

## ANDHRA PRADESH

## **ELECTRICITY REGULATORY COMMISSION**

## TARIFF ORDER

on
Retail Supply Business for the FY 2008-09

of

CENTRAL POWER DISTRIBUTION COMPANY OF A P LTD EASTERN POWER DISTRIBUTION COMPANY OF A P LTD NORTHERN POWER DISTRIBUTION COMPANY OF A P LTD and SOUTHERN POWER DISTRIBUTION COMPANY OF A P LTD

20<sup>th</sup> March 2008

Singareni Bhavan, Red Hills, Lakdi-ka-pool Hyderabad - 500 004

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# ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION Hyderabad

Present Sri R.Radha Kishen, Member Sri. Surinder Pal, Member

Dated: 20-3-2008

O.P No.12 of 2007

Central Power Distribution Company of Andhra Pradesh Limited

and

O.P No. 13 of 2007

Eastern Power Distribution Company of Andhra Pradesh Limited

and

O.P No.14 of 2007

Northern Power Distribution Company of Andhra Pradesh Limited

and

O.P No.15 of 2007

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 21.02.2008 at Vijayawada (O.P.No.15 of 2007), on 23.02.2008 at Vizayanagaram (O.P.No.13 of 2007), on 26.02.2008 at Adilabad (O.P.No.14 of 2007), and on 28.02.2008 at Anantapur (O.P.No.12 of 2007) and having stood over for consideration till this day, the Commission passed the following common

ORDER

#### CHAPTER - I INTRODUCTION

- 1. 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the Electricity (Supply) Act, 1948 (54 of 1948) and the Electricity Regulatory Commissions Act 1998 (14 of 1998) stand repealed as on the date of this order, the provisions of A.P. Electricity Reform Act 1998 (hereinafter called 'the Reform Act'), not inconsistent with the provisions of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.).
- 2. The four Distribution Companies (hereinafter referred to as the 'distribution licensees' or 'DISCOMs') namely, the Eastern Power Distribution Company of A.P Limited (hereinafter, 'APEPDCL' or 'EPDCL'), the Central Power Distribution Company of A.P Limited (APCPDCL / CPDCL), the Northern Power Distribution Company of A.P Limited (APNPDCL / NPDCL), and the Southern Power Distribution Company of A.P Limited (APSPDCL / SPDCL), are the holders of Distribution and Retail Supply Licences (Licences No.12/2000, 13/2000, 14/2000 and 15/2000, respectively) to carry out the distribution business and the retail supply business in their respective areas of Andhra Pradesh for a period of 30 years from 01-04-2001.
- 3. Each licensee was earlier 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.
- 4. From the year 2006-07 onwards, however, the Commission decided to go in for a multi-year tariff framework and accordingly notified, on 14.11.2005, the APERC (Terms and Conditions for Determination of Tariff for Wheeling and Retail Sale of Electricity) Regulation, 2005 (Regulation No.4 of 2005) (hereinafter referred to as the "W&RST Regulation"). Under this Regulation, each distribution licensee has to make the filings as hithertofore but in respect of the distribution business, for a control period, generally of 5 years, the first control period, however, being of 3-year duration (2006-07 to 2008-09). The filings for the retail supply business have, however to, be on annual basis for the first control period and thereafter for the entire Control Period for the subsequent control periods. Accordingly, the Commission issued its Order on Distribution Tariffs for the first control period (2006-07 to 2008-09) and the Retail Supply Tariffs for the year 2006-07 on 23<sup>rd</sup> of March 2006. For the remaining two years (2007-08 and 2008-09), the licensees were/are therefore, required to make their filings only on annual basis.
- 5. Thus, the commission has to determine, for FY 2008-09, the tariffs for retail supply of electricity (hereinafter, the "Retail Supply Tariff" or "RST") alone, based on the filings of the licensees and after considering the objections/suggestions received/heard from general public and other stakeholders thereon.
- 6. 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 Tariff Policy, which was notified by the Central Government on the 6<sup>th</sup> of January 2006. Certain follow-up

actions like, approach to 'distribution margin', rates of depreciation etc., for the guidance of State Commissions are yet to be taken by CERC and / or Forum of Regulators. Nevertheless, the Commission in determination of tariffs and in issuing this Order has paid due regard, to the extent possible, to the Tariff Policy also. The Commission will be taking further action required of it under the Tariff Policy in due course of time.

#### CHAPTER-II FILING OF ARR/TARIFF PROPOSALS

- 7. For the year 2008-09, each of the four Distribution Companies submitted its filings for its Aggregate Revenue Requirement (ARR) and application for Tariffs for the retail supply business on 30.11.2007. The Distribution Companies, however, filed their Cost of Service (CoS) models on 07.01.2008. These filings were further supplemented by addenda filed on different dates (up to 31.12.2007) in respect of additional sales on account of new lift irrigation schemes proposed by GoAP. These filings were taken on record.
- 8. Apart from the aforementioned written filings made by CMDs of respective DISCOMs, the Commission also introduced, on a pilot basis, from the year 2007-08, the concept of e-filing of ARRs/ERCs and also the objections thereupon by general public and other stakeholders. The DISCOMs made their e-filings on 30-11-2007 (with submission of filings on CoS on 07-01-2008). These filings as well as the objections received from public along with the scanned copies of written objections/suggestions received pursuant to the public notice referred to in paragraph 9, have been displayed in the e-filing window of the Commission's website (www.ercap.org → E-Filing).

#### Public Notice calling for objections/suggestions

9. The DISCOMS were directed to serve public notices through publication, on 20-12-2007. The DISCOMs were directed to publish the notices, in atleast two daily newspapers in English and two in Telugu having circulation in their respective areas informing the general public that they had filed their respective ARR and Tariff proposals for FY 2008-09 in respect of retail sale of electricity, 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) were available in the offices of the Chief General Manager, RAC, of the DISCOMs with headquarters at Hyderabad (APCPDCL - O.P.No.12 of 2007), Visakhapatnam (APEPDCL - O.P.No.13 of 2007), Warangal (APNPDCL - O.P.No.14 of 2007) and Tirupathi (APSPDCL - O.P.No.15 of 2007) and all Superintending Engineers in charge of Operation Circles, for inspection/perusal/purchase by interested persons and that objections/ suggestions could be filed on these proposals with the Secretary, APERC, by 25-01-2008 duly enclosing therewith the proof of service of the same to Chief General Manager (RAC) of the respective DISCOMs.

10. The Commission also directed the DISCOMs vide letter dated 04-02-2008 to send replies to all the public objections by 10-02-2008 (extended later on to 15-02-2008) and also supply a copy of the same to the objector concerned.

#### Objections/suggestions received

- 11. Following the public notice published in the newspapers dated 28-12-2007, 123 persons/ organizations sent their objections/suggestions to Secretary, APERC, on the ARR/Tariff proposals of DISCOMS. 15 of these persons/organizations had filed their objections/ suggestions in respect of all the four DISCOMs; the total number of objections/suggestions received thus 168. The date for receipt was last objections/suggestions was 25-01-2008. However, objections/suggestions received up to 05-02-2008 have also been taken up for consideration.
- 12. The schedule of public hearings as indicated herein was communicated to the four DISCOMs and the Government of Andhra Pradesh (GoAP) on 15-02-2008. A press release was also issued on 15-02-2008 so as to enable the public to know of the schedule and the place/venue of the public hearing

Table 1: Programme of public hearings on ARR/Tariff filings by Licensees

Date	Place of hearing	Time	Venue	Licensee (s) on whose filings the hearings were scheduled
21-02- 2008	Vijayawada	10.30 a.m. to 1.30 p.m. and 2.30 p.m. to 5.00 p.m.	Siddhartha Auditorium, Mogalrajapuram, Vijayawada	APSPDCL
23-02- 2008	Vizianagara m	10.30 a.m. to 1.30 p.m. and 2.30 p.m. to 5.00 p.m.	Zilla Parishad Meeting Hall, Vizianagaram	APEPDCL
26-02- 2008	Adilabad	10.30 a.m. to 1.30 p.m. and 2.30 p.m. to 5.00 p.m.	Conference Hall, District Collector's Office Compound, Adilabad	APNPDCL
28-02- 2008	Ananthapur	10.30 a.m. to 1.30 p.m. and 2.30 p.m. to 5.00 p.m.	Revenue Bhavan, District Collector's Office Campus, Ananthapur	APCPDCL

- 13. All persons who had expressed their desire to be heard in person were also intimated in writing of the dates on which they would be heard. General public were again informed of the dates of public hearings through a press release on 15-02-2008. At the hearings, persons / organizations who had not earlier requested for being heard in person were also accommodated.
- 14. The Licensee-wise break-up of objections / suggestions received and, the numbers of objectors desiring to be heard in person are indicated hereunder:

Table 2: Number of objections / suggestions received on ARR / Tariff filings

Name of the Licensee	Number of objections received		actually heard at the public hearings		Total number of objectors heard
(1)	(2)	(3)	(4) *	(5) **	(6)
APCPDCL	22	19	9	2	11
APEPDCL	29	26	10	2	12
APNPDCL	19	16	1	5	6
APSPDCL	98	87	15	6	21
Total	168	148	35	15	50

<sup>\* -</sup> Out of Column (3); \*\* - As per requests at the venue of hearing The list of objectors is available at Annexure J.

#### Hearings

- 15. During the hearings,
  - the licensees made brief opening presentations at the commencement of the public hearings on their respective filings;
  - ii. then, the Commission heard all the objectors desiring to be heard in person;
  - iii. next, the Staff of the Commission made presentations on the issues and concerns relating to the filings of respective licensees; and
  - iv. the respective licensees responded to the issues raised by the objectors during the hearing, and to the presentations made by the Commission Staff.
- 16. On behalf of the Special Chief Secretary to Government, Energy Department, Government of Andhra Pradesh, a statement was made on 21-02-2008, during the hearing on the filings of APSPDCL at Vijayawada,

expressing the views of Government on various aspects like accomplishments of AP Power Sector, Government's commitment to provide quality and un-interrupted power supply to consumers particularly in Rural areas, seven-hour supply to Agriculture, electrification of Rural households, Industrial development, reiteration of commitment to provide necessary financial assistance as needed by the Sector and the subsidy to the utilities as per Section 65 of the Electricity Act, 2003.

#### **CHAPTER - III**

# IMPORTANT ISSUES RAISED IN OBJECTIONS/ SUGGESTIONS FILED AND DURING PUBLIC HEARINGS AND REPLIES THERETO BY DISCOMS

#### ISSUES RELATING TO ALL DISCOMS

Issue: Deficiencies in ARR filings

17. The information provided by the Licensees in the filings is not comprehensive and user friendly in respect of performance of licensees. Every year, the information made available to the consumers by the service providers is being truncated. In the present ARRs, almost all the power purchase costs are already decided. In the case of distribution cost, they have already been decided by the Commission as part of multi year tariffs (MYT). Therefore, the only thing left to review is the performance of the licensees. But the Guidelines related to performance are not included in the ARR filings.

DISCOMs: The ARR & Tariff filings for Retail Supply Business for FY 2008-09 are as per the Guidelines of the Hon'ble Commission. All necessary information related to performance is being submitted to the Commission and are being posted in the websites.

- 18. The information that ought to be available in the filings is:
  - i. Compensation paid by licensees to the consumers for deficiency in service as per the Regulations of the Commission.
  - ii. Details of electrical accidents and ex-gratia paid, if any, during previous year and current year.
  - iii. Replacement of burnt transformers, installation of additional transformers.

- iv. Number of burnt-out, non-functioning or faulty meters (Category-wise and Circle-wise).
- v. Performance with regard to attending to fuse-off calls.
- vi. Breakdowns and interruptions in power supply to urban and rural consumers (Circle-wise) and time taken for restoration.
- vii. Frequency and voltage at various levels of interface over the period.
- viii. Pending applications and connections released to different categories of consumers.
  - ix. Arrears of consumers over Rs.50,000 pending for over six months and details of bad debts written off.
  - x. Court cases involving the Licensee and steps being taken to resolve them.
  - xi. Number of cases filed inrespect of pilferers of power in various categories giving comparative picture with previous years.
- xii. Compliance with directives issued by the Commission in the Tariff Orders.
- xiii. Investment details, including capital expenditure on system improvement, HVDS and RGGVY.

DISCOMs: The information sought for has been furnished to the objector concerned along with Annexures containing the details of the number of cases in which compensation was paid, the number of accidents in past 3 years, number of court cases pending, number of cases filed against pilferage, number of new connections released, etc.

#### Issue: Review at the end of the control period

19. As per Commission's Regulation No. 4 of 2005, a review has to be taken up at the end of the control period of MYT. As the FY 2008-09 is the last

year of the present control period, the present ARR filings should have been used to asses the experience with MYT framework. But there is no sign of such effort.

**DISCOMs:** It is under the purview of APERC.

Issue: Agreements in Telugu

20. It is three years since the Hon'ble Commission directed that the Agreements with consumers for fresh connections should be in Telugu. But the directive is not yet complied with.

DISCOMs: It will be complied with (CPDCL and NPDCL); it has been complied with (EPDCL); the agreement copies for fresh connections are available both in English and Telugu (SPDCL)

Issue: Pass Books

21. All consumers were to be provided with passbooks, which too is not complied with till date.

DISCOMs:In the prevailing circumstances, passbooks are not required and the Hon'ble Commission is being addressed in this regard (CPDCL); with atomization of payments, the need for passbook entries is minimal (EPDCL); consumers are being provided with passbooks, if so desired by them (SPDCL); pass books are being issued to Agriculture consumers on request from them. Others are covered by spot-billing (NPDCL).

Issue: Census of un-authorized agriculture connections

22. The Hon'ble Commission directed the Licensees to conduct census of the un-authorized agriculture connections and submit the same by 31-05-2007. All such un-authorized connections were to be removed within a period of six months i.e. by 30-11-2007. But the same is ignored in the present filings.

DISCOMs: It is in progress (CPDCL); tariff order for FY 2007-08 is implemented in toto except in respect of issuing of passbooks (EPDCL); in view of the problems being faced at the field level, Hon'ble Commission has been requested to extend the time limit (NPDCL); the census of un-authorized services was carried out in May 2007 and the unauthorized services are being booked and regularized continuously (SPDCL).

#### Issue: Determination and payment of compensation

23. The Hon'ble Commission had directed that the licensees will work out and display on their websites a transparent procedure for determination and payment of compensation in respect of electrical accidents involving humans and animals.

DISCOMs: Compensation paid to victims has been enhanced recently, up to Rs.1 lakh, for fatal accidents. The policy is being displayed on the website (CPDCL); will be displayed on the website shortly (EPDCL); compensation payable is Rs.1 lakh in respect of humans and Rs.3,000 for animals (NPDCL); compensation payable in case of accidents has been enhanced to Rs.1 lakh in respect of adult humans, Rs.50,000 for children and Rs.3,000 for animals (SPDCL).

#### Issue: Possibility of 24-hour supply to rural areas

24. The Hon'ble Commission had directed that a status report should be filed in the ARR, on the possibility of 24-hour supply to rural areas

DISCOMs: Depending upon the availability, 24-hour power supply for lighting loads is being arranged in villages (CPDCL); separation of domestic feeders from agricultural feeders to extend 24-hour supply is in progress (EPDCL); 17-hour to 24-hour supply was extended during June, August, October and December, 2007 (NPDCL); 24-hour supply is being extended during days of surplus power (SPDCL).

#### Issue: Lighting load of poultry forms

25. Regarding the claim of the Poultry Farmers' Association of the lighting loads in the poultry farms, DISCOMs had been asked to submit their specific proposals on relaxations, if any, to be granted, while submitting ARR/Tariff filings proposals for 2008-09.

DISCOMs: As of now, there are no separate meters for lighting loads in poultry farms. Poultry farms with more than 1000 birds are under Industrial category only (CPDCL & NPDCL); the DISCOM has not proposed any relaxation as assessing the extent of lighting load is not possible (SPDCL); it is under the purview of Commission (EPDCL).

#### Issue: Energy audit for power intensive industries.

26. Hon'ble Commission had directed that as the National Electricity Policy (paragraph 224 of Tariff Order for FY 2007 - 08) envisages the compulsory energy audit for power-intensive industries, the DISCOMs shall submit proposals for offering suitable incentives to the industrial consumers who comply with the provisions of the Energy Conservation Act, 2005.

DISCOMs: Report has been submitted to the Commission suggesting necessary incentives (CPDCL); several measures for energy audit accounting & reducing line losses are taken (EPDCL); will be complied with (NPDCL); no incentive schemes are offered at present (SPDCL).

#### Issue: Revenue deficit for current year

27. The four DISCOMs put together have shown a net regulatory gap of Rs.3976.49 Cr. after proposing a sum of Rs.1,159.85 Cr for true-up. Such un-realistic and excessive projection of estimates by DISCOMs for reducing the revenue gap will only result in carry forward of such deficits to the future years. The DISCOMs and the Commission ought to be realistic in their estimates.

DISCOMs: It is in the purview of APERC (CPDCL); the proposal is based on the estimated assumption following the most standard technical methodology and the revenue gap shown is realistic (EPDCL); it is based on the historical growth rates recorded and also based on the previous year and the current year first-half actuals (NPDCL); the submissions are made as per the methodology prescribed by the Hon'ble Commission (SPDCL).

#### Issue: Fuel Surcharge Adjustment (FSA)

28. The DISCOMs have requested the Commission to adjust the savings in the power purchase for FY 2006-07 to reduce the projected revenue gap for FY 2007-08. Under the present arrangement for FSA, the amount of savings should accrue to non-agricultural consumers for every quarter.

