etc.) for: FY 2004-05 FY 2005-06	 (162.75) 217.72
Total loans considered in the Capital Base as on 31-03-2006	**736.59**

Note: The amounts within brackets denote minus figures.

Consumer Security Deposits:

523. The Licensee has projected Rs.545.80 crores towards consumer security deposits and the Commission has reckoned the same for Capital Base.

Net capital base:

524. With the above changes in the positive and negative elements of the Capital Base, the net capital base works out to Rs. 15.31 crores as detailed in the following Table as against Rs. 93.46 crores projected by the Licensee:

Table No.69
Capital Base computations for FY 2005-06 **(Rs. Crs)**

ITEM	APCPDCL	APERC
Positive elements of Capital Base		
Original cost of Fixed Assets (excluding consumer contributions, etc. & including intangible assets Rs. 0.50 crore)	2817.80	2578.12
Capital Works-in-Progress	0.00	0.00
Statutory investment (of Contingencies Reserve)	13.18	13.18
Working Capital		
a) Average cost of stores	46.60	12.11
b) Average cash and bank balance	44.13	44.95
A -Total of positive elements of Capital Base	**2921.71**	**2648.35**
Negative elements of Capital Base		
Accumulated Depreciation	1356.74	1350.64
Approved Loans	925.71	736.59
Consumer Security Deposits	545.80	545.80
B - Total of negative elements of Capital Base	**2828.25**	**2633.03**
Net Capital Base (A-B)	**93.46**	**15.31**

Note: The amounts within brackets denote minus figures.

EXPENDITURE
Purchase of energy

525. APCPDCL has projected a requirement of 20919.88 MU of energy against which the Commission has allowed 19775.26 MU as detailed in paragraph 447. The corresponding cost has been arrived at as Rs.3906.34 crores as against Rs.4368.07 crores shown in the ARR.

Wages, Salaries and Other Allowances:

526. The Licensee has projected an amount of Rs.200.17 crores towards Wages, salaries and related costs (net of capitalization). However, the amount taken for Revenue Requirement towards Wages, salaries and allowances is Rs.211.19 crores (net of capitalisation) as calculated in the Table below; the difference is primarily on account of lower level of outlay on capital expenditure admitted by the Commission:

Table No.70
Revenue Requirement – Net Salaries, wages and allowances (Rs. Crs)

Wages, salaries & allowances	233.83
Less: Expense capitalization	22.64
Wages and Salaries- Net of capitalisation	211.19

Administration and general expenses (excluding Rent, rates & taxes, Legal charges, Audit fees, Lease rentals, etc.)

527. The Licensee has claimed Rs.46.15 crores (net of capitalization) towards Administration and General Expenses against which an amount of Rs.42.65 crores is admitted.

Repairs and maintenance

528. APCPDCL has projected Rs.72.65 crores towards Repairs and maintenance for FY 2005-06 for inclusion in the computation of the Revenue Requirement. This is considered reasonable and has been provided.

Rent, rates and taxes

529. APCPDCL has projected Rs.8.53 crores for inclusion in the computation of the Revenue Requirement for FY 2005-06 towards Rent, rates and taxes. This is accepted and is accordingly provided.

Interest on loans (including other finance charges and lease rentals)

530. APCPDCL has projected the interest amount of Rs.262.93 crores. However, APERC has worked out the amount as Rs.204.46 crores as indicated in the Table below:

Table No.71
Interest (net) and Other Finance Charges (Rs. Crs)

Particulars	Amount
Interest	62.77
Lease rentals	3.00
Other Finance Charges	138.69
TOTAL INTEREST	**204.46**

Interest on consumer security deposits

531. APCPDCL has projected Rs.32.21 crores towards interest on consumer security deposits and the same has been accepted as reasonable.

Legal charges

532. The Licensee has claimed an amount of Rs.12.39 crores towards Legal charges. This is accepted as reasonable.

Audit and other fees

533. The Licensee has projected an amount of Rs.0.05 crore towards Audit and other fees. This is accepted as reasonable.

Depreciation

534. Licensee has projected an amount of Rs.184.93 crores and the amount admitted is Rs.178.84 crores. The difference is due to lower level of capitalization.

Contribution to employee funds

535. The Licensee has projected Rs.25.55 crores (net of capitalization) towards contribution to employee funds. An amount of Rs.24.58 crores (gross) has however been admitted on this account towards the computation of the Revenue Requirement for FY 2005-06.

Special Appropriations

Contribution to Contingencies Reserve

536. APCPDCL has proposed an amount of Rs.8.59 crores as Special Appropriation towards Contribution to Contingencies Reserve in the Revenue Requirement, calculated at 0.25% of OCFA projected in the filing. As the amount of OCFA has undergone a change due to the reasons mentioned in the preceding paragraphs 515 and 516 on OCFA, the amount provided towards Contingencies Reserve is Rs. 6.45 crores. The Licensee shall follow the Commission's directive, as incorporated as item no. 12 in Annexure 'A' to this Order, with regard to investment of and withdrawal from the Contingencies Reserve.

Adjustments pertaining to previous years:

(a) Interest:-The interest adjustment amount of Rs.21.53 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(b) Depreciation:- The depreciation adjustment amount of Rs. (-)7.95 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(c) Reasonable Return:- The reasonable return adjustment amount of Rs.(-)6.79 crores for FY 2003-04, has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

Total expenditure

537. In view of the above changes, the total expenditure works out to Rs. 4707.11 crores as against Rs.5222.22 crores projected by the Licensee, as summarized in the following Table:

Table No.72

Statement of expenditure and special appropriations (Rs. Crs)

Expenditure Items	APCPDCL	APERC
Purchase of energy	4368.07	3906.34
Wages and Salaries (net of capitalization)	200.17	211.19
Administration and General Expenses (Net of capitalization)	46.15	42.65
Repairs and maintenance	72.65	72.65
Rent, rates and taxes	8.53	8.53
Approved loan interest (Net of capitalization)	262.93	204.46

Interest on Security Deposits	32.21	32.21
Legal charges	12.39	12.39
Audit and other fees	0.05	0.05
Depreciation	184.93	178.84
Contribution to employee Funds (Net of capitalization)	25.55	24.58
Special Appropriations		
Contribution to Contingencies Reserve	8.59	6.45
Adjustments pertaining to previous years:		
Interest	0.00	21.53
Depreciation	0.00	(7.95)
Reasonable Return	0.00	(6.79)
TOTAL EXPENDITURE	**5222.22**	**4707.11**

Note: The amounts within brackets denote minus figures.

Reasonable return:

538. APCPDCL has not claimed the Reasonable Return in its filings. However, in accordance with the principles enunciated in paragraph 411, the Commission provides an amount of Rs. 6.13 crores [16% of the capital base of Rs.15.31 crores and 0.50% of the loans of Rs.736.59 crores) as Reasonable Return in the calculation of the Revenue Requirement.

Non-tariff income

539. The Licensee has projected an amount of Rs. 307.62 crores as Non-Tariff income (Form 1.4). The Commission has reckoned an amount of Rs.306.63 crores as non-tariff income and the wheeling revenue of Rs.0.99 crore projected by the Licensee has been taken as tariff income.

Aggregate Revenue Requirement

540. The ARR works out to Rs.4406.61 crores as against Rs.5222.22 crores projected by the Licensee as detailed in the Table below:

Table No.73 (Rs. Crs)

Total expenditure	4707.11
Reasonable Return	6.13
Total	4713.24
Minus: Non-Tariff income	306.63
Total net Aggregate Revenue Requirement	**4406.61**

Revenue from tariff and the gap

541. Determination of the ARR is the first step in the process of tariff formulation. Subsequent Chapters (XVI and XVII) of this Order discuss the sales projections by the DISCOMS, the revenue gap, the tariffs approved by the Commission taking into account the cross-subsidy and the government subsidy, the bulk supply tariff (BST) applicable to each DISCOM and other relevant aspects.

CHAPTER – XII
ERC / ARR 2005-06: DISTRIBUTION AND RETAIL SUPPLY
Andhra Pradesh Eastern Power Distribution Company Limited (APEPDCL)

542. APEPDCL, the Licensee company for distribution and retail supply of electricity in the territory assigned to it in Andhra Pradesh as per the licence granted by the Commission, filed its ARR / ERC and FPT for FY 2005-06 on 30.11.2004, followed by an addendum thereto on 07-02-2005. The Commission has examined the Licensee's proposals and indicates herein the areas where the computations of the Licensee are found to be incorrect or unacceptable, with reasons therefor and the Commission's alternative computations.

Capital base – Positive elements:

Capital Base Analysis

543. The Licensee in the filings has made the following projections of capital expenditure for FY 2005-06:

Table No.74
Proposed capital outlay for FY 2005 – 06 (Rs. Crs)

Base capital expenditure	Expenditure capitalisation	IDC*	Total
230.00	23.00	2.09	255.09
* Interest during construction (IDC)			

544. The Base capital expenditure of Rs.230.00 crores is for HVDS and other schemes to strengthen the System, the details of which are examined later. The Licensee has assumed 10% of the Base capital expenditure towards expenditure capitalisation and Rs.2.09 crores have been shown as IDC, raising the aggregate capital expenditure to Rs.255.09 crores.

545. Before dealing with the projections of capital expenditure for FY 2005-06, it is necessary to advert to the capital expenditure during FY 2003-04, the latest year for which the audited figures are available. The Commission has noted that there was an excess of Rs.107.92 crores in capital expenditure vis-à-vis the outlay of Rs.131.20 crores approved for APEPDCL in the Tariff Order for FY 04 as indicated in the Table below:

Table No.75
Capital outlay-Performance during 2003- 04 (Rs. Crs)

Filing	Tariff Order	Actuals	Excess
351.69	131.20	239.12	107.92

(Figures include IDC and expense capitalisation)

546. This excess has resulted in significant variation in the Capital Base calculations for FY 2003-04, as detailed in the Table below:

Table No.76
Capital Base for FY 2003-04
Comparison of actual costs with Tariff Order figures on the basis of the audited accounts (Rs. Crs)

Particulars	Filing	Tariff Order	Actuals	Variance
Original Cost of Fixed Assets	861.75	729.26	760.50	31.24
Capital Works-in-Progress (CWIP)	346.84	174.31	235.53	61.22
Investments	0.00	0.00	1.49	1.49
Avg. Cost of Stores	26.27	2.24	1.61	(0.63)
Avg. Cash and Bank balance	10.82	24.75	23.94	(0.81)
Total (A)	**1245.68**	**930.56**	**1023.07**	**92.51**
Accumulated depreciation	455.64	452.10	459.54	7.44
Borrowings	552.43	369.14	567.08	197.94
Other no-cost funds	0.00	280.40	286.68	6.28
Total (B)	**1008.07**	**1101.64**	**1313.30**	**211.66**
Capital Base (A-B)	**237.61**	**(171.08)**	**(290.23)**	**(119.15)**

Note: The amounts within brackets denote minus figures.

547. The adjustment, due to this variance in the Capital Base, necessitates recalculation of Reasonable Return initially taken into account in the computation of the ARR for FY 2003-04, for necessary correction in the Tariff Order for FY 2005-06.

Capital Works - in - Progress (CWIP):

Capital outlay – Progress during FY 2004- 05:

548. In the ARR for FY 2005-06, the DISCOM has projected a revised capital outlay (Base expenditure) of Rs. 150.00 crores for FY 2004-05 along with IDC of Rs. 7.11 crores and expenditure capitalization of Rs. 15.00 crores (taken at 10%), which aggregate to Rs. 172.11 crores as total capital expenditure expected to be incurred during FY 2004-05 as against Rs.130.74 crores reckoned in the Tariff Order for FY 2004-05. The Commission considers this projection to be on the higher side keeping in view the progress of expenditure during the first eight months of the year, up to November 2004, and allows an amount of Rs.148.00 crores towards base expenditure as detailed in the Table below:

Table No.77
Estimated capital outlay for FY 2004-05 (Rs. Crs)

S.No.	Name of Scheme	APEPDCL	Actual expenditure up to November 2004	APERC
1	T & D	5.00	4.98	5.00
2	Normal works	25.00	12.24	25.00
3	Rural electrification	10.00	8.83	10.00
4	Segregation of Agl feeders	1.44	1.44	1.44
5	Pump-set energisation	5.00	3.37	5.00
6	APDRP - Eluru Circle	30.00	28.92	30.00
7	APDRP - 20 Towns	17.00	11.40	15.00
8	SI meters	6.00	2.54	6.00
9	SI Conductors	3.00	1.16	3.00
10	SI Transformers	2.00	2.00	2.00

11	REC - SI (P: SI Schemes)	8.00	4.06	8.00
12	Metering for Agl services	1.00	0.00	1.00
13	HVDS-Phase 1	35.00	28.01	35.00
14	SI - VCB (old)	1.56	1.56	1.56
	Total	**150.00**	**111.51**	**148.00**

549. The amount to be taken to CWIP in respect of the above schemes works out to Rs.169.82 crores as detailed in the Table below:

Table No.78

Amounts taken for CWIP for FY 2004-05 (Rs. Crs)

Particulars	APEPDCL	APERC
Base capital expenditure	150.00	148.00
Expenses capitalized	15.00	14.80
Interest (IDC) capitalized	7.11	7.02
Total	**172.11**	**169.82**

550. The projected CWIP as on 31-03-2005 would constitute as the Opening Balance for FY 2005-06.

CAPITAL OUTLAY – Projections for FY 2005-06:

551. As regards FY 2005-06, the ARR filings project a Base capital expenditure of Rs.230.00 crores for FY2005-06, which together with the expenditure capitalization of Rs.23.00 crores (10% of Base capital expenditure) and IDC of Rs.2.09 crores aggregates to Rs.255.09 crores. Based on a review of the schemes, the Commission allows an estimated amount of Rs.146.90 crores as base capital expenditure; the major difference is due to non-consideration of HVDS schemes, as they have not been submitted to the Commission. The details are as follows:

Table No.79

Scheme-wise details for Base capital expenditure for FY 2005-06 (Rs. Crs)

S.No.	Name of Scheme	APEPDCL	APERC
1	T & D	5.00	5.00
2	Normal works	25.00	25.00
3	Rural electrification	5.00	5.00
4	Pump-set energisation	3.00	3.00
5	APDRP - Eluru Circle	80.00	50.00
6	APDRP - 20 Towns	45.00	30.00
7	SI Conductors	4.00	4.00
8	REC-SI (P: SI Schemes)	8.00	8.00
9	Metering for Agl services	2.00	2.00
10	SI - Lines (New)	10.00	10.00
11	SI VCB (new)	4.90	4.90
12	SI Meters (New)	10.00	0.00
13	HVDS	28.10	0.00
	Total	**230.00**	**146.90**

552. The DISCOM shall submit monthly progress reports on physical and financial progress on each of the schemes as directed earlier in paragraphs 390 to 391.

553. As already stated above, the Commission has decided to reckon outlays of Rs.148.00 crores for FY 2004-05 and Rs.146.90 crores for FY 2005-06 as Base Capital expenditure (paragraphs 548 and 551). These, together with the expenses and the IDC capitalized, work out respectively to Rs.169.82 crores and Rs.162.92 crores; consequently, the amounts reckoned for CWIP work out to Rs.245.35crores for FY 2004-05 and Rs.208.27 crores for FY 2005-06, as detailed in the Table below:

Table No.80

Statement of estimated Capital Works- in-Progress for FY 2005-06 (Rs. Crs)

Item	APEPDCL	APERC
Closing Balance of CWIP as on 31.03.2004 as per audited Accounts	235.53	235.53
Outlay during the year (FY 2004-05)	150.00	148.00
Expenses capitalized during the year	15.00	14.80
Interest during construction charged to Capital (IDC)	7.11	7.02
Total additions: Capital expenditure	172.11	169.82
Total (OB + Additions)	407.64	405.35
LESS: Works anticipated to be completed in FY 2004-05	222.42	160.00
Closing Balance of CWIP as on 31.03.05 and Opening balance as on 01.04.2005	**185.22**	**245.35**
Additional investments during the year (FY 2005-06)	230.00	146.90
Expenses during the year capitalized	23.00	14.69
Interest during construction charged to Capital (IDC)	2.09	1.33
Total additions: Capital expenditure	255.09	162.92
Total (OB + Additions)	440.31	408.27
LESS: Works anticipated to be completed in FY 2005-06	167.17	200.00
Closing Balance of CWIP as on 31.03.06	**273.14**	**208.27**

Original Cost of Fixed Assets (OCFA):

554. The Licensee has proposed an amount of Rs.1079.32 crores as the OCFA (excluding consumer contributions) to be reckoned in the Capital Base calculations for FY 2005-06. As against Licensee’s projection of Rs. 222.42 crores, for transfer to OCFA from CWIP for FY 2004-05, only an amount of Rs.160.00 crores has been allowed after detailed analysis. Similarly, for FY 2005-06, as against Rs.167.17 crores reckoned by the Licensee, an amount of Rs. 200.00 crores has been taken for transfer to OCFA from CWIP.

555. The estimated amount to be reckoned under OCFA in the Capital Base as on 31-03-2006 is, therefore, as calculated in the Table below:

Table No.81

Statement of estimated fixed assets as on 31-03-2006 (Rs. Crs.)

ITEM	APEPDCL	APERC
Gross Fixed Assets as on 31-03-04 as per audited Accounts **LESS**: Consumer contributions for capital assets	1015.19 229.46	1015.19 254.69
Original Cost of Fixed Assets (OCFA) as on 31.03.04	785.73	760.50
ADD: Works likely to be completed during 2004-05	222.42	160.00
Gross OCFA as on 31.03.05	1008.15	920.50
LESS: Consumer contributions as filed in ARR	48.00	48.00
OCFA as on 31.03.2005	960.15	872.50

ADD: Works likely to be completed in FY 2005-06	167.17	200.00
Gross OCFA as on 31.03.2006	1127.32	1072.50
LESS: Consumer contributions as filed in ARR	48.00	48.00
OCFA as on 31.03.2006	**1079.32**	**1024.50**

556. Accordingly, OCFA taken to Capital Base amounts to Rs.1024.50 crores.

Compulsory investments:

557. The Licensee has projected the compulsory investments (Contingencies Reserve) at Rs. 5.39 crores for FY 2005-06 and the same are considered in the computation of the capital base by APERC.

Working capital requirements

Average cost of stores:

558. The DISCOM has proposed an amount of Rs.42.14 crores towards Average Cost of Stores for inclusion in the Capital Base calculations. As per the Directive given in paragraph of 339 of Tariff Order FY 2003-04, however, an amount of Rs.2.70 crores calculated at two months' requirement of Rs. 16.22 crores for Repairs and Maintenance expenses, as claimed by the Licensee and admitted by the Commission in paragraph 567 infra, is provided.

Average cash and bank balance:

559. The Licensee has proposed Rs.23.27 crores towards Cash and Bank Balance for FY 2005-06. In accordance with paragraph 397, however, the average cash and bank balance at one-and-a-half months' level of eligible expenses which works out to Rs.23.98 crores, has been provided.

Capital base - Negative elements:

Accumulated Depreciation

560. The accumulated depreciation as projected by the Licensee in the filings is Rs. 632.81 crores for FY 2005-06 against which Rs.627.71 crores is admitted. The difference is due to lower capitalization of works, as indicated in paragraph 554 on OCFA.

Loans from government and approved institutions:

561. For FY 2005-06, the Licensee has projected Rs. 83.40 crores as Government loans and Rs. 69.08 crores as loans from approved institutions aggregating to Rs. 152.48 crores. However, the total loan amount admitted by the Commission works out to Rs.316.03 crores as detailed in the following Table:

Table No.82

Details of loans (Rs. Crs)

Closing balance of loans (excluding CWIP) as per audited accounts as on 31-03-2004	255.89
ADD: Net additions considered after taking into account the capitalization of capital expenditure, loan repayments, other sources of funding (depreciation, consumer contribution etc.) for: FY 2004-05 FY 2005-06	 (28.37) 88.51
Total loans considered in the Capital Base as on 31-03-2006	**316.03**
Note: The amounts within brackets denote minus figures.	

Consumer Security Deposits:

562. The Licensee has projected Rs.316.07 crores towards consumer security deposits and the Commission has reckoned the same for Capital Base.

Net capital base:

563. With the above changes in the positive and negative elements of the Capital Base, the net capital base works out to Rs. (-) 203.24 crores as detailed in the following Table as against Rs. 48.76 crores projected by the Licensee:

Table No.83

Capital Base computations for FY 2005-06 (Rs. Crs)

ITEM	APEPDCL	APERC
Positive elements of Capital Base		
Original cost of Fixed Assets (excluding consumer contributions, etc.)	1079.32	1024.50
Capital Works-in-Progress	0.00	0.00
Statutory investment (of Contingencies Reserve)	5.39	5.39
Working Capital		
a) Average cost of stores	42.14	2.70
b) Average cash and bank balance	23.27	23.98
A -Total of positive elements of Capital Base	**1150.12**	**1056.57**
Negative elements of Capital Base		
Accumulated Depreciation	632.81	627.71
Approved Loans	152.48	316.03
Consumer Security Deposits	316.07	316.07
B -Total of negative elements of Capital Base	**1101.36**	**1259.81**
Net Capital Base (A-B)	**48.76**	**(203.24)**

Note: The amounts within brackets denote minus figures.

EXPENDITURE

Purchase of energy

564. APEPDCL has projected a requirement of 7921.54 MU of energy against which the Commission has allowed 7888.17 MU as detailed in paragraph 447. The corresponding cost has been arrived at as Rs.1558.20 crores as against Rs.1766.50 crores shown in the ARR.

Wages, Salaries and Other Allowances:

565. The Licensee has projected an amount of Rs.122.66 crores towards Wages, salaries and related costs (net of capitalization). However, the amount taken for Revenue

Requirement towards Wages, salaries and allowances is Rs.131.89 crores (net of capitalisation) as calculated in the Table below; the difference is primarily on account of lower level of outlay on capital works admitted by the Commission:

Table No.84
Revenue Requirement - Net Salaries, wages and allowances (Rs. Crs)

Wages, salaries & allowances	142.63
Less: Expense capitalization	10.74
Wages and Salaries- Net of capitalisation	**131.89**

Administration and general expenses (excluding Rent, rates & taxes, Legal charges, Audit fees, Lease rentals, etc.)

566. The Licensee has claimed Rs.25.41 crores (net of capitalization) towards Administration and General Expenses against which an amount of Rs.21.76 crores is admitted.

Repairs and maintenance

567. APEPDCL has projected Rs.16.22 crores towards Repairs and maintenance for FY 2005-06 for inclusion in the computation of the Revenue Requirement. This is considered reasonable and has been provided.

Rent, rates and taxes

568. APEPDCL has projected Rs.7.63 crores for inclusion in the computation of the Revenue Requirement for FY 2005-06 towards Rent, rates and taxes. This is accepted and is accordingly provided.

Interest on loans (including other finance charges and lease rentals)

569. APEPDCL has projected an interest amount of Rs.67.81 crores. However, APERC has worked out the amount as Rs.50.02 crores as indicated in the Table below:

Table No.85
Interest (net) and Other Finance Charges (Rs. Crs)

Particulars	Amount
Interest	27.18
Lease rentals	1.24
Other Finance Charges	21.60
TOTAL INTEREST	**50.02**

Interest on consumer security deposits

570. APEPDCL has projected Rs. 18.51 crores and the same has been accepted as reasonable.

Legal charges

571. The Licensee has claimed an amount of Rs.0.07 crore towards Legal charges. This is accepted as reasonable.

Audit and other fees

572. The Licensee has projected an amount of Rs.0.03 crore towards Audit and other fees. This is accepted as reasonable.

Depreciation

573. Licensee has projected an amount of Rs.95.26 crores and the amount admitted is Rs.90.18 crores. The difference is due to lower level of capitalization.

Contribution to employee funds

574. The Licensee has projected Rs.14.21 crores (net of capitalization) towards contribution to employee funds. An amount of Rs.14.33 crores (gross) has however been admitted on this account towards the computation of the Revenue Requirement for FY 2005-06.

Special Appropriations

Contribution to Contingencies Reserve

575. APEPDCL has proposed an amount of Rs.3.51 crores as Special Appropriation towards Contribution to Contingencies Reserve in the Revenue Requirement, calculated at 0.25% of the OCFA projected in the filing. As the amount of OCFA has undergone a change due to the reasons mentioned in the preceding paragraphs 554 and 555 on OCFA, the amount provided towards Contingencies Reserve is Rs.2.56 crores. The Licensee shall follow the Commission's directive, as incorporated as item no. 12 in Annexure 'A' to this Order, with regard to investment of and withdrawal from the Contingencies Reserve.

Adjustments pertaining to previous years:

(a) Interest:-The interest adjustment amount of Rs.(-) 4.29 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(b) Depreciation:- The depreciation adjustment amount of Rs. 5.48 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(c) Income Tax:- The income tax adjustment amount of Rs. 0.14 crore for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(d) Reasonable Return:- The reasonable return adjustment amount of Rs. 0.98 crore for FY 2003-04, has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

Total expenditure

576. In view of the above changes, the total expenditure works out to Rs.1913.72 crores as against Rs.2137.82 crores projected by the Licensee, as summarized in the following Table:

Table No.86

Statement of expenditure and special appropriations (Rs. Crs)

Expenditure Items	APEPDCL	APERC
Purchase of energy	1766.50	1558.20
Wages and Salaries (net of capitalization)	122.66	131.89
Administration and General Expenses (Net of capitalization)	25.41	21.76
Repairs and maintenance	16.22	16.22
Rent, rates and taxes	7.63	7.63
Approved loan interest (Net of capitalization)	67.81	50.02
Interest on Security Deposits	18.51	18.51
Legal charges	0.07	0.07
Audit and other fees	0.03	0.03
Depreciation	95.26	90.18
Contribution to employee Funds (Net of capitalization)	14.21	14.33
Special Appropriations		
Contribution to Contingencies Reserve	3.51	2.56
Adjustments pertaining to previous years:		
Interest	0.00	(4.29)
Depreciation	0.00	5.48
Income Tax	0.00	0.14
Reasonable Return	0.00	0.98
TOTAL EXPENDITURE	**2137.82**	**1913.72**
Note: The amounts within brackets denote minus figures.		

Reasonable return:

577. APEPDCL has not claimed the Reasonable Return in its filings. However, in accordance with the principles enunciated in paragraph 411, the Commission provides an amount of Rs. 1.58 crores (0.50% of the loans of Rs. 316.03 crores alone, the capital base being negative and, therefore, no return being admissible thereon) as Reasonable Return in the calculation of the Revenue Requirement.

Non-tariff income

578. The Licensee has projected an amount of Rs. 79.10 crores as Non-Tariff income (Form 1.4) and the same has been admitted.

Aggregate Revenue Requirement

579. The ARR works out to Rs.1836.20 crores as against Rs.2058.72 crores projected by the Licensee as detailed in the Table below:

Table No.87 (Rs. Crs)

Total expenditure	1913.72
Reasonable Return	1.58
Total	1915.30
Minus: Non-Tariff income	79.10
Total net Aggregate Revenue Requirement	**1836.20**

Revenue from tariff and the gap

580. Determination of the ARR is the first step in the process of tariff formulation. Subsequent Chapters (XVI and XVII) of this Order discuss the sales projections by the DISCOMS, the revenue gap, the tariffs approved by the Commission taking into account the cross-subsidy and the government subsidy, the bulk supply tariff (BST) applicable to each DISCOM and other relevant aspects.

CHAPTER – XIII
ERC / ARR 2005-06: DISTRIBUTION AND RETAIL SUPPLY
Andhra Pradesh Northern Power Distribution Company Limited (APNPDCL)

581. APNPDCL, the Licensee company for distribution and retail supply of electricity in the territory assigned to it in Andhra Pradesh as per the licence granted by the Commission, filed its ARR / ERC and FPT for FY 2005-06 on 30.11.2004, followed by an addendum thereto on 07-02-2005. The Commission has examined the Licensee's proposals and indicates herein the areas where the computations of the Licensee are found to be incorrect or unacceptable, with reasons therefor and the Commission's alternative computations.

Capital base – Positive elements*:*

Capital Base Analysis

582. The Licensee in its filings has made the following projections of capital expenditure for FY 2005-06:

Table No.88
Proposed capital outlay for FY 2005 – 06 **(Rs. Crs)**

Base capital expenditure	Expenditure capitalisation	IDC*	Total
379.46	37.95	17.59	435.00

(*)Interest during construction

583. The Base capital expenditure of Rs.379.46 crores is for HVDS and other schemes to strengthen the System, the details of which are examined later. The Licensee has assumed 10% of the Base capital expenditure towards expenditure capitalisation and Rs.17.59 crores have been shown as IDC, raising the aggregate capital expenditure to Rs.435.00 crores.

584. Before dealing with the projections of capital expenditure for FY 2005-06, it is necessary to advert to the capital expenditure during FY 2003-04, the latest year for which the audited figures are available. The Commission has noted that there was an excess of Rs.56.86 crores in capital expenditure vis-à-vis the outlay of Rs.143.35 crores approved for APNPDCL in the Tariff Order for FY 04 as indicated in the Table below:

Table No.89
Capital outlay-Performance during 2003- 04 (Rs. Crs)

Filing	Tariff Order	Actuals	Excess
275.99	143.35	200.21	56.86

(Figures include IDC and expense capitalisation)

585. This excess has resulted in significant variation in the Capital Base calculations for FY 2003-04, as detailed in the Table below:

Table No.90
Capital Base for FY 2003-04
Comparison of actual costs with Tariff Order figures on the basis of the audited accounts (Rs. Crs)

Particulars	Filing	Tariff Order	Actuals	Variance
Original Cost of Fixed Assets	1022.01	987.05	1041.33	54.28
Capital Works-in-Progress (CWIP)	316.81	151.12	196.88	45.76
Investments	0.00	0.00	3.89	3.89
Avg. Cost of Stores	41.29	6.34	28.62	22.28
Avg. Cash and Bank balance	14.87	31.51	2.36	(29.15)
Total (A)	**1394.98**	**1176.02**	**1273.08**	**97.06**
Accumulated depreciation	557.49	555.14	519.51	(35.63)
Borrowings	745.29	539.27	625.91	86.64
Other no-cost funds	0.00	175.00	168.77	(6.23)
Total (B)	**1302.78**	**1269.41**	**1314.19**	**44.78**
Capital Base (A-B)	**92.20**	**(93.39)**	**(41.11)**	**52.28**

Note: The amounts within brackets denote minus figures.

586. The adjustment, due to this variance in the Capital Base, necessitates recalculation of Reasonable Return initially taken into account in the computation of the ARR for FY 2003-04, for necessary correction in the Tariff Order for FY 2005-06.

Capital Works-in-Progress (CWIP)

Capital outlay – Progress during FY 2004- 05:

587. In the ARR for FY 2005-06, the DISCOM has projected a revised capital outlay (Base expenditure) of Rs.199.00 crores for FY 2004-05 along with IDC of Rs. 13.54 crores and expenditure capitalization of Rs.19.90 crores (taken at 10%), which aggregate to Rs. 232.44 crores as total capital expenditure expected to be incurred during FY 2004-05 as against Rs.139.94 crores reckoned in the Tariff Order for FY 2004-05. The Commission considers this projection to be on the higher side keeping in view the progress of expenditure during the first six months of the year, up to September 2004, and allows an amount of Rs.116.00 crores towards base expenditure as detailed in the Table below:

Table No.91
Estimated capital outlay for FY 2004-05 (Rs. Crs)

S.No.	Name of Scheme	APNPDCL	Actual expenditure up to September 2004	APERC
1	Distribution Plan (Release of Services other than agricultural services)	24.00	16.29	24.00
2	Rural electrification (P:IE)	10.00	5.50	10.00
3	Pump-set energisation	5.00	3.76	5.00
4	APDRP – Town plans	28.00	0.65	5.00
5	APDRP – Warangal district	50.00	7.35	15.00
6	SI meters	8.00	4.07	8.00
7	SI Transformers	9.78	8.15	9.78
8	SI Conductors	7.00	4.07	7.00
9	SI VCBs	1.22	0.00	1.22
10	SI - Lines (Providing 24 hours supply to all villages)	6.00	5.26	6.00

11	System improvement (P: SI Schemes)	20.00	5.41	13.00
12	HVDS	30.00	3.33	12.00
	GRAND TOTAL	**199.00**	**63.84**	**116.00**

588. The amount to be taken to CWIP in respect of the above schemes works out to Rs.135.49 crores as detailed in the Table below:

Table No.92
Amounts taken for CWIP for FY 2004-05 (Rs. Crs)

Particulars	**APNPDCL**	**APERC**
Base capital expenditure	199.00	116.00
Expenses capitalized	19.90	11.60
Interest (IDC) capitalized	13.54	7.89
Total	**232.44**	**135.49**

589. The projected CWIP as on 31-03-2005 would constitute the Opening Balance for FY 2005-06.

CAPITAL OUTLAY – Projections for FY 2005-06:

590. As regards FY 2005-06, the ARR filings project a Base capital expenditure of Rs.379.46 crores for FY2005-06, which together with the expenditure capitalization of Rs.37.95 crores (10% of Base capital expenditure) and IDC of Rs.17.59 crores aggregates to Rs.435.00 crores. Based on a review of the schemes, the Commission allows an estimated amount of Rs.172.46 crores as base capital expenditure; the major difference is due to non-consideration of HVDS– Phase-2 Schemes, as they have not been submitted to the Commission for approval. The details are as follows:

Table No.93
Scheme-wise details for Base capital expenditure for FY 2005-06 (Rs. Crs)

S.No.	**Name of Scheme**	**APNPDCL**	**APERC**
1	Distribution Plan (Release of Services other than agricultural services)	29.00	29.00
2	Rural electrification (P:IE)	10.00	10.00
3	Pump-set energisation	20.00	10.00
4	APDRP – Town plans	17.41	17.41
5	APDRP – Warangal district	45.00	30.00
6	SI meters	10.00	10.00
7	SI Transformers	12.00	12.00
8	SI Conductors	8.00	8.00
9	SI VCBs	1.36	1.36
10	SI - Lines (Providing 24 hours supply to all villages)	10.00	10.00
11	System improvement (P: SI Schemes)	16.69	16.69
12	HVDS	0.00	*18.00
13	HVDS-Phase-2	200.00	0.00
	GRAND TOTAL	**379.46**	**172.46**

* Spill-over from FY 2004-05 (item No. 12 of Table No.91).

591. The DISCOM shall submit monthly progress reports on physical and financial progress on each of the schemes as directed earlier in paragraphs 390 to 391.

592. As already stated above, the Commission has decided to reckon outlays of Rs.116.00 crores for FY 2004-05 and Rs.172.46 crores for FY 2005-06 as Base Capital expenditure (paragraphs 587 and 590). These, together with the expenses and the IDC capitalized, work out respectively to Rs.135.49 crores and Rs.197.70 crores; consequently, the amounts reckoned for CWIP work out to Rs.157.37 crores for FY 2004-05 and Rs.80.07 crores for FY 2005-06, as detailed in the Table below:

Table No.94

Statement of estimated Capital Works- in-Progress for FY 2005-06 (Rs. Crs)

Item	APNPDCL	APERC
Closing Balance of CWIP as on 31.03.2004 as per audited Accounts	196.88	196.88
Outlay during the year (FY 2004-05)	199.00	116.00
Expenses capitalized during the year	19.90	11.60
Interest during construction charged to Capital (IDC)	13.54	7.89
Total additions: Capital expenditure	232.44	135.49
Total (OB + Additions)	429.32	332.37
LESS: Works anticipated to be completed in FY 2004-05	287.19	175.00
Closing Balance of CWIP as on 31.03.05 and Opening balance as on 01.04.2005	**142.13**	**157.37**
Additional investments during the year (FY 2005-06)	379.46	172.46
Expenses during the year capitalized	37.95	17.25
Interest during construction charged to Capital (IDC)	17.59	7.99
Total additions: Capital expenditure	435.00	197.70
Total (OB + Additions)	577.13	355.07
LESS: Works anticipated to be completed in FY 2005-06	328.52	275.00
Closing Balance of CWIP as on 31.03.06	**248.61**	**80.07**

Original Cost of Fixed Assets (OCFA):

593. The Licensee has proposed an amount of Rs.1584.70 crores as OCFA (excluding consumer contributions) to be reckoned in the Capital Base calculations for FY 2005-06. As against Licensee’s projection of Rs. 287.19 crores, for transfer to OCFA from CWIP for FY 2004-05, only an amount of Rs.175.00 crores has been allowed after detailed analysis. Similarly, for FY 2005-06, as against Rs.328.52 crores reckoned by the Licensee, an amount of Rs. 275.00 crores has been taken for transfer to OCFA from CWIP.

594. The estimated amount to be reckoned under OCFA in the Capital Base as on 31-03-2006 is, therefore, as calculated in the Table below:

Table No.95

Statement of estimated fixed assets as on 31-03-2006 (Rs. Crs.)

ITEM	APNPDCL	APERC
Gross Fixed Assets as on 31-03-04 as per audited Accounts	1197.64	1197.64
LESS: Consumer contributions for capital assets	156.31	156.31
Original Cost of Fixed Assets (OCFA) as on 31.03.04	1041.33	1041.33

ADD: Works likely to be completed during 2004-05	287.19	175.00
Gross OCFA as on 31.03.05	1328.52	1216.33
LESS: Consumer contributions as filed in ARR	24.74	24.74
OCFA as on 31.03.2005	1303.78	1191.59
ADD: Works likely to be completed in FY 2005-06	328.52	275.00
Gross OCFA as on 31.03.2006	1632.30	1466.59
LESS: Consumer contributions as filed in ARR	47.60	47.60
OCFA as on 31.03.2006	**1584.70**	**1418.99**

Accordingly, OCFA taken to Capital Base amounts to Rs.1418.99 crores.

Compulsory investments:

595. The Licensee has projected the compulsory investments (Contingencies Reserve) at Rs. 7.76 crores for FY 2005-06 and the same are considered in the computation of the capital base by APERC.

Working capital requirements
Average cost of stores:

596. The DISCOM has proposed an amount of Rs.36.28 crores towards Average Cost of Stores for inclusion in the Capital Base calculations. As per the Directive given in paragraph of 339 of Tariff Order FY 2003-04, however, an amount of Rs.6.58 crores calculated at two months' requirement of Rs. 39.48 crores for Repairs and Maintenance expenses, as claimed by the Licensee and admitted by the Commission in paragraph 605 infra, is provided.

Average cash and bank balance:

597. The Licensee has proposed Rs.22.87 crores towards Cash and Bank Balance for FY 2005-06. In accordance with paragraph 397, however, the average cash and bank balance at one-and-a-half months' level of eligible expenses which works out to Rs.23.58 crores, has been provided.

Capital base - Negative elements:
Accumulated Depreciation

598. The accumulated depreciation as projected by the Licensee in the filings is Rs. 683.35 crores for FY 2005-06 against which Rs.679.00 crores is admitted. The difference is due to lower capitalization of works, as indicated in paragraph 593 on OCFA.

Loans from government and approved institutions:

599. For FY 2005-06, the Licensee has projected Rs. 32.68 crores as Government loans, Rs.160.64 crores as Other Market Borrowings and Rs. 612.31 crores as loans from approved institutions aggregating to Rs. 805.63 crores. However, the total loan amount admitted by the Commission works out to Rs.648.62 crores as detailed in the following Table:

Table No.96
Details of loans (Rs. Crs)

Closing balance of loans (excluding CWIP) as per audited accounts as on 31-03-2004	429.03
ADD: Net additions considered after taking into account the capitalization of capital expenditure, loan repayments, other sources of funding (depreciation, consumer contribution etc.) for: FY 2004-05 FY 2005-06	 48.44 171.15
Total loans considered in the Capital Base as on 31-03-2006	**648.62**

Consumer Security Deposits:

600. The Licensee has projected Rs.145.89 crores towards consumer security deposits and the Commission has admitted Rs. 150.68 crores.

Net capital base:

601. With the above changes in the positive and negative elements of the Capital Base, the net capital base works out to Rs. (-) 21.39 crores as detailed in the following Table as against Rs. 16.74 crores projected by the Licensee:

Table No.97
Capital Base computations for FY 2005-06 (Rs. Crs)

ITEM	APNPDCL	APERC
Positive elements of Capital Base		
Original cost of Fixed Assets (excluding consumer contributions, etc.)	1584.70	1418.99
Capital Works-in-Progress	0.00	0.00
Statutory investment (of Contingencies Reserve)	7.76	7.76
Working Capital		
a) Average cost of stores	36.28	6.58
b) Average cash and bank balance	22.87	23.58
A - Total of positive elements of Capital Base	**1651.61**	**1456.91**
Negative elements of Capital Base		
Accumulated Depreciation	683.35	679.00
Approved Loans	805.63	648.62
Consumer Security Deposits	145.89	150.68
B - Total of negative elements of Capital Base	**1634.87**	**1478.30**
Net Capital Base (A-B)	**16.74**	**(21.39)**
Note: The amounts within brackets denote minus figures.		

EXPENDITURE

Purchase of energy

602. APNPDCL has projected a requirement of 8088.31 MU of energy against which the Commission has allowed 7988.40 MU as detailed in paragraph 447. The corresponding cost has been arrived at as Rs.1578.00 crores as against Rs.1321.63 crores shown in the ARR.

Wages, Salaries and Other Allowances:

603. The Licensee has projected an amount of Rs.102.22 crores towards Wages, salaries and related costs (net of capitalization). However, the amount taken for Revenue

Requirement towards Wages, salaries and allowances is Rs.122.72 crores (net of capitalisation); the difference is primarily on account of lower level of outlay on capital works admitted by the Commission, as calculated in the Table below;

Table No.98
Revenue Requirement - Net Salaries, wages and allowances (Rs. Crs)

Wages, salaries & allowances	135.86
Less: Expense capitalization	13.14
Wages and Salaries- Net of capitalisation	**122.72**

Administration and general expenses (excluding Rent, rates & taxes, Legal charges, Audit fees, Lease rentals, etc.)

604. The Licensee has claimed Rs.12.42 crores (net of capitalization) towards Administration and General Expenses against which an amount of Rs.10.27 crores is admitted.

Repairs and maintenance

605. APNPDCL has projected Rs.39.48 crores towards Repairs and maintenance for FY 2005-06 for inclusion in the computation of the Revenue Requirement. This is considered reasonable and has been provided.

Rent, rates and taxes

606. APNPDCL has projected Rs.1.82 crores for inclusion in the computation of the Revenue Requirement for FY 2005-06 towards Rent, rates and taxes. This is accepted and is accordingly provided.

Interest on loans (including other finance charges and lease rentals)

607. APNPDCL has projected the interest amount of Rs.109.92 crores. However, APERC has worked out the amount as Rs.88.86 crores as indicated in the Table below:

Table No.99
Interest (net) and Other Finance Charges (Rs. Crs)

Particulars	Amount
Interest	56.30
Lease rentals	4.12
Other Finance Charges	28.44
TOTAL INTEREST	**88.86**

Interest on consumer security deposits

608. APNPDCL has projected Rs.9.32 crores towards interest on consumer security deposits against which an amount of Rs.9.61 crores is admitted.

Legal charges

609. The Licensee has claimed an amount of Rs.11.02 crores towards Legal charges. This is accepted as reasonable.

Audit and other fees

610. The Licensee has projected an amount of Rs.0.04 crore towards Audit and other fees. This is accepted as reasonable.

Depreciation

611. Licensee has projected an amount of Rs.90.75 crores and the amount admitted is Rs.86.41 crores. The difference is due to lower level of capitalization.

Contribution to employee funds

612. The Licensee has projected Rs.4.97 crores (net of capitalization) towards contribution to employee funds based on a provisional actuarial valuation. However, an amount of Rs.3.55 crores (gross @ 13% of Basic and DA as considered for all the DISCOMs) has been admitted on this account towards the computation of the Revenue Requirement for FY 2005-06.

Special Appropriations

Contribution to Contingencies Reserve

613. APNPDCL has proposed an amount of Rs.4.97 crores as Special Appropriation towards Contribution to Contingencies Reserve in the Revenue Requirement, calculated at 0.25% of the OCFA projected in the filing. As the amount of OCFA has undergone a change due to the reasons mentioned in the preceding paragraphs 593 and 594 on OCFA, the amount provided towards Contingencies Reserve is Rs.3.55 crores. The Licensee shall follow the Commission's directive, as incorporated as item no. 12 in Annexure 'A' to this Order, with regard to investment of and withdrawal from the Contingencies Reserve.

Adjustments pertaining to previous years:

(a) Interest:-The interest adjustment amount of Rs.1.82 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(b) Depreciation:- The depreciation adjustment amount of Rs. (-) 8.43 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(c) Reasonable Return:- The reasonable return adjustment amount of Rs. 0.41 crore for FY 2003-04, has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

Total expenditure

614. In view of the above changes, the total expenditure works out to Rs. 1959.92 crores as against Rs.1730.57 crores projected by the Licensee, as summarized in the following Table:

Table No.100

Statement of expenditure and special appropriations (Rs. Crs)

Expenditure Items	APNPDCL	APERC
Purchase of energy	1321.63	1578.00
Wages and Salaries (net of capitalization)	102.22	122.72
Administration and General Expenses (Net of capitalization)	12.42	10.27
Repairs and maintenance	39.48	39.48
Rent, rates and taxes	1.82	1.82
Approved loan interest (Net of capitalization)	109.92	88.86
Interest on Security Deposits	9.32	9.61
Legal charges	11.02	11.02
Audit and other fees	0.04	0.04
Depreciation	90.75	86.41
Contribution to employee Funds (Net of capitalization)	26.98	14.34
Special Appropriations		
Contribution to Contingencies Reserve	4.97	3.55
Adjustments pertaining to previous years:		
Interest	0.00	1.82
Depreciation	0.00	(8.43)
Reasonable Return	0.00	0.41
TOTAL EXPENDITURE	**1730.57**	**1959.92**
Note: The amounts within brackets denote minus figures.		

Reasonable return:

615. APNPDCL has not claimed the Reasonable Return in its filings. However, in accordance with the principles enunciated in paragraph 411, the Commission provides an amount of Rs. 3.24 crores (0.50% of the loans of Rs. 648.62 crores alone, the capital base being negative and, therefore, no return being admissible thereon) as Reasonable Return in the calculation of the Revenue Requirement.

Non-tariff income

616. The Licensee has projected an amount of Rs. 138.29 crores as Non-Tariff income (Form 1.4) and the same has been admitted.

Aggregate Revenue Requirement

617. The ARR works out to Rs. 1824.88 crores as against Rs. 1592.28 crores projected by the Licensee as detailed in the Table below:

Table No.101 (Rs. Crs)

Total expenditure	1959.92
Reasonable Return	3.24
Total	1963.17
Minus: Non-Tariff income	138.29
Total net Aggregate Revenue Requirement	**1824.88**

Revenue from tariff and the gap

618. Determination of the ARR is the first step in the process of tariff formulation. Subsequent Chapters (XVI and XVII) of this Order discuss the sales projections by the DISCOMS, the revenue gap, the tariffs approved by the Commission taking into account the cross-subsidy and the government subsidy, the bulk supply tariff (BST) applicable to each DISCOM and other relevant aspects.

CHAPTER – XIV

ERC / ARR 2005-06: DISTRIBUTION AND RETAIL SUPPLY
Andhra Pradesh Southern Power Distribution Company Limited (APSPDCL)

619. APSPDCL, the Licensee company for distribution and retail supply of electricity in the territory assigned to it in Andhra Pradesh as per the licence granted by the Commission, filed its ARR / ERC and FPT for FY 2005-06 on 30.11.2004, followed by an addendum thereto on 07-02-2005. The Commission has examined the Licensee's proposals and indicates herein the areas where the computations of the Licensee are found to be incorrect or unacceptable, with reasons therefor and the Commission's alternative computations.

Capital base – Positive elements:

Capital Base Analysis

620. The Licensee in the filings has made the following projections of capital expenditure for FY 2005-06:

Table No.102

Proposed capital outlay for FY 2005 – 06 (Rs. Crs)

Base capital expenditure	Expenditure capitalisation	IDC*	Total
305.95	35.22	47.75	388.92

* Interest during construction (IDC)

621. The Base capital expenditure of Rs.305.95 crores is for HVDS and other schemes to strengthen the System, the details of which are examined later. The Licensee has assumed Rs.35.22 crores towards expenditure capitalisation and Rs.47.75 crores have been shown as IDC, raising the aggregate capital expenditure to Rs.388.92 crores.

622. Before dealing with the projections of capital expenditure for FY 2005-06, it is necessary to advert to the capital expenditure during FY 2003-04, the latest year for which the audited figures are available. The Commission has noted that there was an excess of Rs. 307.13 crores in capital expenditure vis-à-vis the outlay of Rs.66.95 crores approved for APSPDCL in the Tariff Order for FY 04 as indicated in the Table below:

Table No.103

Capital outlay-Performance during 2003- 04 (Rs. Crs)

Filing	Tariff Order	Actuals	Excess
155.80	66.95	374.08	307.13

(Figures include IDC and expense capitalisation)

623. This excess has resulted in significant variation in the Capital Base calculations for FY 2003-04, as detailed in the Table below:

Table No.104
Capital Base for FY 2003-04
Comparison of actual costs with Tariff Order figures
on the basis of the audited accounts (Rs. Crs)

Particulars	Filing	Tariff Order	Actuals	Variance
Original Cost of Fixed Assets	1252.24	1050.24	1147.22	96.98
Capital Works-in-Progress (CWIP)	76.77	172.47	395.57	223.10
Avg. Cost of Stores	37.84	8.13	4.34	(3.79)
Avg. Cash and Bank balance	21.62	44.55	37.62	(6.93)
Total (A)	**1388.47**	**1275.39**	**1584.75**	**309.36**
Accumulated depreciation	715.91	703.64	714.12	10.48
Borrowings	462.81	345.12	775.68	430.56
Other no-cost funds	0.00	268.55	278.44	9.89
Total (B)	**1178.72**	**1317.31**	**1768.24**	**450.93**
Capital Base (A-B)	**209.75**	**(41.92)**	**(183.49)**	**(141.57)**

Note: The amounts within brackets denote minus figures.

624. The adjustment, due to this variance in the Capital Base, necessitates recalculation of Reasonable Return initially taken into account in the computation of the ARR for FY 2003-04, for necessary correction in the Tariff Order for FY 2005-06.

Capital Works-in-Progress (CWIP)

Capital outlay – Progress during FY 2004- 05:

625. In the ARR for FY 2005-06, the DISCOM has projected a revised capital outlay (Base expenditure) of Rs.184.89 crores for FY 2004-05 along with IDC of Rs.27.04 crores and expenditure capitalization of Rs. 26.36 crores, which aggregate to Rs.238.29 crores as total capital expenditure expected to be incurred during FY 2004-05 as against Rs.181.75 crores reckoned in the Tariff Order for FY 2004-05. The Commission considers this projection to be on the higher side keeping in view the progress of expenditure during the first seven months of the year, up to October 2004, and the past track record and allows an amount of Rs.154.89 crores towards base expenditure as detailed in the Table below:

Table No.105
Estimated capital outlay for FY 2004-05 (Rs. Crs)

S.No.	Name of Scheme	APSPDCL	Actual expenditure up to October 2004	APERC
1	APDRP-Tirupathi Circle	30.00	19.57	30.00
2	APDRP-Town business plans	25.00	12.48	25.00
3	Village electrification	15.00	15.00	15.00
4	Releasing of Agl services	35.00	9.61	10.00
5	System improvement (P: SI Schemes; Erection of 33/11 kV SS)	25.00	10.91	20.00
6	SI: T & D	5.00	5.00	5.00
7	Distribution budget	15.00	10.39	15.00
8	SI: Lines	13.00	2.69	13.00
9	HVDS	20.00	16.94	20.00
10	Meters (HT Tri-vector meters)	1.89	1.25	1.89
	TOTAL	**184.89**	**103.84**	**154.89**

626. The amount to be taken to CWIP in respect of the above schemes works out to Rs.193.03 crores as detailed in the Table below:

Table No.106
Amounts taken for CWIP for FY 2004-05 (Rs. Crs)

Particulars	APSPDCL	APERC
Base capital expenditure	184.89	154.89
Expenses capitalized	26.36	15.49
Interest (IDC) capitalized	27.04	22.65
Total	**238.29**	**193.03**

627. The projected CWIP as on 31-03-2005 would constitute the Opening Balance for FY 2005-06.

CAPITAL OUTLAY – Projections for FY 2005-06:

628. As regards FY 2005-06, the ARR filings project a Base Capital expenditure of Rs.305.95 crores for FY2005-06, which together with the expenditure capitalization of Rs.35.22 crores and IDC of Rs.47.75 crores aggregates to Rs.388.92 crores. Based on the progress of the schemes the Commission allows an amount of Rs.179.75 crores as base capital expenditure. The details are as follows:

Table No.107
Scheme-wise details for Base capital expenditure for FY 2005-06 (Rs. Crs)

S.No.	Name of Scheme	APSPDCL	APERC
1	APDRP-Tirupathi Circle	50.00	35.00
2	APDRP-Town business plans	25.00	20.00
3	Village electrification	10.00	10.00
4	Releasing of Agl services	10.00	10.00
5	System improvement (P: SI Schemes; Erection of 33/11 kV SS)	20.00	20.00
6	SI: T & D	10.00	7.00
7	Distribution budget	15.00	15.00
8	SI: Lines	10.00	10.00
9	HVDS	136.85	33.65
10	Meters (HT Tri-vector meters)	6.00	6.00
11	Meters to Agl services	13.10	13.10
	TOTAL	**305.95**	**179.75**

629. The DISCOM shall submit monthly progress reports on physical and financial progress on each of the schemes as directed earlier in paragraphs 390 to 391.

630. As already stated above, the Commission has decided to reckon outlays of Rs.154.89 crores for FY 2004-05 and Rs.179.75 crores for FY 2005-06 as Base Capital expenditure (paragraphs 625 and 628). These, together with the expenses and the IDC capitalized, work out respectively to Rs.193.03 crores and Rs.225.78 crores; consequently, the amounts

reckoned for CWIP work out to Rs.363.60 crores for FY 2004-05 and Rs.339.38 crores for FY 2005-06, as detailed in the Table below:

Table No.108

Statement of estimated Capital Works-in-Progress for FY 2005-06 (Rs. Crs)

Item	APSPDCL	APERC
Closing Balance of CWIP as on 31.03.2004 as per audited Accounts	395.57	395.57
Outlay during the year (FY 2004-05)	184.89	154.89
Expenses capitalized during the year	26.36	15.49
Interest during construction charged to Capital (IDC)	27.04	22.65
Total additions: Capital expenditure	238.29	193.03
Total (OB + Additions)	633.86	588.60
LESS: Works anticipated to be completed in FY 2004-05	283.25	225.00
Closing Balance of CWIP as on 31.03.05 and Opening balance as on 01.04.2005	**350.61**	**363.60**
Additional investments during the year (FY 2005-06)	305.95	179.75
Expenses during the year capitalized	35.22	17.98
Interest during construction charged to Capital (IDC)	47.75	28.05
Total additions: Capital expenditure	388.92	225.78
Total (OB + Additions)	739.52	589.38
LESS: Works anticipated to be completed in FY 2005-06	276.50	250.00
Closing Balance of CWIP as on 31.03.06	**463.02**	**339.38**

Original Cost of Fixed Assets (OCFA):

631. The Licensee has proposed an amount of Rs.1667.98 crores as OCFA (excluding consumer contributions) to be reckoned in the Capital Base calculations for FY 2005-06. As against Licensee's projection of Rs. 283.25 crores, for transfer to OCFA from CWIP for FY 2004-05, only an amount of Rs.225.00 crores has been allowed after detailed analysis. Similarly, for FY 2005-06, as against Rs.276.50 crores reckoned by the Licensee, an amount of Rs. 250.00 crores has been taken for transfer to OCFA from CWIP.