DISCOMs: The Commission adjusted fixed costs pertaining to FY 2006-07 only due to shifting of COD (dates of commissioning) of new gas plants and RTPP-II (CPDCL); the DISCOM is guided by the Hon'ble Commission (EPDCL); DISCOM has submitted FSA sales up to 3<sup>rd</sup> quarter of FY 2007-08 to the Commission (NPDCL); the DISCOM has submitted all necessary data for FY 2006-07 to the Commission (SPDCL).

#### Issue: Power purchase from gas-based projects

29. What are the reasons for high cost of power from gas-based plants in previous year and the expected decrease in ensuing year?

DISCOMs: Power purchases from M/s Lanco Kondapalli are as per the PPA. The power purchase costs vary according to the variations in the fuel price and transportation charges of fuel. The reduction is also due to fall in dollar value (CPDCL, SPDCL); the matter is in the purview of APERC (EPDCL); the power purchases are as per the power purchase agreements (NPDCL).

Issue: NCE projects

30. Hon'ble Commission directed the DISCOMs to purchase power from NCE projects atleast up to 5%, including 0.5% from windmills. APERC allowed DISCOMs to negotiate with new NCE projects while entering into PPAs. Are the DISCOMs in a position to achieve the target of procuring power from NCE projects as fixed by APERC?

DISCOMs: This DISCOM is achieving its target (CPDCL); the DISCOM is following the directions of APERC (EPDCL); the percentage of purchase from NCE projects for current year is 3.17% and for next year 4.17% (NPDCL); DISCOM is purchasing more power than the obligated 5% from NCE projects and is further negotiating for more power as per the directions of the Hon'ble Commission (SPDCL).

Issue: APGENCO issues

#### (a) Payment of APGENCO bills:

31. In view of wide variations between the claims of DISCOMs and APGENCO, the latter submitted details of fixed costs, station-wise. Have the DISCOMs paid all the power bills to APGENCO?

DISCOMs: Determination of fixed tariff charges is under the purview of APERC (CPDCL & NPDCL); APGENCO has filed a petition before APERC for determination of tariff. Fixation of fixed charges is under the purview of APERC (EPDCL); fixed charges for 2008-09 projected in the ARR are based on the fixed charges to be paid during the ensuing financial year considering the fixed costs of RTPP-II and VTPS stage-II (SPDCL).

(b) Rising tariffs of APGENCO stations

32. An explanation is required as to why APGENCO; tariffs have been rising

sharply in the past few years.

DISCOMs: APGENCO stations are located at load centers and most of the

units are non-pithead stations located very far away from the coalfields.

APERC fixes the tariff considering all the factors (CPDCL); it is under the

purview of APERC (EPDCL); fixed costs are fixed by APERC and the

variable costs are being paid provisionally as per the Commission's order

dated: 16-10-07 in IA No: 11/07 in OP No: 4/07 (SPDCL & NPDCL).

(c) Public hearing on APGENCO

33. Commission has not yet notified the regulations on Generation Tariff.

Hon'ble Commission is requested to hold the public hearings on the PPA

with APGFNCO.

**DISCOMs**: This is under the purview of the Commission

Issues concerning Agricultural Supply:

Issue: DSM measures

34. It is very difficult for all the motors to be replaced by ISI motors. As the

farmers have no financial capacity to bear the cost of such

replacements, the Government should bear 100% instead of the 80% cost

as proposed earlier. Replacement of iron pipes with HDPE pipes may not

be insisted upon as the saving in energy is only marginal (1.6%) and may

not justify the capital investment required for such replacement.

However, DSM measures may be insisted for new agricultural

connections.

DISCOMs: It is under the purview of APERC (CPDCL); DSM measures are

beneficial to public (EPDCL); DSM measures are implemented as per the

Tariff Order (NPDCL); consumers are being made aware of DSM measures

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and the consequent reduction in tariff gets passed on to the consumers (SPDCL).

35. Whether locally-repaired ISI motors (after installation) would be considered as ISI motors?

**DISCOMs**: The ISI motors burnt and rewound will be considered as ISI motors.

#### Issue: Release of new agricultural connections

36. Have the DISCOMs really given new connections during the current financial year as projected in the demand projections?

DISCOMs: 11,958 agricultural connections are released during this financial year and this consumption is taken for projections (CPDCL); agricultural consumption estimates are arrived at based on the methodology communicated by APERC (EPDCL); all the 12,278 new agricultural services were released during the current year upto January, 2008 (NPDCL); the agricultural services expected to be released in the current year and the ensuing year have been taken into consideration while estimating consumption (SPDCL).

#### Issue: Regularization of un-authorized agricultural connections

37. What is the progress of regularization of un-authorized agricultural services and also in regard to the removal of unauthorized service connections?

DISCOMs: The unauthorized connections are being regularized as per the quota decided by Government. The process of removing the unauthorized service connections is on.

Issue: Agricultural supply hours

38. Agriculture consumers should be given 7 to 12 hour supply continuously during day time. The timings should be fixed after consulting the farmers for extending cooperation to DISCOMs.

DISCOMs: Power supply is being given for 7-hours per day considering orders of Government, in two shifts during the day and the night, depending on variations in generation and consumption.

Issue: Cottage Industries

- (a) Smithy and Carpentry units (below 10 HP load)
- 39. Smithy and carpentry may be recognised as agro-based domestic industry with tariff at 90 p/unit for connected load up to 10 HP, as in the case of pisci and prawn culture units of below 10 HP under LT Category III (A).
  - (b) Engineering and Iron Works Small units:
- 40. Small Engineering and Iron Works up to 10 HP may be classified under LT Category IV, Cottage Industry.

DISCOMs: Historically, industries with contracted load of up to 5 HP are categorized as cottage industries and billed under Category-IV. The DISCOM opposes any move to increase the said limit. However, the GoAP may be approached for any such relaxation so that it reimburses the revenue lost by DISCOMs as it does in the case of agricultural category (CPDCL).

Issue : Implementation problems relating to Cottage Industries Category

- (a)Instructions to field officers:
- 41. Though the Commission has classified Smithy, Carpentry, Silpi and Goldsmithy under LT Category IV, the field staff are not aware of this change in classification and consequently these consumers are facing

hardship. The DISCOMs may be directed to issue necessary instructions to field staff for considering these units under Category-IV.

DISCOMs: The certification of these units as Cottage Industries cannot be done by the field staff of the DISCOM. It shall be done by the Industries department only. (CPDCL).

#### (b) Welding units in Smithy:

42. Modern welding units are not being treated as equivalent to furnace of the Smithy and therefore not classified as LT Category - IV.

DISCOMs: We do not agree with the proposed change (CPDCL).

Issue: Engineering and Iron Works - Conversion to 3-phase

43. Most of the small Engineering and Iron works are availing single-phase supply LT Category - II. Such services may be converted to LT Category - III with 3-phase supply, without development charges.

**DISCOMs**: The GTCS (General Terms and Conditions of Supply) is being followed in this regard (CPDCL).

#### Issue :Pending court cases

44. There are many cases pending in different courts. APERC may censure the DISCOMs for the inefficient and pro-IPPs stance in the long pending court cases.

DISCOMs: The court cases are being pursued constantly and because of these efforts only, these cases came to final arguments (CPDCL); continuous monitoring of pending court cases was taken up under guidance of APPCC for speedy disposal (EPDCL); cases in the Hon'ble Supreme Court are being pursued constantly (NPDCL); licensee is making all efforts to defend the cases (SPDCL).

Issue: Filling up of vacant posts

45. How many sanctioned posts are continuing to be vacant in DISCOMs?

**DISCOMs**: The vacant posts are being filled up (CPDCL, NPDCL and SPDCL); all the vacant posts are filled up (EPDCL)

Issue :Collection of minimum charges of Rs.25 for domestic load below 260W.

46. The monthly minimum charges being collected from domestic consumers with load below 260 W may be reduced from Rs.50 to Rs.25.

**DISCOMs:** It is in the purview of APERC.

Issue: Methodology for calculation of Cost of Service (CoS)

47. The methodology for working out CoS of each category of consumers is changing.

**DISCOMs**: It is under purview of APERC

Issue: Income from other sources

48. As per Commission's Regulation No. 4 of 2005, DISCOM has also to file proposals on income from other sources

**DISCOMs**: DISCOM is exploring the possibilities of income from other sources (CPDCL)

Issue : Railway Traction tariff

- 49. **(a)** The Railway Traction Tariff ought to be reduced on the following grounds
  - i. Tariff of 410 paise / unit is unreasonable when compared to the average power purchase cost of Rs.2.11/unit.

- ii. Cost-to-Serve of Railway Traction is ranging from Rs 2.59 unit (CPDCL) to Rs 3.13 unit (NPDCL), whereas the traction tariff is Rs 4.10p/unit.
- iii. Incentive for improvement in Power Factor to 90% and above may be considered.
- iv. Incentives for early payment of bills may be considered.

DISCOMs: (i) No increase in tariff is in real terms a reduction in Tariff. the licensees have to balance their own finances while rationalizing tariffs. Hence, further reduction in tariff is not acceptable. (ii) Cost to serve is based on the approved embedded cost (CPDCL, NPDCL); the matter is under purview of APERC (EPDCL). (iii) & (iv) (No comments from any of the DISCOMs).

(b) The estimated transmission losses for FY 2008-09 are 3.94% (reduced from 4.03% for FY 2007-08). This benefit is not passed on to Railways.

DISCOMs: The reduction in transmission loss for FY 2008-09 is only an estimate and the saving is likely to reduce the financial gap of the DISCOMs and their dependence on GoAP.

(c) Railways Tariff is fixed at a higher price than that for Ferro Alloys though Railway Traction is also a power intensive unit as is a Ferro Alloys unit.

**DISCOMs:** The Railway traction supply cannot be compared with Ferro Alloys industry.

#### Issue: Ferro Alloys units

50. Tariff for Ferro Alloys Units be reduced to Rs.2.12 unit as CoS for 132 KV consumers has come down to Rs.1.81 unit. (ii) Ferro alloys units may be

permitted to pay the cross- subsidy component as determined by APERC, only when these units fail to consume energy equivalent to 85% Load factor.

**DISCOMs:** It is under the purview of APERC (CPDCL & EPDCL).

Issue: DISCOMs' investment in 1600-MW Krishnapatnam Project

51. The DISCOMs are opting for shares in APGENCO's 1600 MW Krishnapatnam Power Project only to hand over the shares to IPPs at a future date.

**DISCOMs:** DISCOMs are investing in APGENCO considering the requirements of power in future (CPDCL).

Issue: Theft control

52. (a) What are specific measures taken to control theft of energy, and are there any HT consumers indulging in major theft? (b) DISCOM is collecting less than Rs.5 Cr from offenders of the theft of energy. DISCOM may be directed to set a target of Rs.100 Cr per year

CPDCL: 58,981 cases were booked during 2006-07 and another 51,620 cases in 2007-08 (upto December, 2007). Intensive inspections are being carried out periodically to detect and control theft of Electricity. The DPE wing of the DISCOM is periodically conducting inspections of industrial and high value services.

NPDCL: 26,332 and 20,380 cases respectively were booked during 2006-07 and 2007-08 (up to December 2007). The cases of malpractice and theft of energy have been detected across all the categories.

**SPDCL**: DISCOM is making all efforts to curb the theft of energy.

Issue: GTCS issues

Clause 10.4 of GTCS deals with recovery of revenue loss. It is stated, Revenue loss Electricity charges payable at 3 times of normal tariff. Loss of revenue to the licensee can not be 3 times the normal tariff. It is suggested to use different terminology.

CPDCL: DISCOM to address APERC to amend CI:10.4 of GTCS relating to 'Revenue Loss' such as 'Special rates will be charged at 3 times of normal tariff for the first conviction and for the subsequent convictions, at 6 times the normal tariff for each conviction.

**NPDCL**: It is as per APERC regulations only.

#### ISSUES RELATING TO APCPDCL

Issue: Agricultural consumption

54. (a) It is stated that the agricultural consumption is 7207.97 MU against the approved APERC target of 5938 MU, depicting an increase of 1269.97 MU for which there is no justification. Good monsoon and good potential ground water will not increase the consumption. An increase of 1270 MU can be construed as adding system losses to agricultural consumption to exhibit less system losses. The projected quantum of agriculture consumption of 7230.61 MU in 2008-09 is said to be on the basis of the DTR (LV) meter readings of September, 2006 to August, 2007 and pump set capacity as per 2001 census. However, in the Tariff Order for FY 2007-08, APERC stated that agricultural consumption for FY 2007-08 will be decided after the receipt of the report from ISI, of which there is no mention in the filings.

CPDCL: The DISCOM is following the methodology approved by APERC to assess the agriculture consumption. The DISCOM has identified a total of 6,277 DTRs exclusively feeding agricultural loads for metering in 235 out of 322 mandals. The six rural districts of DISCOM are largely dependent

on ground water for irrigation needs. In spite of regular appeals, farmers are continuously going in for paddy crop in mid-summer too. Out of 6,277 DTRs, continuous readings have been recorded for 2304 DTRs. The report of Indian Statistical Institute (ISI), Kolkata, is being pursued.

(b) All around Hyderabad, due to the GoAP-proposed Ring Road and other developmental activities, speculative land deals have led to stoppage of agricultural operations in large areas of Rangareddy, Mahabubnagar, Nalgonda and Medak districts resulting in decrease in consumption of power in agricultural sector. This aspect needs to be taken into account.

CPDCL: The suggestion is noted.

(c) The agricultural consumption is based on 7 - hour supply per day. Not a single village within the jurisdiction of CPDCL received 7 - hour supply per day.

CPDCL: DISCOM is strictly maintaining 7-hour 3-phase power supply to the agricultural sector. Whenever there is a shortfall in assured hours of supply due to breakdowns, etc., the same is being compensated.

Issue: HVDS

55. Details of HVDS projects are not mentioned. It is not stated as to what are the resultant savings in distribution losses and what is the cost - benefit analysis.

CPDCL: In 1<sup>st</sup> phase, 464 feeders in Ananthapur, Mahabubnagar and Nalgonda districts are identified for implementation of HVDS. Out of these, works on 72 feeders have been taken up and completed in the case of 6 feeders. The reduction in distribution losses and the cost -

benefit ratio are not evaluated so far and will be evaluated after completion of all the works.

Issue: Tatkal connections and Clubbing of bills

a)Tatkal connections should also be included in the scheme of free electricity supply to agriculture category. b)There should not be any disconnection of domestic supply if a consumer fails to pay agriculture supply bills.

CPDCL: (a) It is under the purview of GoAP. (b) Integrated bills are being issued for the convenience of the consumers. Disconnections are done as per GTCS (General Terms and Conditions of Supply) issued by the Commission.

Issue: Metering of agricultural services

57. As per Section 55 of Electricity Act, 2003, all services are required to be metered. The Commission has granted time for fixing meters to agricultural services up to March, 2008, which is fast approaching.

CPDCL: Matter is being taken up with the Commission.

Issue : Group Wells

i) In respect of group wells, pro-active steps beyond energy management are needed to manage the growing energy demand in agriculture. ii) DISCOM should take stock of service connections with group sharing mechanisms and exhibit them as a separate category in future ARR reports. iii) Existing un-authorized connections may be regularized without charging any fee if farmers form a group and seek regularization as a sharing group.

**CPDCL**: Suggestions are noted.

Issue: Reduction in tariff for rural industrial services

59. Fixed charges for Cat-III A services in rural areas should be reduced to

Rs.12 from the present Rs.35 as these services are receiving supply for

only 7 hours unlike the services in the cities.

CPDCL: It is under the purview of APERC.

Issue: LT Category - II

60. The LT Category-II is singled out for discriminatory treatment to make

up for the losses incurred by utilities through subsidy. Only the LT

Category-I (Domestic) tariff should be charged to trading establishments

consuming up to 250 units/month.

CPDCL: It is under the purview of APERC

Issue: Reconnection charges

61. The re-connection charges of Rs.50 is very high for consumers who pay

minimum charges. It may be reduced to Rs10.

CPDCL: Reconnection charges are being collected as per the directives

of APERC.

Issue: Uniformity in bills collection charges

62. There should be uniform commission charges in respect of collection of

bills by e-seva centers and private collection agents.

CPDCL: It is under the purview of APERC

#### Issue: Tariff for Shopping Malls

63. In order to bring down demand, higher tariff of say Rs.8 per unit needs to be fixed for shopping malls and hoardings on the lines of Tariff Order of Maharashtra ERC.

**CPDCL**: It is under the purview of APERC.

#### Issue: Metered sales

64. It is mentioned that the metered sales for FY 2006-07 were 287 MU less than the Tariff Order level.

CPDCL: The metered sales for 2006-07 were less due to (i) less energy drawl by M/s. My Home Cement Industries Limited as it availed power supply from its 15 MW captive power plant; (ii) contracted capacity and sales in respect of two major Ferro Alloys units is falling from 91.11 MU in 2004-05 to 42.47 MU in 2005-06 and 41.39 MU in 2006-07; (iii) consumption for streetlight services during the last 3 years showing a downward trend; and (iv) load curtailment of about 581 MU during FY 2006-07 inclusive of load curtailment of 511 MU during December-March 2007 (non-Monsoon period) alone.

#### Issue: Decentralized distribution

65. As per Electricity Act, 2003, and the National Electricity Policy, distribution sector has to be decentralized through franchisees and users associations, panchayats, etc.,

CPDCL: Outsourcing of issue of bills, collection of revenue and some maintenance works was taken up on experimental basis in a few villages around Cherlapatelguda village in Ibrahimpatnam Mandal of Rangareddy district with the help of Administrative Staff College of India.

Issue: UI charges

66. The UI charge of Rs.10 per unit is very high and such inter-changes of power are not regulated by the electricity regulators.

CPDCL: It is under the purview of APERC.

Issue: Delayed Payment Surcharge

67. The high interest rate on the installments and delayed payment surcharge must be brought down. At present, these put together amount to more than 49% per annum, which is highly abnormal. Even for theft

cases, the Electricity Act, 2003, has stipulated only16% per annum.