632. The estimated amount to be reckoned under OCFA in the Capital Base as on 31-03-2006 is, therefore, as calculated in the Table below:

Table No.109

Statement of estimated fixed assets as on 31-03-2006 (Rs. Crs.)

ITEM	APSPDCL	APERC
Gross Fixed Assets as on 31-03-04 as per audited Accounts **LESS**: Consumer contributions for capital assets	1499.40 311.17	1499.40 352.18
Original Cost of Fixed Assets (OCFA) as on 31.03.04	1188.23	1147.22
ADD: Works likely to be completed during 2004-05	283.25	225.00
Gross OCFA as on 31.03.05	1368.71	1372.22
LESS: Consumer contributions as filed in ARR	40.00	40.00
OCFA as on 31.03.2005	1328.71	1332.22
ADD: Works likely to be completed in FY 2005-06	276.50	250.00
Gross OCFA as on 31.03.2006	1611.96	1582.22
LESS: Consumer contributions as filed in ARR	40.00	40.00
OCFA as on 31.03.2006	**1667.98**	**1542.22**

Accordingly, OCFA taken to Capital Base amounts to Rs.1542.22 crores.

Compulsory investments:

633. The Licensee has projected the compulsory investments (Contingencies Reserve) at Rs. 3.03 crores for FY 2005-06 and the same are considered in the computation of the capital base by APERC.

Working capital requirements
Average cost of stores:

634. The DISCOM has proposed an amount of Rs.51.48 crores towards Average Cost of Stores for inclusion in the Capital Base calculations. As per the Directive given in paragraph of 339 of Tariff Order FY 2003-04, however, an amount of Rs.5.29 crores calculated at two months' requirement of Rs. 31.74 crores for Repairs and Maintenance expenses, as claimed by the Licensee and admitted by the Commission in paragraph 643 infra, is provided.

Average cash and bank balance:

635. The Licensee has proposed Rs.28.52 crores towards Cash and Bank Balance for FY 2005-06. In accordance with paragraph 397, however, the average cash and bank balance at one-and-a-half months' level of eligible expenses which works out to Rs.33.33 crores, has been provided.

Capital base - Negative elements:
Accumulated Depreciation

636. The accumulated depreciation as projected by the Licensee in the filings is Rs. 975.14 crores for FY 2005-06 against which Rs.970.06 crores is admitted. The difference is due to lower capitalization of works, as indicated in paragraph 631 on OCFA.

Loans from government and approved institutions:

637. For FY 2005-06, the Licensee has projected Rs. 41.99 crores as Government loans, Rs. 15.73 crores as Other Market Borrowings and Rs. 501.10 crores as loans from approved institutions aggregating to Rs. 558.82 crores. However, the total loan amount admitted by the Commission works out to Rs.457.10 crores as detailed in the following Table:

Table No.110
Details of loans (Rs. Crs)

Closing balance of loans (excluding CWIP) as per audited accounts as on 31-03-2004	380.11
ADD: Net additions considered after taking into account the capitalization of capital expenditure, loan repayments, other sources of funding (depreciation, consumer contribution etc.) for:	
FY 2004-05	(35.10)
FY 2005-06	112.09
Total loans considered in the Capital Base as on 31-03-2006	**457.10**
Note: The amounts within brackets denote minus figures.	

Consumer Security Deposits:

638. The Licensee has projected Rs.245.03 crores towards consumer security deposits and the Commission has admitted Rs. 246.44 crores.

Net capital base:

639. With the above changes in the positive and negative elements of the Capital Base, the net capital base works out to Rs. (-) 89.73 crores as detailed in the following Table as against Rs. (-) 27.98 crores projected by the Licensee:

Table No.111

Capital Base computations for FY 2005-06 (Rs. Crs)

ITEM	APSPDCL	APERC
Positive elements of Capital Base		
Original cost of Fixed Assets (excluding consumer contributions, etc.)	1667.98	1542.22
Capital Works-in-Progress	0.00	0.00
Statutory investment (of Contingencies Reserve)	3.03	3.03
Working Capital		
a) Average cost of stores	51.48	5.29
b) Average cash and bank balance	28.52	33.33
A - Total of positive elements of Capital Base	**1751.01**	**1583.87**
Negative elements of Capital Base		
Accumulated Depreciation	975.14	970.06
Approved loans	558.82	457.10
Consumer Security Deposits	245.03	246.44
B - Total of negative elements of Capital Base	**1778.99**	**1673.60**
Net Capital Base (A-B)	**(27.98)**	**(89.73)**
Note: The amounts within brackets denote minus figures.		

EXPENDITURE

Purchase of energy

640. APSPDCL has projected a requirement of 11423.48 MU of energy against which the Commission has allowed 10790.35 MU as detailed in paragraph 447. The corresponding cost has been arrived at as Rs.2131.49 crores as against Rs. 2178.46 crores shown in the ARR.

Wages, Salaries and Other Allowances:

641. The Licensee has projected an amount of Rs.174.18 crores towards Wages, salaries and related costs (net of capitalization). However, the amount taken for Revenue Requirement towards Wages, salaries and allowances is Rs.188.45 crores (net of capitalisation), the difference is primarily on account of lower level of outlay on capital works admitted by the Commission as calculated in the Table below;

Table No.112

Revenue Requirement - Net Salaries, wages and allowances (Rs. Crs)

Wages, salaries & allowances	206.43
Less: Expense capitalization	17.98
Wages and Salaries- Net of capitalisation	**188.45**

Administration and general expenses (excluding Rent, rates & taxes, Legal charges, Audit fees, Lease rentals, etc.)

642. The Licensee has claimed Rs.25.47 crores (net of capitalization) towards Administration and General Expenses against which an amount of Rs.23.97 crores is admitted.

Repairs and maintenance

643. APSPDCL has projected Rs.31.74 crores towards Repairs and maintenance for FY 2005-06 for inclusion in the computation of the Revenue Requirement. This is considered reasonable and has been provided.

Rent, rates and taxes

644. APSPDCL has projected Rs.1.08 crores for inclusion in the computation of the Revenue Requirement for FY 2005-06 towards Rent, rates and taxes. This is accepted and is accordingly provided.

Interest on loans (including other finance charges and lease rentals)

645. APSPDCL has projected an amount of Rs.108.65 crores. However, APERC has worked out the amount as Rs.86.48 crores as indicated in the Table below:

Table No.113

Interest (net) and Other Finance Charges (Rs. Crs)

Particulars	Amount
Interest	40.11
Lease rentals	7.08
Other Finance Charges	39.29
TOTAL INTEREST	**86.48**

Interest on consumer security deposits

646. APSPDCL has projected Rs. 15.70 crores and the Commission has admitted Rs.15.75 crores.

Legal charges

647. The Licensee has claimed an amount of Rs.9.95 crores towards Legal charges. This is accepted as reasonable.

Audit and other fees

648. The Licensee has projected an amount of Rs.0.26 crore towards Audit and other fees. This is accepted as reasonable.

Depreciation

649. Licensee has projected an amount of Rs.141.62 crores and the amount admitted is Rs.136.53 crores. The difference is due to lower level of capitalization.

Contribution to employee funds

650. The Licensee has projected Rs.23.23 crores (net of capitalization) towards contribution to employee funds. An amount of Rs.21.43 crores (gross) has however been admitted on this account towards the computation of the Revenue Requirement for FY 2005-06.

Special Appropriations

Contribution to Contingencies reserve

651. APSPDCL has proposed an amount of Rs.5.15 crores as Special Appropriation towards Contribution to Contingencies Reserve in the Revenue Requirement, calculated at 0.25% of OCFA projected in the filing. As the amount of OCFA has undergone a change due to the reasons mentioned in the preceding paragraphs 631 and 632 on OCFA, the amount provided towards Contingencies Reserve is Rs.3.86 crores. The Licensee shall follow the Commission's directive, as incorporated as item no. 12 in Annexure 'A' to this Order, with regard to investment of and withdrawal from the Contingencies Reserve.

Adjustments pertaining to previous years:

(a) Interest:-The interest adjustment amount of Rs. 2.77 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(b) Depreciation:- The depreciation adjustment amount of Rs. 8.74 crores for FY 2003-04 has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

(c) Reasonable Return:- The reasonable return adjustment amount of Rs. 2.14 crores for FY 2003-04, has been taken as special appropriation in the calculation of the Revenue Requirement for FY 05-06.

Total expenditure

652. In view of the above changes, the total expenditure works out to Rs. 2664.64 crores as against Rs.2721.74 crores projected by the Licensee, as summarized in the following Table:

Table No.114

Statement of expenditure and special appropriations (Rs. Crs)

Expenditure Items	APSPDCL	APERC
Purchase of energy	2178.46	2131.49
Wages and Salaries (net of capitalization)	174.18	188.45
Administration and General Expenses (Net of capitalization)	25.47	23.97
Repairs and maintenance	31.74	31.74
Rent, rates and taxes	1.08	1.08

Approved loan interest (Net of capitalization)	108.65	86.48
Interest on Security Deposits	15.70	15.75
Legal charges	9.95	9.95
Audit and other fees	0.26	0.26
Depreciation	141.62	136.53
Other expenses	6.25	0.00
Contribution to employee Funds (Net of capitalization)	23.23	21.43
Special Appropriations		
Contribution to Contingencies Reserve	5.15	3.86
Adjustments pertaining to previous years:		
Interest	0.00	2.77
Depreciation	0.00	8.74
Reasonable Return	0.00	2.14
TOTAL EXPENDITURE	**2721.74**	**2664.64**

Note: The amounts within brackets denote minus figures.

Reasonable return:

653. APSPDCL has not claimed the Reasonable Return in its filings. However, in accordance with the principles enunciated in paragraph 411, the Commission provides an amount of Rs. 2.29 crores (0.50% of the loans of Rs. 457.10 crores alone, the capital base being negative and, therefore, no return being admissible thereon) as Reasonable Return in the calculation of the Revenue Requirement.

Non-tariff income

654. The Licensee has projected an amount of Rs. 127.71 crores as Non-Tariff income (Form 1.4) and the same has been admitted.

Aggregate Revenue Requirement

655. The ARR works out to Rs.2539.22 crores as against Rs.2594.03 crores projected by the Licensee as detailed in the Table below:

Table No.115 (Rs. Crs)

Total expenditure	2664.64
Reasonable Return	2.29
Total	2666.93
Minus: Non-Tariff income	127.71
Total net Aggregate Revenue Requirement	2539.22

Revenue from tariff and the gap

656. Determination of the ARR is the first step in the process of tariff formulation. Subsequent Chapters (XVI and XVII) of this Order discuss the sales projections by the DISCOMS, the revenue gap, the tariffs approved by the Commission taking into account the cross-subsidy and the government subsidy, the bulk supply tariff (BST) applicable to each DISCOM and other relevant aspects.

CHAPTER - XV
CONSOLIDATED POSITION OF THE FOUR DISCOMS

657. The consolidated net Aggregate Revenue Requirements (ARRs) of the four DISCOMs taken together work out to Rs.10606.90 crores as detailed in the table below:

Table No.116

Aggregate Revenue Requirement for the four DISCOMS for FY 2005-06 (Rs. Crs)

	APNPDCL	APEPDCL	APSPDCL	APCPDCL	TOTAL
Total Expenditure	1959.92	1913.72	2664.64	4707.11	11245.39
Reasonable Return	3.24	1.58	2.29	6.13	13.24
Less:Non-Tariff Income	138.29	79.10	127.71	306.63	651.73
Total Net ARR	**1824.88**	**1836.20**	**2539.22**	**4406.61**	**10606.90**

658. The aggregate revenue of the four DISCOMs from current tariffs is as follows:

Table No.117 (Rs. Crs)

DISCOMS	Filing	APERC
APNPDCL	1180.60	1173.34
APEPDCL	1841.88	1837.12
APSPDCL	2010.88	2008.41
APCPDCL	4151.31	4152.88
Total	9184.67	9171.75

659. The resultant gap is Rs.1435.15 crores (Rs.10606.90 crores minus Rs.9171.75 crores) to be covered through tariffs, efficiency gains and GoAP subsidy.

CHAPTER XVI
SALES PROJECTIONS, REVENUES AND REVENUE GAP

Sales Projections:

660. The DISCOMs estimated the sales for FY05-06 for each category of consumers based on first six months actual sales and the estimated sales for the remaining six months of the year 2004-05. The estimated sales volumes in this manner have been incorporated in the filings. The consumption for unmetered agricultural consumers has been estimated in the same manner with the supporting information from meters fixed on LV side of sample distribution transformers fixed for measuring the consumption. The Commission also utilised the sales database filed by the distribution companies every month for cross verification of the sales volumes filed by the them. The Commission in Tariff Order for FY04-05 had directed the DISCOMs to disaggregate the sales forecast at section or division level, for better accuracy in forecast as well as verification of the actual sales. The DISCOMs are yet to comply with this directive in full despite the availability of the information in the form of physical records and also electronic database, i.e. sales database, for each consumer. With the broader conformation of the sales growth with the volumes for previous year and sales information in the form of sales database, the Commission approves the sales forecast as projected by the DISCOMs except for Rural Electric Cooperatives and LT V Agriculture.

661. The Commission feels that it is necessary that the forecasting should be done at disaggregate level and to begin with it should start at operation circle/district level. In this context, the Commission directs that,

> ***The DISCOMS need to separate the sales at each operation circle/district category-wise effective from April 2005 and the sales forecast in the filing for FY2006-07 shall be circle-wise/district-wise. The DISCOMs shall file the information for every month effective from April 2005 in the format that will be prescribed and communicated for this purpose.***

Load Profiles:

662. In Tariff Order 2004-05, the Commission directed the DISCOMs to arrive at the consumer load profile through the load survey capability meters. After issue of the Tariff Order, the DISCOMs sought certain clarifications with regard to procedure and utility of such metering.

663. The consumer load profiles are the basis for the cost of service model and also to arrive at the time of day consumption for each consumer class. It is the primer for any intervention towards energy conservation besides the tariff making exercise. Further, as the open access is required to be provided, detailed consumer load profiles should be helpful for the DISCOMs for better planning to retain consumer loads with them.

664. The disaggregated load profiles are highly desirable for better segmentation of consumers for tariff making apart from their uses in planning. The available load profiles at present based on feeder metering offer the consumer load profile for the entire class of consumers. Load profiles based on DTR metering also cannot offer disaggregated load profiles. This would be so since the metering is on group basis with which the disaggregated profiles cannot be arrived at.

665. In these circumstances, the DISCOMs need to develop a customer profile immediately in the context of open access and also make efforts to develop such profiles for other categories of consumers. The Commission, therefore, directs that,

> **Each DISCOM should make a survey of load profiling methods and adopt suitable method for profiling and submit action plan duly indicating the sample size, consumer differentiation principles for profiling and estimated cost of such profiling study by end-August 2005. Based on DISCOM compliance, the Commission will take appropriate decision with regard to load profiles.**

LT Agriculture:

666. Most of the services in LT-V agriculture and irrigation category of consumers are not metered and it is necessary to estimate the likely consumption for FY05-06. The projected sales volumes by DISCOMs for FY05-06 are primarily supported in terms of consumption estimates for the period 11/03 to 10/04 based on LV Side meter readings on DTRs that serve only the agricultural loads. The other supporting information is in terms of the number of new services to be releases, consumption by consumers in RESCOs supply areas, which are merged with DISCOMs, consumption on account of Tatkal services released.

667. Since FY03-04, the basis for Commission’s decisions has been the information collected from metered DTRs that serve the agricultural loads exclusively. As per this methodology, the consumption for each mandal is computed based on a) consumption per HP in the mandal computed from data collected from metered DTRS, and b) total connected HP as per agricultural census, including revisions, if any. If the DTR data is not available for a mandal, the district-wise DTR information is used along with the total connected HP in the mandal.

668. The DISCOMs are filing the information for each month with the Commission since 11/02. The Commission examined the data quality and coverage, and noted with disquiet that the quality and coverage had deteriorated for the latest 12 month period, 11/03 to 10/04, compared with the earlier 12 month period, 11/02 to 10/03. The data is further examined for 24 months' consistency, i.e. continuous availability of readings from the metered DTRs for 24 months at a stretch.

669. The ratio of mandals with valid meter readings to total mandals with agricultural loads loads, the coverage ratio, is an indicator of availability of information. The coverage ratio has declined for all DISCOMs except NPDCL. The overall ratio is 65.56 percent for 11/03 to 10/04. This ratio declines further, to 40 percent, when the data consistency is checked for the entire 24-month period.

670. The ratio of DTRs with valid information to total number of metered DTRS, the quality ratio, is the indicator of quality of information available. The quality ratio has declined from 49 in 2003 to 39 in 2004. This ratio further declines to 18 percent when the data consistency is checked for the entire 24-month period.

671. In these circumstances, the information available for the period 11/02 to 10/03 is wider in terms of coverage with high data quality compared with the information available for the period 11/03 to 10/04. The approved volumes for FY04-05 (based on the data for 11/02 to 10/03) should be more reliable compared with much restricted information available for the period 11/03 to 10/04. Accordingly, the Commission has adopted the consumption volumes approved for FY04-05 as the base consumption for FY05-06.

672. The Commission examined the consumption growth on 3521 DTRs whose data is consistent for 24 months across the two periods, 11/02 to 10/03 and 11/03 to 10/04. Considering the less reliability of the contemporary data, especially that relating to the connected HP of metered DTRs due to unauthorized connections, the base consumption level as mentioned above has been raised by applying only 50 percent of the growth rate of consumption observed during the later period. Further, the consumption on account of new releases, consumption in RESCOs merged with DISCOMs and possible energy savings on account DSM measures are also reckoned. The sales projections by DISCOMs and the Commission's approved volumes for FY05-06 are given below.

Table No.118

LT V: AGRICUTURAL CONSUMPTION FOR FY05-06 (MU)

DATA ITEM	CPDCL	EPDCL	NPDCL	SPDCL	TOTAL
DISCOMs Projection	6393	1262	2983	3566	14204
Sales Approved	5453	1232	2908	3054	12647

Sales Volume for FY05-06:

673. The Commission examined the sales projections filed by DISCOM on historical basis and cross-verified the same with sales database filed by the DISCOMS. As explained above, the agricultural consumption volumes approved by the Commission are lower compared the DISCOM filings by 1557 MU. Further, the sales volumes projected for RESCOs by DISCOMs have been adjusted based on independent evaluation of RESCOs' filings for FY05-06. This has resulted in reduction of 19 MU compared with the filings. The details are given below.

Table No.119
Sales Volumes: Projections and approvals for FY05-06 (MU)

CONSUMER CATEGORY	DISCOMS	APERC	Difference
LT I:DOMESTIC	8597.37	8597.36	0.00
LT II:NON-DOMESTIC AND COMMERCIAL	1970.44	1970.44	0.00
LT III:INDUSTRY: NORMAL, OPTIONAL AND OTHERS	2290.40	2290.39	0.00
LT IV:COTTAGE INDUSTRIES AND DOBIGHATS	46.02	46.02	0.00
LT V:AGRICULTURE	14203.51	12646.80	-1556.71
LT VI: STREET LIGHTING AND PWS SCHEMES	1304.68	1304.67	0.00
LT VII:GENERAL	112.63	112.63	0.00
LT VIII:TEMPORARY	8.49	8.49	0.00
SUB TOTAL:LOW TENSION	28533.54	26976.80	-1556.74
HT I: INDUSTRIAL-General	7119.04	7119.04	0.00
HT1: (Ferro Alloys)/Power Intensive	1063.03	1063.03	0.00
HT II: INDUSTRIAL-Others	936.00	936.00	0.00
HT IV: AGRICULTURE AND IRRIGATION	229.67	229.66	0.00
HT V: RAILWAY TRACTION	1205.53	1205.53	0.00
HT VI: TOWNSHIPS AND RESIDENTIAL COLONIES	244.32	244.32	0.00
RESCOS	684.81	666.09	-18.72
TEMPORARY	1.76	1.76	0.00
SUB TOTAL: HIGH TENSION	11484.16	11465.43	-18.73
TOTAL	40017.70	38442.23	-1575.47

REVENUE AND REVENUE GAP FOR FY05-06:

674. The revenue from tariffs comprises four sub-components: i) revenue from sale of energy at applicable tariff, ii) revenue from application of minimum charges under certain tariff conditions, iii) revenue from application of fixed charges on connected/contracted load/demand, and iv) revenue through charges for wheeling of electricity for others.

675. The DISCOMs projected the revenue at Rs.8763.33 cr for FY05-06 at the proposed tariff. The Commission estimates, the revenue from the proposed tariff at Rs.8882.42 cr.

The revenue is higher compared with the DISCOMs projections on account higher revenue estimation from wheeling charges by the Commission.

676. As per the filing, the revenue gap (aggregate revenue requirement in excess of tariff revenue) at proposed tariffs is computed at Rs.2396.30 cr for FY05-06. With the Commission's calculations on sales and other issues, the revenue gap at approved tariffs for FY05-06 is Rs.1599.48 Cr after taking into account the directed efficiency gains of Rs.125.00 cr to be achieved by DISCOMs in 2005-06. The details are given below.

Table No.120

REVENUE: PROJECTIONS AND APPROVALS FOR FY05-06 (Rs.Cr)

CONSUMER CATEGORY	DISCOMS	APERC
LT I:DOMESTIC	2039.20	2039.20
LT II:NON-DOMESTIC AND COMMERCIAL	1128.34	1128.34
LT III:INDUSTRY: NORMAL, OPTIONAL AND OTHERS	923.15	923.15
LT IV:COTTAGE INDUSTRIES AND DOBIGHATS	9.13	9.13
LT V:AGRICULTURE	67.07	67.07
LT VI: STREET LIGHTING AND PWS SCHEMES	220.99	220.99
LT VII:GENERAL	45.69	45.69
LT VIII:TEMPORARY	5.26	5.26
SUB TOTAL:LOW TENSION	**4438.83**	**4438.83**
HT I: INDUSTRIAL-General	3134.62	3139.94
HT II: INDUSTRIAL-Others	499.04	499.04
HT IV: AGRICULTURE AND IRRIGATION	39.67	38.85
HT V: RAILWAY TRACTION	530.43	530.43
HT VI: TOWNSHIPS AND RESIDENTIAL COLONIES	85.51	85.51
RESCOS	33.32	26.71
TEMPORARY	0.92	0.92
SUB TOTAL: HIGH TENSION	**4323.51**	**4321.40**
Wheeling Charges	**0.99**	**122.19**
TOTAL	**8763.33**	**8882.42**

REVENUE GAP FOR FY05-06

Table No.121

REVENUE: PROJECTIONS AND APPROVALS FOR FY05-06 (Rs.Cr)

Sl.No.	ITEM	DISCOMS	APERC
1	Reasonable Return	0.00	13.24
2	Expenditure	11812.35	11245.39
3	Non-Tariff Income	652.72	651.73
4	Efficiency Gains	0.00	125.00
5	Revenue Requirement	11159.63	10481.90
6	Revenue (including Wheeling charges)	8763.33	8882.42
7	**Net Revenue Gap**	**(2396.30)**	**(1599.48)**

CENTRAL POWER DISTRIBUTION COMPANY LIMITED:

677. The Commission has approved a sales volume of 16233.51 MU as against the projected sales of 17173.18 MU by the DISCOM for FY05-06. The reduction in forecasted sales is on account of reduction in forecasted sales for LT Agriculture.

678. As per filings, the revenue from tariff is at Rs.3981.15 cr and as per the Commission's computations, it is at Rs.4041.97 cr. Revenue from wheeling has been included as part of the tariff income. An amount of Rs.61.49 cr has been reckoned towards revenue from wheeling for FY 2005-06

679. The revenue gap as per the filing is Rs.933.45 cr while as per the Commission's computations, for expenditure and revenue, it works out to Rs.304.64 cr, after taking into account the directed efficiency gains of Rs.60.00 cr to be achieved by CPDCL in 2005-06. The details are given below.

Table No.122
CPDCL: SALES AND REVENUE FOR FY 05-06

CONSUMER CATEGORY	SALES (MU)		REVENUE (RsCr)	
	CPDCL	APERC	CPDCL	APERC
LT I:DOMESTIC	3175.03	3175.03	838.61	838.61
LT II:NON-DOMESTIC AND COMMERCIAL	929.08	929.08	539.84	539.84
LT III:INDUSTRY: NORMAL, OPTIONAL AND OTHERS	910.26	910.26	399.83	399.83
LT IV:COTTAGE INDUSTRIES AND DOBIGHATS	18.73	18.73	3.86	3.86
LT V:AGRICULTURE	6392.73	5453.06	35.56	35.56
LT VI:STREET LIGHTING AND PWS SCHEMES	576.67	576.67	110.47	110.47
LT VII:GENERAL	43.60	43.60	17.63	17.63
LT VIII:TEMPORARY	3.36	3.36	2.08	2.08
SUB TOTAL:LOW TENSION	**12049.46**	**11109.79**	**1947.88**	**1947.88**
HT I: INDUSTRIAL-General	3838.97	3838.97	1511.78	1512.65
HT1: (Ferro Alloys)/Power Intensive	360.61	360.61	103.50	103.50
HT II: INDUSTRIAL-Others	611.35	611.35	325.95	325.95
HT IV: AGRICULTURE AND IRRIGATION	152.25	152.25	26.45	25.90
HT V: RAILWAY TRACTION	90.25	90.25	39.71	39.71
HT VI: TOWNSHIPS AND RESIDENTIAL COLONIES	68.53	68.53	23.99	23.99
TEMPORARY	1.76	1.76	0.92	0.92
SUB TOTAL: HIGH TENSION	**5123.72**	**5123.72**	**2032.28**	**2032.60**
Wheeling Charges			**0.99**	**61.49**
GRAND TOTAL	**17173.18**	**16233.51**	**3981.15**	**4041.97**

Table No.123
CPDCL:REVENUE GAP FOR FY05-06 (Rs.Cr)

Sl.No.	ITEM	CPDCL	APERC
1	Reasonable Return	0.00	6.13
2	Expenditure	5222.22	4707.11
3	Non-Tariff Income	307.62	306.63
4	Efficiency Gains	0.00	60.00
5	Revenue Requirement	4914.60	4346.61
6	Revenue (including Wheeling charges)	3981.15	4041.97
7	**Net Revenue Gap**	**(933.45)**	**(304.64)**

EASTERN POWER DISTRIBUTION COMPANY LIMITED:

680. The Commission approved sales of 6749.12 MU as against the projected sales of 6779.87 MU for FY05-06 by the DISCOM. The reduction in forecasted sales is on account of reduction in forecasted sales for LT Agriculture.

681. As per filings, the revenue from tariff is at Rs.1821.52 cr and as per the Commission's computations, it is at Rs.1862.39 cr. Revenue from wheeling has been included as part of the tariff income. An amount of Rs. 39.93 cr has been reckoned towards revenue from wheeling charges for FY 2005-06

682. The revenue gap as per the filing is the Rs.237.20 cr while as per and with the Commission's computations for expenditure and revenue, it works out to Rs.32.19 cr, after taking into account the directed efficiency gains of Rs.6.00 cr to be achieved by EPDCL in 2005-06. The details are given below.