CPDCL: It is under the purview of APERC.

Issue: Pole-mounted metering

68. To curb pilferage, CPDCL introduced pole-mounted metering in certain

areas. A report was to be filed with Commission by 30.06.2007.

CPDCL: Report is submitted to APERC

ISSUES RELATING TO APEPDCL

ISSUES CONCERNING AGRICULTURAL SUPPLY:

Issue: Agriculture consumption estimates

69. (a) From the ARR filings for 2008-09, it is very clear that there is a sharp

difference in power consumption between three Circles of Srikakulam,

Vizianagaram and Vishakhapatnam on the one hand and Rajahmundry

and Eluru Circles on the other.

EPDCL: The different patterns of agricultural loads are studied by the

DISCOM. The loads and the agricultural consumers at Eluru and

Rajahmundry circles are based on the field conditions.

(b) The figures in Form-7 of ARR filings of the Annexures provide a sharp contrast

EPDCL: The total consumption of agricultural services mentioned is correct and the data is prepared based on the methodology given by the Hon'ble Commission.

(c) The Commission announced that it had appointed the Indian Statistical Institute, Kolkata, to verify the estimates of the Agricultural consumptions arrived by the Licensees.

EPDCL: ISI had already studied and there is no huge variation in respect of the consumptions estimated by EPDCL.

(d) Un-authorized connections are to be removed

EPDCL: Intensive inspections are conducted and all the measures are taken to remove un-authorized connections

(e) Regularisation of un-authorized connections

EPDCL: Regularisations will be done in cases of disclosure by consumers as per the laid-down procedures.

(f) Quality power supply with few interruptions should be given to all agricultural consumers. Extending supply during night time is causing inconvenience to the farmers.

EPDCL: Supply to Agricultural sector is monitored and provided based on the availability of power in the Grid. Supply in a single stretch causes lot of pressure on the system and cannot be effected. However, supply timings are rotated among groups of feeders at 11 KV level so that nobody gets an undue advantage. Issue: HVDS System

70. DISCOM should speed up the implementation of the HVDS programme.

EPDCL: Regular meetings are being conducted with contractors and officers to speed up the HVDS programme.

Issue: DSM measures

71. (a)It has been repeatedly mentioned that inefficient motors, metal pipes for suction and delivery, metal foot- valves and absence of capacitors are all leading to excessive consumption.

EPDCL: Wide publicity was given for implementation of DSM measures and educating the consumers at field.

(b) DSM measures are not exclusively for farmers but for all the consumers and the problem cannot be tackled in a piecemeal manner.

EPDCL: Energy conservation measures have been taken by EPDCL. Distribution of CFL lamps at Visakhapatnam Circle in coordination with M/s OSRAM is under process and will be extended based upon the performance.

#### **TARIFF - RELATED ISSUES:**

Issue: Tariff condition for HT Industrial consumers

- 72. M/s. Hindustan Zinc Ltd., Visakhapatnam, has made the following comments / suggestions:
  - a) The incentive for HT Industrial consumers may be fixed @30% instead of 25 % for the LF above 70 %.
  - Incentive for off-peak power may also be introduced to encourage industrial consumers.

- c) Incentive may be allowed for higher power factor than the specified power factor to encourage HT consumers with higher PF.
- d) The demand charge may be reduced as these charges have never been reduced.
- e) The cross subsidy surcharge may be fixed in such a way that the obligation and intention behind the Electricity Act 2003 are fulfilled.
- f) The relief accruing due to hydel generation may be extended to HT consumers.

EPDCL: (a) to (e): Tariff fixation is under the purview of Hon'ble Commission (f) FSA levies are made considering hydel generation also.

# Issue: Tariff for temples

73. Maintenance of temples has become a difficult task. Hence, it is requested to change the category for lighting at temples in rural areas from LT-VII to LT-V (A), without any charges.

EPDCL: Not acceptable to EPDCL. This is however under purview of APERC

#### Issue: Tariff for educational institutions

74. (a) Educational institutions are charged a tariff of Rs 4 per unit under General category. Kindly exempt institutes like schools for deaf & dumb, being charitable institutions. (b) Entire dues for each financial year may be collected by way of single payment mode.

EPDCL: (a) Tariff fixation is under purview of APERC. (b) Not possible to collect bills once in a year. However, advance payments can be accepted.

#### ISSUES CONCERNED WITH CONSUMER SERVICES:

Issue: Interaction with public welfare associations

75. DISCOM should have system of interaction with public welfare associations.

EPDCL: Substation meetings, Pragathi Padham and other public oriented meetings are arranged by EPDCL at section office level covering all villages, and the representatives of public welfare associations can meet the DISCOM's officers at any time. To redress grievances the Consumer Grievances Redressal Forum is also available at Consumers' disposal.

#### Issue: Increase in consumption by Domestic Consumers

76. Domestic consumption has shown a sharp increase of 14.81% during 2007-08 and is estimated to grow at 8.85% in 2008-09. No explanation is furnished.

EPDCL: The sharp rise in domestic consumption during current year vis-àvis the previous year is due to load relief of 120.46 MU during the previous year and the plan for release of new connections under RGGVY.

#### Issue: Name transfer problems

77. Even though indemnity bonds are submitted, DISCOM authorities are not effecting the transfer of connections in the names of the valid legal heirs.

EPDCL: Problems arising out of name transfer requests will be examined and any bottlenecks in solving such issues will be sorted out accordingly.

#### Issue: Transmission loss levels

78. Corrections in transmission loss levels are objectionable

EPDCL: Transmission losses are given as per the latest field conditions and are reduced by taking effective technical and commercial measures.

Issue: Pending cases of IPPs

79. Status of pending cases of IPPs (Independent Power Producers)

EPDCL: 25 cases relating to IPPs are pending.

Issue: Additional power purchase

80. Additional power purchase at higher prices is attributed to the increased

Agricultural consumption

EPDCL: Agricultural consumption is assessed as per the technical

methodology.

Issue: Power purchase from BSES

81. While power supply rates in the case of all other IPPs are expected to

show a decrease in the ensuing year, the rate of M/s BSES is tending to

rise from Rs.2.50 per unit to Rs 2.62 per unit.

EPDCL: Due to shortage of gas, net availability of plant comes down for

M/s BSES. As fixed cost remains the same, a decrease in the net

availability leads to increase in average cost.

**ISSUES CONCERNING IPPS:** 

Issue: LVS Project

82. (a) For the last 7 years or so, LVS (a naphtha-based IPP project lying

closed and the matter being before the Hon'ble Supreme Court) has

received more than Rs.200Cr towards fixed costs under an interim

direction of the Hon'ble Supreme Court, i.e. more than the cost of the

project itself (about Rs 110 Cr), without generating/selling a single unit

of power.(b) The DISCOMs may think of ways to make a deal with LVS

once for all, as the project has been reimbursed a total amount in

excess of the investment therein.

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EPDCL: (a) The matter is subjudice at the Hon'ble Supreme Court level. DISCOM has accordingly no comments to offer and has to follow the directions of Hon'ble Supreme Court. (b) EPDCL is following the directions of the Hon'ble Commission.

#### Issue: Usage of solar power

83. Usage of solar power needs to be encouraged as per the National Electricity Policy.

EPDCL: Electrification of un-electrified villages and hamlets where grid connectivity is not feasible has been taken up with solar panels by the DISCOM for about 600 households in remote tribal villages and a scheme in this regard has also been submitted to the Hon'ble Commission for approval.

#### ISSUES RELATING TO APNPDCL

#### Issue: Agricultural consumption

84. (a) NPDCL has done away with the procedure of assessing the agricultural consumption under sampled metered DTRs for a year as directed by the Commission.

NPDCL: The DISCOM is submitting the estimates as per the Commission's directions. 2923 MU of energy was consumed during FY 2005-06 in NPDCL jurisdiction. The Commission had permitted the same consumption level for 2006-07 and 2007-08.

(b) NPDCL estimated new connections for the year at 41,000. However, the number of service connections so far given is only 4,018 i.e. hardly 9.8% thereof.

NPDCL: Release of agricultural service connections is based on GoAP policy only. Targeted release of new agricultural services for the year will be completed by end of the year.

(c) What prevents the authorities from insisting on regularization of unauthorized services despite Commission's repeated orders?

NPDCL: 10,393 numbers of un-authorized services have been regularised against 30,880 identified in the DISCOM.

(d) Every year the consumption figures given by NPDCL are dreamt-up figures with no mention of number of services, circle-wise load, etc. Tatkal services figures and HVDS- metered figures are also not made available.

NPDCL: ARR and proposed tariff filings for FY 2008-09 are made as per the guidelines of Commission.

(e) It is reported that Rs.430.70 Cr is the share of NPDCL in the total purchase of power from the open market for the ensuing year. What is the extent of excess power estimated as to be consumed in the agricultural sector?

NPDCL: The additional sales of 534 MU in agricultural category, including HT LI schemes, are expected.

(f) Because of non-supply of quality supply for 7 hours continuously, motors are getting burnt

NPDCL: Licensee is putting all efforts to provide quality supply of power for 7 hours to agricultural sector to prevent damage to the motors.

Issue: HVDS

85. DISCOM may be directed to complete the HVDS programme.

NPDCL: Up to 31.03.2007, the HVDS was implemented in respect of 1,27,737 of agricultural pump sets at a cost of Rs.261.633 Cr. During

2006-07 and 2007-08, sanctions were accorded for implementation of HVDS in two districts - Karimnagar and Nizamabad. In 2006-07 under HVDS scheme 49,960 agriculture pumpsets were covered at a cost of Rs.89.65 Cr. In 2007-08, HVDS has been implemented in respect of 57,009 agriculture services at a cost of Rs.109.44 Crs. up to the end of January 2008.

#### Issue: Lift Irrigation schemes

86. The reduction in power consumption due to new Lift Irrigation (LI) schemes which are expected to consume 226 MUs of power is only expected to lead to 0.43% saving in consumption. What is the basis for this calculation?

NPDCL: It is in view of the forthcoming LI schemes in the DISCOM area that a small percentage has been considered.

#### Issue: Agricultural services under Tatkal

87. Tatkal services load per service at 3.54 HP is extremely low indicating under-reporting.

NPDCL: A majority of such services are only for 3 HP.

# Issue: Metering of agricultural services

88. As per Section 55 of Electricity Act, 2003, all the services are to be metered. The Commission has granted time for fixing meters to agricultural services up to March 2008 (which is fast approaching).

NPDCL: Under execution by the DISCOM.

#### Issue: DSM measures

89. There is total silence on the progress of implementation of DSM measures.

NPDCL: Capacitors have been installed for 6,74,259 agricultural services against the existing total of 7,69,013 such services. A pilot, project has been proposed for replacement of 1,000 numbers of existing non-ISI pump sets with ISI-marked pump sets in Kamareddy division of Nizamabad district.

#### Issue: Subsidy for Domestic services

90. What is the number of domestic services receiving subsidy of Rs.10 per month?

NPDCL: 1,94,530 consumers are receiving this subsidy.

#### Issue: Distribution losses

91. What are the circle-wise distribution losses? What are the steps being taken to reduce the losses where they are more than 15%? What are the results of latest energy audit conducted by DISCOM?

NPDCL: Circle-wise percentages of distribution losses is Warangal - 19.17%, Karimnagar - 17.18%, Khammam -16.79%, Nizamabad - 21.06% and Adilabad - 12.63%. Reasons for the variations in extent of losses are: (i) length of lines and location of substations, (ii) differences in load mix in different circles, (iii) location of EHT substations vis-à-vis the load centers, (iv) differences in network topologies in different circles, and (v) loading patterns on the feeders.

#### Issue: Pole-mounted metering

92. NPDCL had introduced pole-mounted metering in certain areas. A report was to be filed with the Commission by 30.06.2007 as per Tariff Order, 2007-08. There is no mention of this in the filings.

NPDCL: Instead of going in for pole-mounted metering, the NPDCL has been taking steps to avoid pilferage by laying LT AB cables and by shifting the meters from inside of a house to outside. Pole-mounted metering will be implemented, wherever required.

#### Issue: Safety standards

93. The Commission had directed that licensee will chalk out by 30.09.2006, a cogent and viable plan of action to adhere to appropriate Safety Standards. They will also work out and display on their website a transparent procedure for determination and payment of compensation in respect of electrical accidents involving humans and animals'.

NPDCL: The licensee has taken all steps to prevent electrical accidents by (i) erecting intermediate poles to rectify loose spans and to increasing the extent of ground clearance in the case of both HT and LT lines. For these, NPDCL has allocated Rs.20 Cr and the works are under progress; (ii) giving wide publicity on safety precautions by means of displays at market yards, railway stations and with slides in cinema halls; and (iii) restringing the loose lines and providing stays where ever required.

#### ISSUES RELATING TO APSPDCL

#### Issue: Agricultural consumption

94. (a) A utility which is unable to record the correct load of pump sets installed cannot claim that 100% capacitors installation has been completed.

SPDCL: All existing pump sets are installed with capacitors. New services are being released only when fixed with capacitors of adequate ratings.

**(b)** While it had been announced that 30,000 new connections would be released during the year, the licensee did not make a mention of the backlog of 80,000 pending applications.

SPDCL: The GoAP sanctioned release of agricultural services under normal plan (free power scheme) and tatkal schemes. In 2007-08, the targets are 11,400 under normal plan and 31,150 under Tatkal scheme. As per the orders of the Commission, agricultural pump sets with DSM measures will only be considered for release of free power services.

(c) 12-hour power supply is required for agriculture sector.

SPDCL: Depending upon the availability of power and depending upon the orders of GoAP, the power supply for 7 hours per day would be extended in shifts.

(d) Regularisation of existing un-authorised services is not being done.

SPDCL: The licensee is immediately regularising the un-authorised agricultural connections, if the consumer is ready to pay the required charges

(e) Two representatives from farming community are required to be nominated on to the State Advisory Committee. During public hearings, representative of the GoAP should be available.

**SPDCL**: It is under the purview of APERC.

(f) It would be better to prepare the statement of agricultural consumption after assessing the statistics/field observations on the extent of land under different crops normally and the source of irrigation.

SPDCL: Agricultural consumption estimate is being done based on the present connected load. The estimate is based on the 2003 connected loads i.e., when the census of agricultural services was conducted by outside agencies. Even though a number of services were released

during the subsequent period, the additional loads were not considered while estimating the agricultural consumption.

(g) As per the Electricity Act, 2003 all the services are required to be metered, whether the energy consumed is free or on payment.

**SPDCL**: Metering on LV side of the agriculture DTRs is being implemented. All the agricultural services under tatkal scheme are also metered.

Issue: HVDS

95. (a) How many 11 kV agricultural feeders are converted to HVDS?

SPDCL: The circle/district - wise details are as follows: Kadapa-97, Tirupathi-159, Nellore-18, Ongole-6, Vijayawada-5 and Guntur-8

**(b)** HVDS works are started enthusiastically but later on the quality of works has not been monitored.

**SPDCL**: A separate Quality Control Wing is functioning in the DISCOM to monitor the quality of works being executed.

Issue: Lift Irrigation schemes

(a) Consumption under HT-IV and other irrigation schemes is likely to jump from 24 MU in FY 2006-07 to 40.96 MU in FY 2007-08 and 56.86 MU in FY 2008-09. There is no mention of the impact of these schemes on ground water.

**SPDCL**: The licensee is not the authority competent to offer an explanation on such an impact.

(b) Free power supply is available to all the agricultural pump sets, including the Lift Irrigation schemes. Many of the LI schemes are unable to function as there are no dedicated feeders and the losers are farmers.

A time-bound programme shall be drawn by Hon'ble APERC and direct the DISCOM to implement the scheme.

SPDCL: Dedicated feeders are being erected to cater to Lift Irrigation schemes, as requested by APSIDC, after payment of cost of the line.

Issue: Agricultural services under Tatkal

97. It is indicated that Tatkal service load is 4266781 HP for the whole DISCOM and the power consumption recorded is shown to be 313056251 units for period November 2006 to October 2007, which appears to be highly un-realistic.

SPDCL: The HP connected load given in Table 3.27 of ARR filings is cumulative connected load for the entire period of 12 months

Issue: Metering of agricultural services

98. As per Section 55 of Electricity Act, 2003, all the services are to be metered. The Commission has granted time for fixing meters to agricultural services only up to March 2008.

SPDCL: Under execution by the DISCOM.

Issue: DSM measures

99. **(a)** The due date for implementation of DSM measures may be extended to 31.03.2009.

**SPDCL**: It is in the purview of APERC

(b) Though it was assured that 1,50,000 free power services per annum will be released, only 68,233 services have been released till now -

SPDCL: New services are being released where DSM measures are followed, as per the directions of APERC

(c) Unlike other three DISCOMs, SPDCL also reports the non-DSM services as NIL, which means that 100% of services are covered by DSM measures. This is highly exaggerated claim.

SPDCL: The details of agricultural pump sets with DSM measures and non-DSM measures are given in the filings.

Issue: Consumer - related issues

100. (a) Payment of LT-I should be allowed in villages at post offices.

**SPDCL**: Possibilities of implementing this proposal are to be studied.

(b) All the expenditure for shifting of meters is being borne by the consumers only

**SPDCL**: The expenditure is to be borne by the consumers only.

(c) For better results, advisory committees at Division and Circle levels may be formed and consumer societies may be given opportunity to join these committees.

SPDCL: Meetings are being held regularly with consumer societies at substation level.

(d) Delays in erection of new transformers need to be curtailed

SPDCL: New transformers are being erected depending upon the priority and the availability,

(e) It has been announced by GoAP that all the cases against domestic consumers will be waived and GoAP shall pay all the penalties.