Table No.124
EPDCL: SALES AND REVENUE FOR FY 05-06

CONSUMER CATEGORY	SALES (MU)		REVENUE (Rs.Cr)	
	EPDCL	APERC	EPDCL	APERC
LT I:DOMESTIC	1809.10	1809.10	388.31	388.31
LT II:NON-DOMESTIC AND COMMERCIAL	343.16	343.16	194.42	194.42
LT III:INDUSTRY: NORMAL, OPTIONAL AND OTHERS	378.50	378.50	155.17	155.17
LT IV:COTTAGE INDUSTRIES AND DOBIGHATS	1.56	1.56	0.31	0.31
LT V:AGRICULTURE	1262.48	1231.73	2.80	2.80
LT VI:STREET LIGHTING AND PWS SCHEMES	195.37	195.37	35.53	35.53
LT VII:GENERAL	23.21	23.21	9.48	9.48
LT VIII:TEMPORARY	0.00	0.00	0.00	0.00
SUB TOTAL:LOW TENSION	**4013.00**	**3982.63**	**786.03**	**786.03**
HT I: INDUSTRIAL-General	1344.09	1344.09	555.22	558.45
HT1: (Ferro Alloys)/Power Intensive	702.42	702.42	201.59	201.59
HT II: INDUSTRIAL-Others	145.01	145.01	77.33	77.23
HT IV: AGRICULTURE AND IRRIGATION	27.63	27.63	5.65	5.54
HT V: RAILWAY TRACTION	400.38	400.38	176.17	176.17
HT VI: TOWNSHIPS AND RESIDENTIAL COLONIES	26.96	26.96	9.44	9.44
RESCOS	118.00	120.00	10.10	7.92
TEMPORARY	0.00	0.00	0.00	0.00
SUB TOTAL: HIGH TENSION	**2766.49**	**2766.49**	**1035.49**	**1036.43**
Wheeling Charges			**0.00**	**39.93**
GRAND TOTAL	**6779.87**	**6749.12**	**1821.52**	**1862.39**

Table No.125
EPDCL: REVENUE GAP FOR FY05-06 (Rs.Cr)

Sl.No.	ITEM	EPDCL	APERC
1	Reasonable Return	0.00	1.58
2	Expenditure	2137.82	1913.72
3	**Non-Tariff Income**	79.10	79.10
4	Efficiency Gains	0.00	6.00
5	Revenue Requirement	2058.72	1830.20
6	Revenue (including Wheeling charges)	1821.52	1862.39
7	**Net Revenue Gap**	**(237.20)**	**32.19**

NORTHERN POWER DISTRIBUTION COMPANY LIMITED:

683. The Commission approved sales of 6505.75MU as against the projected sales of 6587.04 MU for FY05-06 by the DISCOM. The reduction in forecasted sales is on account of reduction in forecasted sales for LT Agriculture.

684. As per filings, the revenue from tariff is at Rs.1073.86 cr and as per the Commission's computations, it is at Rs.1075.98 cr. Revenue from wheeling has been included as part of the tariff income. An amount of Rs. 1.63 cr has been reckoned towards revenue from wheeling charges for FY 2005-06

685. The revenue gap as per the filing is the Rs.518.42 cr while as per and with the Commission's computations for expenditure and revenue, it works out to Rs.720.89 cr, after taking into account the directed efficiency gains of Rs.28.00 cr to be achieved by NPDCL in 2005-06. The details are given below.

Table No.126
NPDCL: SALES AND REVENUE FOR FY 05-06

CONSUMER CATEGORY	SALES (MU)		REVENUE(RsCr)	
	NPDCL	APERC	NPDCL	APERC
LT I:DOMESTIC	1244.88	1244.88	273.83	273.83
LT II:NON-DOMESTIC AND COMMERCIAL	217.12	217.12	121.27	121.27
LT III:INDUSTRY: NORMAL, OPTIONAL AND OTHERS	264.47	264.47	118.24	118.24
LT IV:COTTAGE INDUSTRIES AND DOBIGHATS	4.38	4.38	0.86	0.86
LT V:AGRICULTURE	2982.70	2908.41	13.74	13.74
LT VI:STREET LIGHTING AND PWS SCHEMES	236.63	236.63	30.60	30.60
LT VII:GENERAL	13.94	13.94	5.58	5.58
LT VIII:TEMPORARY	1.05	1.05	0.65	0.65
SUB TOTAL:LOW TENSION	**4965.17**	**4890.88**	**564.76**	**564.76**
HT I: INDUSTRIAL-General	786.04	786	305.36	306.48
HT II: INDUSTRIAL-Others	41.64	41.64	23.21	23.21
HT IV: AGRICULTURE AND IRRIGATION	18.00	18.00	3.27	3.20
HT V: RAILWAY TRACTION	299.00	299.00	131.56	131.56
HT VI: TOWNSHIPS AND RESIDENTIAL COLONIES	84.89	84.89	29.71	29.71
RESCOS	392.00	385.30	15.98	15.41
TEMPORARY	0.00	0.00	0.00	0.00
SUB TOTAL: HIGH TENSION	**1621.87**	**1614.87**	**509.09**	**509.58**
Wheeling Charges			**0.00**	**1.63**
GRAND TOTAL	**6580.47**	**6505.75**	**1073.86**	**1075.98**

Table No.127
NPDCL:REVENUE GAP FOR FY05-06 **(Rs.Cr)**

Sl.No.	ITEM	NPDCL	APERC
1	Reasonable Return	0.00	3.24
2	Expenditure	1730.57	1959.92
3	**Non-Tariff Income**	138.29	138.29
4	Efficiency Gains	0.00	28.00
5	Revenue Requirement	1592.28	1796.87
6	Revenue (including Wheeling charges)	1073.86	1075.98
7	Net Revenue Gap	**(518.42)**	**(720.89)**

SOUTHERN POWER DISTRIBUTION COMPANY LIMITED:

686. The Commission approved sales of 8953.83 MU as against the projected sales of 9479.17 MU for FY05-06 by the DISCOM. The reduction in forecasted sales is on account of reduction in forecasted sales for LT Agriculture.

687. As per filings, the revenue from tariff is at Rs.1886.82 cr and as per the Commission's computations, it is at Rs.1902.10 cr. Revenue from wheeling has been included as part of the tariff income. An amount of Rs. 19.13 cr has been reckoned towards revenue from wheeling charges for FY 2005-06

688. The revenue gap as per the filing is the Rs.707.21 cr while as per and with the Commission's computations for expenditure and revenue, it works out to Rs.606.12 cr, after taking into account the directed efficiency gains of Rs.31.00 cr to be achieved by SPDCL in 2005-06. The details are given below.

Table No.128
SPDCL: SALES AND REVENUE FOR FY 05-06

CONSUMER CATEGORY	SALES (MU)		REVENUE(RsCr)	
	SPDCL	APERC	SPDCL	APERC
LT I:DOMESTIC	2368.35	2368.35	538.45	538.45
LT II:NON-DOMESTIC AND COMMERCIAL	481.08	481.08	272.80	272.80
LT III:INDUSTRY: NORMAL, OPTIONAL AND OTHERS	737.17	737.17	249.90	249.90
LT IV:COTTAGE INDUSTRIES AND DOBIGHATS	21.35	21.35	4.10	4.10
LT V:AGRICULTURE	3565.62	3053.60	14.98	14.98
LT VI:STREET LIGHTING AND PWS SCHEMES	296.01	296.01	44.39	44.39
LT VII:GENERAL	31.88	31.88	13.00	13.00
LT VIII:TEMPORARY	4.08	4.08	2.53	2.53
SUB TOTAL:LOW TENSION	**7505.54**	**6993.52**	**1140.16**	**1140.16**
HT I: INDUSTRIAL-General	1149.90	1149.90	457.19	457.28
HT II: INDUSTRIAL-Others	138.01	138.01	72.56	72.56
HT IV: AGRICULTURE AND IRRIGATION	31.77	31.77	4.29	4.21
HT V: RAILWAY TRACTION	415.90	415.90	183.00	183.00
HT VI: TOWNSHIPS AND RESIDENTIAL COLONIES	63.94	63.94	22.38	22.38
RESCOS	174.11	160.79	7.24	3.38
TEMPORARY	0.00	0	0.00	0.00
SUB TOTAL: HIGH TENSION	**1973.63**	**1960.31**	**746.65**	**742.80**
Wheeling Charges	**0.00**	**0.00**	**0.00**	**19.13**
GRAND TOTAL	**9479.17**	**8953.83**	**1886.82**	**1902.10**

Table No.129
SPDCL:REVENUE GAP FOR FY05-06 (Rs.Cr)

Sl.No.	ITEM	SPDCL	APERC
1	Reasonable Return	0.00	2.29
2	Expenditure	2721.41	2664.64
3	Non-Tariff Income	127.71	127.71
4	Efficiency Gains	0.00	31.00
5	Revenue Requirement	2594.03	2508.22
6	Revenue (including Wheeling charges)	1886.82	1902.10
7	**Net Revenue Gap**	**(707.21)**	**(606.12)**

CHAPTER : XVII
TARIFF DESIGN

Structure of Retail Tariff and Transmission & Wheeling Charges

689. The Cost-of-Service (CoS) model is the basis for fixing the retail tariffs for FY2005-06 in line with Section 61(g) of the Electricity Act, 2003, which mandates the State Commissions to ensure that the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within a period to be specified by the Appropriate Commission. The CoS enables identification of costs attributable to each consumer category and therefore the basis for tariff fixation. The same cost-allocation principles incorporated in the CoS model allow both identification and allocation of cross-subsidy within the system between consumer categories. The Commission has used the CoS model since the first Tariff Order for FY2000-01 for both tariff fixation and allocation of cross-subsidy. The model is based on the embedded cost approved by the Commission as the revenue requirement of the ensuing year that needs to be recovered by way of tariff adjustments. While designing the final retail tariffs, the Commission is largely guided by the principles set out in Section 61(d) ibid, that requires the tariffs to safeguard consumers' interest and at the same time ensure recovery of the reasonable cost of electricity.

690. Under Section 62(b) and (c) of the Electricity Act,2003, the Commission is also required to fix the transmission and wheeling charges for the use of the network. These charges fixed on the basis of postage stamp method as per CERC Guidelines, will be applicable for all users of the network including the DISCOMs. The Commission has therefore separately determined the transmission and SLDC charges to be paid by all consumers of the transmission network (66KV and above) with compensation for losses in kind. Similarly the consumers using the network 66 KV are required to pay the wheeling charges as determined by the Commission with compensation for losses in kind that vary with voltage levels. Those consumers who use both transmission network and distribution network have to pay both transmission and SLDC charges and wheeling charges as determined by the Commission as also compensation for losses in kind at different voltage levels.

CoS Model

691. The Licensees have in the filings for FY2005-06 proposed: a) return to evening peak and b) the use of class non-coincident peak to allocate demand related costs. As noted in the earlier Tariff Orders (see paragraph 845 of Tariff Order, 2004-05) when the licensees had filed their CoS based on morning peak, the data on load curves submitted by the Licensees

showed that if agricultural demand is not taken into consideration, the peak of the system occurs in the evening since supply to agriculture is largely during off-peak hours. The Commission therefore, preferred to use the evening peak. The current proposal of APTRANSCO for evening peak is in line with the Commission's understanding on the time of occurrence of the peak.

692. Regarding the use of class non-coincident peak, the Commission prefers to continue with coincident peak demand as it is the appropriate basis for allocation of costs.

693. It is, however, important that if the Licensees wish to modify the present CoS, the quality of supporting data in terms of derivation of load curves as observed in paragraph 848 of the Tariff Order for FY2004-05, has to improve considerably despite notable improvements since the first CoS model. The Commission, however, note with concern that the progress on Load Research front is slow, especially with respect to DISCOMs. In the Chapter on Sales, the issue of developing load profiles of consumer categories has been discussed. The DISCOMs should move to set up a separate cell for Load Research. At present, all the tabulated data is sent to APTRANSCO which undertakes the derivation of load shapes and load curves.

The Commission directs that each DISCOM set up a separate Load Research Cell which undertakes load survey and consumer profiling.

Full Cost Tariff and Efficiency Gains

694. The full cost approved by the Commission for FY 2005-06 is Rs.10606.90 crs. The directed efficiency gains of Rs.125.00 crs. are deducted from the total revenue requirements to arrive at the fully allocated costs of Rs.10481.90 crs. The fully allocated costs are then assigned to each consumer category on the basis of the CoS model to derive the cost to serve per unit of a category and is referred to as the Fully Allocated Cost Tariff (FACT) .

Cross-subsidy / Subsidy by GoAP

695. Prior to determining FACT of each category, the Commission allocates the available cross-subsidy emanating from the CoS model among the subsidized categories in proportion to the financial gap (the difference between the estimated revenue at the prevailing tariff and the cost-to-serve (CoS) of these categories) to the total financial gap of all subsidized categories. If the gap continues even after cross-subsidy allocation, for the subsidized categories, a view is taken whether to increase the tariffs of the subsidized category or of the subsidizing category in order to cover the gap. This decision is based on the Commission's perception on the permissible rate shock that can be absorbed by the

subsidized / subsidizing categories. The process of tariff rationalization of the Commission is to bring each consumer category's tariff closer to its CoS in line with section 61(g) of the Electricity Act 2003, as initiated in HT-I- Industry, a major subsidizing category. The cross-subsidy available for FY2005-06 is Rs.2214.54 crs.

696. The fully allocated tariffs for each category of consumers as determined by the Commission are intimated to the GoAP for directions, if any, in respect of provision of subsidy for any consumer or class of consumers under Sec.65 of the Electricity Act, 2003. The GoAP decides the levels to which the fully allocated cost tariffs in respect of the subsidized categories are to be reduced and makes good the resultant gap in the revenue requirement by way of subsidy. The tariffs so finalized are notified. The table below gives the fully allocated cost tariffs communicated to GoAP.

Table No.130
Fully allocated cost tariffs-FY2005-06

	SALES	Current Tariff		Proposed Tariff		Fully Allocated Cost Tariff		Total Revenue		
CATEGORY	MU s	Demand	Energy	Demand	Energy	Demand	Energy	Current	Proposed	APERC
LOW TENSION										
Category I: Domestic										
0 – 50	4907.17		145		145		220	803.60	803.60	1171.64
51 – 100	1792.46		280		280		345	501.89	501.89	618.40
101 – 200	1169.19		305		305		355	356.60	356.60	415.06
201 – 300	314.50		475		475		475	149.39	149.39	149.39
> 301	414.04		550		550		550	227.72	227.72	227.72
SUB TOTAL	8597.36							2039.20	2039.20	2582.21
Category II: Non-Domestic and Commercial										
0 - 50	515.00		395		395		395	219.12	218.69	218.69
> 51	1455.44		625		625		625	909.65	909.65	909.65
SUB TOTAL	1970.44							1128.77	1128.34	1128.34
Category III (a & b) Industrial										
Category III (a): Industrial-Normal										
All Units	1754.16	444	375	444	375	444	375	761.70	761.70	761.70
Sub Total	1754.16							761.70	761.70	761.70
Category III (b): Industrial-Optional										
All Units	145.38	444	375	444	375	444	375	54.52	54.52	54.52
Sub Total	145.38							54.52	54.52	54.52
Seasonal Industries - Optional Tariff	156.38	1200	375	1200	375	1200	375	85.83	85.83	85.83
Pisciculture	234.48		90		90		90	21.10	21.10	21.10
Sugarcane Crushing	0.00		50		50		50	0.00	0.00	0.00
SUB TOTAL OF CATEGORY III (a & b)	2290.40	444	375	444	375	444	375	923.15	923.15	923.15
Category IV:										
Cottage Industries	46.02	120	180	120	180	120	225	9.13	9.13	11.20
Dhobighats										
Upto 3 HP	0.00	250		250		250		0.00	0.00	0.00
Above 3 HP upto 5 HP	0.00	400		400		400		0.00	0.00	0.00
Above 5 HP below 10 HP	0.00	500		500		500		0.00	0.00	0.00
Above 10 HP	0.00	600		600		600		0.00	0.00	0.00
SUB TOTAL	46.02							9.13	9.13	11.20

	SALES	Current Tariff		Proposed Tariff		Fully Allocated Cost Tariff		Total Revenue		
CATEGORY	MU s	Demand	Energy	Demand	Energy	Demand	Energy	Current	Proposed	APERC
Category V: Agriculture										
DPAP areas										
Up to 3 HP (2.25kw)	1334.42	225		0		0		5.14	0.00	0.00
> 3 HP up to 5 HP (2.25to 3.75kw)	4939.17	375		0		0		82.55	0.00	0.00
> 5 HP up to 10 HP (375 to 7.5kw)	1597.19	475		0		0		51.76	0.00	0.00
> 10 HP (7.5kw)	444.15	575		0		0		24.84	0.00	0.00
0 - 2500 Units per annum	0.00		20		0		0	0.00	0.00	0.00
> 2500 Units per annum	0.00		50		0		0	0.00	0.00	0.00
SUB TOTAL	0.00							164.29	0.00	0.00
Other areas										
Up to 3 HP (2.25kw)	780.80	275		0		0		46.91	0.00	0.00
> 3 HP up to 5 HP (2.25to 3.75kw)	3416.47	425		0		0		167.17	0.00	0.00
> 5 HP up to 10 HP (375 to 7.5kw)	672.89	525		0		0		29.47	0.00	0.00
> 10 HP (7.5kw)	399.76	625		0		0		21.42	0.00	0.00
0 - 2500 Units per annum	0.00		20		0		0	0.00	0.00	0.00
> 2500 Units per annum	0.00		50		0		0	0.00	0.00	0.00
SUB TOTAL	5388.08							264.97	0.00	0.00
Tatkal	180.00		50		0		0	9.00	0.00	0.00
Horticulture	0.00		50		0		0	0.00	0.00	0.00
SUB TOTAL (DPAP and NDPAP)	14203.53							438.26	0.00	0.00
New Agricultural Policy										
With Demand Side Management (DSM) Measures										
Corporate Farmers & I T Assessees	298.51	0	0	0	100	0	175	0.00	29.85	52.24
Wet Land Farmers (Holdings > 2.5 Acres)	438.78	0	0	0	20	0	100	0.00	8.78	43.88
Dry Land Farmers (Connections > 3 Nos.)	196.73	0	0	0	20	0	100	0.00	3.93	19.67
Wet Land Farmers (Holdings <= 2.5 Acres)	35.89	0	0	0	0	0	50	0.00	0.00	1.79
Dry Land Farmers (Connections <= 3 Nos.)	408.99	0	0	0	0	0	50	0.00	0.00	20.45
Sub-total of DSM	1378.90							0.00	42.56	138.03
Without Demand Side Management (DSM) Measures										
Corporate Farmers & I T Assessees	0.00	0	0	0	200	0	225	0.00	0.00	0.00
Wet Land Farmers (Holdings > 2.5 Acres)	313.21	0	0	0	50	0	155	0.00	15.66	48.55
Dry Land Farmers (Connections > 3 Nos.)	139.54	0	0	0	50	0	155	0.00	6.98	21.63
Wet Land Farmers (Holdings <= 2.5 Acres)	1913.79	0	0	0	0	0	67	0.00	0.00	128.22
Dry Land Farmers (Connections <= 3 Nos.)	8807.95	0	0	0	0	0	67	0.00	0.00	590.13
Sub-total of without DSM	11174.49							0.00	22.64	788.53
Total Irrigation & Agriculture (Excl. Tatkal)	12553.39							0.00	65.20	926.57
Tatkal	93.41	0	0	0	20	0	100	0.00	1.87	9.34
TOTAL FOR LT V Category (DSM + N-DSM + Tatkal)	12646.80							0.00	67.07	935.91
Category VI: Local Bodies Street Lighting & PWS schemes										
Local Bodies										
Street Lighting										
Minor Panchayats	296.95		156		156		245	46.32	46.32	72.75
Major Panchayats	82.59		208		208		295	17.18	17.18	24.36
Nagarpalikas and Municipalities Gr.3	16.36		274		274		340	4.48	4.48	5.56
Municipalities Gr.1 & 2	47.19		326		326		420	15.38	15.38	19.82
Municipalities Selection Spl.Gr.	49.85		353		353		440	17.60	17.60	21.93
Corporations	119.39		379		379		450	45.25	45.25	53.73
PWS Schemes										
Minor Panchayats	431.29							20.69	20.69	63.96
0 - 2500 Units per annum	29.19		20		20		125	0.58	0.58	3.65
> 2500 Units per annum	402.10		50		50		150	20.11	20.11	60.32
Major Panchayats	147.99							7.40	7.40	22.20
0 - 2500 Units per annum	0.00		20		20		125	0.00	0.00	0.00
> 2500 Units per annum	147.99		50		50		150	7.40	7.40	22.20

	SALES	Current Tariff		Proposed Tariff		Fully Allocated Cost Tariff		Total Revenue		
CATEGORY	MU s	Demand	Energy	Demand	Energy	Demand	Energy	Current	Proposed	APERC
Nagarpalikas and Municipalities Gr.3										
Upto 1000 units	6.41	240	375	240	375	300	425	2.55	2.55	2.89
Balance units	31.55	240	405	240	405	300	475	12.86	12.86	15.08
Municipalities Gr.1 & 2										
Upto 1000 units	8.94	240	375	240	375	300	425	3.39	3.39	3.85
Balance units	23.82	240	405	240	405	300	475	9.73	9.73	11.41
Municipalities Selection Spl.Gr.										
Upto 1000 units	4.15	240	375	240	375	300	425	1.58	1.58	1.79
Balance units	18.10	240	405	240	405	300	475	7.35	7.35	8.62
Corporations										
Upto 1000 units	1.40	240	405	240	405	300	475	0.60	0.60	0.70
Balance units	18.70	240	460	240	460	300	525	8.64	8.64	9.86
SUB TOTAL	1304.68							220.99	220.99	338.53
Category VII: General Purpose	112.63		400		400		400	45.65	45.69	45.69
Category VIII: Temporary Supply	8.49		620		620		620	5.26	5.26	5.26
TOTAL LOW TENSION	26976.82							4810.42	4438.83	5970.29
HIGH TENSION										
Category I: Industry - General										
General Consumption	6691.26							2768.28	2659.99	2659.99
>= 132 kV		2340	350	2340	325	2340	325	914.32	860.63	860.63
>33 kV upto 132 kV		2340	350	2340	335	2340	335	737.09	709.34	709.34
>11 kV upto 33 kV		2340	350	2340	340	2340	340	1116.88	1090.02	1090.02
Lighting	254.70							112.07	106.75	112.07
>= 132 kV		2340	440	2340	415	2340	440	78.21	73.77	78.21
>33 kV upto 132 kV		2340	440	2340	425	2340	440	9.37	9.05	9.37
>11 kV upto 33 kV		2340	440	2340	430	2340	440	24.48	23.93	24.48
Colony	160.41							56.15	56.15	56.15
>= 132 kV		2340	350	2340	350	2340	350	49.45	49.45	49.45
>33 kV upto 132 kV		2340	350	2340	350	2340	350	4.37	4.37	4.37
>11 kV upto 33 kV		2340	350	2340	350	2340	350	2.33	2.33	2.33
Ferro Alloys	1063.03		212		287		287	225.36	305.09	305.09
Seasonal Industries	12.63							6.65	6.65	6.65
>= 132 kV		2340	440	2340	440	2340	440	0.00	0.00	0.00
>33 kV upto 132 kV		2340	440	2340	440	2340	440	0.37	0.37	0.37
>11 kV upto 33 kV		2340	440	2340	440	2340	440	6.28	6.28	6.28
All Consumption	8182.03							3168.51	3134.62	3139.94
SUB TOTAL	8182.03							3168.51	3134.62	3139.94
Category II: Industry - Other	936.01	2340	440	2340	440	2340	440	498.65	499.04	499.04
>= 132 kV		2340	440	2340	440	2340	440	52.56	52.95	52.95
>33 kV upto 132 kV		2340	440	2340	440	2340	440	67.94	67.94	67.94
>11 kV upto 33 kV		2340	440	2340	440	2340	440	378.15	378.15	378.15
Category IV: Irrigation and Agriculture	229.65							42.99	39.67	45.69
Government Lift Irrigation schemes	164.60		241		241		236	39.67	39.67	38.85
Private HT Agri	39.47	430		0		759		2.43	0.00	4.28
Metered Consumption	25.58		35		0		100	0.90	0.00	2.56
Category V: Railway Traction	1205.53		440		440		440	530.43	530.43	530.43
Category VI: Townships and Residential Colonies	244.32		350		350		350	85.51	85.51	85.51
Rural Electric Co-operatives	666.09							33.32	33.32	87.89
Anakapalle	90.00		85		85		150	7.69	7.69	13.50
Chipurupally	30.00		80		80		150	2.41	2.41	4.50
Sircilla	385.30		41		41		129	15.98	15.98	49.63
Kuppam	160.79		45		45		126	7.24	7.24	20.26
Temporary	1.76	3510	525	3510	525	3510	525	0.92	0.92	0.92
TOTAL HIGH TENSION	11465.39							4360.34	4323.52	4389.43

	SALES	Current Tariff		Proposed Tariff		Fully Allocated Cost Tariff		Total Revenue		
CATEGORY	MU s	Demand	Energy	Demand	Energy	Demand	Energy	Current	Proposed	APERC
Wheeling Charges Revenue								0.99	0.99	122.19
SYSTEM TOTAL	38442.21							9171.75	8763.34	10481.91

Directions of GoAP on Subsidy

697. The Commission after determining the fully allocated cost, communicated GoAP to intimate whether it required, under Section 65 of the Electricity Act, 2003, to grant any subsidy to any consumer or class of consumers in the tariff determined by the Commission. GoAP desired that the tariff in respect of the subsidized categories may be reduced to the levels proposed by the DISCOMS and accordingly, agreed to make available the consequent total financial implication of Rs.1599.48 crs as subsidy to DISCOMS. The table below gives the details of subsidy allocation for FY 2005-06 to the various subsidized categories:

Table No.131
Details of subsidy allocation in FY 2005-06 (Rs.Crs)

Particulars	Amount
Domestic	544.42
Cottage Industries	2.10
LT Agriculture	871.17
Local Bodies	117.49
HT Agriculture	6.41
RESCOS	57.89
Total	1599.48

698. The DISCOM-wise distribution of subsidy is given in the table below:

Table No.132
DISCOM-wise subsidy for FY 2005-06

Name of the DISCOM	Amount (Rs.Crs.)
NPDCL	342.07
EPDCL	232.87
SPDCL	410.71
CPDCL	613.83
TOTAL	1599.48

699. The GoAP subsidy as in the earlier Tariff Orders has been mainly for Domestic and Agriculture categories. The details of revenue recovery, cross-subsidy and subsidy for the various subsidized categories are given in the table below:

Table No.133
Details of revenue, cross-subsidy and Government subsidy for FY 2005-06 (Rs. Crs.)

Subsidised categories	Revenue	Cross-subsidy	Government subsidy
Domestic	2039.20	779.82	544.42
Cottage Industry	9.13	2.96	2.10
Agriculture	67.07	1176.21	871.17

Local Bodies	220.99	166.22	117.49
HT Agriculture	38.85	8.86	6.41
RESCOS	26.71	80.47	57.89
Total	2401.95	2214.54	1599.48

Administration of Subsidy:

700. Subsidy provided by the GoAP is administered as follows:

a) The subsidy given by the GoAP as per Section 65 of Electricity Act 2003 is for maintaining the tariffs at the levels proposed by the DISCOMS in respect of the subsidized categories.

b) Each DISCOM gets the subsidy commensurate to the extent of energy sales projected in each subsidised category.

c) The subsidy allocation to each DISCOM as calculated in (b) above must be paid by the GoAP to the respective DISCOMS in monthly instalments, in advance.

701. The Subsidy administration mechanism outlined in the Directive in paragraph 860 of the Tariff Order for FY2004-05 as extracted below shall apply.

"The DISCOMs shall file before the Commission the actual sales to subsidized categories of consumers for whom the GoAP agreed to pay the subsidy every month and the Commission will monitor the units actually sold by the DISCOMs vis-à-vis the subsidy provided. At the end of the year, subsidy adjustments will be made based on the consumption of units in respect of various subsidized categories."

Final Retail Tariffs

702. Section 62(3) of the Electricity Act, 2003, stipulates that the Appropriate Commission while determining the tariff should not show any undue preference to any consumer of electricity, but may differentiate according to the consumers' load factor, power factor, voltage, total consumption of electricity etc. Accordingly, the Commission followed the prescribed criteria while differentiating among consumers.

703. The important changes made in the present Tariff Order are:

a) The tariffs for all HT-I - Industrial has been reduced as proposed by the Licensees as a process of tariff rationalization, duly fixing lesser tariff for high voltages of supply

b) The tariff of HT-IV-Government Lift Irrigation has been reduced to the current level of cost-to-serve

Category -LT-I : Domestic

704. The tariff rates remain unchanged, as the GoAP have decided to provide the required subsidy. The cost-to-serve for this category is Rs.3.97 per unit, and after efficiency gains the cost-to-serve is Rs.3.93 per unit.

Table No.134
CAT-LT-I : DOMESTIC TARIFF

Slab (units/month)	Current Energy charge (ps/unit)	DISCOMS	APERC
		Proposed Energy charge (ps/unit)	Approved Energy charge (ps/unit)
0-50	145	145	145
51-100	280	280	280
101-200	305	305	305
201-300	475	475	475
Above 300	550	550	550

705. Consumers in the domestic category who wish to avail power at connected load above 56 KW are permitted to do so by fixing meters on the HT side. The charges applicable will be those of LT – I Domestic.

Category LT-II: Non-Domestic and Commercial

706. The non-domestic and commercial category LT-II, which includes shops, offices, commercial establishments, entertainment center, studios etc. The cost-to-serve for this category is Rs.3.91 per unit and after efficiency gains the cost-to-serve is Rs.3.87 per unit. The DISCOMs have not proposed any changes in the rates for this category and the Commission has retained the existing tariffs.

Table No.135
CAT-LT-II: NON-DOMESTIC AND COMMERCIAL TARIFF

Slab	Current Energy charge (ps/unit)	DISCOMS	APERC Approved
		Proposed Energy charge (ps/unit)	Energy charge (ps/unit)
0 - 50	395	395	395
51 & above	625	625	625

Category LT III (A) -Industry

707. This category consists entirely of industrial loads in the LT category. The cost-to-serve for this category is Rs. 3.17 per unit and after efficiency gains the cost-to-serve is Rs.3.14 per unit. DISCOMS have not suggested any changes in the tariff for this category and the Commission has retained the existing tariffs. The industrial consumer under LT-III(A) with load of 50 HP and above are given an option to choose a tariff based on demand charges per kVA instead of the fixed charge per HP. Accordingly the Commission specifies that the contracted demand declared shall not be less than 25 kVA for those who opt for the demand tariff.

LT-III (A)- Seasonal Industry

708. There is no change in the tariffs for this category. The demand charges during the off-season will be on the basis of recorded maximum demand or 30% of the contracted

demand whichever is higher, if it is optional category; otherwise, fixed charges shall be payable at 30% of the contracted load. The energy charges applicable will be those of HT-II. The definition of “seasonal industry”, will be the same as for HT-I category.

Category LT III (B) –Industry

709. LT-III (B) is a separate category created in LT-III Industrial for the small scale industries whose connected load is more than 75HP and below 150 HP, which would normally qualify as HT-I category. As in the earlier Order, the consumer is given the benefit of declaring a contracted demand lower than the connected load. A two-part tariff is levied which consists of demand charges and energy charges.

LT-III (B) – Seasonal Industry

710. There is no change in the tariffs for this category. The demand charges during the off-season will be on the basis of recorded maximum demand or 30% of the contracted demand whichever is higher. The energy charges applicable will be those of HT-II. The definition of “seasonal industry”, will be the same as for HT-I category.

711. A small change has been initiated in LT – III (A) and LT-III (B) categories on account of requests from consumers. The permissible lighting load has been increased from 5% to 10% of total consumption in line with industrial consumers in the HT segment.

Table No.136

CAT-LT-III : INDUSTRIAL TARIFF

Slab	Current charges		DISCOMS Proposed charges		APERC Approved charges	
	Fixed charges	Energy charge (paise/ unit)	Fixed charges	Energy charge (paise / unit)	Fixed charges	Energy charges (paise/ unit)
Category III(A): Industrial						
(i). Industrial – normal up to 75 HP	Rs.37/HP/month	375	Rs.37/HP/ month	375	Rs.37/HP/ month	375
(ii). Industrial - Optional 50-75 HP	Rs.100/kVA/month	375	Rs.100/ kVA/month	375	Rs.100/ kVA/month	375
(iii). Pisciculture and Prawn Culture (below 10HP)	--	90	--	90	--	90
(iv). Sugarcane Crushing (coming under agricultural services)	--	50	--	50	--	50
Category III (B): Industrial						
Above 75 HP up to 150 HP	Rs.100/kVA/month	375	Rs.100/kVA/ month	375	Rs.100/kVA/ month	375
Category III (A&B) Seasonal Industries – Off-season tariff (During season the applicable tariff of the respective categories will apply)						

Slab	Current charges		DISCOMS Proposed charges		APERC Approved charges	
	Fixed charges	Energy charge (paise/ unit)	Fixed charges	Energy charge (paise / unit)	Fixed charges	Energy charges (paise/ unit)
LT-IIIA(i)	--	--	--	--	Rs.37/HP/ month on 30% of the CL	440
LT-IIIA(ii)	--	--	--	--	Rs.100/kVA/ per month on RMD or 30% of the CMD which ever is higher	440
LT-III(B)	Rs.100/kVA/ per month on RMD or 30% of the CMD which ever is higher	440	Rs.100/kVA/ per month on RMD or 30% of the CMD which ever is higher	440	Rs.100/kVA/ per month on RMD or 30% of the CMD which ever is higher	440
CL: contracted Load; CMD: Contracted maximum demand; RMD: Recorded maximum demand						

Category-LT-IV : Cottage Industries

712. The cost to serve this category is Rs. 3.13 /unit, and after efficiency gains the cost-to-serve is Rs.3.09 per unit. The DISCOMs have not proposed any changes in the rates for this category and the Commission has retained the existing tariffs.

Table No.137
CAT-LT-IV : COTTAGE INDUSTRIES & DHOBIGHATS TARIFF

Current Charges		DISCOMS Proposed charges		APERC Approved charges	
Fixed Charge (Rs/HP/ month)	Energy charge (ps/ unit)	Fixed charge (Rs/HP/ month)	Energy charge (ps/ unit)	Fixed charge (Rs/HP/ Month)	Energy charge (ps/ unit)
10	180	10	180	10	180

Category-LT-V: Agriculture

713. The cost-to-serve for this category is Rs.1.68 /unit, and after efficiency gains the cost-to-serve is Rs.1.65 per unit. The rates have been fixed as per the new policy of GoAP as filed by the DISCOMs. The Commission has accepted their proposals and the new categorization of agriculture as per the GoAP policy has been adopted.

Table No.138
CAT-LT-V: AGRICULTURE TARIFFS

	Current charges		DISCOMS Proposed charges		APERC	
Slab	**Fixed charges (Rs/HP/ Year)**	**Metered tariff (ps/ unit)**	**Fixed charges (Rs/HP/ Year)**	**Metered tariff (ps/ unit)**	**Fixed charges (Rs/HP/ Year)**	**Optional metered tariff (ps/ unit)**
DPAP areas						
Up to 3 HP (2.25kw)	225	@	These categories are now abolished.			
> 3 HP up to 5 HP (2.25to 3.75kw)	375	@				
> 5 HP up to 10 HP (375 to 7.5kw)	475	@				
> 10 HP (7.5kw)	575	@				
Non-DPAP areas						
Up to 3 HP (2.25kw)	275	**@**				
> 3 HP up to 5 HP (2.25to 3.75kw)	425	@				
> 5 HP up to 10 HP (375 to 7.5kw)	525	@				
> 10 HP (7.5kw)	625	@				
Category V (B) - Agriculture (Tatkal) Metered Tariff		**50**				
Category V (C) - Horticulture metered tariff Upto 2500/yr Balance units/yr		 **20** **50**				
As per GoAP Policy						
With DSM measures						
Dry Land Farmers (Connections <= 3 Nos.)	**No matching classification in the existing tariff**		--	**0**	--	**0**
Wet Land Farmers (Holdings <= 2.5 Acres)	**- do -**		--	**0**	--	**0**
Dry Land Farmers (Connections > 3 Nos.)	**- do -**		* 210	**20**	* 210	**20**
Wet Land Farmers (Holdings > 2.5 Acres)	**- do -**		* 210	**20**	* 210	**20**
Corporate Farmers & I T Assessees	**- do -**		--	**100**	--	**100**

Slab	Current charges		DISCOMS Proposed charges		APERC	
	Fixed charges (Rs/HP/ Year)	Metered tariff (ps/ unit)	Fixed charges (Rs/HP/ Year)	Metered tariff (ps/ unit)	Fixed charges (Rs/HP/ Year)	Optional metered tariff (ps/ unit)
Without DSM measures						
Dry Land Farmers (Connections <= 3 Nos.) #	- do -		--	0	--	0
Wet Land Farmers (Holdings <= 2.5 Acres) #	- do -		--	0	--	0
Dry Land Farmers (Connections > 3 Nos.)	- do -		* 525	50	* 525	50
Wet Land Farmers (Holdings > 2.5 Acres)	- do -		* 525	50	* 525	50
Corporate Farmers & I T Assessees	- do -		--	200	--	200
Out of Turn allotment (Tatkal) : with DSM measures	- do -		--	20	--	20

(@) - Represents optional metered tariff : up to 2500 units / year - 20 p / unit
above 2500 units / year - 50 p / unit

(*) - Equivalent flat rate tariff

(#) - The Farmers eligible for free supply under Dry Land as well as Wet Lands have to comply with the following Demand Side Management measures (DSM) as applicable for his pumping system viz. submersible and surface pump sets in the following stages failing which they shall not be eligible for free supply.

Stage – I to be complied by March 2006

Friction less foot valve (exempted for submersible pumpset)
Capacitor of adequate rating for the pumpset

Stage – II to be complied by March 2008
HDPE or RPVC piping suction and/or delivery
ISI-marked monobloc or submersible pumpset

Free supply shall not be allowed for Paddy in second crop. Farmers in dry land areas shall not be eligible for free supply if they grow Paddy in second crop.

All new connections shall be given only with DSM measures implemented and with meters.

Category-LT-VI : Local Bodies

714. The cost-to-serve for this category is Rs.4.52 /unit, and after efficiency gains cost-to-serve is Rs.4.40 per unit. The DISCOMs have not proposed any changes in the rates for this category and the Commission has retained the existing tariffs.

Table No.139

CAT-LT-VI : LOCAL BODIES TARIFF

Slab	Current charges		DISCOMS Proposed charges		APERC Approved charges	
	Fixed charge (Rs/HP/ Month)	Energy (paise/ unit)	Fixed charge (Rs/HP/ Month)	Energy (paise/ unit)	Fixed charge (Rs/HP/ month)	Energy (paise/ unit)
Local Bodies Street Lighting & PWS schemes						
A. Street Lighting						
Minor Panchayats		156		156		156
Major Panchayats		208		208		208
Nagarpalikas and Municipalities Gr.3		274		274		274
Municipalities Gr.1 & 2		326		326		326
Municipalities Selection Spl.Gr.		353		353		353
Corporations		379		379		379
B. PWS Schemes						
Panchayats (Major and Minor)						
Up to 2500 Units		20		20		20
Above 2500 Units		50		50		50
All Nagarpalikas and Municipalities						
Up to 1000 Units	20	375	20	375	20	375
Balance Units		405		405		405
Corporations						
Up to 1000 Units	20	405	20	405	20	405
Balance Units		460		460		460

Category-LT-VII : General Purpose

715. The LT General Purpose category covers places of worship like churches, temples, mosques, gurudwaras, Government educational institutions and student hostels of Government educational institutions and educational institutions run by charitable institutions (Public charitable trusts and Societies registered under Societies Registration Act running educational and medical institutions on a no-profit basis), recognized service institutions, and social welfare hostels run by Government of Andhra Pradesh. This also covers crematoriums.

716. The cost-to-serve for this category is Rs.3.37/unit and after taking into account, efficiency gains the cost-to-serve is Rs.3.24 per unit. The DISCOMs have not proposed any changes in the rates to this category and the Commission has retained the existing tariffs.

Table No.140

CAT-LT-VII: GENERAL PURPOSE TARIFF Paise/unit

Current Energy charge	DISCOMS	APERC
	Proposed Energy charge	Approved Energy charge
400	400	400

Category-LT-VIII: Temporary Supply

717. The cost-to-serve for this category is Rs.3.83/unit, and after efficiency gains the cost-to-serve is Rs.3.71 per unit. The rates remain unchanged and the Commission has retained the existing tariffs.

Table No.141

CAT-LT-VIII: TEMPORARY SUPPLY (General) TARIFF Paise/unit

Current Energy charge	DISCOMS	APERC
	Proposed Energy charge	Approved Energy charge
620	620	620

HIGH TENSION

Category-HT-I: Industry

718. In keeping with its tariff philosophy of aligning tariff of cross-subsidizing consumers to cost-to-serve, the Commission approves the proposal of the DISCOMs to rationalize tariffs of this category. The process of rationalization proposed is two-fold. Firstly, the energy charges are proposed to be fixed voltage-wise and secondly, the basic energy charges have been reduced from Rs. 3.50/unit to i) Rs. 3.25/unit for the 132 kV and above consumers, a decrease of 7.14 percent; ii) to Rs.3.35 ps./unit for 33kV and above consumers, a decrease of 4.28 percent; and to iii) Rs.3.40 ps./unit for the 11 kV and below consumers, a decrease of 2.86%. The cost-to-serve for this category is Rs.2.38/unit, and after efficiency gains the cost-to-serve is Rs.2.36 per unit.

719. The DISCOMs in their filings had also proposed differential energy rates for lighting load in factories and industrial establishment when the load exceeds 10%. The Commission does not approve this modification being devoid of any rationale and hence has retained the existing uniform rate.

720. Changes have been proposed in the existing incentive scheme which is valid till March 2005. The new incentive scheme as proposed by DISCOMs has been approved by the Commission to remain in force, till 31st March, 2006.

721. The Tariff for Ferro Alloys Units has been changed from Rs. 2.12 ps/unit to Rs. 2.87 ps./unit as proposed by the Licensees. These consumers are not entitled for the load factor incentive mentioned above.

Table No.142
CAT-HT-I: INDUSTRIAL TARIFF

	Current charges		DISCOMS Proposed charges		APERC Approved charges	
Slab	**Demand charges (Rs/kVA/ month)**	**Energy charge (ps/unit)**	**Demand charges (Rs/kVA/ month)**	**Energy charge (ps/ unit)**	**Demand Charges (Rs/kVA/ month)**	**Energy charge (ps/ unit)**
(a). Industry - General						
132 Kv and above	195	350	195	325	195	325
33 kV	195	350	195	335	195	335
11 kV and below	195	350	195	340	195	340
(b). Ferro Alloys		212		287*		287*

* - Based on 85% Load Factor. Energy falling short of 85% Load Factor will be billed as deemed consumption.

Category –HT-II: Others

722. This is an amorphous category and covers all consumers who are not covered in other HT categories.

723. The cost to serve this category is Rs.2.72/unit, and after efficiency gains the cost-to-serve is Rs.2.69 per unit. There is no charge in the tariffs of this category.

Table No.143
CAT-HT-II: OTHERS TARIFF

Current charges		DISCOMS Proposed charges		APERC Approved charges	
Demand Charges (Rs/kVA/ month)	**Energy charge (ps/ unit)**	**Demand Charges (Rs/kVA/ month)**	**Energy charge (ps/ unit)**	**Demand Charges (Rs/kVA/ month)**	**Energy charge (ps/ unit)**
195	440	195	440	195	440

Category –HT-IV: Irrigation and Agriculture

724. The cost to serve this category is Rs.2.38/unit , and after efficiency gains the cost-to-serve is Rs.2.36 per unit. This category has been classified into Government Lift Irrigation Schemes [HT-IV (A)] and other Irrigation Schemes [HT-IV (B)]. The charges for Government

Lift Irrigation Schemes will cover the fully allocated cost in line with the decision taken in the Order for FY 2001-02 that all Government Schemes will be charged at cost-to-serve which after efficiency gains would now be Rs.2.36/unit. FSA will be applicable if it is for purposes other than agriculture. Tariffs for Lift Irrigation schemes owned by the private societies have been made free under the new agricultural power supply policy.

Table No.144
CAT-HT-IV: IRRIGATION AND AGRICULTURE TARIFF

Category	Current charges		DISCOMS Proposed charges		APERC Approved charges	
	Fixed charges (Rs/kVA/ annum)	Energy charge (ps/ unit)	Fixed charges (Rs/kVA/ annum)	Energy charge (ps/ unit)	Fixed charges (Rs/kVA/ annum)	Energy charge (ps/ unit)
A: Govt. Lift Irrigation Schemes	0	241	0	241	0	236
B: Others	430	35*	0	0	0	0

* Optional metered tariff

Category – HT-V: Railway Traction

725. The cost-to-serve for this category is Rs.3.00/unit, and after efficiency gains the cost-to-serve is Rs.2.97 per unit. There is no change in the tariffs for HT Railway Traction.

The Commission directs the Licensees to propose a two-part tariff for this category in the tariff proposals for FY 2006-07.

Table No.145
CAT-HT-V: RAILWAY TRACTION TARIFF (Paise/Unit)

Current Energy charge	DISCOMS	APERC
	Proposed Energy charge	Approved Energy charge
440	440	440

Category – HT-VI: Townships / Colonies

726. The cost to serve this category has increased from Rs. 3.28 / unit to Rs. 3.29 / unit, and after the efficiency gains the cost-to-serve is Rs.3.28 per unit. There is no change in tariffs for this category.

Table No.146
CAT-HT-V: TOWNSHIPS/COLONIES TARIFF (Paise/Unit)

Current Energy charge	DISCOMS	APERC
	Proposed Energy charge	Approved Energy charge
350	350	350

TIME OF DAY (TOD) METERING:

727. In the last Order, the Commission had considered adoption of Time of Day (TOD) tariff as an economic measure for optimal utilization of available electrical energy and had directed that all DISCOMs explore and identify all such consumers who are using higher quantum of energy and select cases where T.O.D. tariff can be effectively implemented to the advantage of both the utility and the consumers. A report to this effect was submitted by the DISCOMs but no specific proposals were made for introducing this scheme. ***The Commission however feels the DISCOMs should come up with specific proposals for introducing TOD metering for large consumers with details on: a) metering facility; b) consumption patterns; and c) proposed incentive. The Commission directs that a specific plan be submitted within 3 months of this Order. During the year, mock billing should be done for the targeted consumers.***

Rural Electric Cooperative Societies (RESCOs)

728. The RESCOs are a subsidized category as their area of operation covers predominantly the Domestic and Agricultural consumers. The average full cost per unit for the four RESCOs is Rs. 2.51/unit and after taking into account the efficiency gains fixed for each RESCO, the cost-to-serve comes to Rs.2.35/unit. During the year FY 2004-05, some of the RESCOs have been merged with DISCOMs. The RESCOs at Jogipet, Kadiri (East), Kadiri (West) have been merged with CPDCL and those at Atmakur & Rayachoty with SPDCL. For the remaining RESCOS at Anakapalle, Chipurupally, Sircilla & Kuppam, the Commission calculates the Power Purchase Cost separately for each RESCO, after taking into account the subsidy paid by the Government, and accordingly fixes the RESCO-wise power purchase costs for the year 2005-06 as follows:

Table No.147

Rural Electric Co-operative Societies (Paise/Unit)

RESCOs	Current Energy charges	Energy charge for 2005-06
Anakapalle	85	66
Chipurupally	80	66
Sircilla	41	40
Kuppam	41	21

Tariff Structure for Transmission and Wheeling

729. The APTRANSCO also filed the proposals for transmission and SLDC charges for FY2005-06. These charges were calculated on the basis of the energy allocated to the

DISCOMs. The Commission does not consider the proposal of APTRANSCO reasonable as they have not taken other users into consideration and has determined the transmission tariff payable taking into consideration all users of the system. These rates as recalculated by the Commission shall, however, be subject to the orders of the Hon'ble Supreme Court in the appeals pending before it and Orders of Hon'ble High Court in the writ petitions pending before it. The recalculated transmission and SLDC charges are given in the table below:

Table No.148
Transmission and SLDC Charges

Tariff for Transmission and Bulk Supply	APTRANSCO Proposed	APERC Approved
Transmission and SLDC Charges		
Transmission Charges (Rs./kW/Month)	66.61	69.25
SLDC Charges (Rs./kW/Month)	4.38	4.10

730. Besides transmission charges, all users of the system have to pay losses in kind. The projected loss of 5% as filed by APTRANSCO has been accepted by the Commission.

Wheeling Charges

731. The DISCOMs have filed the proposals for wheeling charges. These charges have been re-estimated by the Commission after taking into account the approved revenue requirement for FY2005-06. These rates as recalculated by the Commission shall, however, be subject to the orders of the Hon'ble Supreme Court in the appeals pending before it and Orders of Hon'ble High Court in the writ petitions pending before it. The individual wheeling charges, DISCOM-wise, are as shown below:

Table No.149
Wheeling Charges (Paise/unit)

	NPDCL	EPDCL	SPDCL	CPDCL
Wheeling charges	60	47	56	46

732. Besides wheeling charges, all users of the distribution network have to pay for losses in kind. The losses projected by the individual DISCOMs have been accepted by the Commission and the table below gives the required compensation in kind for losses, DISCOM-wise.

Table No.150
Wheeling Charges: Compensation for losses in kind up to the respective Voltage level at which the wheeled energy is delivered

	NPDCL	EPDCL	SPDCL	CPDCL
33kV	6.07%	7.11%	5.66%	5.78%
11kV	12.90%	13.11%	11.92%	12.28%
LT	23.05%	21.30%	20.44%	20.50%

733. The schedule of tariffs for FY2005-06 of retail tariffs and for transmission and wheeling charges is finalized on the above lines. The Table below gives the schedule of tariffs for FY2005-06 after adjusting the GoAP subsidy among different categories of consumers:

Table No.151
Schedule of Electricity Tariffs-FY2005-06

LT Categories

Category No.	Purpose	Rates for the year 2005-06		
		Fixed Charges	Energy Charge (Paise/Unit)	Total Revenue in (Rs crs.)
I	**Domestic**			
	0 - 50 Units/Month	--	145	803.60
	51- 100 Units/Month	--	280	501.89
	101 - 200 Units/Month	--	305	356.60
	201 - 300 Units/Month	--	475	149.39
	More than 300 Units/Month	--	550	227.72
	Total			**2039.20**
II	**Non-Domestic / Commercial**			
	0 – 50 Units/Month	--	395	218.69
	Above 50 Units/Month	--	625	909.65
	Total			**1128.34**
III (A)	**Industrial**			**923.15**
(i)	Industrial – Normal upto 75HP	Rs.37/HP/Month of connected Load **Or**	375	
(ii)	Industrial-Optional 50 to 75 HP	Rs.100/ kVA per month of contracted Demand (Optional)	375	
(iii)	Pisciculture and Prawn culture below 10 HP	--	90	
(iv)	Sugarcane crushing (under agricultural services)	--	50	
	Off-season tariff for seasonal loads under (i)	Rs.37/HP/month on 30% of contracted load	440	
	Off-season tariff for seasonal loads under (ii)	Rs.100/kVA/month on recorded demand or 30% of	440	

Category No.	Purpose	Rates for the year 2005-06		
		Fixed Charges	Energy Charge (Paise/Unit)	Total Revenue in (Rs crs.)
		contracted demand, whichever is earlier		
III (B)	**Industrial - Optional category** Above 75 HP upto 150 HP	Rs.100/ kVA per month of Contracted Demand	375	
	Off-season tariff for Seasonal loads	Rs.100/ kVA per month of recorded demand or 30% of contracted demand whichever is higher.	440	
IV	**Cottage Industry and Dhobi Ghats**			**9.13**
	All Units	Rs.10/HP/ Month	180	
V (A)	**Agriculture**			**67.07**
With DSM	Corporate Farmers & IT Assesses		100	29.85
	Wet Land Farmers (Holdings >2.5 Acres)	* Rs210/HP /year	20	8.78
	Dry Land Farmers (Connections > 3 Nos.)	* Rs210/HP /year	20	3.93
	Wet Land Farmers (Holdings<=2.5 Acres)		0	0.00
	Dry Land Farmers (Connections<= 3 Nos.)		0	0.00
	*** equivalent flat rate tariff**			
Without DSM	Corporate Farmers & IT Assesses		200	0.00
	Wet Land Farmers (Holdings >2.5 Acres)	* Rs525/HP /year	50	15.66
	Dry Land Farmers (Connections > 3 Nos.)	* Rs525/HP /year	50	6.98
	Wet Land Farmers (Holdings<=2.5 Acres)		0	0.00
	Dry Land Farmers (Connections<= 3 Nos.)		0	0.00
	*** equivalent flat rate tariff**			
V (B)	**Out of turn allotment (Tatkal): with DSM**	--	20	1.87
VI (A)	**Local Bodies** **Street Lighting**			**220.99**
	Minor Panchayats	--	156	46.32
	Major Panchayats	--	208	17.18
	Nagarpalikas and Municipalities Gr 3	--	274	4.48

Category No.	Purpose	Rates for the year 2005-06		
		Fixed Charges	Energy Charge (Paise/Unit)	Total Revenue in (Rs crs.)
	Municipalities Gr 1 & 2	--	326	15.38
	Municipalities Selection & Special Grade	--	353	17.60
	Corporations	--	379	45.25
VI (B)	**Local bodies/PWS Scheme**			
	Minor / Major Panchayats			
	Upto 2500 units / year		20	0.58
	Above 2500 units / year		50	27.51
	All Nagarpalikas and Municipalities			
	Upto 1000 units / month	Rs.20/HP/Month	375	7.52
	Balance Units		405	29.94
	Corporations			
	Upto 1000 Units / month	Rs.20/HP/Month	405	0.60
	Balance Units		460	8.64
VII	**General Purpose**	--	400	**45.69**
VIII	**Temporary Supply**			**5.25**
	Agriculture Purpose	--	230	
	Other than Agriculture	--	620	

HT CATEGORIES Category No.	Purpose	Demand Charges	Energy Charge Paise/Unit	Total Revenue in (Rs. crs.)
I	**Industrial #**			**3139.94**
	(A) Industry – General			2834.85
	132 kV and above	Rs.195/kVA /month	325	
	33 kV	Rs.195/kVA /month	335	
	11 kV and below	Rs.195/kVA /month	340	
	(B) Ferro Alloys – applicable to entire off take from DISCOMs and without Load Factor incentives.	Based on 85% Load Factor. Energy falling short of 85% Load Factor will be billed as deemed consumption	287	305.09
II	**Others**	Rs.195/kVA /month	440	**499.04**
IV	**Irrigation and Agriculture**			**38.85**
IV(A)	Govt. Lift Irrigation Schemes	--	236	38.85
IV(B)	Others	--	--	0.00
	Optional metered tariff	--	--	0.00
V	**Railway Traction**	--	440	**530.43**

VI	**Townships/colonies**	--	350	**85.51**
	Temporary Supply	**$**	**$**	**0.92**
	Rural Cooperatives			**26.71**
	Anakapalle	--	66	5.94
	Chipurupally	--	66	1.98
	Sircilla	--	40	15.41
	Kuppam	--	21	3.38
TOTAL OF ALL CATEGORIES				**8760.23**
REVENUE FROM WHEELING				**122.19**
TOTAL TARIFF REVENUE				**8882.42**

FSA applicable to all categories except agriculture. Fuel Surcharge Adjustment (FSA) is applicable as notified by the Commission from time to time as per the regulations made by the Commission in this behalf.