**SPDCL**: There are no such orders from GoAP.

(f) If the meter burns for the first time, it should be replaced within 24 hours without collection of any charges

SPDCL: If the meter burns due to the fault of the consumer, the replacement cost has to be borne by the consumer only.

(g) Temples may be categorized based upon the income they earn.

SPDCL: It is in the purview of APERC.

(h) One of the Chief Engineers of SPDCL has been appointed as Chairman of the Consumer Redressal Forum. With this, consumers cannot expect any justice from the Forum.

SPDCL: Appointment of Chairman is only in accordance with Regulation No.1 of 2004 of APERC.

(i) In the last public hearings, it was requested to modify the regulations in such a way on common issues that the Consumer Societies can also lodge complaints with the Redressal Forums directly.

**SPDCL**: It is in the purview of APERC.

(j) After the introduction of Spot Billing, collection of charges is being done in the month subsequent to the one in which the reading is recorded, leading to levying of penalty.

**SPDCL**: Collection of charges is being done within the due dates only.

(k) Un-educated farmers cannot send affidavits. Even the objections sent on post cards should be accepted. The Commission should come to the villages to collect the objections.

**SPDCL**: Consumers can send their suggestions/ objections in whatever form they want. Co-operation of DISCOM officers will always be available to receive the objections/suggestions.

#### Issue: Power supply to industrial consumers in villages

101. 16-hour power supply should be provided to the Industrial services in villages.

SPDCL: If the cost for erection of the dedicated feeder is borne by the consumer, 16-hour power supply can be extended

#### Issue: Distribution losses

102. What are the circle-wise distribution losses? What are the steps being taken to reduce the losses where they are more than 15%? What are the results of latest energy audit conducted by DISCOM?

SPDCL: The percentages of distribution losses Circle-wise are Vijayawada - 13.69%, Guntur - 13.81%, Ongole -15.23%, Nellore - 15.65%, Tirupathi - 15.48% and Kadapa - 15.31%. Reasons for variations are-(i) lengths of lines (ii) the varying number of agricultural services and (iii) the location of power -intensive industries.

# CHAPTER - IV STAFF PRESENTATION AND RESPONSE OF LICENSEES THERETO PART A - STAFF PRESENTATION

- 103. The Commission Staff on behalf of and for the benefit of the consumers, made a presentation at the public hearings on their analysis of the tariff filings of the respective DISCOMs. The analysis covering the Retail Supply Business of the Licensees comprised: (a) analysis of the ARR as filed, and (b) analysis of Regulatory interventions prayed for in the filings by the Licensees.
- 104. All the DISCOMs made their ARR filings for FY 2008-09 on 30<sup>th</sup> November 2007. The Commission pointed out certain gaps especially those relating to cost of service. The NPDCL and SPDCL complied with this requirement on 06.01.2008 and EPDCL and CPDCL on 07.01.2008 by filing the cost of service data with the Commission. Each DISCOM further filed an addendum on 17.12.2007 (SPDCL), 26.12.2007(NPDCL), 28.12.2007 (EPDCL) and 31.12.2007 (CPDCL) for additional sales on account of new schemes under HT- Lift Irrigation which require additional power.
- 105. The filings broadly contain the following requests made by the DISCOMs for FY 2008-09.
  - a) Determination of retail supply tariffs duly reckoning the
    - i) Costs ii) revenues and iii) proposed tariff.
  - b) Tariff guidance on the following categories of consumers;
    - i. Horticulture
    - ii. Newly-created municipalities, and,
    - iii. HT colony lighting
  - c) Commission's views/decisions on the following issues related to retail supply business;

- i. Delayed payment surcharge (DPS), and
- ii. Interest income on consumer security deposits.

# Filings in Brief

106. A summary of filings of DISCOMs is as follows:

Table 3: Summary of filings

Table 3. Sulfillially of fillings				
	CPDCL	NPDCL	EPDCL	SPDCL
	Filings*	Filings*	Filings*	Filings*
Power Availability (MU)	30447	10544	10290	15462
Sales (MU)	25193	8789	8864	12873
Power Dispatch (MU)	30850	10807	10488	15641
Network Cost (Rs.Crs.)	1181	579	558	727
Power Purchase Cost (Rs.Crs.)	6728	2641	2575	3515
Other Cost (Rs.Crs.)	60	13	27	28
Revenue Requirement (Rs.Crs.)	7969	3233	3160	4269
Revenue from Tariffs (Rs.Crs.)	6475	1431	2485	2830
Non-Tariff Income (Rs.Crs.)	87	34	50	89
Revenue from Trading (Rs.Crs.)	0	213	229	71
Total Revenue(Rs.Crs.) exclusive of revenue from trading	6562	1465	2535	2920
Revenue Deficit(-)/ Surplus (+) exclusive of revenue from trading (Rs.Crs.)	1407	1768	626	1349

<sup>\*</sup> All figures relating to filings in this table and elsewhere are, unless specified otherwise as per revised filings.

107. The Staff pointed out that the DISCOMs had neither proposed any increase in tariff nor mentioned any other resources to meet the deficit.

#### Staff Analysis

#### Sales volume

108. The proposed sales volumes to different categories of consumers are in line with the historical trends, new consumer additions, load growth etc. In case of LT agricultural consumers, the sales volumes are substantially higher when compared with the approved volumes for FY2007-08. As on date, there is no robust measurement mechanism and data to take an informed decision on consumption volumes for unmetered agricultural consumers. The staff reckoned the agricultural consumption volumes for FY2008-09 at Commission approved volumes for FY2007-08 and considers this as rational in the absence of any robust mechanism for dependable and reliable estimation.

**Table 4: Sales Volumes** 

(MU)

	CPDCL		NPDCL		EPDCL		SPDCL	
Category	Filings	Staff	Filings	Staff	Filings	Staff	Filings	Staff
LT Agriculture	7231	5938	3851	2909	1282	1260	4079	3291
HT Agriculture	839	839	477	477	190	190	177	177
Rescos (*)	0	0	515	414	166	150	NA	199

<sup>\*</sup> Rural Electric Supply Co-operative Societies

## Energy purchase requirement

109. While the Staff reckoned the revised sales volume as mentioned earlier for LT agriculture, it adopted the sales volume to HT agriculture as proposed by the DISCOMs. Based on the revised sales volumes, the power purchase requirement for the DISCOMs has been worked out at the Commission - approved loss levels for FY2008-09. The power purchase requirement recomputed in this manner is less compared with the proposals made by the CPDCL by 1748 MU, NPDCL by 1364 MU, EPDCL by

- 73 MU and SPDCL by 1086 MU for FY2008-09. The lower purchase requirement thus is the outcome of the view taken on agricultural consumption volumes in the absence of information.
- 110. Availability as per filings includes purchases of 1581 MUs from the market and 1981 MUs from Pool Purchases for CPDCL; 615 MUs from the market and 188 MUs from Pool Purchases for NPDCL; 607 MUs from the market and no purchases from power pool for EPDCL; and 833 MUs from the market and 81 MUs from Pool Purchases for SPDCL. No short-term power purchases as per the staff analysis.

Table 5: Details of Power Purchase Requirement

(MU)

Particulars -	CPI	DCL	NPI	DCL	EPE	DCL	SPI	DCL
Power purchase Requirement	Filed	Staff	Filed	Staff	Filed	Staff	Filed	Staff
Power Purchase Requirement	30850	29101	10807	9443	10488	10415	15641	14555
Allocated Generation	26885	26885	10674	10674	12621	12621	14858	16056
Availability	30447	31092	10544	10795	10290	10537	15462	15801
Dispatch	30850	27063	10807	10743	10488	10757	15641	14952
Surplus / (deficit)		-2038		1300		342		397
D-to-D {Purchase (-) / Sale (+) }	-1995		-15			55	-66	
Market [Purchase (-) / Sale (+)]	-44					2		
Short Term Purchases	1581		615		607		833	
Pool Purchases	1981		188		0		81	

# **Energy availability**

111. A DISCOM sources energy from its share in various generating stations, from the shares of other DISCOMs in the state and external sources (UI and short term). Accordingly, the Staff examined the plant maintenance schedules and generation efficiencies observed in the past for thermal

stations and actual generation in case of Hydro stations. By factoring in the past information, the Staff moderated the availability by each station and the net impact of this alternate calculation has led to increased availability of energy for the CPDCL by 645 MU, NPDCL by 251 MU, EPDCL by 247 MU and SPDCL by 339 MU compared with availability as per the filings

#### Power purchase cost

- 112. The DISCOMs estimated the generation cost for stations with which each has bilateral agreements based on likely fuel prices and fixed cost obligations as per agreements. The Staff examined the drivers of variable costs (fuel prices) and fixed cost obligations in terms of Fuel prices, PLFs and Commercial Operation Date (COD). After examining these details from the existing documents/data available, the impact has been factored in both fixed and variable costs for each generating station.
- 113. The net impact of this alternate calculations has led to decrease in energy cost for CPDCL by Rs. 1490 Cr, NPDCL by Rs. 676 Cr, EPDCL by Rs. 602 Cr and SPDCL by Rs. 714 Cr compared with purchase costs as per the filings.

Table 6: Power purchase cost

(Rs.Crs.)

Power	CPDCL		NPDCL		EPDCL		SPDCL	
purchase cost	Filing	Staff	Filing	Staff	Filing	Staff	Filing	Staff
Allocated Power Purchase Cost	5930	4882	2371	1963	2411	1953	3342	2790
D-to-D Purchase/ Sale	451	325	43	2	0	20	18	11
Market (Purchase / Sale)	347	31	227	0	164		155	0
Total Power Purchase Cost	6728	5238	2641	1965	2575	1973	3515	2801

#### Power purchases from other DISCOMs

- In the centralised dispatch system, sometimes a DISCOM may end up drawing power from by other DISCOMs' share a) in excess of its own share in generation capacity and/or b) backing down costlier generation from its own stations to avail cheaper power from others. The DISCOMs considered such power purchase on an average price of at Rs.2.28/kWh in the filings. However, the Staff has suggested an alternative methodology of marginal cost pricing, i.e. variable cost of last generating station available for dispatch for the DISCOM but not dispatched in a centralised model.
- 115. The Staff also observed that power purchases from the market on a short-term basis have been done at times in a manner that has resulted in backing down of long-term contracted power and thereby raising the power purchase cost. The Commission had issued a Directive in its Tariff Order for FY2007-08 (Directive No.2) that deviations in power purchases and reasons for deviations from the Tariff Order should be put on the web-site. The Staff suggests that alternative, and transparent, methods of purchasing power for limited periods when required, should be put in place. Access to the Power Exchanges can also be resorted to.

#### **Supply Margin**

116. The Commission initiated the Multi-Year Tariff (MYT) Regulatory framework in 2006 for three years in which network and retail supply businesses are treated separately. In this framework, the Commission provided supply margin as return for retail supply business for FY 2006-07 and 2007-08. The licensees were required to file such margin for FY2008-09. Despite such opportunity, the DISCOMs did not file any amount as supply margin. This indicates, as per the Staff, low level of commercial attitude on part of the DISCOMs despite the onset of reforms in the sector. The Staff based on the earlier practice, provided the

supply margin to CPDCL at Rs.8 Crs, to NPDCL at Rs.5 Crs, to EPDCL at Rs.3 Crs and to SPDCL at Rs.3 Crs.

#### Revenue from Sale of power

117. The Staff recomputed the revenue at proposed tariffs on revised sales at Rs.6475 Cr for FY2008-09 for CPDCL, Rs.1431 Cr for FY2008-09 for NPDCL, Rs.2485 Cr for FY2008-09 for EPDCL and Rs.2828 Cr for FY2008-09 for SPDCL. The reason for the variations is reduction in LT agricultural sales volumes and increase in HT agriculture sales volume as contemplated by the DISCOMs. However, the revenue impact on altered sales volumes is minimal as the affected agricultural sales volumes are mostly at zero tariff, as proposed by the DISCOMs. The revenue computed in this manner is the net revenue from sale of power, net of the HT incentive amounts.

#### Non-Tariff Income

118. This revenue item primarily consists of power purchase rebates and miscellaneous receipts. The Staff computed the income on security deposits at 9% per annum. Since the interest cost on security deposits is included in revenue requirement, it is reasonable to recognize such income as otherwise the security deposit amounts would constitute funds available to DISCOMs free of cost. This results in additional income during FY 2008-09 as interest on security deposits of Rs.61 cr. for CPDCL, Rs.20 cr. for NPDCL, Rs.41 cr. for EPDCL and Rs.42 cr. for SPDCL.

#### Revenue from trading of power

- 119. As mentioned earlier, in the centralised dispatch, the DISCOMs are bound to sell their surplus power to market and other DISCOMs also for which they realize revenue as per specified formulae.
- 120. The projected income from sale of power to other DISCOMs and from other short term purchases for FY 2008-09 is Rs.213 Cr for NPDCL, Rs.229 Cr for EPDCL and Rs.71 Cr for SPDCL. The D-to-D rate in the projections

is taken at an average price of Rs.2.28/kwh and for the remaining sales at market price. The Staff put the price for D-to-D sales at the marginal variable cost of Rs.1.63/kWh while in the case of market sales the market price as filed was taken for purpose of estimating the income from trading of power. The recomputed income from trading for FY 2008-09 comes to Rs.206 Cr for NPDCL, Rs.58 Cr EPDCL and Rs.69 Cr for SPDCL.

121. The table below shows the total revenue for each DISCOM, which comprises i) revenue from tariffs; ii) non-tariff income; and iii) trading of power, as per the filings and as per the Staff estimates. The total revenue available to DISCOMs as per Staff estimates is Rs.6623Crs. for CPDCL, Rs 1691 Crs for NPDCL, Rs.2634 Crs. for EPDCL and Rs. 3028 Crs. for SPDCL.

Table 7: Total Revenue

Crs.

Revenue items	CPDCL		NPDCL		EPDCL		SPDCL	
	Filed	Staff	Filed	Staff	Filed	Staff	Filed	Staff
Tariff	6475	6475	1431	1431	2485	2485	2830	2828
Non- Tariff Income	87	148	34	54	50	91	89	131
Trading	0	0	213	206	229	58	71	69
Total Revenue (inclusive of trading)	6562	6623	1678	1691	2764	2634	2990	3028

# Aggregate Revenue Requirement (ARR) and surplus/deficit

122. The revenue income estimated by the Staff for FY2008-09 is Rs. 6623 Cr for CPDCL, Rs. 1691 Cr for NPDCL, Rs. 2634 Cr for EPDCL and Rs. 3028 Cr for SPDCL, as per the calculations explained earlier. The revenue includes revenue from tariffs, non-tariff income and trading as shown in the Table 7.

- on the cost side, the Staff reworked out the power purchase cost based on the revised energy requirement, energy availability, fuel and fixed cost of each generating station. The Staff also provided the supply margin to all the DISCOMs as per the Commission's previous decisions and the network cost are taken as per the Multi-Year Tariff Order for FY2006-07 to FY2008-09. The ARRs for FY 2008-09 worked out in this manner are Rs. 6488 Cr for CPDCL, Rs. 2561 Cr for NPDCL, Rs.2541 Cr for EPDCL and Rs. 3559 Cr for SPDCL.
- 124. Based on these alternate calculations, the revenue deficit / surplus for the DISCOMs is as follows as compared to the filings.

Table 8: Aggregate Revenue Requirement

(Rs. crores)

ARR/ Revenue	CPDCL		NPDCL		EPDCL		SPDCL	
	Filed	Staff	Filed	Staff	Filed	Staff	Filed	Staff
ARR	7969	6488	3233	2561	3160	2541	4269	3559
Revenue including revenue from trading	6562	6623	1678	1691	2764	2634	2990	3028
Revenue Surplus (+) / Deficit (-)	-1407	135	-1555	-870	-396	93	-1279	-531

# Regulatory issues

# **Delayed Payment Surcharge (DPS)**

125. The DISCOMs brought out the issue that the income from delayed payment surcharge should not be included as revenue in the tariff setting process. The Staff is of the opinion that the issue of DPS is now a non-issue on the grounds of 100% collection. However, the levy of DPS and interest charged to consumers needs to be reviewed.

## Interest on Consumer Security Deposits

126. The DISCOMs pointed out that the Commission may consider either the income arising out from late payments or interest income on security deposits and not both to avoid double counting. The Staff, however, for reasons explained in paragraph 118, 'Non-Tariff Income', has calculated the interest income on security deposits at 9 percent per annum.

#### Tariff Issues

#### Nurseries

- 127. The DISCOMs proposed to reclassify nurseries, from LT-II-Non-Domestic to LT V: Agriculture at zero tariff. The DISCOMs submitted that this proposal is as per the direction of GOAP. Re-categorisation of consumers from one class to another class has to be in congruence with the Section 62 of the Electricity Act-2003. The DISCOMs did not provide any reasons why the consumers ought to be re-categorised.
- 128. The GOAP can always extend subsidy irrespective of the categorization of consumers. The Staff suggested that the nurseries be part of LT II-Non-Domestic and the tariff issue may be settled by the GOAP u/s 65 of the Electricity Act 2003. Such a measure would be useful in identifying the consumption separately for the purpose of cost and allocation of cross subsidies and external subsidies.

#### **Township and Colonies**

129. The DISCOMs requested for fixing a higher tariff for HT townships and colonies since consumption is for domestic purposes and the existing tariff is low when compared to that charged from LT Domestic consumers. The Staff suggests a graded tariff similar to LT domestic consumers duly factoring in the voltage-wise loss differences.

#### **Newly-created municipalities**

130. The DISCOMs requested for tariff applicable to Major Panchayats also for the newly-created municipalities. The DISCOMs stated that this is on the

direction of the Government. The request is not backed up with any reasoning except stating that the GoAP directed the DISCOMs to seek such reduced tariff. In this case too, the classification of consumers has to be consistent with section 62 of the Electricity Act and thus there exists no scope for application of a lowered tariff by the Commission for this category. However, the GoAP can extend subsidies under section 65 of the Act to such municipalities. This requires quantification of consumption by these newly created municipalities. The Staff suggests that the consumption by this category of consumers may be separately identified to enable the GoAP to extend the required external subsidies.

#### HT Incentive costs

- 131. The projected HT incentive scheme is projected to cost about Rs.140 Cr to CPDCL, Rs. 13 Cr to NPDCL, Rs. 39 Cr to EPDCL and Rs. 50 Cr to SPDCL for FY2008-09. The Staff has reckoned the same amounts in its calculations as deductions from revenue from HT Category-I consumers. However, the Staff makes the following observations on the scheme:
- 132. The scheme appears to have outlived its utility in terms of attracting consumers resorting to captive generation as the captive generation cost itself has gone up significantly.
- 133. Many consumers who are availing these incentives have reduced the contracted demand to have the benefits of the scheme. This needs to be examined further.
- 134. It may be worthwhile to examine the relevance of continuing this scheme as it benefits only a few consumers based on load factor.

#### Short-term power purchase

135. In general, it appears from the previous data and present filings, that as and when the DISCOMs contract external power purchase, the purchases have been on continuous basis. This has led to backing down of the least-cost stations during the off-peak hours for which the fixed cost is

already being paid by the consumers. There is a need to avoid this anomaly. Contracting power for only required hours would resolve this problem. Accordingly, there is a need to formulate a short term power purchase procedure duly recognizing the hourly requirements and to contract power only for required number of hours. With the presence of many traders, UI market and captive generating stations, such procurement for limited periods is possible.

# PART-B RESPONSE OF DISCOMS TO STAFF PRESENTATION

#### CPDCL

#### Consumer security Deposits

- in revenue by Rs. 61 crores by including interest income on Consumer Security Deposits calculated at 9% p.a. The Licensee questions the inclusion of this income in Non-Tariff income. The funds available through Consumer Security deposits are never actually available as surplus cash for investment. They are completely utilized in the operations of the Licensee. The arrears from consumers against sale of power accumulated over the years are actually being funded by this source.
- 137. Hence the Licensee requests the Hon'ble Commission to waive off the interest presumably earned on Consumer Security Deposits and consequently included in the Non-Tariff Income.

#### Agriculture sales

138. In the Staff analysis, the agriculture sales for FY 2008-09 has been reduced by1293 MU.CPDCL in their response have commented that the estimation of consumption of electricity in the agriculture sector is arrived at by the DISCOMs based on the prescribed methodology of APERC. The actual agricultural consumption is being submitted to the

Commission every month. As already explained and requested by the Chairman and Managing Director of the licensee to the Hon'ble Commission, the agriculture consumption projected by the Licensee may be approved.

#### NPDCL

# Agriculture sales

In the analysis presented by the Staff, LT-Agriculture sales are projected 139. as 2909 MU against proposed 3851 MU by the Licensee for the year 2008-09. The Hon'ble Commission has not allowed additional sales for LT-Agriculture since 2005-06, which has had a severe adverse impact on the licensee's financial and operational performance. The licensee also submits that there has been good rainfall for the past three years resulting in increase of ground water levels in NPDCL area and hence the area under cultivation also. Consequently, the specific consumption of LT-Agl category has increased due to increase in the acreage under paddy due to the farmers switching over from dry crops like maize, chilly, etc to paddy. Moreover, increase in specific consumption is also to be attributed to the reason that some of the dried-up open wells and borewells have become operational. The following tables show the increase in area under paddy cultivation and the agricultural sales requirements of the licensee due to the aforesaid reasons.

Table 9: Statement Showing District- Wise Area Under Paddy Cultivation from 2005-06 to 2007-08 in NPDCL

(acres)

	Khariff		Rab	i	Total		
Year	Total cultivated	Under Paddy	Total cultivated	Under Paddy	Total cultivated	Under Paddy	
	area		area		area		
2005-06	4281891	1325253	1429645	591905	5711536	1917158	
2006-07	4177721	1363249	1640055	723833	5817776	2087082	
2007-08	4215446	1322928	1856514	827706	6071960	2150634	

Table 10:Figures of Agriculture sales approved by the Commission and the actuals /projections of the Licensee from 2005-06 onwards (MU)

	2005-06	2006-07	2007-08	2008-09
APERC approved	2908.41	2909.06	2909.06	2909*
Actuals /	2923.87	3399.23	3702.04 \$	3851**
projections				

<sup>\*</sup> As per Staff of APERC\*\* As per NPDCL Projections \$ Actuals up to 02/08.

- 140. As seen from the above Tables, the consumption of LT- Agriculture category has increased from year by year due to aforesaid reasons. However, the Commission has been approving 2909 MU constantly for the past 3 years as LT- Agricultural Sales in spite of increase of 778 MU in actual sales from 2005-06 to 2007-08. Again the same consumption has been adopted in the Staff analysis during public hearing on filing of ARR & FPT of NPDCL for the year 2008-09. The new services have been released from 2005-06 onwards in addition to the drastic increase in specific consumption of existing services due to constant publicity of free power among the agricultural farmers by the Government through various platforms.
- 141. The licensee earnestly requests the Hon'ble Commission to consider Agricultural consumption as projected by NPDCL for the year 2008-09 by considering the above facts.

#### Power purchase cost

142. In the Staff analysis, the power purchase cost is expected to be less by Rs. 676 crores and the Staff has analysed that excess power which the licensee has projected as to be purchased from external sources at high cost is not required.

- 143. Due to less estimation of sales in respect of Agriculture by 942 MU for the DISCOM and 101 MU for the RESCO by the Commission Staff, the power purchase cost has got adversely affected. The above less estimation of sales has directly impacted on power purchase requirement from the external sources at high cost i.e., Rs. 7/- to Rs. 8/- per unit.
- 144. The power purchase cost of the licensee is dependent not only on half-hourly schedule and peak demand of a day but also on sufficient availability of power at times. The licensee purchases power at higher cost from external sources to meet increased demand at peak hours and also sells power to others on the same day at non-peak hours during which cost of power is low and thus power purchase and sale occur same day. Due to the aforesaid reason to, NPDCL is compelled to procure power at higher cost from external sources and requests the Hon'ble Commission to consider the same.

#### **SPDCL**

#### **Consumer Security Deposits**

145. The interest income on consumer security deposits computed by Staff is Rs.41 Crores at the rate of 9% p.a. The DISCOM however opines that the funds available through consumer security deposits are never actually available as surplus cash for investment. The funds available from consumer security deposit are utilized towards supporting the arrears accumulated over the years and therefore are not available for investments in fixed assets or financial instruments.

#### Agriculture consumption for 2008-09

146. The Staff's presentation during the public hearing did not provide any numerical estimation for keeping the LT-V sales (Agriculture) constant for the third consecutive year at 3291 MU. Further, there is no firm

- methodology and information to assess the agricultural consumption due to lack of metering.
- 147. The DISCOM has estimated the agricultural sales based on LV side DTR meter readings and the methodology prescribed by the Commission. SPDCL has been submitting estimated agricultural consumption every month to APERC based on the total valid DTR meter readings received from the field and employing connected load as per updated agricultural census data as on March 2002 along with the data on new service connections released after 01-04-2002. An analysis of the LT Agricultural consumption as per the ARR & Tariff filings and the Tariff Orders is given below:

Table 11: SPDCL's view point on Agriculture Consumption

Year	As per ARR & Tariff filings	As per Tariff Order Staff presentation)of	Actual agricultural Consumption	Remarks
2006-07	3291	3291*	3684.13	393 MU Excess
2007-08	3922	3291*	3502	1557 MU (actuals for 1st half of 2007-08) + 1945 MU (estimated for second half)
2008-09	4079	3291**	-	-

<sup>\*</sup> As per Tariff Orders\*\* As per Staff Presentation

148. It can be seen from the above data that despite release of new services and prevalence of higher energy consumption every year, the LT Agricultural consumption is fixed by APERC at 3291.06 MU from 2006-07 onwards, which is not matching the requirement. Only moderate growth of 4% is projected over 2007-08 Tariff filings while estimating LT Agricultural sales for the year 2008-09. The Commission has to consider

the new agricultural services too while assessing the growth in consumption.

149. For the reasons explained above, a reasonable rationale needs to be adopted for assessing the agricultural sales for the year 2008-09 while approving the Tariff Order. The agricultural consumption of 2008-09 will be at least 4% more than the actual consumption of 2007-08.

#### **HT-Incentive**

- 150. APSPDCL has estimated the cost of incentives to be given to HT consumers as Rs. 50 Crs. The Staff has stated in its presentation that the HT incentive scheme is beneficial only to a few consumers and that consumers are reducing their contracted load to benefit from higher load factor.
- 151. The SPDCL has in its response pointed out that the instances of consumers decreasing their CMD deliberately to optimize the load factor for the sake of incentives is rare in the licensee's area. Moreover, HT incentive scheme is having several benefits as explained below:
  - As the consumers try to achieve better load factor, flattening of load curve takes place resulting in optimum utilization of generation. If the HT incentive scheme is abandoned, no consumer will be bothered to achieve better load factor which may result in even higher peak load. Higher peak load obviously necessitates additional power purchases at abnormal prices affecting the power purchase cost and the financial performance of the DISCOM. Flattening of load curve will help the licensee in better planning of infrastructure and optimum utilization of the network.
  - HT incentive scheme is attracting new consumers to establish industries in the licensee's area and at the same time preventing the existing consumers from opting for open access.

152. In support of above contention, the licensee has cited three cases wherein the consumers from other States have approached its Corporate Office, Tirupati, for availing HT supply to the extent of 125 MW for the only reason that power tariff along with the incentive is less for high load factor large HT services.

# CHAPTER - V STATEMENT OF GOVERNMENT OF ANDHRA PRADESH

- 153. The Government of Andhra Pradesh (GoAP) presented its views before the Commission during the public hearing at Vijayawada on 21st February, 2008. At the outset, Sri A.K.Goyal, Special Chief Secretary to Government, who could not attend the hearing personally due to being preoccupied with the ongoing Budget Session of the State Assembly, in a written communication to the Commission, highlighted some of the more important achievements of the Power Sector since the commencement of the reform process in the State. Sri Goyal stated that all the electricity utilities have performed exceptionally well with APGENCO (the GoAP-owned electricity generating company) performing consistently well, maintaining a PLF of about 84% during the year 2007-08 (up to January, 2008). Similarly, the Transmission and Distribution utilities have demonstrated exemplary performance and have reduced T&D losses from 19.82% to 19.06% (up to December, 2007) with the reduction estimated to reach 18.51% by end of 2007-08.
- 154. APTRANSCO (the transmission licensee) was adjudged best in the country in transmission availability for the year 2005-06 with 99.87% by Ministry of Power, Government of India, and received a Gold Shield from the Hon'ble Prime Minister of India, apart from winning other laurels.
- 155. The present installed capacity in the State, Sri Goyal added, is 12,342.54 MW as on 31.01.2007 and realizing the urgency for capacity addition in power sector, the State Government has entrusted the State-owned APGENCO with the implementation of capacity addition programme of 8,945 MW, out of which 7,109 MW is programmed to be commissioned during the 11<sup>th</sup> Plan period.
- 156. Sri Goyal also stated that the GoAP has given foremost importance to the development of Power Sector, and that in its endeavor to provide quality

and uninterrupted supply of power to all consumers in the State, particularly the consumers in the rural areas, 8,00,452 rural households under RGGVY and 31,516 urban households in selected wards in 11 Municipal Corporations and 119 Municipalities have been electrified under INDIRAMMA programme.

- 157. Sri Goyal further added that the Government is committed to the welfare of the farmers and is providing free power to about 95% of the agricultural consumers since 14.05.2004 and has been providing necessary subsidy besides funds for purchase of additional power to meet the additional demand in Rabi season.
- 158. Sri Goyal also stated that the Government is committed to the cause of industrial development in the State and it was a matter of pride for him to state that Andhra Pradesh has one of the lowest Industrial HT Tariff in the country and there is a gradual reduction in industrial tariff year by year. He maintained that the overall industrial effective tariff for the year 2007-08 with the incentive scheme is Rs.3.56 paise per unit.
- 159. He also stated that priority is also given by Government for promoting Lift Irrigation in order to reduce exploitation of ground water.
- 160. Referring to the filings of the four DISCOMs, Sri Goyal stated that the filings made by the utilities for the financial year 2008-09 reflect the key objectives set by the Government of Andhra Pradesh.
- 161. Conclude his statement, Sri Goyal added that the Government is committed to providing necessary financial assistance as needed by the Power sector and providing subsidy to the utilities in accordance with the provisions of Section 65 of the Electricity Act, 2003.

# CHAPTER - VI COMMISSION'S ANALYSIS ON SUBSTANTIVE ISSUES

#### Pending court cases

- 162. A number of objectors have expressed concern about the cases relating to IPPs, NCE, etc., pending in Appellate Tribunal for Electricity, High Court and the Supreme Court and expressed their dissatisfaction with the pursuance thereof by the licensees.
- 163. The DISCOMs in their response have, on the other hand, stated that they are putting in their best efforts to pursue these cases. The Commission trusts that if they are not already doing it, the licensees shall make a careful analysis of the pending court cases, rating each case according to its importance and monitor the pursuance of the more important cases, at appropriate higher levels including the level of CMD or senior Directors of the licensees, who may also interact with the counsel concerned on a regular basis, or devise some other more appropriate and effective mechanism.

#### LVS power project

- 164. It has been represented that the Lord Venkateshwara Swamy (LVS) power project, a low sulphur heavy stock -based IPP project, lying closed because of high generation cost and the matter being before the Hon'ble Supreme court has, during the last about 7 years, received fixed costs, under an interim direction of the Hon'ble Supreme Court, which are more than the cost of the project itself. During all these years, the project has not generated and supplied a single unit of power to the DISCOMs. As they have already paid a total amount in excess of the total investment in the project, the DISCOMs may think of ways to arrive at a settlement with the IPP.
- 165. The Commission will be referring the suggestion to the DISCOMs and has no further comments to offer, the matter being *sub judice*.

# Public hearings

- 166. While appreciating the Regulatory practice of placing the Licensees' activities under public scrutiny under the Reforms regime, some of the objectors have pointed out that sufficient time was not there between the publication of dates for, and the actual holding of, the public hearings. A number of objectors, mainly from Chittoor district, have desired that the hearing for SPDCL be conducted at Tirupathi also. Some of the objectors have suggested that instead of affidavits, the objections sent on postcards should also be accepted, as many of the farmers do not know anything about an affidavit. Some of them have also requested that the Commission may come to the villages for collection of objections and that the nominee of the Government be available at all places of public hearings.
- As also stated in the Tariff Orders for 2006-07 (paras 141 to 144) and 2007-08 (para 153), at the very outset, the Commission would like to point out that it has to complete the tariff determination process within a prescribed time limit for four licensees. Obviously, therefore, it can conduct public hearings only at a limited number of places. It would be appreciated that from the Tariff Orders for 2005-06 onwards, it has been holding hearings at four places and has, this year too, conducted the hearings in the circles away from the headquarters of the licensees. The idea is that consumers of as many circles / districts as possible should be made aware of, and given an opportunity to participate in, the regulatory processes of the Commission. The Commission will, nevertheless, keep the suggestion for hearings at a larger number of places in mind, while drawing up the schedule of hearings in future.
- 168. The somewhat shorter gap between the publication of dates of public hearings and the actual holding of hearings was because though the Licensees submitted the ARR filings on 30-11-2007, the CoS filings were received by the Commission with some delay (as already indicated in the

public notifications issued by the Licensees on the Retail Supply filings in the newspapers on 28-12-2007), followed further by the filings of addenda to the ARRs on account of new Government lift irrigation schemes. However, in spite of short time available at the disposal of the Commission for finalization of tariffs, all efforts were made to intimate the Schedule of public hearings to all the objectors and the public at large. Further, though the last date specified for receipt of objections was 25-01-2008, the objections received much beyond the due date were also taken into consideration. Apart from this, all objectors, who expressed their desire to be heard only at the venues of the public hearings and not earlier, were also accommodated.

- 169. The Commission clarifies that the consumers can lodge their objections, in whatever form, like postcard, etc., instead of affidavits. However, it has to be appreciated that it is not possible for the Commission to come to the villages to collect the objections. The objectors can utilize the facility of furnishing the objections at the offices of the licensees closer to their places of residence/business.
- 170. As regards the presence of a government nominee at all the public hearings, the Commission had made a request to GoAP to this effect. An officer of the Energy Department did attend the hearing at Vijayawada. The Commission, however, clarifies that the government nominee should not be expected to offer any on-the-spot responses since what is under examination at the hearings is the filings of the licensees.

# Deficiency in filings

- 171. Many objectors have commented that the information provided by the licensees in the filings is not comprehensive, especially in respect of the performance of the licensees. The State Advisory Committee too has desired that such data/information needs to be provided.
- 172. The Commission takes note of these concerns and directs that:

The licensees in their ARR filings for the years 2009-10 onwards shall provide data (along with similar data pertaining to the preceding year) on the following items as an addendum to their filings, in case Guidelines already issued by the Commission for filing of ARRs do not already provide for the depiction of these data in the ARR filings; they shall also place these data on their website:

- Compensation paid by the Licensee to consumers for deficiency of service as per the Regulations of the Commission.
- ii. Details of electrical accidents and ex-gratia paid, if any during previous year and current year.
- iii. Replacement of burnt transformers, installation of additional transformers.
- iv. Number of burnt-out, non-functioning or faulty meters (category-wise and Circle-wise).
- v. Performance with regard to attending to fuse-off calls.
- vi. Breakdowns and interruptions in power supply to urban and rural consumers (Circle-wise) and time taken for restoration.
- vii. Frequency and voltage at various levels of interface over the period.
- viii. Pending applications and connections released to different categories of consumers.
  - ix. Arrears of consumers over Rs.50,000 pending for over six months and details of bad debts written off.
  - x. Court cases involving the Licensee and steps being taken to resolve them.