@ The Farmers eligible for free supply under Dry Land as well as Wet Lands have to comply with the following Demand Side Management measures (DSM) as applicable for his pumping system viz. submersible and surface pump sets in the following stages failing which they shall not be eligible for free supply.

Stage – I to be complied by March 2006

Friction less foot valve (exempted for submersible pumpset)
Capacitor of adequate rating for the pumpset

Stage – II to be complied by March 2008
HDPE or RPVC piping suction and/or delivery
ISI-marked monobloc or submersible pumpset

Free supply shall not be allowed for Paddy in second crop. Farmers in dry land areas shall not be eligible for free supply if they grow Paddy in second crop.

All new connections shall be given only with DSM measures implemented and with meters.

Category HT I (A) The following incentives are applicable for consumers for the energy consumed from the Distribution Companies:

Load factor	**Discount applicable on the energy rates**
More than 30% upto 50%	5%
More than 50% upto 60%	10%
More than 60% upto 70 %	15%
More than 70%	20%

The incentive scheme is applicable for the consumption with the above mentioned load factors. The discount rate is non-telescopic and will be applied on the entire consumption eligible for incentives. This scheme will be effective till 31st March 2006.

$ Temporary supply or temporary increase in supply to existing consumers ordinarily limited to a period not exceeding 6 months at rates 50% in excess of HT Tariffs

Minimum charges

LT categories			
Category No.	**Purpose**		**Rates for the year 2005- 06**
I	Domestic	Single Phase upto 250 W above 250W Three Phase	 Rs.25/Month Rs.50/Month Rs.150/Month
II	Non-domestic/ Commercial	Single Phase Three Phase	Rs.65/Month Rs.200/Month
III (A)(ii) III (B)	Industrial Optional 75-150HP		Recorded demand during the month or 80% of contracted demand whichever is higher and 50 Units/kVA of Billing Demand per month
VI (A)	Street Lighting	Panchayats Municipalities And Corpns.	Rs.2/Point/Month Rs.6/Point/Month
VII	General Purpose	Single Phase Three Phase	Rs.50/Month Rs.150/Month
VIII	Temporary Supply	Agriculture	Rs.100/HP of contracted load for the first 30 days or part thereof and Rs.50 per HP of contracted load for every Subsequent period of 15 days or part thereof
		Others	Rs.125/kW or part thereof of contracted load for first 30 days or part thereof and Rs. 75 per kW or part thereof of contracted load for every Subsequent period of 15 days or part thereof
HT Categories			
Minimum billing demand			Recorded demand during the month or 80% of contracted demand whichever is higher
Min.Energy Charges			
Category No.	**Purpose**		**Rates for the year 2005- 06**
I(A)	Industrial – General		50 Units/kVA of billing demand per month
I(B)	Ferro Alloys		Guaranteed energy off-take at 85%LF on CMD or recorded demand whichever is higher. Energy falling short of 85%LF will be billed as deemed consumption.
II	Non-Industrial		25 Units/kVA of billing demand per month
V	Railway Traction		32 Units/kVA of Contracted demand/ month
VI	Townships/Colonies		25 Units/kVA of contracted demand/ month

VOLTAGE SURCHARGE

(A) H.T. consumers who are now getting supply at voltage different from the declared voltages and who want to continue taking supply at the same voltage will be charged as per the rates indicated below.

Sl.No.	**Contracted Demand with Licensee and other sources (in kVA)**	**Voltage at which Supply should be availed (in kV)**	**Voltage at which consumer is availing supply (in kV)**	**Rates % extra over the normal rates**	
				Demand Charges	**Energy Charges**
1.	70 to 1500	11	6.6 or below	12%	10%
2.	1501 to 5000	33	11 or below	12%	10%
3.	Above 5000	132 or 220	66 or below	12%	10%

(B) For HT Consumers availing supply through independent feeders

1.	70 to 2500 kVA	11	6.6 or below	12%	10%
2	2501 to10,000 kVA	33	11 or below	12%	10%
3	Above 10000 kVA	132 or 220	66 or below	12%	10%

Customer Charges

The Customer charges, are as given below:

For all LT Categories inclusive of Agricultural Services — Rs. 20/- per month*

*Domestic consumers in the first slab — Rs.15/- per month

H.T.Categories

(a) 66 kV and below — Rs.750/- per month

(b) 132 /220 kV — Rs.1500/- per month

734. All other conditions as per in the Annexure D of the Tariff order will be applicable for the respective categories under LT and HT supply.

Tariff structure for the power purchase cost of DISCOMs

735. APTRANSCO in its filings for Bulk Supply Tariff (BST) has proposed a two-part bulk supply tariff of Rs.501.48/kW/month and variable cost at Re.0.75 paise/kWh to the DISCOMs. APTRANSCO also proposed Transmission charges at Rs.66.61/kW/month and SLDC charges at Rs.4.38/kW/month applicable for the four DISCOMs based on segregation of costs into Transmission and SLDC functions.

736. It is the Commission's view that transmission and SLDC assets are used and useful for not only DISCOMs but also other open access consumers/generators. The Commission has reckoned 700 MW load of open access consumers/generators and 10816 MW load of DISCOMs in its calculations for fixation of tariffs. The Commission's approved expenditure for transmission is Rs.897.98 crs and for SLDC Rs.56.60 crs for FY2005-06. These loads and expenditure are the basis for determination of transmission tariff at Rs.69.25/kW/month and SLDC charges at Rs.4.10/kW/month by the Commission as stated under transmission tariffs and shown above.

737. Though APTRANSCO filed a two-part bulk supply tariff for DISCOMs, the Commission approved a single bulk power purchase (cost) tariff (BST) of 197.54 paise per kWh which includes generation cost, transmission charges and SLDC charges. This tariff is estimated separately for each DISCOM for FY 2005-06 pending finanalisation of allocation of generation capacities to DISCOMs by GoAP. The details of this tariff are given below:

Table No.152
Schedule of Bulk Supply Tariffs (Rs.Crs.)

Particulars	APNPDCL	APEPDCL	APSPDCL	APCPDCL	DISCOMs
Revenue	1075.98	1862.39	1902.10	4041.97	8882.42
Subsidy	342.07	232.87	410.71	613.83	1599.48
Total of Revenue and Subsidy (A)	1418.05	2095.26	2312.81	4655.80	10481.90
Sales in MU	6505.75	6749.12	8953.83	16233.51	38442.21
Power Purchase Cost	1199.18	1823.25	1936.08	4215.52	9174.03
Other Cost	381.92	355.53	533.15	800.77	2071.37
Reasonable Return	3.24	1.58	2.29	6.13	13.24
Revenue Requirement	1584.34	2180.36	2471.52	5022.42	11258.64
Non-Tariff Income	138.29	79.10	127.71	306.62	651.72
Net Revenue Requirement	1446.05	2101.26	2343.81	4715.80	10606.92
Efficiency Gains	28.00	6.00	31.00	60.00	125.00
Total Expenditure allowed (B)	1418.05	2095.26	2312.81	4655.80	10481.92
Surplus / (Deficit) [B - A]	0.00	0.00	0.00	0.00	0.00
MUs purchased by each DISCOM	7988.39	7888.17	10790.35	19775.26	46442.18
Bulk Supply Tariff Ps/kWh	150.12	231.14	179.43	213.17	197.54

738. The overdrawal rates for the excess requirements will be paid directly by the DISCOMs depending upon the requirements and the capacity allocated to them at the rates negotiated by them and approved by the Commission.

Grid Support Charges

739. Persons operating captive power plants (CPPs) in parallel with A.P.Grid have to pay 'Grid Support Charges' on the difference between the capacity of CPP in kVA and the

contracted maximum demand in kVA with the Licensee and all other sources of supply, at a rate equal to 50% of the prevailing demand charges for HT consumers. In case of CPPs exporting firm power to APTRANSCO, the capacity, which is dedicated to such export, will be subtracted from the CPP capacity. This levy is however, subject to court orders on the subject.

740. The Commission does not consider the Licensees' revenue calculations as filed to be in accordance with the requirement. The Commission has instead proposed alternative calculations of the expected revenue from charges, which the Licensees shall accept and implement the Tariffs based thereon, as contained in this Order.

741. This Order is signed by the Andhra Pradesh Electricity Regulatory Commission on 22nd March, 2005.

Sd/-	Sd/-	Sd/-
(SURINDER PAL)	**(K.SREERAMA MURTHY)**	**(K.SWAMINATHAN)**
MEMBER	**MEMBER**	**CHAIRMAN**

ANNEXURE – A

List of Directives carried forward and requiring continuing compliance

Energy Audit

1. APTRANSCO shall conduct regular and thorough energy audit to ensure accountability. A copy of the Energy Audit Reports of each Discom to be filed with the Commission on a quarterly basis.

2. The Licensee to submit Global Energy Account every month with details of the power purchases and sales to different DISCOMS and others. Gist of the Global Energy Account consisting of energy drawn from different sources and non-conventional sources of energy with percentages of energy of total purchases from different sources and consumption by different DISCOMS, inter-State sales and third party energy wheeled, have to be posted on the website of the Licensee every month.

3. The Commission directs that the Licensee shall henceforth reconcile the energy accounting figures annually and file reconciliation statements along with the audited Annual Accounts every year. They shall also incorporate the necessary corrections in their Annual Accounts, beginning from the accounts for the year 2003-04. The reconciliation may also be done for the years 2000-01 to 2002-03 and necessary corrections be incorporated in the Accounts in hand.

Merit Order

4. The Licensees to examine the benefits likely to accrue, by identifying the linkages between generating stations and the load centers, duly factoring the reduction in transmission losses into the variable cost and submit a report to the Commission by 1st June 2004.

   (*Not yet complied with fully. May be complied with by 30th September 2005).*

Management of Industrial Feeders

5. The APTRANSCO and DISCOMS are hereby directed that they shall submit data log sheets for supply conditions pertaining to the previous 30 days through RS 232 communications port, along with an abstract summary statement pertaining to their company regarding interruptions to industrial feeders once in a month to the Commission. The Commission intends to observe the time being taken to restore power and the quality of power supplied to industries to ensure supply of uninterrupted quality power

Metering

6. The Licensee to complete the installation of 0.2 class meters on the remaining generating stations within three months.

   (*Not yet complied with fully. This may be completed by 30th September 2005).*

7. The Commission reiterates its previous directive (Tariff Order for 2002-03) that a) for loads of 20HP and above but below 50HP, LT demand meters should be fixed; and b) for loads of 50HP and above but up to 75HP, tri-vector meters be fixed and the metering should be on the HT side.

8. The DISCOMs shall install high quality meters on connections in all towns and Mandal headquarters by September 2005.

   (A comprehensive metering plan has been filed. It has to be updated and prioritization done. This should be done and filed by 31st July 2005.)

9. The Commission directs the DISCOMS to conduct a door-to-door checking of all services and to remove all multiple connections and on a continuous basis.

Distribution Losses

10. To complete the distribution losses study initiated by them by 30th September 2005 and file the present status report by 15th May 2005. The Commission notes that the consultation paper on the "Achievable level of distribution losses in the future years" has not yet been submitted. It should be submitted by 30th June 2005 positively.

Financials

11. To submit instrument-wise details for all loans, source-wise, year-wise, asset-wise, purpose-wise, and date-wise, along with the repayment schedules.

12. The Commission reiterates the contributions towards Contingencies Reserve must be invested in securities authorized under the Indian Trusts Act, 1882, within a period of six months from the close of the year of account in which the appropriation is made. Any drawal from the Contingencies Reserve can be made only with prior approval of the Commission.

Agriculture consumption estimate

13. The DISCOMS shall file the monthly agricultural consumption estimate in two parts, a) consumption estimate for unmetered services based on LV side DTR meters, and b) consumption on account of services released under Tatkal scheme and metered services. The estimate shall be filed with the Commission by 25th of every month.

Metering & Billing

14. (a) The Commission directs that the DISCOMS should make full-scale efforts to fill the gaps in sales database and achieve the stipulated 2 to 3 percent sales ratio of assessed sales of total metered sales by 31.03.2005.

    (*Not yet complied with fully. Should be complied with by 30th September 2005*).

    (b)The DISCOMS shall file a Metering, Billing and Collection (MBC) report based on sales database, by 25th of every month without fail.

Subsidy Administration

15. The DISCOMS shall file before the Commission the actual sales to subsidized categories of consumers for whom the GOAP agreed to pay the subsidy every month and the Commission will monitor the units actually sold by the DISCOMS vis-à-vis the subsidy provided. At the end of the year, subsidy adjustments will be made based on the consumption of units in respect of various subsidized categories.
16. For measuring the sales to the subsidized categories, the agricultural consumption estimate based on LV side meter readings on DTRs shall be the basis. For measuring the sales to metered categories of consumers, the sales database shall be the basis.
17. The Commission reiterates that in case the subsidy is not paid regularly on monthly basis, in advance, by GoAP, the DISCOMS shall revert to the full cost tariff fixed by the Commission.
18. The GOAP obligation towards subsidy payments to DISCOMS is limited to the quantities mentioned in this order. If the DISCOMS exceed tariff order quantities and thus the subsidy requirement, the Commission will not entertain any request for additional quantities of energy to subsidized categories unless the permission of the GoAP is taken for additional subsidy if the excess consumption relates to agriculture. In other categories, if there is excess consumption, no additional subsidy will be recommended by the Commission to GoAP.

Display on Bills

19. Commission directs the DISCOMS that they should ensure that each bill issued to consumers shows the component of subsidy, and cross-subsidy provided. This is in addition to the instruction regarding position of arrears to be displayed on the consumer's bill. DISCOMS are directed to implement the directive immediately.

ANNEXURE – B

LIST OF DIRECTIVES – FY 2005-06

APTRANSCO

Availability Based Tariff

1. The APTRANSCO is directed to submit a discussion paper on the methodology of putting this in practice by 30th June 2005. **(Para 318)**

Transmission Losses

2. Considering the fact that the transmission losses in APTRANSCO are close to 5% during the period from April 2004 to February 2005 and considerable investment has been permitted for system improvements during the years FY 2005 and FY 2006, the Commission directs APTRANSCO to endeavour to achieve a loss level of not exceeding 4.5%. **(Para 337)**

Purchase of power from SSLBPH

3. APTRANSCO to work out the power purchase cost from SSLBPH for the year 2004-05 as per the directions issued in Tariff Order 2004-05 supported by the data captured as per the prescribed proforma by 15th May 2005. **(Para 375)**

Maintenance Schedule

4. The Commission directs APTRANSCO to optimise power purchase cost through re-drawing of the maintenance schedule in consultation with the generating companies wherever cheaper source is proposed for maintenance during periods of higher power requirement. **(Para 395)**

Srisailam Operations

5. The Commission directs APTRANSCO to develop an operational regime for Srisailam complex to optimize the generation, utilizing the waters from Srisailam reservoir at different conditions obtained at Srisailam and Nagarjuna Sagar, in collaboration with APGENCO. Such operational regime developed and put into practice shall be furnished to the Commission before 15th May, 2005. **(Para 417)**

DISCOMs

Defaulters' List

1. The Licensees shall henceforth post on their website, the list of all those defaulters whose dues exceed Rs.50,000, along with the reasons for non-collection and details of litigation

involved, if any. This data shall be updated every six months and will be displayed on the first of the second month following the end of the previous half-year. Thus, the data pertaining to the dues as on 31st March shall be posted by 1st May and that as on 30th September by 1st of the following November. **(Para 234)**

Consumer Passbooks

2. The Licensees to issue passbooks to all consumers, if not already issued as per the earlier practice. The Licensees shall make necessary arrangements at the customer service centers set up by them at sub-division level to update the passbooks, as and when requested by the consumers. **(Para 241)**

24-hour supply to Rural Areas

3. The DISCOMs should estimate the additional power requirement to provide 24-hour supply to rural areas and identify the generation sources to procure the additional energy and include the same in the next ARR / Tariff proposals along with financial implications. **(Para 248)**

Display of LV Side Meter Data

4. The DISCOMs shall fix a permanent display board at every circle/district headquarters and also at their corporate headquarters and post the details like number of services, metered DTRs, DTRs producing valid meter readings and estimated consumption for the previous month by 15th of every month. The details at circle/district headquarters should be for each mandal and at corporate headquarters for each circle/district. The DISCOMs shall also maintain the relevant records and should disclose the details to public on specific request. **(Para 259)**

TOD Metering

5. The Discoms should come up with specific proposals for introducing TOD metering for large consumers with details on: a) metering facility; b) consumption patterns; and c) proposed incentive. The Commission directs that a specific plan be submitted within 3 months of this Order. During the year, mock billing should be done for the targeted consumers. **(Para 727)**

Payment of HT-Incentive

6. There should be no lag in passing on the load factor incentive amount to HT Category-I (A) consumers, effective from the billing month of October 2005. Any request/prayer by

DISCOMs relating to their inability to implement this directive for whatever reason shall be made not later than by 31st July 2005. **(Para 266)**

Payment of Testing Fees

7. The Licensees shall make necessary arrangements to receive payments for meter testing fees at the bill collection centers of the Licensees or make suitable other arrangements by 31st July 2005, under report to the Commission. **(Para 291)**

Reconnection Charges

8. The Licensee shall not collect any reconnection charges unless the connection has actually been disconnected. **(Para 311)**

Consumer Agreements in Telugu

9. The DISCOMs to initiate appropriate action for execution of agreements by Licensees in Telugu also. The consumer may be given the option to execute the agreement in Telugu or in English. **(Para 356)**

Review of HT-Incentive Scheme

10. The DISCOMs shall make a detailed review of working of the incentive scheme for the first six months of FY2005-06 and present the results to the Commission by end-November 2005. Upon receipt of the results of this review, the Commission will examine the need for any modifications to the scheme before approving its continuation for a longer period. **(Para 367)**

Capital Investments

11. Considering the importance of capitalization of works, the Commission lays down the following requirements to be fulfilled before accepting inclusion of the value of a capitalized work in the OCFA:

d) On completion of a capital work, a physical completion certificate (PCC) to the effect that the work in question has been fully executed, physically, and the assets created are put to use, to be issued by the concerned engineer not below the rank of Superintendent Engineer.

e) The PCC shall be accompanied or followed by a financial completion certificate (FCC) to the effect that the assets created have been duly entered in the Fixed Assets Register by transfer from the CWIP register to OCFA. The FCC shall have to be issued by the concerned finance officer not below the rank of Senior Accounts Officer.

f) The above-mentioned certificates have to be submitted to the Commission within 60 days of completion of work, at the latest.

The Commission may also inspect or arrange to inspect, at random, a few of the capitalized works included in the OCFA to confirm that the assets created are actually being used and are useful for the business. **(Paras 390 and 391)**

Sales Data Base

12. The DISCOMS need to separate the sales at each operation circle/district category-wise effective from April 2005 and the sales forecast in the filing for FY2006-07 shall be circle-wise/district-wise. The DISCOMs shall file the information for every month effective from April 2005 in the format that will be prescribed and communicated for this purpose. **(Para 661)**

Consumer Load Profile and Load Research Cell

13. Each DISCOM should make a survey of load profiling methods and adopt suitable method for profiling and submit action plan duly indicating the sample size, consumer differentiation principles for profiling and estimated cost of such profiling study by end-August 2005. Based on DISCOM compliance, the Commission will take appropriate decision with regard to load profiles.

The Commission directs that each Discom set up a separate Load Research Cell, which undertakes load survey and consumer profiling. **(Paras 665 and 693)**

Railway Tariff

14. The Commission directs the Licensees to propose a two-part tariff for this category in the tariff proposals for FY 2006-07. **(Para 725)**

Annexure – C

ALL DISCOMS

Sl.No.	DISCOMS	Waivers requested by DISCOMS	Commission's Decision
1	NPDCL, EPDCL, CPDCL	Due to limitations in the accounting and information systems, the Licensee seeks the Hon'ble Commission's waiver from providing the voltage-wise break-up of fixed assets and depreciation in the projections for 2004-05 and 2005-06. However, the voltage-wise break-up of fixed assets and depreciation for the year 2003-04 has already been submitted to the Hon'ble Commission.	NPDCL, EPDCL and CPDCL are directed to submit the Fixed Asset Register upto FY2004-05 by 30-09-2005
2	SPDCL	Fixed assets register (voltage wise) has been updated till 31-03-2003. However the differences in the opening balance figures as on 01-04-2000 between APTRANSCO and APSPDCL as per second transfer scheme and fixed assets register are yet to reconciled. On this account, the Licensee seeks the Hon'ble Commission's waiver from providing the voltage-wise break-up break-up of fixed assets and depreciation.	SPDCL is directed to submit the Fixed Asset Register upto FY2004-05 by 30-09-2005

Annexure - D

SCHEDULE OF RETAIL TARIFF RATES AND TERMS & CONDITIONS AND WHEELING CHARGES IN RESPECT OF THE FOUR DISTRIBUTION COMPANIES AND TRANSMISSION CHARGES OF APTRANSCO FOR FY - 2005-06

PART 'A' - H.T. TARIFFS

These tariffs are applicable for supply of Electricity to H.T. Consumers having loads with a contracted demand of 70 KVA and above and/or having a connected load exceeding 75 H.P/56 kW excepting the LT III (B) industrial optional category.

H.T. Category-I

This tariff is applicable for supply to all H.T. Industrial Consumers. Industrial purpose shall mean manufacturing, processing and/or preserving goods for sale, but shall not include shops, Business Houses, Offices, Public Buildings, Hospitals, Hotels, Hostels, Choultries, Restaurants, Clubs, Theatres, Cinemas, Railway Stations and other similar premises not withstanding any manufacturing, processing or preserving goods for sale. The Water Works of Municipalities and Corporations and any other Government organisations come under this category. The Information Technology units identified and approved by the Consultative Committee on IT industry (CCITI) constituted by Govt. of AP also fall under this category.

A) INDUSTRY – GENERAL

(i) DEMAND CHARGES

Per KVA of Billing Demand		**Rs.195** per KVA per

PLUS

(ii) ENERGY CHARGES

For all units consumed during the month,

11KV and below		**340** Paise per Unit
33KV	..	**335** paise per Unit
132KV and above	..	**325** Paise per Unit

IMPORTANT

i) The billing demand shall be the maximum demand recorded during the month or **80%** of the contracted demand whichever is higher.

ii) Energy charges will be billed on the basis of actual Energy consumption or **50 units** per KVA of billing demand whichever is higher

FSA will be extra as applicable

B) FERRO ALLOY UNITS

(i) DEMAND CHARGES .. –NIL—

(ii) ENERGY CHARGES
For all units consumed
during the month .. **287**Paise per Unit

Conditions

1. Guaranteed energy off-take at 85% annual Load Factor on Contracted Maximum Demand or Actual Demand whichever is higher. The energy falling short of 85% Load Factor will be billed as deemed consumption.
2. The consumer shall draw his entire power requirement from DISCOMS only.
3. Not eligible for HT-I Load Factor incentive.
4. FSA will be extra as applicable

Notes:

1) Incentive

a) The following non-telescopic incentives are applicable for HT-category-I (A) consumers:

Load Factor (LF)	Discount applicable on the energy rates
More than 30% upto 50%	5%
More than 50% upto 60%	10%
More than 60% upto 70%	15%
More than 70%	20%

b) The discount rate will be applied on the entire consumption eligible for incentives i.e., such consumption as is in excess of the threshold LF level of 30% on a non-telescopic basis. This scheme will be effective till 31st March 2006.

2) Consumption of energy for lights and fans in factory:

The consumption of energy for lights and fans in the factory premises in excess of **10%** of total consumption shall be billed at **440** paise per unit provided lights and fans consumption in the Unit is separately metered.

3) Case of non-segregation of fans and lights

In case segregation of light and fan loads has not been done, **15%** of the total energy consumption shall be billed at **440** paise per unit and the balance units shall be charged at the corresponding energy tariff under HT category I(A).

4) Colony Consumption

The consumption of energy exclusively for the residential colony/ township in a month, separately metered with meters installed by the consumer and tested and sealed by the Licensee shall be billed at **350** paise per unit.

5) Seasonal Industries

Where a consumer avails supply of energy for manufacture of sugar or ice or salt, decorticating, ginning and pressing, fruit processing, tobacco processing and re-drying and for such other industries or processes as may be approved by the Commission from time to time principally during certain seasons or limited periods in the year and his main plant is regularly closed down during certain months of the year, he may be charged for the months during which the plant is shut down (which period shall be referred to as the **off-season** period) as follows under H.T. Category-II rates.

DEMAND CHARGES	
Based on the Recorded Maximum Demand or **30%** of the Contracted Demand whichever is higher	Rs.**195** per KVA/Month.
PLUS	
ENERGY CHARGES	
For all the units of energy consumed	**440** Paise / unit.
FSA will be extra as applicable	

This concession is subject to the following conditions:

i) Consumers, classified as seasonal load consumers, who are desirous of availing the seasonal benefits shall specifically declare their season at the time of entering into agreement that their loads should be classified as seasonal loads.

ii) The period of season shall not be less than 4(four) continuous months. However, consumer can declare longer seasonal period as per actuals.

iii) Existing eligible consumers who have not opted earlier for seasonal tariffs will also be permitted to opt for seasonal tariff on the basis of application to the concerned Superintending Engineer of the Licensee.

iv). The seasonal period once declared cannot be changed , during the Tariff year in which it is declared.

v). The off-season tariff is not available to composite units having seasonal and other categories of loads.

vi). The off-season tariff is also not available for such of those units who have captive generation exclusively for process during season and who avail supply from Licensee for miscellaneous loads and other non-process loads.

vii). Any consumer who after declaring the period of season consumes power for his main plant during the off-season period, shall not be entitled to this concession during that year.

viii). Development charges @ Rs.500/- per KVA, shall be paid by the consumer in advance for availing supply under the above said category with seasonal benefits.

H.T. CATEGORY-II

This tariff is applicable to all H.T. Consumers other than those covered under other H.T. Categories:

A) DEMAND CHARGES

Per KVA of billing Demand .. Rs.**195** /KVA/Month

PLUS

B) ENERGY CHARGES

For all units consumed during the month .. **440** Paise per unit

IMPORTANT

i) The billing demand shall be the maximum demand recorded during the month or **80**% of the contracted demand, whichever is higher

ii). Energy charges will be billed on the basis of actual Energy consumption or **25 units** per KVA of Billing Demand, whichever is higher.

FSA will be extra as applicable

Note

(i) In respect of Government controlled Auditoriums and Theatres run by public charitable institutions for purpose of propagation of art and culture which are not let out with a profit motive and in respect of other Public Charitable Institutions rendering totally free service to the general public the overall unit rate (including customer charges) may be limited to the tariff rates under L.T. Category-VII General purpose in specific cases as decided by the Licensee.

H.T. Category-III (Deleted)

H.T. Category-IV (A)- GOVT. LIFT IRRIGATION SCHEMES

This tariff is applicable to lift irrigation schemes managed by Government.

ENERGY CHARGES:

For all units consumed during the month .. **236 paise/unit**

FSA will be extra as applicable if it is for purposes other than agriculture.

H.T. Category-IV (B)- AGRICULTURAL

This tariff is applicable for consumers availing H.T. Supply for Irrigation and Agricultural purposes and not covered under HT Category IV(A).

ENERGY CHARGES: zero paise/unit

NOTE:

1. If the consumer does not maintain the capacitors of requisite capacity as indicated in PART-'D' of this Annexure, the consumer attracts the penal provisions as per the General Terms and Conditions of Supply notified by the licensees from time to time, as also indicated in Note 2 in Part 'D' of this Annexure.
2. The metering is mandatory for both categories A&B and Energy reading shall be taken even if the supply is free.
3. The Customer Charges are payable as per PART 'C' herein.
4. The Low Power Factor surcharge condition mentioned in General conditions of HT Supply under part 'A' HT – Tariffs shall be applicable for Govt. lift irrigation schemes.