- xi. Number of cases filed in respect of pilferage of power in various categories giving comparative picture with previous year.
- xii. Compliance with directives issued by the Commission in the relevant Tariff Order(s).
- xiii. Investment details, including capital expenditure on system improvement, HVDS and RGGVY.

# Agricultural Consumption Estimates and Subsidy

- at robust estimates has always been the concern of the Commission and is under continuous review. To recall, estimation of agricultural consumption based on readings from DTR meters of purely agricultural loads to arrive at specific consumption per HP aggregated for the each DISCOM/State as a whole, as per the survey of agricultural pump sets carried out by Discoms was accepted as scientific by the Indian Statistical Institute (ISI) as mentioned as early as in the Tariff Order of FY2003-04. Robust estimates however, also depend on the availability of continuous, consistent and valid readings from a given set of meters.
- In the Tariff Order for FY2006-07, the Commission expressed concern on the quality of data with regard to consistency and validity echoing the Staff's observations that while the agricultural consumption estimates are sensitive to quality and coverage, the available DTR meter readings information for the period November 2004 October 2005 indicated a poor ratio (19%) of valid meter readings. Under these conditions, the Commission preferred to take more conservative estimates of agricultural consumption than those projected by the Licensees. The Licensees were also directed to ensure the availability of valid DTR meter readings. Subsequently, the Government in its letter No.870/Pr II(1)2006-1 dated 03.11.2006 desired 3<sup>rd</sup> party verification of agricultural

estimates. ISI was entrusted with the task. The ISI Report suggested that an alternative robust methodology of data collection was necessary in view of unsatisfactory ratio of valid DTR meter readings which were resulting in considerable uncertainty as regards the robustness of data estimates and suggested an alternative mechanism for arriving at the estimates. The Report as desired has been sent to the Government.

- 175. As on date, there is no robust measurement mechanism and data to take an informed decision on consumption volumes for un-metered agricultural consumers. ISI is working out a feasible alternative mechanism, the details of which are awaited. At the same time, any alternative mechanism suggested by ISI will need to be verified and tested at the field to ascertain the robustness of the new methodology. The Commission has therefore, in the meanwhile, decided to adopt the agricultural consumption figures of 2007-08 Tariff Order (when the figures for 2006-07 were similarly adopted) and thereby not delay the issuance of the Tariff Order for 2008-09.
- 176. If, however, no significant progress is visible in this estimation by ISI, by 30<sup>th</sup> September, 2008, the Commission will be prepared to consider hearing the Discoms on the agriculture consumption quantities adopted by the Commission. The Commission also clarifies that quantities of agriculture subsidy to various DISCOMS as referred to elsewhere in this Order do not cover the additional power purchases made by the Discoms over and above the Tariff Order quantities, at the instance or with the approval of GoAP.

### Release of new connections

177. All new connections, both under free power category and Tatkal scheme will be released subject to the condition that DSM measures are adopted and Meters are fixed.

## DSM measures

- On DSM measures, a number of farmers and farmer-organisations have represented that (i) it is very difficult for all the motors to be replaced by ISI motors. As the farmers have no financial capacity to bear the cost of such replacements, the Government should bear 100% instead of the 80% cost as proposed earlier. (ii) Replacement of iron pipes with HDPE pipes may not be insisted upon as the saving in energy is only marginal (1.6%) and may not justify the capital investment required for such replacement. (iii) However, DSM measures may be insisted for new agricultural connection.
- 179. The Commission <u>further</u> likes to clarify that free supply of power to agricultural consumers and the related issues of DSM measures, etc., are part of a policy decision of the State Government. The Commission would, therefore pass on these comments for consideration by GoAP.

# Some clarifications on responses of DISCOMs

## Release of new connections

- 180. A number of farmers/farmers' associations have represented that the last date for implementation of DSM measures be extended to 31.03.2009.
- 181. The response of the DISCOM (APSPDCL) that this is in the purview of APERC is not correct as the matter falls within the jurisdiction of the State Government.

#### DSM measures

182. Release of new agriculture connections is another complaint by farmers / farmers' associations. It has been contended that while it was assured that 1,50,000 free services per annum would be released, the number released so far was only 68,233. The response of SPDCL that new

- services were being released only where DSM measures are followed as per the directions of APERC.
- 183. This response is also misleading as the DSM measures are prescribed by GoAP, and not by the Commission.

# **State Advisory Committee**

- 184. Some of the consumers have represented that two representatives from farming community should be there on the State Advisory Committee (SAC).
- 185. The Commission has always seen to it that the farming community is duly represented on the SAC and even at present, the Committee has two Members representing the farming community on it.

#### **Consumer Grievances Redressal Forums**

- 186. Some of the participants have raised an objection that SPDCL has appointed its own Chief Engineer as Chairman of the Consumer Grievances Redressal Forum and as such the consumers cannot expect any justice from the Forum.
- 187. The Commission likes to clarify that the Consumer Grievances Redressal Forums under Section 42 of the Electricity Act, 2003, are to be set up by a distribution licensee itself under Guidelines to be issued by the Commission ( issued vide Regulation No. 1 of 2004, published in A.P. Gazette dated 06-02-2004). While the appointment of licensee's own Chief Engineer as Chairman is not in violation of the legal provisions/regulations, the Commission, vide an amendment to the aforementioned Regulation No. 1 of 2004, has provided for nomination of a person by the Commission itself, familiar with consumer affairs and with voting rights, on each of such Forums. These nominations will be made shortly.

- 188. It has further been represented that the consumer societies should also be allowed to represent common issues before these forums.
- 189. The aforementioned Regulation No. 1 of 2004 already allows 'any registered consumer society', and also 'any unregistered association of consumers, where the consumers have similar interest' to file a complaint before a Forum.

# **Group Wells**

- 190. It has been suggested that group wells i.e. common wells shared by a number of farmers should be encouraged, not only for energy conservation but also to avoid over-exploitation of ground water. It has been further suggested that the existing unauthorized connections may be regularized without charging any fee, if the farmers form a group and seek a single connection for a common well on sharing basis.
- 191. The Commission takes note of the suggestions and will be seeking the views of the DISCOMs on the feasibility of implementation of the suggestions.

# Bill collection charges

- 192. Some of the objectors have desired that the collection charges in respect of collection of bills by e-Seva centers and private collection agents should be uniform.
- 193. The Commission has examined this issue in detail as recently as in its common Order dated 18.09.2007 in R.P. Nos. 1,2,3 and 4 of 2007 in O.P. Nos. 36, 35, 33, and 34 of 2006 respectively, when the Commission reached a finding that the '...e-seva centers provide superior service....' and cannot be equated with certain other providers of bill-collection service. No material has been placed before the Commission to substantiate that the private collection agents also provide equally good service. The Commission is therefore unable to accede to the request.

Recovery of compensation for non-compliance with Standards of Performance (SoPs)

- 194. Some of the objectors have stressed that the amount of compensation paid by a licensee for non-compliance to the SoPs prescribed by the Commission should not be borne by the licensee but should instead be recovered from the person(s) held responsible for such non-observance.
- 195. The Commission finds quite some merit in the objection and directs that:

The compensation payable/paid by a licensee for non-compliances with the Standards of Performance as laid down by the Commission from time to time shall not be a charge on the consumer tariffs and should be recovered by the licensees concerned from the person(s) held responsible for such non-compliance.

# Investment by DISCOMs in generation

- investing their surplus funds in power projects including those of APGENCO, the GoAP-owned generating company. They have expressed the apprehension that with the privatization of DISCOMs in due course, such investments will provide a toehold to such private owners of DISCOMS in APGENCO, ultimately paving the way for their taking over the latter. They have accordingly desired the Commission to direct the DISCOMs not to make any investments in generation.
- 197. First of all, the Commission finds the objections to be speculative in nature inasmuch as they presume that privatization will take place, GoAP will simultaneously allow sale of DISCOMs' investment(s) in generation, and so on. The Commission is not privy to any such moves nor have the objectors revealed if they have any information in this regard.

198. Secondly, the Commission likes to point out that under law, the Commission is authorized to regulate only the distribution business (including retail supply business) of a DISCOM and not any other business that a DISCOM may engage itself in. To ensure however, that the resources available and the assets created for its distribution and retail supply business are not diverted without adequate compensation to any other business, the Commission has already issued the APERC (Treatment of Other Business of Transmission Licensees and Distribution Licensees) Regulation 2005 (Regulation No.3 of 2005).

# Non-conventional Energy (NCE)

- 199. Some of the objectors have pointed out that NEDCAP has already authorized setting up of NCE power projects much in excess of what the fuels like biomass available in the State can generate. They have expressed concern that such generating units are using lots of unauthorized fuels also.
- 200. The Commission likes to point out that its RPPO (Renewable Power Purchase Obligation) Order dated:27.09.2005 in O.P.No.9 of 2005 is due for review with effect from 01.04.2008, and that this review is likely to be taken up shortly (it could not be taken up earlier due to certain unavoidable circumstances). All the concerns including the one mentioned above can be voiced and will be addressed when this review is taken up. The Commission will also be addressing the NEDCAP, the nodal agency for NCE projects in the State, in this regard.

# Disconnection charges

201. It has been represented that in spite of earlier directives of the Commission disconnection charges of Rs.50 are being collected by the DISCOMS without actually having disconnected the electricity connections. 202. The Commission takes serious note of violation of the directives of the Commission issued in this regard in paras 211 and 211-213 of Tariff Orders for 2006-07 and 2007-08 respectively and directs that:

No licensee shall levy and collect any disconnection charges from a consumer in case the consumer's connection was not actually disconnected. In case, however, such a collection is effected, the Commission re-iterates that the Licensee shall adjust all such unauthorized collections in the future CC bills along with interest @ 24% p.a. with a minimum of Rs.75. Further, the affected consumers are entitled to approach the respective Forums for Redressal of Consumer Grievances.

# **Energy conservation**

- 203. The Commission is deeply concerned that due to the prevailing shortage of electricity practically all over the country, the DISCOMS at times have to procure electricity at as high rates as Rs.9 / 10 per unit. This highlights, if any highlighting were indeed required, the urgent need for conservation of electricity. The Commission takes note with approbation in this connection, the initiatives taken by EPDCL to promote the use of CFL lamps to somewhat reduce the requirement of energy during the peak periods.
- 204. The Commission would like to lend a helping hand to the EPDCL in this endeavour and to the other DISCOMs also. Accordingly, the Commission has provided Rs.1 cr. for each of the DISCOMs in this tariff order, as carrying cost for one year, to enable the DISCOMs to raise some funds to experiment with and promote the use of CFL lamps. The Commission in due course will be providing for the repayment of the funds so raised and employed by the DISCOMs for the purpose.
- 205. The Commission is simultaneously aware of the concerns expressed in various quarters about the adverse effects of adopting CFL, especially in

regard to low Power Factor and also the environmental concerns in the disposal of such lamps. Accordingly, while making the provisions as mentioned above, the Commission directs that:

Each of the DISCOMs shall ascertain and intimate to the Commission by 31.12.2008 the likely adverse effects of adoption of CFL lamps of low Power Factor, as also the environmental concerns regarding the disposal of such lamps and the steps taken / proposed to be taken by them to minimize / eliminate such adverse effects and their own evaluation whether or not support from the Commission in this endeavour should be continued.

# Fuel Surcharge Adjustment (FSA)

- 206. Some of the objectors have raised an objection that the benefits of FSA pertaining to FY 2006-07 were not passed on to the consumers in FY2007-08 and similarly no FSA claim/refund has been filed for FY2007-08. Their contention is that the Commission had failed in its important role of regulatory intervention thereby denying the consumer the benefits of lower fuel costs. They also pointed to the failure of the Commission to maintain its commitment to the designing of a regulatory mechanism to deal with all issues relating FSA. These are serious concerns which need to be addressed and cleared up before examining the appropriate regulatory mechanism for handling the issue relating to FSA.
- 207. First and foremost, the Commission has always upheld the view that variations in fixed and variable costs whether negative or positive should be passed on to the consumers periodically on monthly or quarterly basis. Filing of FSA data by the Licensees has always suffered from a time-lag and more often been incomplete. Under these circumstances, the Commission's Orders on FSA have invariably got delayed. But it is to be noted that the end-results have also been in favour of the consumers,

whether of positive or negative FSA. The delayed filings for FSA settlement lead to the second observation, namely, the wide fluctuations in fuel cost which are now commonplace, perhaps largely on account of hydel generation or in recent times on the availability of natural gas. The non-availability of fuel in turn has impacted on the projected CoD (dates of commissioning of new power plants/units) distorting the projections as regards fixed costs also. Wide fluctuations do not favour quarterly determination of FSA as the sharp positive (increases) fuel costs tend to get muted or negated by equally sharp negatives (decreases) in these costs when looking at the overall trend for over a year as a whole. A consumer while appreciating negative FSA leading to credits appearing on his electricity bill is less tolerant when required to pay positive FSA, a reality that too has to be taken into account. The basic assumption of FSA is that only small variations in fuel costs would be required to be handled.

- 208. The scenario in FY 2006-07 and FY 2007-08 reflected exactly the above situation. The Licensees filed for FSA only for two quarters of FY2006-07 before filing for the Tariffs for FY2007-08. The FSA for the first three quarters of FY 2006-07 were negative and that for the last quarter was on the positive side. The FSA for the third and fourth quarters of FY2006-07 was filed in the month of November 2007 but without full details.
- 209. It was in this context that the Commission had asked the Staff to look at the prevailing FSA Regulation and also examine a draft FSA Regulation circulated some time back before arriving at the appropriate regulatory mechanism for dealing with FSA. On introspection and experience of FSA filings, the Staff is of the opinion that reform in the power sector transiting to market orientation in an environment of supply shortages requires a flexible approach. The Staff took the view that in the context of (a) multiple licensees (DISCOMs) in the State (b) the tariff setting in

- isolation, i.e. restricting to supply area of a single licensee, especially considering the general expectation of the consumers at large of uniform tariff and charges in the State, the FSA draft in circulation was neither in keeping with the spirit of the Electricity Act, 2003, nor specifically with Section 62 of the Act. A number of options were suggested but no conclusive results could be arrived at.
- 210. Section 62 (4) of the Electricity Act, 2003, prohibits amendments to the tariff more frequently than once in any financial year, but allows such amendments in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified. The FSA in its common form covers only fuel cost variations over approved levels for the approved quantity of power. In its extended form, it covers the variations in power purchase mix and fixed cost variations also, which in turn happen to be significant. In handling FSA, a dimension that now needs to be kept in mind is that the Electricity Act, 2003 (Sections 66,86) provides for facilitating purchases from market and traders either to make up for any short supply from the approved sources in the Tariff Order or to optimize power purchase costs. FSA which is a passthrough to consumers may therefore, need to encompass the different components of power purchase costs. Meanwhile the GoAP in their recent letter dated 18.03.08 (Letter No. 1212/PR.II/2008-04) have requested the Commission that FSA be determined annually.
- 211. Given the complexity of the situation, a Concept Paper on the subject will be circulated shortly by the Commission to the public before finalizing a regulatory methodology to handle fuel cost variations in the context of multiple licensees, shared generating stations, uncertainties about hydel generation and sales- mix variations across licensees in the State.

# Treatment of Income from Trading

212. The Commission's treatment of trading by licensees was clarified as early as in the Tariff Order for FY 2004-05 (Para 429) as follows:

"A distinction is always made between regulatory accounts and the Profit & Loss (P&L) accounts (and the Balance Sheet) of a Licensee. In the regulatory framework, the Commission determines the expected revenue from charges to be recovered from consumers by way of tariffs, determined 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 for which tariffs are levied 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. For example, in the case of sales, the regulated business income i.e. tariff income in the transmission sector relates to sales to DISCOMS in the case of APTRANSCO and in the distribution segment, it refers to sales to retail consumers. Purchases and sales of power as part of the trading activity of APTRANSCO (the predecessor entity of DISCOMs in retail supply business) would normally not be reckoned as expenditure of and income from regulated business. This distinction is not drawn in the case of P&L accounts where business income includes earnings incurred on running the regulated business income includes earning from (and expenditure on ) all sources. With this distinction, trueup of expenses incurred on running the regulated business will only be considered, with a further distinction between controllable and non-controllable factors The Commission's concern is with regulated business....." (emphasis added).

213. The Commission has consistently followed this policy, taking also into consideration the fact that the trading activity, as distinct from D - to - D (one distribution licensee to another) transfers, could also at times result in some loss, which the Commission would not like to pass on to the consumers. The Commission has followed this policy this year, too.

However, the trading activity now having emerged as an organized business in the power sector, the Commission would like to have another look at this activity which constitutes the "Other Business" of the licensee, as defined in Section 51 of the Electricity Act, 2003.

# 214. The Commission accordingly, directs that:

DISCOMS shall submit to the Commission by 30.09.2008 a detailed note on its trading activities during the last three years detailing therein the various steps taken to locate and / or procure surplus power from different sources for trading, the methodology adopted for price discovery for sale, as well as for purchase, if any resorted to for this activity, the volumes, and the financial results for each year, estimated and the actuals.

# Safety issues and Compensation

215. Another of the Commission's directives which is stated to have not been complied with as is the one given in its Retail Supply Tariff Order dated 23.03.2006 for FY 2006-07 requiring the licensees to chalk out and place on their website by 30.09.2006, a viable plan of action to adhere to appropriate safety standards and a transparent procedure for the payment of compensation in respect of electrical accidents. The Commission accordingly reiterates that directive extending, however, the time limit referred to therein to 30.09.2008, as follows:

The distribution licensees will chalk out by 30.09.2008, a cogent and viable plan of action to adhere to appropriate safety standards, in particular to periodically inspect their electrical installations to take prompt action to rectify any shortcomings noticed or brought to their notice and to lay down a time schedule therefor. They will also work out and display on their website a transparent procedure

for determination and payment of compensation in respect of electrical accidents involving humans as well as animals.

#### **APGENCO** issues

- 216. A number of consumers have raised the issue that the claims of APGENCO for supply of electricity generated by it to DISCOMs are not being honoured in full and that the tariff issues relating to APGENCO are yet to be settled by the Commission.
- 217. The tariffs of APGENCO stations could not be settled earlier because (i) the Commission's regulations on Generation Tariffs were not finalised, and (ii) the APGENCO was unable to supply details of its fixed costs, Station-wise. The Commission's regulations on Generation Tariff are presently under finalisation and as regards the tariffs, the APGENCO has filed a petition before the Commission, which is under consideration. Elsewhere in this Tariff Order (paragraphs 274 to 279), the Commission has provided appropriate amounts for meeting the DISCOMs' liabilities towards APGENCO.

#### **HT Incentive Scheme**

- 218. Some of the objectors as also the Commission Staff have called for a fresh look at the continued relevance of the tariff incentive scheme, currently applicable to HT I-industrial consumers based on load factor. The issues raised are:
  - a) The scheme was introduced eight years ago to maximize the sales in the context of widespread captive generation and to some extent, due to the existence of some surplus power.
  - b) As of now matters have changed significantly as can be seen in the context of rising oil / fuel prices and consequently the rising cost of captive generation.

- c) The tariff for this category of consumers has been coming down for the last several years and there is, therefore, no need to have an incentive scheme as well.
- 219. The DISCOMs on the other hand, have expressed the opinion that the incentive scheme is useful for attracting new industries to the State and thus maximizing the HT sales which in turn generates more cross-subsidy. Neither the objectors nor the DISCOMs have however quantified the impact of the scheme. The Commission feels that it would be worthwhile to examine the issue in some detail and directs that:

Each DISCOM shall prepare a consultative paper on the incentive scheme applicable to HT-industrial consumers, duly indicating the number of consumers who have availed the incentive and their consumption pattern over a period of time in terms of load factor, power factor, contracted and recorded loads. The DISCOMs shall submit this consultative paper to the Commission by end- August 2008, to enable the Commission to take a view on the continuity or otherwise of the scheme for future years in its present form or in some modified form.

#### **Green Power**

220. CPDCL requested the Commission to accord it permission to sell Green Energy to willing consumers at higher tariffs as may be fixed by the Commission. The request is for the introduction of a separate tariff category 'Green power' for consumers to purchase green power instead of conventional electricity and thereby support the development of new, clean technologies. The request reads:

By choosing to purchase green power instead of conventional electricity, consumers can support the development of new, clean technologies that will reduce the environmental impacts associated with conventional electricity generation and increase their nation's energy independence.

- 221. The Commission is of the opinion that this is a welcome innovative concept and must be encouraged. The concept is new at least in India, for till now, the benefits of Clean Development Mechanism (CDM) are oriented entirely towards producers of green power. It is innovative as it enables consumers of electricity to show their support to a greater level of 'environmental consciousness'. A separate category titled Green Power has therefore, been created in the Tariff Schedule and is available to all consumers in the State with the following broad terms and conditions:
  - Green pricing is an optional tariff offered by the licensees and is voluntary
  - 2. Each consumer is entitled to Renewable Energy Certificates (RECs)
- 222. The distribution licensees are required to immediately undertake measures to prepare the ground for introducing Green Power. Firstly, for validation of RECs by internationally acknowledged green trading companies who have been acknowledged by UNFCCC as 'Certifiers for Carbon Credit', have to be contacted and listed. Only a certified REC entitles a consumer to carbon credits thereby making the certificates internationally acceptable and tradeable. Identification of such firms is therefore a primary pre-requisite. Secondly, regular green audits are required to monitor the amount of green power released into the Grid equivalent to the number of certificates issued. Lastly, a separate fund to be created to which the revenue from Green Power will be credited for use purely for encouraging green generation in general and environment protection in particular.

The Commission desires an October 2008 launch of Green Power.

To meet this target, the Discoms need to submit comprehensive proposal by mid-August (16.08.08). Meanwhile, the Commission fixes the tentative Green Power Tariff at Rs.6.70 /kWh for FY

2008-09 for consumers who voluntarily opt for the Green Power. The difference between the Green Power Tariff and the normal consumer categories tariff otherwise applicable are to be deposited in a non- drawl ' Green Power Fund' to be used only with Commission's permission.

# Solar power in Tribal Hamlets

- 223. The Rural Electricity Policy (Clause 3.2) as notified by Government of India in compliance with Sections 4 and 5 of the Electricity Act, 2003, suggests that for villages/habitations where grid connectivity and even stand-alone systems are not feasible, isolated lighting technologies, like solar photovoltaic technology, may be adopted.
- 224. Accordingly, the Commission examined the possibility of the use of solar photovoltaic cells for households and for street lighting in the light of the success of this technology in 'Paderu' hamlet falling within the jurisdiction of EPDCL. 'Paderu' is an inaccessible hamlet and the scheme initiated by National Institute for Rural Development is a community-based system using solar photovoltaic cells and is unique in that it is managed by women who have been trained as 'Barefoot Solar Engineers'.
- 225. The Commission lauds the effort and has directed EPDCL to extend the 'Paderu' model to other inaccessible tribal hamlets and has provided Rs.1.32 cr. for the purpose.

## **End-of the-Control-Period Review**

226. Some of the objectors have pointed out that as per the Commission's Regulation No.4 of 2005, a review of the principles laid down in that Regulation and the modifications thereto, if any, required as a result of such review have to be undertaken by the Commission at the end of the Control Period. Although the Control Period ends with the year 2008-09,

there is no sign of such effort and the ARR filings are silent in this regard.

227. The Commission would like to state in this regard that the review process has already commenced. The first steps were taken in September 2007 on availability of audited accounts and operating results of APTRANSCO and DISCOMs for the first year (2006-07) of the Control period. The performance review at the field level was done by the Staff of the Commission and discussions were held with the Discoms on i) performance of investment schemes approved and cleared by the Commission; ii) performance with regard to loss reduction; iii) evaluation of O&M costs. The overall performance and operating results will be examined at the end of the control period once the audited accounts for FY 2007-08 and whatever latest performance results for FY 2008-09 are available some time before the end of the control period.

# Projection and use of surplus for 2008-09

228. The Government of A.P. has directed, in letter dated 18-03-08, that for the Tariff year 2008-09, uniform tariffs be maintained across the State. The computations of the Commission for the year 2008-09 show that EPDCL will have a surplus of Rs. 160 Crs. The Commission would like to clarify that this surplus is not 'profit' earned by the Discom return on equity, etc. but constitutes consumers' funds and cannot as be appropriated for any other purpose. The amount shall be kept in a non-drawl reserve account to be utilized only for the benefit of the consumers, in case of contingencies, with prior permission of the Commission.

#### **Short-term Power Purchases**

229. It is observed that power purchases from the market on a short-term basis have been made at times while backing down the long-term contracted power. This though unavoidable on many occasions due to

non-availability of power at peak hours etc., or when otherwise most required, does raise the power purchase cost. The Commission's concern is that power contracted on a continuous basis from external sources even in the case of short-term purchase necessitates the backing down of least-cost stations for which the fixed costs are already paid for and the power is therefore available from them at the variable cost alone. There is therefore, a need to minimise, if not to altogether eliminate, this anomaly. Contracting power for only required hours would resolve this problem. Accordingly what is needed is the formulation of such a short-term power purchase procedure that duly recognizes the halfhourly requirements and to contract purchase of power thereafter on half-hourly basis only for the required number of hours in a day / month(s). The presence of traders, UI market and a number of captive generating stations (which incidentally are sourcing their electricity from the grid), willing to supply power at half-hourly intervals, with half-hourly price quotation need to be tapped. The Discoms can then contract for purchase of power from different parties at different rates selectively and thereby optimize resources to efficiently manage demand to suit individual Discom's demand preference and load patterns. The existing methods of purchases of power need to be appropriately modified to make them suitable for efficient handling of such short-term supply-demand gaps. The end aim is to develop a mechanism for each Discom to access power at short notice - 'power on tap' - at the most competitive prices possible.

230. In FY2007-08 the Commission had directed the Discoms to place on their website deviations in actual dispatch of Generating Stations in Merit Order compared to the monthly dispatch schedule adopted in the Order with a view largely to observe the pattern of power purchases and optimality in resource usage as also as the first step towards developing an on-line trading mechanism. The Commission is distressed to observe that Discoms have not complied with this Directive. The failure to follow

the Directive has also inhibited the development of a website that could have by now emerged as the platform of purchase and sale of electricity for short-term bilateral contracts.

231. The Electricity Act, 2003 with emphasis on competition and competitive bidding as time-tested and desirable mechanisms to source power at competitive rates under Section 86(1)(b) of the Act, mandates the power purchases and the procurement process including the price paid, to be regulated by the Commission. Further, Section 62(1)(a) ibid provides that in times of shortages, the Commission if required, may fix the floor and ceiling prices for short-term power purchases. The two principles that have always guided the Commission, apart from examining the requirement and need of power are whether the process of purchase is transparent and whether the price is competitive. Trading on the net is the answer. Flexibility of quick transaction, security of operations and transparency, the features that Commission is concerned about, can easily be incorporated in online web based trading platforms. The Commission accordingly directs that:

Each DISCOM shall immediately design and create a web-based platform with facilities for online trading to be operationalised by 31<sup>st</sup> August 2008. For this purpose, a prototype model that has inbuilt features for settlement as well as a balancing mechanism on a half-hourly basis has to be developed and put on the website. The Discoms have to show to the Commission's satisfaction by 30<sup>th</sup> June,2008, the modus operandi they intend to adopt for attracting a large number of players as also the methodology they plan to adopt for arriving at the acceptable bid prices.

**UI Charges** 

232. It has been represented that the UI (Un-scheduled Interchanges of power) charge of Rs.10 / unit is too high and further such interchanges of power are not regulated by the Commission.

233. The Commission likes to clarify that the UI charges, varying according to the grid frequency with Rs.10 / unit being the highest, have been specified not by this Commission but by the Central Electricity Regulatory Commission (CERC), the competent authority to do that. CERC has fixed these charges mainly with a view to maintaining grid stability by discouraging overdrawls by different States. This Commission has no role to play in the levy of these charges.

# Consumer categorization - Hotels and restaurants

- 234. The Commission often receives requests from various consumer categories, usually listed under LT Category II-Non-Domestic and Commercial and HT Category II, that they be instead categorized under the HT Category I-Industrial, according to the voltage at which they receive the supply. Such requests are received from hotels and restaurants, film industry, etc., on the consideration that certain departments / organs of the Government such as Industries Department, Provident Fund Organization, ESI, etc., treat them as Industry and in the case of BSNL (Bharat Sanchar Nigam Limited), even a reference was invited to a judicial pronouncement of the Hon'ble Supreme Court in support of the plea. The hotels and restaurants have represented this year, too, for treatment of their business as industry.
- 235. As in its earlier Orders, the Commission reiterates that the electricity consumer classification and categorization, 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 the Central Government or their organs for some other purpose. 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. Since the working of the hotel sector is a commercial activity, the sector has been classified accordingly.

# **Townships and Residential Colonies**

- The DISCOMs in their filings have requested for fixing a higher tariff for 236. Category VI-Townships and Residential Colonies since their consumption is for domestic purposes and the existing tariff is low compared to that for the LT Domestic consumers. In the Tariff Order for FY 2007-08 (paragraphs 206 & 207), the Commission in keeping with Government of India, Ministry of Power, notification, dated: 09.06.2005, issued under Section 183 of the Electricity Act, 2003, had clarified that township/residential colonies availing HT-supply can be billed under HT-Category VI irrespective of the status of the owner/operator, subject to conditions specified under that category. The present proposal of the DISCOMs for a higher tariff too merits consideration in view of the fact that the nature of the cost contribution to the system is the same as that of the domestic consumers except for difference in voltages and the consequent losses attributable to this category. The Staff in their presentation suggested a graded tariff similar to that for LT domestic consumers duly factoring in the voltage-wise loss differences. While no doubt this would be a more logical approach in terms of treatment of similarly-placed consumers, such a treatment requires more details, like load study analyses. Pending such studies to be conducted by the DISCOMs, the Commission agrees to marginally align the tariff of this category with LT-I: Domestic and has revised the tariff for this category from the prevailing Rs 3.50/kWh to Rs 4.00/kWh.
- 237. The Commission, however, observes that the Terms and Conditions of Supply prescribed for this category need further modification to implement appropriately the clarifications given in the Tariff Order for FY 2007-08, as mentioned above. The modifications are:

<u>Substitution of the following</u>: [appearing below the heading 'HT Category VI-Townships and Residential Colonies']:

"This tariff is applicable exclusively for Townships and Residential colonies of Cooperative group housing societies who own the premises and avail supply at single point in the same premises, at HT and any person who avails supply at single point at HT for making electricity available to his employees residing in contiguous premises for domestic purpose, such as lighting, fans, heating etc.,......"

## With-

"This tariff is applicable exclusively for (i) Townships and Residential colonies of Cooperative group housing societies who own the premises and avail supply at single point for making electricity available to the members of such society residing in the same premises, at HT and (ii) any person who avails supply at single point at HT for making electricity available to his employees residing in contiguous premises, the supply in all cases being only for domestic purposes, such as lighting, fans, heating etc.,......"

## Tariff for shopping malls and hoardings

- 238. One of the suggestions put forward is that to bring down demand, higher tariff of, say, Rs.8 / unit ought to be set for shopping malls and hoardings. In support, it has been stated that the Maharashtra Electricity Regulatory Commission has taken such a step.
- 239. Supply of electricity to shopping malls attracts tariff under category LT-II-Non-Domestic and Commercial, which is the highest tariff charged by the DISCOMS, and so should the 'hoardings'. The Commission however is not aware as to what tariff, as also whether a uniform one, is actually charged for the hoardings as the hoardings are seen even atop or on the walls or alongside the residential complexes too. The Commission therefore directs that:--

As the hoardings have all the attributes to be covered under LT Category Non-Domestic and Commercial, and consume electricity mainly during evening peak hours, the Discoms shall confirm to the Commission by 30.09.2008 that the tariff actually charged from them is LT-II- Non-Domestic & Commercial, irrespective of their location, atop the residential apartment complexes, etc. They shall also come up with appropriate proposals, if considered desirable, for any revision of tariff for hoardings and the shopping malls while filing their ARRs, etc. for the next Control Period commencing from FY 2009-10.

# Re-categorization of Tariff Consumer Categories

240. The Discoms under direction from GoAP, have filed for re-categorization of the following two consumer categories:

#### i. Nurseries

The DISCOMs have been directed by GoAP to supply power to nurseries free of cost. Accordingly they have submitted a proposal to reclassify the Nurseries from LT-II-Non-Domestic to LT V: Agriculture. This reclassification would enable the nurseries to the benefits of Government policy of free power to agriculture.

Re-categorization of consumers from one class to another class can be accepted only if it is in consonance with Section 62 of the Electricity Act 2003. The Commission therefore finds no valid grounds nor have any been advanced by the DISCOMs as per Section 62 to permit recategorization of nurseries. The Government also did not give any specific directions to the Commission in response to the Commission-determined tariffs with regard to its intention to pay subsidy for these consumers as it has agreed to for certain other categories of consumers.

At present, these consumers are being billed under LT Category II: Non-Domestic and Commercial whose consumption is being billed under two slabs. The DISCOMs are therefore advised to approach GOAP to make available subsidy for this category of consumers to duly reimburse the DISCOMs to cover the loss of revenue due to difference between the prevailing tariff and that the GoAP desires to be charged.

# ii. Newly-created Municipalities

The GoAP has also directed that Major Panchayats which were recently converted to Municipalities should be extended the benefit of the lower rates applicable to Major Panchayats earlier. As in the case of Nurseries, the Commission reiterates that re-categorization of consumers must be consistent with Section 62 of the Electricity Act, 2003, and finds no basis for re-categorizing the newly-created Municipalities. The Government also did not give any specific directions to the Commission in this instance too in response to the Commission-determined tariffs with regard to its intention to pay subsidy for these consumers as it has agreed to for certain other categories of consumers.

In this case, too, the DISCOMs are advised to approach GOAP to make available subsidy for this category of consumers to duly reimburse the DISCOMs to cover the loss of revenue due to difference between the prevailing tariff and that the GoAP desires to be charged.

# **Poultry Farming**

241. It has been repeatedly represented before the Commission that ceiling of 10% on lighting load of poultry units falling under LT category-III (A) - Industrial - Normal Category needs to be done away with as the lighting is not 'incidental' to the running of a poultry farming unit but is an absolutely essential prerequisite for rearing of chicks, hatching of eggs, etc. The Commission has given the matter a careful thought and decides to accede to the request but with the stipulation that the supply for a poultry farming unit shall not be diverted for any other purpose. An

appropriate note to this effect is being incorporated in the Schedule of Retail Tariff rates appearing as Annexure 'D' to this Order.

### Domestic loads below 260 W

242. Some of the consumers have pleaded for reduction in minimum charges in the case of domestic loads below 260 watts, from Rs.50 p.m. to Rs.25 p.m. The Commission notes that the minimum charges in respect of domestic loads of up to 250 watts are already Rs.25 p.m., and does not find any justification for raising this limit to 260 watts.

# Small trading establishments

243. Some of the objectors have represented that tariff for LT Cat.-II - Non-Domestic /Commercial is too high and the smaller trading establishments consuming energy up to 250 units p.m. be charged only LT-Domestic category tariff. The Commission does not find any justification for equating any commercial establishment - small or large - with a domestic consumer. Even at present, the smaller establishments consuming up to 50 units per month have been provided with a lower tariff. Further, a relief of 10 paise / unit has been provided to them in this Tariff Order.