H.T. Category-V - RAILWAY TRACTION

This tariff is applicable to all H.T. Railway Traction Loads.

NO DEMAND CHARGES

ENERGY CHARGES

For all units consumed ..**440** paise per unit

IMPORTANT

Energy charges will be billed on the basis of actual energy Consumption or **32 units** per KVA of Contracted Maximum Demand whichever is higher.

FSA will be extra as applicable

HT CATEGORY -VI - TOWNSHIPS AND RESIDENTIAL COLONIES

This tariff is applicable to H.T. supply exclusively for Townships, Residential Colonies of consumers under HT categories I to V for domestic purpose such as lighting, fans, heating etc., provided that the connected load for common facilities such as Non Domestic supply in residential area, Street Lighting and Water Supply etc., shall be within the limits specified hereunder:-

Water Supply & Sewerage and Street Lighting put together	--	**10%** of total connected load
Non-Domestic/ Commercial and General Purpose put together	--	**10%** of total connected load

NO DEMAND CHARGES

ENERGY CHARGES

For all units consumed .. **350** paise per unit

IMPORTANT

Energy charges will be billed on the basis of actual consumption or **25 units** per KVA of Contracted Maximum Demand, whichever is higher.

FSA will be extra as applicable

CONDITIONS

i) The consumer shall lay suitable internal distribution lines at his own cost and maintain the same in accordance with the statutory rules and Licensee's directions if any.

ii) The HT consumers who avail separate HT supply under this category for supply of electricity to individuals, shall obtain permission of the Commission under amendment to APERC (Conduct of Business) Regulations 2000 (Regulation No.8), and subject to conditions mentioned thereunder.

GENERAL CONDITIONS OF H.T. SUPPLY

The foregoing tariffs are subject to the following conditions:-

(1) **A. VOLTAGE OF SUPPLY**

The voltage at which supply has to be availed by:

(i) HT consumers, seeking to avail supply on common feeders shall be:

For Total Contracted Demand with the Licensee and all other sources.

Upto 1500 KVA	11000 Volts
1501 KVA to 5000 KVA	33000 Volts
Above 5000 KVA	132000 Volts or 220000 Volts as may be decided by Licensee

(ii) HT Consumers seeking to avail supply through independent feeders from the substations shall be:

For total contracted Demand with the licensees and all other sources.

Upto 2500 KVA	11000 Volts
2501 KVA to 10,000 KVA	33000 Volts
Above 10000 KVA	132000 Volts or 220000 Volts

The relaxations are subject to the fulfillment of following conditions:

(a) The consumer should have an exclusive dedicated feeder from the substation;

(b) The consumer shall pay full cost of the service line as per standards specified by APTRANSCO/DISCOM including take off arrangements at substation;

B. VOLTAGE SURCHARGE

(1)H.T. consumers who are now getting supply at voltage different from the declared voltages and who want to continue taking supply at the same voltage will be charged as per the rates indicated below:

Sl. No	Contracted Demand with DISCOM and other sources	Voltage at Which supply should be availed	Voltage at Which Consumer is availing supply	Rates % Extra Over Normal Rate	
				Demand Charge	Energy Charge
	KVA	KV	KV	KVA	Kwh
1.	70 to 1500	11	6.6 or below	12%	10%
2.	1501 to 5000	33	11 or below	12%	10%
3.	Above 5000	132 or 220	66 or below	12%	10%
Note: The FSA will be extra as applicable					

For HT consumer availing supply from through independent feeders.

Sl. No	Contracted Demand with DISCOM and other sources	Voltage at Which supply should be availed	Voltage at Which Consumer is availing supply	Rates % Extra Over Normal Rate	
				Demand Charge	Energy Charge
	KVA	KV	KV	KVA	Kwh
1	70 to 2500 kVA	11	6.6 or below	12%	10%
2	2501 to 10,000 kVA	33	11 or below	12%	10%
3	Above 10,000 kVA	132 or 220	66 or below	12%	10%

Note: The FSA will be extra as applicable

(2) MAXIMUM DEMAND

The maximum demand of supply of electricity to a consumer during a month shall be twice the largest number of Kilo-Volt- Ampere Hours (KVAH) delivered at the point of supply to the consumer during any consecutive 30 minutes in the month. However, for the consumers having contracted demand above 4000 kVA the maximum demand shall be four times the largest number of Kilo-Volt-Ampere-Hours(KVAH) delivered at the point of supply to the consumer during any consecutive 15 minutes in the month.

(3) BILLING DEMAND

The billing demand shall be the maximum demand recorded during the month or **80%** of the contracted demand whichever is higher.

(4) MONTHLY MINIMUM CHARGES

Every consumer whether he consumes energy or not shall pay monthly minimum charges calculated on the billing demand plus energy charges specified for each category in this part to cover the cost of a part of the fixed charges of the Licensee.

(5) SUPPLY TO TOWNSHIPS OR RESIDENTIAL COLONIES OF H.T.CONSUMERS

Consumers of High Tension supply except those coming under H.T. Category -VI may, with the permission of the Commission under APERC (Conduct of Business) Regulations 2000 (Regulation No. 8), and subject to the conditions mentioned thereunder supply electricity after converting it into Low Tension at their own cost for the township or residential colonies attached to the consumer's establishment for domestic purposes like lighting, fans and heating to their employees or others residing therein and for any non-domestic supply in the residential area and street lighting of such residential colony.

The consumer shall lay suitable internal distribution lines at his own cost and maintain the same in accordance with the statutory rules and Licensee's directions, if any.

(6) SURCHARGE FOR LOW POWER FACTOR

The power factor for the month shall be the ratio of Kilo-Watt hours to the Kilo-Volt-Ampere Hours supplied to the consumer during the month. The power factor shall be calculated upto two decimal places. The power factor of the consumer's installation shall not be less than 0.90. If the power factor falls below 0.90 during any month, the consumer shall pay a surcharge as detailed below:

S.No	Power Factor Range	Surcharge
1.	Below 0.90 & upto 0.85	1% of C.C.charges bill of that month for every 0.01 fall in Power Factor from 0.90
2.	Below 0.85 & Upto 0.80	1.5% of C.C. charges bill of that month for every 0.01 fall in Power Factor from 0.85
3.	Below 0.80 & Upto 0.75	2% of C.C.charges bill of that month for every 0.01 fall in Power Factor from 0.80
4.	Below 0.75	3% of C.C.charges bill of that month for every 0.01 fall in Power Factor from 0.75

Should the power factor drop below 0.75 and so remain for a period of 2 consecutive months it must be brought upto 0.90 within a period of 6 months by methods approved by the Licensee failing which, without prejudice to the right of the Licensee to collect surcharge and without prejudice to such other rights as having accrued to the Licensee or any other right of the Licensee, the supply to the consumer may be discontinued.

(7) ADDITIONAL CHARGES FOR MAXIMUM DEMAND IN EXCESS OF THE CONTRACTED DEMAND

If in any month the recorded maximum demand of the consumer exceeds his contracted demand (with Licensee), that portion of the demand in excess of the contracted demand will be billed at twice the normal charges.

(8) TEMPORARY SUPPLY AT HT

i) For new connections: Temporary supply at High Tension may be made available by the Licensee to a consumer, on his request subject to the conditions set out herein-after as also in Part-C. Temporary supply shall not ordinarily be given for a period exceeding 6(six) months. The electricity supplied to such consumer shall be charged for, at rates 50% in excess of the rates set out in the H.T. Tariffs applicable subject to, however, that the billing demand for temporary supply shall be the contracted demand or the recorded maximum demand registered during the month whichever is higher.

ii) Existing consumers requiring temporary supply or temporary increase in supply : If any consumer availing regular supply of electricity at High Tension requires an additional supply of electricity at the same point for a temporary period, the temporary additional supply shall be treated as a separate service and charged for as in Clause(i) above, subject to the following conditions:

a) The contracted demand of the temporary supply shall be the billing demand for that service. The recorded demand for the regular service shall be arrived at by deducting the billing demand for the temporary supply from the maximum demand recorded in the month.

b) The total energy consumed in a month including that relating to temporary additional supply, shall be apportioned between the regular and temporary supply in proportion to the respective billing demands.

(9) ADDITIONAL CHARGES FOR BELATED PAYMENT OF CHARGES

The consumer shall pay an additional charge at Seven (7) paise per One hundred rupees per day of delay on the amount of the bill for the period of delay if he does not pay the bill within the prescribed period. The amount of additional charges shall be rounded off to nearest paisa.

(10) CUSTOMER CHARGES

Every consumer of H.T. electricity shall in addition to demand and energy charges billed as per tariff applicable to them, pay customer charges as applicable.

(11) FUEL SURCHARGE ADJUSTMENT

Fuel Surcharge Adjustment (FSA) is applicable to all categories except agriculture. FSA is applicable as notified by the Commission from time to time as per the regulations made by the Commission in this behalf.

(12). GRID SUPPORT CHARGES

Persons operating Captive Power Plants (CPPs) in parallel with A.P. Grid have to pay 'Grid Support Charges' on the difference between the capacity of CPP in kVA and the contracted Maximum Demand in kVA with Licensee and all other sources of supply, at a rate equal to 50% of the prevailing demand charge for HT Consumers. In case of CPPs exporting firm power to APTRANSCO, the capacity, which is dedicated to such export, will also be additionally subtracted from the CPP capacity. This levy is subject to the orders of the Hon'ble Supreme Court in the pending appeals before it.

(13). The Tariffs are exclusive of Electricity duty payable as per the provisions of AP Electricity Duty Act.

(14). These rates are applicable in the areas of operation of 4 (four) Distribution Companies viz., Andhra Pradesh Eastern Power Distribution Company Limited, Andhra Pradesh Central Power Distribution Company Limited, Andhra Pradesh Northern Power Distribution Company Limited and Andhra Pradesh Southern Power Distribution Company Limited. (The jurisdiction of the DISCOMs extends to the RESCOs areas also for purpose of supply to HT Consumers).

PART 'B' : L.T.TARIFFS

System of Supply	Low Tension A.C. 50 Cycles
	Three Phase Supply at 415 Volts
	Single Phase supply at 240 Volts

The tariffs are applicable for supply of Electricity to L.T consumers with a connected load of 56 KW/75 HP and below including the LT-III (B) Industrial category.

L.T. Category-I-Domestic

Applicability

Applicable for supply of energy for lights and fans and other domestic purposes in domestic premises.

Rates

Consumers shall pay electricity charges as shown below:

0-50 units per month	**145** paise per unit
51-100 Units/month	**280** paise per unit
101-200 Units/month	**305** paise per unit
201-300 Units/month	**475** paise per unit
Above 300 Units/month	**550** paise per unit
Subject to monthly minimum charges of:	
Single Phase:	
Upto 250 W	**.. Rs.25/ Month**
Above 250 W	**.. Rs.50/ Month**
Three Phase	**.. Rs.150/ Month**
FSA will be extra as applicable	

Notes:

1. For loads less than 3KW single phase supply only will be given.

2. If electricity supplied in domestic premises is required to be used for non-domestic and commercial purposes a separate connection should be taken for such loads under LT – II failing which the entire supply shall be charged under L.T.Category-II tariff apart from liability for penal charges as per the terms and conditions of the supply.

3. For common services like Water supply, common lights in corridors and supply for lifts in multistoried buildings, consumers shall pay electricity charges as follows:
   i) At L.T.Category-I, if the plinth area occupied by the domestic consumers is 50% or more of the total plinth area.
   ii) At L.T.Category-II, if the plinth area occupied by the domestic consumers is less than 50% of the total plinth area.
   iii) If the service in a flat is for domestic purpose, it will be charged at L.T.Category -I (Domestic). If the service in a flat is for commercial or office use or any other purpose, which does not fall under any L.T.Category, it will be charged at L.T. Non-Domestic Category-II.

4. Single Point LT services released to residential complexes of State Government/ Central Government Departments under specific orders of Licensee with Contracted Load/ Connected Load in excess of 56 KW/75 HP shall continue to be billed under LT-I Domestic tariff slab rate applicable based on the average monthly energy consumption per each authorized dwelling i.e. total energy consumption in

the month divided by the number of such dwelling units, in the respective residential complexes.

The above orders are subject to the following conditions, namely:

a). Orders are applicable to Police Quarters and other State/Central Government residential complexes specifically sanctioned by the Licensee.

b). Provided that it is at the request of the designated officer, who shall give an unconditional undertaking that he will pay up the bill for CC charges to the Licensee irrespective of collection from the individual occupants.

c). The consumers shall be billed at the appropriate slab rate in tariff based on the average monthly consumption per dwelling unit in the complex.

d). Meter reading shall be taken monthly in all such cases.

e). Customer charges calculated at Rs.20 per month for each dwelling unit shall be billed.

5. Where an individual consumer seeks to avail supply for Domestic purpose with a connected load of over 56KW/75HP, such consumers may be given supply under this category subject to the following conditions.

(a) The metering shall be provided by the DISCOMS on HT side of the distribution transformer

(b) Meter reading shall be done monthly and the energy recorded in the HT metering shall be billed at tariff rates under LT category I.

MODE OF BILLING AND PAYMENT

The licensee may introduce monthly billing for all consumers instead of bimonthly (once in two months) presently in vogue.

L.T. CATEGORY-II - NON-DOMESTIC AND COMMERCIAL

Applicability

Applicable for supply of energy for lights and fans for non-domestic and commercial purposes excluding loads falling under L.T. Categories I, III to VII and shall include supply of energy for lighting, fans, heating and power appliances in Commercial and Non-Domestic premises such as shops, business houses, offices, public buildings, hospitals, hostels, hotels, choultries, restaurants, clubs, theaters, cinema halls, railway stations, Timber Depots, Photo Studios and other similar premises.

The Educational Institutions run by individuals, Non-Government Organisations or Private Trusts and their student hostels are also classified under this category. Exclusions for this would be those that qualify to be under Category LT-VII.

Consumers shall pay electricity charges as shown below:

First 50 Units /month	..	**395 Paise** per Unit
Above 50 Units/ month	..	**625 Paise** per Unit
Monthly Minimum Charges	..	**Rs. 65** per month for **Single Phase**
	..	**Rs.200** per month for **Three Phase**
FSA will be extra as applicable		

Notes:

1) For Loads less than 5 KW single phase supply only will be given.

2) For loads 35 KW and above, a demand meter shall also be provided.

3) In respect of the complexes having connected load of more than 56 KW/75 HP released under specific orders of Licensee for Single Point Bulk supply, where such complex is under the control of a specified organisation/ agency taking responsibility to pay monthly current consumption bills regularly and abide by the Terms and Conditions of supply as per agreement, the billing shall be done at the highest slab tariff rate under this category. The energy shall be measured on HT side of the Distribution Transformer feeding the Load. In cases where energy is measured on LT side of the transformer, 3% of the recorded energy during the month shall be added to arrive at the consumption on High Tension side of the transformer.

MODE OF BILLING:

The Licensee may introduce monthly billing for all consumers instead of bi-monthly (once in two months) presently in vogue.

L.T.CATEGORY-III (A) - INDUSTRIAL: NORMAL CATEGORY

The tariffs are applicable for supply of electricity to Low Tension Industrial consumers with a Contracted load of 75 HP/56 KW and below including incidental lighting load not exceeding 10% of the total Contracted Load. Industrial purpose shall mean supply for purpose of manufacturing, processing and/or preserving goods for sale but shall not include shops, business houses, offices, public buildings, hospitals, hotels, hostels, choultries, restaurants, clubs, theaters, cinemas, railway stations and other similar premises, notwithstanding any manufacturing, processing or preserving goods for sale. This tariff will also apply to Water Works & Sewerage Pumping Stations operated by Government Departments or Co-operative Societies and pumpsets of Railways, pumping of water by industries as subsidiary function and sewerage pumping stations operated by local bodies. This tariff is also applicable to Workshops, flour mills, oil mills, saw mills, coffee grinders and wet grinders, Ice candy units with or without sale outlets, Goshalas, grass cutting and fodder cutting units. Further, this tariff is also applicable to:

- i) Poultry Farming Units other than those coming under LT Category - IV
- ii) Pisciculture and Prawn culture units.
- iii). Mushroom production units, Rabbit Farms.
- iv). Floriculture in Green Houses.
- v). Sugar cane crushing.

Rates:

(i) Industrial – Normal

(a) Fixed Charges -- **Rs. 37 Per HP/Month of connected Load**

Plus

(b) For all units consumed/Month - **375 Paise per unit**

(ii) Industrial – Optional

(a) Demand Charges - **Rs.100/kVA per month**

Plus

(b) Energy Charges - **375 Paise per unit for units consumed/month**

(iii) Tariff for Pisciculture and Prawn culture units with Contracted Load below 10HP - **90 Paise per unit**

(iv) Sugar cane crushing - **50 paise per unit**

Note: Consumers with connected load between 50 and 75 HP can opt for a two part optional tariff. FSA will be extra as applicable

<u>IMPORTANT FOR LT III(A) INDUSTRIAL–OPTIONAL Demand Tariff Consumers</u>

i) The billing demand shall be the maximum demand recorded during the month or **80%** of the contracted demand whichever is higher.

ii) Energy charges will be billed on the basis of actual Energy consumption or **50 units** per KVA of billing demand whichever is higher

<u>NOTE :</u>

(i) The Licensee reserves the right to restrict usage of Electricity by the consumers for Industrial purpose during evening peak load hours i.e 17.00 hours to 21.00 hours in any area based on system constraints through notification by the Superintending Engineer of the area from time to time . Violation of this condition by the industrial consumer shall entail disconnection of power supply.

(ii) The Contracted load shall be the connected load required by the consumer and so specified in the agreement as per sanction accorded for the service. In the case of Industrial - optional two-part tariff the consumer can declare a contracted demand different from the contracted load but shall not be less than 25 KVA. If the consumer opts for a two part demand tariff the billing demand shall be 80% of the Contracted Demand or Recorded Demand whichever is higher. If the recorded demand exceeds the Contracted Demand such excess demand shall be billed at the demand charge prescribed under HT Category-I.

(iii) If the actual connected load for lighting purpose exceeds the prescribed limit of 10%, the energy recorded prorata to the lighting load shall be billed at the LT Category-II highest slab rate. It is not necessary to have a separate service for lighting load in the premises.

(iv) Sugar cane crushing operations will be allowed under existing agricultural connections with the specific permission of DE (Operation).

(v) (a) A demand meter shall be provided for the consumers with connected load 20HP to below 50HP.

(b). For loads 50 HP to 75 HP the metering will be provided on HT side of the Distribution Transformer.

(c). The Low Power Factor (LPF) surcharge is applicable as in the case of HT consumers for LT Category III (A) Industrial – Optional demand tariff category.

L.T. CATEGORY - III(B) - INDUSTRIAL

(I) This tariff is applicable to Small Scale Industrial Units which have been licenced by the Industries Department as bonafide Small Scale Industries and given registration No. under SSI registration scheme with connected loads above 75 HP and upto 150 HP and who wish to avail supply at Low Tension subject to the Conditions mentioned here-under. The applicants should indicate their consent for these conditions, in the application for LT supply. The existing LT Category-III consumers who come under SSI category and who were sanctioned LT supply for connected loads above 75 HP and upto 125 HP subject to certain conditions prior to 15.7.1987, and who did not switch over to HT supply, may also come under this category duly complying with these conditions.

Rates:

Energy Charges:

For all units consumed/month - 375 Ps/Unit.

Plus

Demand Charges - Rs.100/kVA/Month

FSA will be extra as applicable.

IMPORTANT

i) The billing demand shall be the maximum demand recorded during the month or **80%** of the contracted demand whichever is higher.

ii) Energy charges will be billed on the basis of actual Energy consumption or **50 units** per KVA of billing demand whichever is higher

Conditions:

i) The maximum Connected Load under this Category shall not exceed 150 HP including incidental lighting load of not more than 10% of the total connected load. The contracted load shall be as specified in the agreement as per sanction accorded for the service. The consumer shall declare his contracted maximum demand, which shall not be less than 50KVA and shall also be specified in the Agreement.

ii) If the recorded demand exceeds the Contracted Demand mentioned in (i) above, such excess demand shall be billed at the demand charge prescribed under HT Category-I.

iii) The consumer should erect his own Distribution Transformer and structure initially along with necessary switch gear. The transformer will be maintained by the Licensee.

iv) For new/additional loads the consumer has to comply with the procedures as per the terms and conditions of supply of the Licensee as applicable to HT Industrial consumers.

v) The metering will be on HT side of the Distribution Transformer with a Trivector Meter together with MD indicator. The energy recorded in the meter will be billed at the energy charge mentioned above.

vi) The Low Power Factor (LPF) surcharge is applicable as in the case of HT consumers for LT III (B) Industrial Optional Category.

vii) Customer charges shall be as applicable for HT consumers.

viii) The conditions (i) & (iii) mentioned in the NOTE under LT Category-III(A) shall be applicable for LT III (B) Industrial Optional Category also.

(II) Seasonal Industries

Where a consumer avails supply of energy under LT III (A)(i)(ii) and LT III(B) for manufacture of sugar or ice or salt, decorticating, fruit processing, ginning and pressing, tobacco processing and redrying and for such other industries or processes as may be approved by the Commission from time to time principally during certain seasons or limited periods in the year and his main plant is regularly closed down during certain months of the year, he may be charged for the months during which the plant is shut down (which period shall be referred to as the **off-season** period) as follows.

LT III(A)(i)

FIXED CHARGES	
on 30% of contracted load	Rs.37/HP/Month
ENERGY CHARGES	
For all units of energy consumed	Rs.440ps/unit
FSA will be extra as applicable	

LTIII(A)(ii) & LT III(B)

DEMAND CHARGES	
Based on the Recorded Maximum Demand or **30% of** the Contracted Demand whichever is higher	Rs.**100**per KVA/Month.
PLUS	
ENERGY CHARGES	
For all the units of energy consumed	440 **Paise / unit.**
FSA will be extra as applicable	

This concession is subject to the following conditions:

i) Consumers, classified as seasonal load consumers, who are desirous of availing the seasonal benefits shall specifically declare their season at the time of entering into agreement that their loads should be classified as seasonal loads.

ii) The period of season shall not be less than 4(four) continuous months. However, consumer can declare longer seasonal period as per actuals.

iii) Existing eligible consumers who have not opted earlier for availing of seasonal tariffs will also be permitted to opt for seasonal tariff on the basis of application to the concerned Superintending Engineer of the Licensee.

iv) The seasonal period once notified cannot be changed , during one Tariff year.

v) The off-season tariff is not available to composite units having seasonal and other categories of loads.

vi) The off-season tariff is also not available for such of those units who have captive generation exclusively for process during season and who avail supply from Licensee for miscellaneous loads and other non-process loads.

vii) Any consumer who after declaring the period of season consumes power for his main plant during the off-season period, shall not be entitled to this concession during that year.

viii) Development charges @ RS. 500/- per kVA shall be paid by the consumer in advance for availing supply under the above said category with seasonal benefits.

L.T. Category-IV

Cottage Industries and Dhobighats

Applicable for supply of energy to Dhobighats & bonafide small Cottage Industries specifically power looms, Carpentry, blacksmithy, Kanchari, Gold smithy, shilpi and pottery having connected load not exceeding 5H.P. including incidental lighting in the premises. Poultry farming units upto 1000 birds strength (subject to certification by A.P.S.M & P.D.C. as to the strength in the poultry farm) come under this category. If the bird strength of birds in the poultry farm exceeds 1,000 birds, electricity supply to such poultry farms shall be classified under L.T. Category-III (A) or HT category I as the case may be according to the connected load.

Rates

For all units consumed	.. **180 Paise** per unit
Fixed charges	.. **Rs.10/- per month** per H.P. of ***Contracted load subject to a minimum of Rs.30/- per month.***

FSA will be extra as applicable

Notes

i) It is not necessary to have a separate service for lighting load in the premises.

ii) Poultry farming units upto 1000 units without certification from APSM &PDC shall be classified under LT Category-III (A) Industrial Tariff.

L.T. CATEGORY – V(A) – Agricultural

Category	Purpose	Fixed charges	Energy Charge Ps/Unit
With DSM measures (@)	Dry Land Farmers (Connections<= 3 Nos.)		0
	Wet Land Farmers (Holdings<=2.5 Acres)		0
	Dry Land Farmers (Connections > 3 Nos.)	*Rs.210/HP/Year	20
	Wet Land Farmers (Holdings >2.5 Acres)	*Rs.210/HP/Year	20
	Corporate Farmers & IT Assesses		100

Without DSM measures	Dry Land Farmers (Connections<= 3 Nos.)		0
	Wet Land Farmers (Holdings<=2.5 Acres)		0
	Dry Land Farmers (Connections > 3 Nos.)	*Rs.525/HP/Year	50
	Wet Land Farmers (Holdings >2.5 Acres)	*Rs.525/HP/Year	50
	Corporate Farmers & IT Assesses		200
	* Equivalent flat rate tariff		

LT Category – V(B) – Agriculture

Out of Turn Allotment – Tatkal scheme with DSM measures	:	Energy Charge 20paise/unit

Note:

1. Agricultural consumers are permitted to use 1 or 3 lamps of 5 watts each near the main switch as pilot lamp/s.
2. Supply to the L.T. Agricultural services will be suitably regulated as notified by Licensee from time to time.
3. Customer charges of Rs.20/- per month per service in terms of Part `C' of the tariff shall be payable by all Agricultural Consumers.

4. The Farmers eligible for free supply under Dry Land as well as Wet Lands have to comply with the following Demand Side Management measures (DSM) as applicable for his pumping system viz. submersible and surface pump sets in the following stages failing which they shall not be eligible for free supply.

Stage – I to be complied by March 2006

Friction less foot valve (exempted for submersible pumpset)
Capacitor of adequate rating for the pumpset

Stage – II to be complied by March 2008

HDPE or RPVC piping suction and/or delivery
ISI-marked monobloc or submersible pumpset

Free supply shall not be allowed for Paddy in second crop. Farmers in dry land areas shall not be eligible for free supply if they grow Paddy in second crop.

All new connections shall be given only with DSM measures implemented and with meters.

L.T. CATEGORY-VI

Applicable for supply of energy for lighting on public roads, streets, thoroughfares including parks, markets, cart-stands, taxi stands, bridges and also for PWS scheme in the Local Bodies viz. Panchayats/ Municipalities/ Municipal Corporations. Metering is compulsory irrespective of tariff structure.

Rates:

A. Street Lighting:

For all units consumed

Minor Panchayats ..	**156 Paise** per unit
Major Panchayats ..	**208 Paise** per unit
Nagarpalikas & Municipalities Gr.3:	**274 Paise** per unit
Municipalities Gr. 1 & 2: ..	**326 Paise** per unit
Municipalities Selection / Spl. Gr.:..	**353 Paise** per unit
Corporations ..	**379 Paise** per unit
Minimum charges	
Panchayats	Rs.2 per point per month
Municipalities/Corporations	Rs.6 per point per month

FSA will be extra as applicable

B. PWS Schemes:

Minor / Major Panchayats

Up to 2500 units/year	**– 20 paise per unit**
Above 2500 units	**- 50 paise per unit**

All Nagarpalikas & Municipalities

	Energy charges	Fixed charges
Upto 1000 Units	**375 Paise/Unit**	**Rs.20/HP/Month of**
Balance Units	**405 Paise/Unit**	contracted load subject to a minimum of Rs.100

Municipal Corporations:

Up to 1000 Units ..	**405 Paise/Unit**	**Rs.20/HP/Month of**
Balance Units	**460Paise/Unit**	contracted load subject to a minimum ofRs.100

FSA will be extra as applicable

Notes (Street Lighting):

i). The cost of fittings shall be borne or paid for by the consumers. The responsibility for maintenance including renewals and replacements rests with the Local Bodies viz., Panchayats, Municipalities, Municipal Corporations.

ii) Where the cost of fittings is borne by the Licensee, the first supply of filament lamps, fluorescent tubes, mercury vapour lamps including special type lamps along with their fittings will be made by the Licensee at its cost. In such cases consumer will have to pay fixed charges as in column(3) below. However, where the cost of fittings is borne by the consumer but maintenance is done by the Licensee, the consumer will have to pay fixed charges as in Column (4) below:

Sl. No (1)	Fittings for (2)	Fixed charges Per Month where the cost of fittings is borne by Licensee (3)	Fixed charges per month where the cost of fittings is borne by the Local Body but maintenance by Licensee (4)
		(Rs.)	(Rs.)
1.	Ordinary Filament Lamp	2.00	1.00
2.	Fluorescent Lamp 40 W Single Fixture	7.00	4.00
3	Fluorescent Lamp 40 W Double Fixture	8.00	4.00
4.	M.V. Lamps 80 W Fixture	12.00	6.00
5.	M.V. Lamps 125 W Fixture	15.00	8.00
6.	M.V. Lamps 250 W Fixture	45.00	23.00
7.	M.V. Lamps 400 W Fixture	50.00	25.00

iii). The replacement of filament lamps, fluorescent tubes, mercury vapour and other special type of lamps will be made by the Local Body at its cost. However, in Urban areas till such time the Municipalities and Corporations make their own arrangements for such replacements the Licensee may, if the consumer so desires, carry out the replacement provided the Local Body supplies the lamps and tubes. The consumer will in such cases be billed labour charges at the rate of Rs. 2 per replacement.

However, in Rural areas, such replacement of bulbs supplied by the Local Body will be made by the Licensee without collecting labour charges. For this purpose the area coming under Gram Panchayat shall constitute 'Rural Area'.

iv). Additional charges: Every local body shall pay an additional charge equivalent to any tax or fee levied by it under the provisions of any law including the Corporation Act, District Municipalities Act or Gram Panchayat Act on the poles, lines, transformers and other installations through which the local body receives supply.

L.T. Category-VII - General Purpose

Applicable for supply of energy to places of worship like Churches, Temples, Mosques, Gurudwaras, Government Educational Institutions and Student Hostels run by Government agencies, and Educational Institutions run by charitable Institutions (Public charitable trusts and societies registered under the Societies Registration Act running educational and medical institutions on a no profit basis) and Recognised Service Institutions.

Rates	
For all the units consumed	.. **400 Paise per unit**
Minimum charges	Rs.50 per month for single phase supply
	Rs.150 per month for three phase supply
FSA will be extra as applicable	

Note:

1. Licensee may introduce monthly billing for all consumers instead of bimonthly (once in two months).

2. For loads less than 5 KW, single phase supply only will be given.

L.T. CATEGORY-VIII - L.T. Temporary supply

1. For temporary supply of energy to all categories other than Irrigation and Agriculture:

Rates: For all units consumed .. **620 paise per unit** Minimum charges .. Rs.125 per KW or part thereof of contracted load for first 30 days or part thereof and Rs.75 per KW or part thereof of contracted load for every subsequent period of 15 days or part thereof **FSA will be extra as applicable**

2. **Temporary supply for Agriculture Purpose**:

Rates: For all units consumed .. **230 Ps. /Unit** Minimum Charge Rs.100 per HP of contracted load for the first 30 days or part thereof and Rs.50 per HP of contracted load for every subsequent period of 15 days or part thereof.

Conditions:

(i) Estimated cost of works and estimated energy charges.

These charges shall be paid in advance by the consumer in accordance with the procedure prescribed in clause VI of part C along with any other charges payable as specified therein.

(ii) Regular consumers requiring temporary additional supply:

In cases where consumers availing regular supply of energy require additional supply for temporary period, the additional supply shall be given as a temporary service under a separate connection and charged as such in accordance with the procedure prescribed in clause VI of part C.

General conditions of L.T. Tariff

The foregoing L.T. Tariffs are subject to the following conditions.

1. Classification of Premises

   The Licensee shall have the right to classify or re-classify the supply of energy to any premises under an appropriate category of L.T. Tariff.

2. The connected load of the consumer shall not exceed his contracted load except in case of LT category III(A) optional and III(B) and if the connected load of the consumer is found to be in excess of his contracted load, the provisions of General Terms and Conditions of supply separately notified shall be applied.

3. Additional Charges for belated payment of Bills:

   a) The C.C. bills shall be paid by the consumers within the due date mentioned in the bill, i.e. 15 days from date of the bill.

   b) If payment is made after due date, the consumers are liable to pay belated payment charges on the bill amount at the rate of Seven (7) Paise per One hundred rupees per day of delay calculated from due date mentioned in the bill up to the date of payment.

   c) If the C.C. bills amount is not paid within 15 days from the due date the power supply is liable for disconnection.

   d) For re-connection of power supply after disconnection, the consumer has to pay reconnection fees plus belated payment charges calculated as per para (b) above.

4. Fuel Surcharge Adjustment (FSA) is applicable to all categories except agriculture. FSA is applicable as notified by the Commission from time to time as per the regulations made by the Commission in this behalf.

5. The Tariffs are exclusive of Electricity duty payable as per the provisions of AP Electricity Duty Act.

6. These rates are applicable in the areas of operation of 4 (four) Distribution Companies viz., Andhra Pradesh Eastern Power Distribution Company Limited (APEPDCL), Andhra Pradesh Central Power Distribution Company Limited (APCPDCL), Andhra Pradesh Northern Power Distribution Company Limited (APNPDCL) and Andhra Pradesh Southern Power Distribution Company Limited (APSPDCL)) and 4 (four) Rural Electric Co-operatives viz., Anakapally, Chepurupally, Siricilla, Kuppam,.

Part - `C'

I. SERVICE CONNECTION CHARGES.

(1) In respect of the cases involving extension of distribution mains, the extension portion of the scheme will be executed by the Licensee adopting the standards prescribed by the Commission from time to time on payment of service line charges.

(2) The service connection portion from the overhead mains terminated outside the premises of the consumer shall be executed by the consumer as per the standards prescribed by the licensee from time to time. However, the meter and cutout shall be provided by the licensee.

(3) Service connection wires for L.T. Category- V Irrigation and Agricultural purposes shall be laid collecting an amount of Rs.25/- per H.P. of contracted load towards service connection charges.

II. RECONNECTIONS

(a) Low Tension Services.

i). Overhead Services	Rs. 50/-
ii). U.G. Services	Rs.100/-

(b) High Tension Services

i) 11 KV.	Rs.300/-
ii) 33 KV	Rs.500/-
iii) 132/220 KV	Rs.1000/-

III. TESTING

(a) Installations:	**L.T.**	**H.T.**
i) The first test and inspection of a new installation or of an extension to an existing installation.	Nil	Nil
ii) Charges payable by the consumer in advance for each subsequent test and/or inspection if found necessary owing to any fault in the installation or to non-compliance of the conditions of supply.	Rs.20/-	Rs.200/-

(b) Meters

	L.T.	H.T.
i) A.C. Single Phase Energy meter	Rs. 10/-	--
ii) A.C. Three Phase Energy meter	Rs .30/-	--
iii) Demand or special type meter	Rs.150/-	Rs.500/-

(c) Transformer Oils:

i) First sample of oil	Rs.150/- per sample
ii) Additional sample of oil of the same equipment received at the same time	Rs.100/- per sample

IV. SERVICE CALLS

(a) Charges for attendance of Fuseman for Low Tension Consumers

i) Replacing of Licensee's cut out fuses	Nil
ii) Replacing of consumer's fuses	Rs.3/-

(b) Charges for attendance of Fuseman/Wireman at the consumer's premises during any function or temporary illumination provided a Fuseman/Wireman can be spared for such work	Rs.100/- for each day or part thereof.
(c) Charges for Infructuous visit of Licensee employees to the consumer's premises .	Rs.25/- for each visit when there is no defect in Licensee's equipment.

V MISCELLANEOUS CHARGES

(a) Application Registration Fees

i) For LT Agricultural & Domestic	Rs. 25/-
ii) For all other LT Categories	Rs. 50/-
iii) For all HT Categories	Rs.100/-
(b) Revision of estimates	Rs. 10/-
(c) Fee for rerating of consumer's installation at the request of the consumer.	Rs. 20/-

This does not include the additional charges payable by the consumer for increasing his connected load in excess of the contracted load, as provided in General Terms and conditions of supply.

(d) Resealing of:

i) L.T. Meter Cut outs in the consumer's premises	Rs. 5/-
ii) M.D. Indicator meters and other apparatus in the consumer's premises	Rs.100/-

(The aforesaid charges do not include the additional charges payable by the consumer for breaking the seals)

	L.T.	H.T
(e) For changing meter only at the request of the consumer (where it is not necessitated by increase in demand permanently)	Rs.25/-	Rs.100/-

(f) For changing or moving a meter board :	Actual cost of material and labour plus 25% supervision charges on cost of materials and labour.
(g) Customer charges:	
For all LT Categories inclusive of Agricultural services	Rs.20/- per month*
* Domestic Consumer in the first slab	Rs. 15/- per month
H.T. Categories:	
a) 66 KV and below	Rs.750/- per month
b) 132/220 K.V..	Rs.1500/- per month
(h) Urgency charges for temporary supply at short notice	Rs. 100/-

(i) **Special rates chargeable for pilferage and malpractice cases**

As provided in the Electricity Act 2003.

(j) Supervision/Inspection & checking charges

i) For LT Agricultural and Domestic	Rs. 50.00
ii) For all other LT categories	Rs.150.00
iii) For HT Services	Rs.300.00

VI TEMPORARY SUPPLY

(1) Requests for temporary supply of energy cannot normally be considered unless there is a clear notice of at least one week in the case of domestic and three months in case of other types of supply. If supply is required at a short notice, in addition to the charges mentioned below, an urgency charge, as specified in clause V(h) above.

(2) Estimated cost of the works means the cost of works for making necessary arrangements for supplying energy including the cost of distribution lines, switchgear, metering equipment, etc., as may be worked out on the basis of standards and norms prescribed by the Licensee , from time to time plus cost of dismantling the lines and other works when the supply is no more required less the cost of retrievable material.

(3) (a) Estimated cost of the works as mentioned in para (2) above shall be paid by the consumer in advance. After the works are dismantled and retrievable materials returned to stores, a bill for the actual amount payable by the consumer shall be prepared and the difference would be collected from or refunded to the consumer, as the case may be.

(b) In addition to the aforesaid charges payable by consumers availing temporary supply, they shall pay hire charges at 2% on cost of retrievable material per month or part thereof, for the duration of temporary supply. These charges will be claimed along with the consumption bills.

(4) (a) The consumer requiring supply on temporary basis shall be required to deposit in advance, in addition to the estimated cost of works mentioned in 3(a), the estimated consumption charges at the rate stipulated in Tariff Order for Temporary supply, and worked out on the basis for use of electricity by the consumer for 6 hours per day for a period of 2 months in case the supply is required for more than 10 days. If the period of temporary supply is for 10 days or less, the advance consumption charges for the actual period requisitioned shall be paid.

(b) The Bill for electricity consumed in any month shall be prepared at the tariff applicable plus hire charges as mentioned in 3(b) above. The consumers have to pay monthly CC charges regularly during the period of availing temporary supply and the estimated energy consumption deposit shall be adjusted with the last month consumption and the balance if any shall be refunded.

(c) In the case of consumers requiring temporary supply for the purposes of Cinema, the estimated energy charges for a minimum period of 3 months shall have to be deposited by the consumer subject to the condition that the consumer shall pay every month energy and other miscellaneous charges for the preceding month and the amount deposited by him in advance shall be adjusted with the last month consumption and the balance amount shall be refunded.

(d) In the event of estimated energy charges deposited by the consumer having been found insufficient, the consumer shall deposit such additional amount, as may be demanded by the Licensee failing which the Licensee may discontinue the supply of electricity.

VII MISCELLANEOUS WORKS

The charges for any work which the Licensee may be required to undertake for the consumer and which is not included in the foregoing schedule, shall be the actual cost of labour and material plus 25% on cost of labour and material to cover overhead charges. The aforesaid charges shall be paid by the consumer in advance.

PART `D'

POWER FACTOR APPARATUS and Capacitor Surcharge

1. FOR H.T. AGRICULTURAL CONSUMERS

Every H.T. Agricultural Consumer using induction motors shall install L.T. Shunt capacitors of specified rating as given below:

Sl. No.	Rating of Individual Motor (in HP)	KVAR rating of L.T.Capacitors for various R.P.M. of motors			
		750 RPM	1000 RPM	1500 RPM	3000 RPM
1	Up to 50	15	15	12	10
2	60	20	20	16	14
3	75	24	23	19	16
4	100	30	30	24	20
5	125	39	38	31	26
6	150	45	45	36	30
7	200	60	60	48	40

2. FOR L.T. CONSUMERS

Every L.T. Consumer using induction motors and welding transformers shall install L.T. Shunt Capacitors of specified rating as given below:

(a) Motors

Sl. No.	Rating of individual Motor (in HP)	KVAR rating of LT capacitors for various R.P.M of motors			
		750 RPM	1000 RPM	1500 RPM	3000 RPM
1.	Upto 3	1	1	1	1
2.	5	2	2	2	2
3.	7.5	3	3	3	3
4.	10	4	4	4	4
5.	15	6	5	5	4
6.	20	8	7	6	5
7.	25	9	8	7	6
8.	30	10	9	8	7
9.	40	13	11	10	9
10.	50	15	15	12	**10**

(b) Welding transformers

Sl.No	Rating of Welding Transformer In KVA	Rating of Capacitor in KVAR
1	1	1
2	2	2
3	3	3
4	4	3
5	5	4
6	6	5
7	7	6
8	8	6
9	9	7
10	10	8
11	11	9
12	12	9
13	13	10
14	14	11
15	15	12
16	16	12
17	17	13
18	18	14
19	19	15
20	20	15
21	21	16
22	22	17
23	23	18
24	24	19
25	25	19
26	26	20
27	27	21
28	28	22
29	29	22
30	30	23
31	31	24
32	32	25
33	33	25
34	34	26
35	35	27

NOTE

1. New connections under HT Cat IV(A),(B), LT Cat III(A),(B), LT Category IV and LT Category V shall not be given unless the capacitors of required ratings are installed.
2. If during inspection, no capacitor is found, or the capacitors already installed are found to be damaged or having defect or ceased to function, such consumer shall be liable to pay surcharge @ 25% of the monthly bill amount, as per the terms and conditions of supply notified by the licensee.
3. Low Power factor surcharge is to be levied for the consumers falling under LT III (A) Industrial (Optional) and LT III (B) Industrial Optional categories as applicable to HT consumers.
4. In case the rated capacity of the induction motor or welding transformer falls in between the steps of the stipulated ratings, the capacitors suitable for the next higher step shall be installed by the consumer.
5. The failure on the part of the consumer to comply with the above requirement, shall be treated as violation of terms and conditions of the supply and the Licensee can terminate the contract and collect the sum equivalent to the minimum charges for the balance initial period of agreement, apart from disconnection of supply as provided in the Terms & Conditions of Supply.

PART – 'E'
TRANSMISSION CHARGES SLDC CHARGES AND WHEELING CHARGES

1. TRANSMISSION CHARGES

The transmission charges as given below are applicable for the use of transmission lines (system) of a transmission licensee by Generating companies, distribution licensees, other Licensees, and also consumers who are permitted open access u/s42 (2) of the Electricity Act 2003.

Rates:

Transmission charges --------- **Rs. 69.25/KW/month**

Plus

Energy losses in kind at 5%

2. STATE LOAD DESPATCH CENTRE (SLDC) CHARGES

Rate: Rs. 4.10 paise per KW/month.

Notes:

i) The Transmission licensee shall deliver the quantum of energy given to it by a generating company or a captive plant or a licensee for transmission after taking into account the transmission loss of 5%.

ii) The Distribution Companies availing bulk supply from APTRANSCO need not pay Transmission charges and SLDC charges separately as long as they avail such bulk supply as the Transmission charges are already factored in the bulk supply tariff. However, as and when the APTRANSCO is divested of the Bulk supply function as required under the Electricity Act 2003, the Distribution Companies have to pay the Transmission Charges and SLDC charges as may be in force as specified by the Commission from time to time.

3. WHEELING CHARGES

The wheeling charges as given below are applicable for use of distribution system of a licensee by other licensees or generating companies or captive power plants, or consumers permitted open access u/s 42 (2) of the Electricity Act 2003.

Rates:

	NPDCL	EPDCL	SPDCL	CPDCL
Wheeling charges	**60**	**47**	**56**	**46**

Plus

Losses in kind up to the respective voltage level at which the wheeled energy is delivered are as follows:

	NPDCL	EPDCL	SPDCL	CPDCL
33kV	6.07%	7.11%	5.66%	5.78%
11kV	12.90%	13.11%	11.92%	12.28%
LT	23.05%	21.30%	20.44%	20.50%

Notes:

i) The Distribution licensee shall deliver the quantum of energy given to it for wheeling reduced by the distribution loss level at the voltage at which the energy is delivered to consumer in the area of the distribution licensee.

ii) If the wheeling involves transmission of energy through transmission system of a Transmission Licensee, the consumer or the supplier as the case may be, has to pay the applicable transmission charges also.

iii) If the wheeling of electricity is through the distribution system of more than one distribution licensee, the wheeling charges shall be payable to the distribution licensee of the area where the electricity is delivered.

(iv) These rates passed by the Commission shall, however, be subject to the orders of the Hon'ble Supreme Court in the pending appeals, which have arisen out of the interpretation of the provisions of the Reform Act and have been the subject matter of the order passed by the Hon'ble High court. This order shall be read subject to any order, directions etc. that may be issued by the Hon'ble High Court and the Hon'ble Supreme Court in the pending proceedings.

4. Cross Subsidy Surcharge and Additional Surcharge

The cross subsidy surcharge payable for availing open access to the transmission system and the distribution system as envisaged under sections 39(2)(d) 40(c) and 42(2) of the Electricity Act, including in the case of use of wheeling facility by generators to supply electricity to consumers under existing wheeling agreements, shall be as per the terms and conditions of open access specified u/s 42(2) of the Electricity Act 2003. The additional surcharge under section 42(4) of the Electricity Act, 2003 shall be payable wherever applicable, as specified by the Commission in relevant Regulations.

Annexure – E

Quarterly Sales and Power Purchase during FY 2005-06 (Units in MU)

DISCOM - EPDCL	QRT 1	QRT 2	QRT 3	QRT 4	TOTAL
LT I :Domestic	465.78	483.17	471.12	389.04	**1809.10**
LT II:Non-Domestic	90.20	89.93	85.54	77.49	**343.16**
LT III:Industrial	103.72	87.75	84.54	102.49	**378.50**
LT IV:Cottage Industries	0.41	0.37	0.40	0.38	**1.56**
LT V:Irrigation and Agriculture	292.91	286.81	302.17	349.85	**1231.73**
LT VI - Local Bodies, Street Lighting & PWS schemes	46.23	45.38	50.90	52.86	**195.37**
LT VII - General purpose	5.14	5.65	6.45	5.96	**23.21**
LT VIII - Temporary Supply	0.00	0.00	0.00	0.00	**0.00**
LT Total	**1004.39**	**999.06**	**1001.12**	**978.06**	**3982.63**
HT I: Industry	494.22	494.03	521.29	536.96	**2046.51**
HT II: Industry Others	35.96	42.54	33.57	32.94	**145.01**
HT IV: Irrigation & Agriculture	1.30	9.61	13.66	3.06	**27.63**
HT V: - Railway Traction	97.57	100.54	101.07	101.20	**400.38**
HT VI: - Townships & Residential Colonies	7.50	7.34	6.19	5.94	**26.96**
Rural Co-operatives	35.20	32.38	24.68	27.73	**120.00**
Temporary	0.00	0.00	0.00	0.00	**0.00**
HT Total	671.76	686.43	700.47	707.84	**2766.49**
LT+HT Total	1676.15	1685.50	1701.58	1685.90	**6749.12**
Loss%	14.44 %	14.44 %	14.44 %	14.44 %	14.44 %
Loss MU	282.88	284.46	287.18	284.53	**1139.05**
Discom PURCHASES (MU)	1959.03	1969.96	1988.76	1970.43	**7888.17**
Transmission Loss (%)	5%	5%	5%	5%	5%
TRANSCO Purchases (MU)	2062.14	2073.64	2093.43	2074.13	**8303.34**
T & D Loss (MU)	385.99	388.14	391.85	388.24	**1554.22**
T & D Loss (%)	18.72%	18.72%	18.72%	18.72%	18.72%

Quarterly Sales and Power Purchase during FY 2005-06 (Units in MU)

DISCOM - CPDCL	QRT 1	QRT 2	QRT 3	QRT 4	TOTAL
LT I: Domestic	869.47	794.88	717.96	792.72	3175.03
LT II: Non-Domestic	249.58	225.97	225.91	227.62	929.08
LT III: Industrial	235.94	211.54	225.30	237.48	910.26
LT IV:Cottage Industries	6.78	3.45	4.32	4.18	18.73
LT V:Irrigation and Agriculture	1054.99	1401.25	1397.41	1599.41	5453.06
LT VI - Local Bodies, Street Lighting & PWS schemes	143.74	137.42	143.94	151.57	576.67
LT VII - General Purpose	9.77	10.81	11.81	11.21	43.60
LT VIII: Temporary Supply	0.64	0.77	1.10	0.85	3.36
LT Total (Including Agrl.)	2570.91	2786.09	2727.75	3025.04	11109.79
HT - I (general)	1001.28	1044.88	1026.96	1126.46	4199.58
HT II: Industry Others	156.59	150.02	145.38	159.36	611.35
HT IV: Irrigation & Agriculture	10.01	34.06	30.03	78.15	152.25
Category V - Railway Traction	21.77	21.53	23.60	23.35	90.25
Category VI - Townships & Residential Colonies	17.82	16.99	16.65	17.07	68.53
Rural Co-operatives	0.00	0.00	0.00	0.00	0.00
Temporary	0.00	0.00	0.00	1.76	1.76
HT Total	1207.47	1267.48	1242.62	1406.15	5123.72
Total	3778.38	4053.57	3970.37	4431.19	16233.51
Loss%	17.91%	17.91%	17.91%	17.91%	17.91%
Loss MU	824.32	884.35	866.19	966.73	3541.58
DISCOM PURCHASES (MU)	4602.55	4937.72	4836.36	5397.70	19774.33
Transmission Loss (%)	5%	5%	5%	5%	5%
Transco Purchases (MU)	4844.79	5197.60	5090.91	5681.79	20815.09
T & D Loss (MU)	1066.56	1144.23	1120.74	1250.82	4582.34
T & D Loss (%)	22.01%	22.01%	22.01%	22.01%	22.01%

Quarterly Sales and Power Purchase during FY 2005-06 (Units in MU)

DISCOM - NPDCL	QRT 1	QRT 2	QRT 3	QRT 4	TOTAL
LOW TENSION					
LT I : Domestic	314.16	327.36	327.70	275.66	1244.88
LT II : Non Domestic & Commercial	57.12	56.30	54.38	49.33	217.12
LT III : (a&b) Industrial	54.99	49.98	54.18	105.32	264.47
LT IV :Cottage Industries	1.02	0.98	1.09	1.28	4.38
LT V : Irrigation and Agriculture	481.62	811.71	775.68	839.53	2908.41
LT VI - Local Bodies, Street Lighting & PWS schemes	63.16	58.63	57.36	57.48	236.63
LT VII:General Purpose	3.45	3.10	3.69	3.69	13.94
LT VIII:Temporary Supply	0.13	0.08	0.04	0.81	1.05
TOTAL LOW TENSION	**975.65**	**1308.14**	**1274.12**	**1333.10**	**4890.88**
HIGH TENSION					
HT I:Industry-General	203.61	196.89	189.16	196.38	786.04
HT II:Industry-Others	11.69	11.44	10.35	8.17	41.64
HT- IV: Irrigation & Agriculture	2.15	2.74	6.71	6.40	18.00
HT V - Railway Traction	71.34	73.07	78.05	76.53	299.00
HT VI - Townships & Residential Colonies	16.90	16.93	25.17	25.90	84.89
Other Sales (Not included above)	0.00	0.00	0.00	0.00	0.00
Rural Co-operatives	85.27	90.39	102.44	107.19	385.30
Temporary	0.00	0.00	0.00	0.00	0.00
TOTAL HIGH TENSION	**390.95**	**391.46**	**411.88**	**420.58**	**1614.87**
SALES GRAND TOTAL	**1366.60**	**1699.59**	**1686.00**	**1753.68**	**6505.75**
Loss%	18.56%	18.56%	18.56%	18.56%	18.56%
Loss MU	311.45	387.33	384.24	399.66	1482.67
Discom PURCHASES (MU)	1678.05	2086.93	2070.23	2153.34	7988.55
Transmission Loss (%)	5%	5%	5%	5%	5%
Transco Purchases (MU)	1766.36	2196.77	2179.19	2266.67	8409.00
T & D Loss (MU)	399.76	497.17	493.20	512.99	1903.12
T & D Loss (%)	22.63%	22.63%	22.63%	22.63%	22.63%

Quarterly Sales and Power Purchase during FY 2005-06 (Units in MU)

DISCOM - SPDCL	QRT 1	QRT 2	QRT 3	QRT 4	TOTAL
LOW TENSION					
LT I : Domestic	616.13	589.83	609.61	552.78	2368.35
LT II : Non Domestic & Commercial	130.51	129.14	114.79	106.64	481.08
LT III : (a&b) Industrial	183.2422	178.2511	182.8026	192.8741	737.17
LT IV :Cottage Industries	5.44624	5.325644	5.353357	5.224759	21.35
LT V : Irrigation and Agriculture	640.7348	758.9715	739.3113	914.7101	3053.6
HT VI - Townships & Residential Colonies	73.02	74.97	74.41	73.61	296.01
LT VII:General Purpose	6.997313	7.799782	8.384306	8.698598	31.88
LT VIII:Temporary Supply	1.454388	0.625612	1.392754	0.607246	4.08
TOTAL LOW TENSION	**1657.535**	**1744.914**	**1736.054**	**1855.145**	**6993.52**
HIGH TENSION					
HT I:Industry-General	289.85	290.9	284.06	285.09	1149.9
HT II:Industry-Others	35.42	34.1	34.9	33.59	138.01
HT- IV: Irrigation & Agriculture	6.21	10.31899	8.797221	6.447794	31.774
HT V - Railway Traction	101.21	102.08	105.01	107.6	415.9
HT VI - Townships & Residential Colonies	16.24394	16.64606	15.56493	15.48507	63.94
Other Sales (Not included above)	0.00	0.00	0.00	0.00	0.00
Rural Co-operatives	35.15298	43.65767	34.2221	47.75724	160.79
Temporary	0.00	0.00	0.00	0.00	0.00
TOTAL HIGH TENSION	**484.0869**	**497.7027**	**482.5542**	**495.9701**	**1960.314**
LT+HT Total	**2141.622**	**2242.616**	**2218.609**	**2351.115**	**8953.834**
Loss%	17.02%	17.02%	17.02%	17.02%	17.02%
Loss MU	439.2673	459.9823	455.0581	482.2364	1836.544
Discom PURCHASES (MU)	2580.889	2702.599	2673.667	2833.351	10790.51
Transmission Loss (%)	5%	5%	5%	5%	5%
TRANSCO Purchases (MU)	2716.725	2844.841	2814.386	2982.475	11358.43
T & D Loss (MU)	575.1036	602.2243	595.7774	631.3602	2404.465
T & D Loss (%)	21.17%	21.17%	21.17%	21.17%	21.17%