# Tariff for religious places and charitable educational institutions

- 244. Some consumers have requested that tariff for lighting of temples should be categorized according to the income they earn. Another suggestion is that the temples in rural areas be exempted from any charges as in the case of LT Category V-A Agriculture; the same suggestion has bee made in respect of educational institutions like schools for the deaf and dumb being charitable institutions.
- 245. The Commission has earlier examined the issues relating to tariff for religious places and charitable educational institutions in paragraph 262

to 264 of its Tariff Order for 2005-06, and continues to be of the view that the proposals cannot be accepted. Further, categorization of religious places according to their income is otherwise also not a feasible proposition.

### **Passbooks**

- 246. It has been represented that the Commission's directive that all consumers be provided with passbooks is not being complied with.
- 247. The general response of the DISCOMs on this issue is that in view of the spot-billing as well as the facility for payment of bills online, there is no need for the issue of passbooks. The Commission does not consider this to constitute full compliance with its directive and accordingly directs that:

All DISCOMs shall ensure that passbooks are issued to all consumers desiring the issue thereof. The specific reservations of the DISCOMs, if any, on this issue must be brought to the notice of the Commission by 31.08.2008.

## Incentive for HT consumers with power factor exceeding 0.9

- 248. Some of the industrial consumers and the railways have sought incentive for maintaining power factor higher than 0.9, on the plea that a higher power factor (PF) is beneficial to the DISCOMs as it helps in reduction of technical losses. The issue has been raised in the meeting of State Advisory Committee also.
- 249. The Commission has re-examined the rationale of providing incentives to consumers for maintaining higher PF. Power factor has inverse correlation with reactive power drawl. Higher the power factor, lower will be the reactive power drawl and vice versa. Ideally, the PF should be 1.0. However, as it is not always possible to maintain this level, the consumers are allowed to draw certain quantum of reactive power free

of cost by allowing them to maintain it stipulating PF at 0.9 or above. It is relevant to mention here that if a consumer allows the PF, to fall below 0.9, he attracts a penalty. Conversely, those maintaining PF at 0.9 and above but below 1.0, are not subjected to any penalty. Further, a higher PF benefits the consumer also by way of lower demand (kVA) requirement for the same quantum of energy consumption.

250. For the reasons stated above, the Commission is of the view that there is no justification for disturbing the present dispensation and for allowing incentive to those maintaining PF at 0.9 and above.

# Certification for LT Category IV - Cottage industries

- 251. A number of objectors have represented that the benefit of LT Category-IV Cottage Industries is not being extended to such units on the plea that each such consumer are first required to obtain a certificate about his unit being a Cottage Industry from the Industries Department, etc. In respect of some of the cottage industries already falling under this category, like blacksmithy, it has been requested that the ceiling of 5 HP on connected be raised to 10 HP.
- 252. The Category is a subsidized category meant mainly for promotion of the tiny units with connected load not exceeding 5 HP listed thereunder. At the same time, it has necessarily to be ensured that the benefit of subsidized tariff is not misutilised. The Commission therefore directs that:

In respect of LTCategory IV - Cottage Industries and Dhobighats, the DISCOMs shall first enquire of the District Officer of the concerned Department of GoAP whether or not that Department is issuing the certificates that a particular unit is indeed a Cottage Industry, etc. In case such certificates are issued by the Department concerned, the certification will be insisted upon for extending the benefit of tariff under this category. The certificate shall not be insisted upon

and it will be the Officers of the DISCOM concerned, not below rank of the Divisional Engineer who will decide whether or not a particular unit falls under this category, when however, the department concerned is not issuing such certificates.

253. The Commission does not find any justification for raising of the existing ceiling of 5 HP on the connected load and any other conditions in respect of any of the units falling under this category.

# Surcharge and interest on delayed payments by consumers

- 254. Some objectors have pointed out that the delayed payment surcharge in the case of belated payments by consumers and interest on installments, if granted for clearing such overdue amounts, are too high. It has been pointed out that the Licensee charges 7 paise / Rs.100/day when a consumer defaults in payment of his dues. Further, if the consumer seeks to pay the amount in installments, the licensee charges twice on the outstanding amount, i.e. first at 7 paise / Rs.100/day and also at 24% / annum which works out to more than 49% per annum. As per the objectors, the charges are unduly high and unjust.
- 255. The tariff-setting exercise is premised on timely payments by consumers and 100% collection efficiency on the part of licensees. Any accumulation of arrears, therefore, is neither fair to the licensee not to the other consumers. The surcharge, etc. are kept high more as deterrent against delays in clearing the licensee's dues than as a source of revenue. However, the charges so levied are a matter to be determined by the Commission and have to be fair, high enough to act as a deterrent against delayed payments while also simultaneously being reasonable.
- 256. The Commission after careful consideration of the matter has accordingly decided that:

The Licensees shall charge the delayed payment surcharge (DPS) at 5 paise/Rs.100/day and the interest leviable on the outstanding amounts in case of grant of installments at 18% per annum and the two shall not be levied at the same time. These charges would come into effect immediately, from 01.04.2008 (without waiting for the consequent amendments, wherever necessary), and will remain in force for one year whereafter these may be reviewed by the Commission on the basis of their impact on the licensees' receivables and other relevant factors.

# Agreements in Telugu

- 257. A number of objectors have complained that in spite of the Commission having issued a directive three years back that the agreements with consumers for fresh connections should be in Telugu, the directive has not yet been complied with.
- 258. The Commission notes that while the CPDCL and NPDCL are yet to comply with the directive, the SPDCL has responded that agreements for fresh connections are available with it both in English and Telugu without, however, stating clearly that the agreements are being allowed to be executed in Telugu, as and if desired by the consumers. The Commission accordingly directs that:

The DISCOMs shall ensure by 31.08.2008 that the agreement formats for fresh connections are also available in Telugu and confirm by 31.10.2008 that the consumers have indeed been provided with the option of executing the agreements in Telugu, if so desired by them.

## 24-hour supply to rural areas

259. A number of objectors have represented that (i) 24-hour supply should be extended to all rural areas; (ii) as rural areas are not being provided with 24-hour supply as is done in the case of urban areas, the tariff charges in rural areas should be reduced; and (iii) though the Commission had desired a status report on the possibility of 24-hour

power supply to rural areas, hundreds of villages and the industrial units located therein are not being provided the 24-hr. supply.

260. The Commission notes that though there is quite some progress in separation of domestic feeders (catering also to industrial, etc. consumers) from agriculture feeders in the rural areas, the extent of progress requires to be monitored closely. The DISCOMs are therefore directed that:

The DISCOMS shall submit half-yearly reports to the Commission by  $31^{st}$  October and  $30^{th}$  April indicating therein the status on separation of feeders as on  $30^{th}$  September and  $31^{st}$  March, respectively. A gist of these reports may also be displayed by the DISCOMs on their website. They may also report by 31.10.2008 as to why not the minimum charges payable by the consumers in rural areas where the supply is provided only for a limited number of hours a day on a continuous basis throughout the year should not be suitably reduced.

# Non-compliance with Commission's directives by DISCOMs

261. The Commission is distressed to note that the DISCOMs have not paid attention to a number of directives issued in the Tariff Order for 2007-08. A number of consumers have also pointed out this failure of the DISCOMs. These directives are listed in Part-I of the Annexure-B to this Tariff Order. Further,

The Commission expresses its displeasure on the DISCOMs not complying with a number of its directives issued in the Tariff Order for 2007-08 and some even in earlier orders, which are listed in Part-I of Annexure-B to this Tariff Order. The Commission expects the DISCOMs to fully comply with these directives by the revised dates indicated therein. Any failure to do so will be taken a serious note of.

# CHAPTER - VII TARIFF DETERMINATION PROCESS

# PART-A

### **POWER PURCHASE COST**

262. Determination of the power purchase cost is an elaborate exercise undertaken by the DISCOMs and examined in depth by the Commission. The exercise involves taking into consideration: i) Power generation capacity (owned by the GoAP-owned generation company - APGENCO, State's share in Central Generating Stations and generating stations owned by Independent Power Producers, etc) and availability of power therefrom within/to the State and the allocated share of each Discom therein; ii) Requirement of power to meet the projected sales taking into account the projected losses in the network business; iii) the dispatch of available capacity to meet power requirements on the basis of central dispatch, and iv) purchases if required from outside sources to cover the balance requirements of Discoms. The Commission considers it appropriate to discuss herein the Power Purchase cost, the single largest component in the cost structure in the ARRs for the Retail Supply Business of FY 2008-09.

## PART -I

# Generation capacity and availability

- 263. Andhra Pradesh has a total generation capacity of 13936 MW including 3014 MW allocated to the State as its share in the Central Generating Stations (CGS), 2496 from Independent Power Producers (IPPs) and 607 MW from Non-Conventional Energy (NCE) and other sources.
- 264. The total available generation capacity (with the exception of NCE) of the State is allocated among the four DISCOMs as per the Third Transfer Scheme in the proportions indicated below:

Table 12: Third Transfer Scheme

Third Transfer Scheme Allocation			
APEPDCL	APCPDCL	APNPDCL	APSPDCL
16.70%	43.48%	16.92%	22.90%

Note: As of now, unless extended further, modifications to the Third Transfer Scheme can be made by GoAP up to 31<sup>st</sup> March 2008 In case of the NCE power plants, the total capacity of a plant has been allocated to the DISCOM in which the plant is located.

265. Discoms have filed their estimates of availability of energy from different sources and requirements to meet their projected sales for FY2008-09. The filings detail the capacity of each generating station and the availability taken into account for meeting the monthly sales requirements. As per the filings the availability of power for the four Discoms comes to 66751 MU which includes short-term power purchase of 3637.16 MUs from the market. The Commission has examined the filings and after taking into account factors that include maintenance schedule, the Plant Load Factor (PLF) of each station and past performance, estimates the availability of energy for FY2008-09 at 65,098.50 MUs from the existing contracted capacity, exclusive of any The table below gives the total generation market purchases. availability under broad category sources as filed by the Discoms and as approved by the Commission. Energy availability for each month and each generating station is given in Annexures E (i,ii).

Table 13: SOURCE-WISE GENERATION AVAILABILITY

	IVIUS
DISCOMs	APERC
24435.98	24944.85
7991.43	9,045.55
13549.37	13,884.65
7305	7,400.00
355.55	355.55
6849.91	6,849.91
2516.77	2,507.77
110.21	110.21
3637.16	0
66751.38	65,098.49
	24435.98 7991.43 13549.37 7305 355.55 6849.91 2516.77 110.21 3637.16

MHc

# Sales forecast and Power purchase requirements

266. The combined energy sales of DISCOMs are projected at 55,718.94 MUs for FY2008 - 09 against which the Commission has approved energy sales of 52,527.60 MUs. The total energy requirement has been arrived at by grossing up the sales projections to account for Transmission and Distribution losses. For the purpose of grossing up, the transmission and distribution loss levels for FY2008 - 09 as per the loss reduction trajectory approved by the Commission in its earlier Orders on Transmission Tariffs and Distribution Tariffs under the Multi-Year Tariff (MYT) framework has been adopted. The sales projections and power purchase requirements filed by the DISCOMs and as accepted by the Commission are tabulated below:

Table 14: Sales & Power Purchase Requirements

	MUs					
DISCOM	Sales		Power Pu Require			
	DISCOMs	APERC	DISCOMs	APERC		
APEPDCL	8863.18	8,824.81	10,488.18	10,414.86		
APCPDCL	25,193.07	23,900.46	30,849.63	29,101.29		
APNPDCL	8,789.43	7,746.21	10,806.68	9,443.51		
APSPDCL	12,873.26	12,056.12	15,640.56	14,554.91		
Total	55,718.94	52,527.60	67,785.05	63,514.56		

# Merit Order Dispatch / Centralised Dispatch

- 267. On the basis of availability, sales and power purchase requirements of each month, the stations which are eligible for dispatch starting from the must-run stations to other stations in the ascending order of variable cost per unit are simulated through a power purchase model. energy dispatches from the stations so eligible to meet the total requirement of energy enable the estimation of power purchase costs (fixed costs and variable costs). Dispatch of generating stations on the basis of merit order has been insisted upon by the Commission right from the year 2001-02 and adopted by the Licensees as the most optimal methodology. Dispatch is done centrally by the State Load Despatch Centre (SLDC) under Section 32 of the Electricity Act, 2003. For examining the projections of DISCOMs the Commission has prepared its own Merit Order dispatch model in similar manner, which enables the Commission to match energy requirements with energy availability. It may be appropriate at this place to explain in some detail the sequence of steps involved in the merit order dispatch of energy before discussing the attendant effect on power purchase costs.
- 268. In the first instance, the energy availability of generating stations is stacked up with lowest variable cost having first priority, the second lowest variable cost having second priority and so on. In case the total available energy in the State is not sufficient to meet the energy requirement, the shortfall is met through market purchases. In case of availability being surplus of requirements, the generating station with highest variable charge is backed down.
- 269. The shortfall in the energy dispatched to a DISCOM is first met from DISCOMs having surplus. In case of further shortfall, the additional energy is sourced from the market. In case a DISCOM is left with surplus energy even after meeting the energy shortfall of other DISCOMs, then it

is assumed that such energy has been sold to the market. The total power purchase cost of the DISCOMs is computed by netting of such income from sale of surplus energy in the market.

- 270. A point to be noted as mentioned earlier is that availability in the Discoms' filings includes market purchases. The Commission in its analysis in Chapter VI (Commission's Analysis on Substantive issues) on short-term power purchases has suggested an alternative methodology for such purchases of power that will enable a Discom to optimize its resources and manage its demand more efficiently.
- In a centralised dispatch system, market purchases are made at the aggregate demand-supply State imbalance and not at the individual Discom level. These market purchases are then apportioned on the basis of the Transfer Scheme. The implication of such treatment of purchases to meet the short-term imbalances is that the costs of power purchases do not correctly reflect the costs otherwise attributable to a Discom for meeting its energy requirement. The total availability of energy as per the dispatch model of the Commission does not include such purchases from the market. The Commission deals with these purchases separately.
- 272. The month-wise and station-wise dispatches in MU as adopted for computation of cost of energy are given in Annexure E(iii) and adopted for the combined energy purchase requirement of all the four DISCOMs during FY 2008-09. To keep track of the deviations from the month-wise and station-wise merit-order dispatches so adopted by it and to study the impact of such deviations, the Commission reiterates the Directive given in Tariff Order FY 2007-08 which was not complied with during the year and directs that it be followed this year.

The Commission directs DISCOMs to furnish a monthly report on deviations along with reasons for such deviations in actual dispatch of Generating Stations in Merit Order compared to the monthly dispatch schedule adopted in this Tariff Order showing the quantum of energy in MU for each generating station. They are also directed to follow the directive of the Commission issued vide paragraph 479 in Tariff Order for 2005-06 on maintenance schedule based on demand and supply position in different months.

#### PART - II

# **Cost of Energy**

273. Cost of energy as per the filings and as accepted by the Commission is discussed in the paragraphs that follow.

#### **APGENCO**

- 274. The DISCOMs have included in their ARR filings an aggregate fixed cost of Rs.2049.15 Crs. for FY 2008-09 based on a proposal submitted by APGENCO (A.P. Power Generation Corporation Limited), as being payable to the latter. This includes the fixed cost of Rs. 1503.69 Crs. estimated for the existing stations of APGENCO as was adopted by the Commission in its Tariff Order 2007-08 for these stations. In addition, they have proposed Rs.322.00 Crs. as the fixed cost for RTPP Stage II, Rs. 123.46 Crs. for new APGENCO stations like Priyadarshini Jurala and VTPS Stage IV which are expected to commence commercial operations during 2008-09 and a provision of Rs. 100.00 Crs. towards likely impact of determination of tariff for APGENCO stations, a petition for which is presently pending before the Commission.
- 275. During the public hearings, APGENCO had deposed that the fixation of their tariffs should be in accordance with the principles adopted in the last Tariff Order till such time as the new Regulations for determination of generation tariffs are finalized and made applicable. The Commission has examined the submissions made by APGENCO and the costs proposed by the Licensees and considers it appropriate to provide for i) Rs.1479.13 Crs. towards fixed costs of existing stations of APGENCO for FY 2008-09

(both Thermal & Hydel); ii) Rs. 322 Crs. for RTPP - II whose CoD stands postponed from FY 2007 to April 2008; iii) Rs.96.88 Crs. as fixed costs of Jurala and iv) provision of Rs. 100 Crs. as in Tariff Order FY 2007-08 towards the likely financial, impact on the tariffs of APGENCO of the decision of the Commission on the APGENCO's petition after finalization of the new Regulations. The total fixed costs of APGENCO thus come to Rs. 1998.01 Crs. The details are shown in the Table below.

Table 15: Details of APGENCO's Fixed Cost for FY 2008-09 (Rs. Crs.)

Itams of Evnanditura	DISCOMs	APERC
Items of Expenditure	As Filed	As approved
Interest on Capital Loan	88.22	88.22
Depreciation	571.00	528.02
Operation and Maintenance	435.46	452.88
Return on Equity	279.86	279.86
Inter-State Power	14.01	15.01
Interest on Working Capital	115.14	115.14
Total for existing power stations	1503.69	1479.13
Fixed Cost of RTPP Stage - II	322.00	322.00
New Stations - Jurala HES & VTPS-IV	123.46	96.88
Provision for Tariff determination	100.00	100.00
Grand Total	2049.15	1998.01

276. The fixed costs provided in the Tariff Order for FY 2007-08 on the assumption that RTPP-Stage II would achieve CoD in April 2007 but did not do so, have not been withdrawn, as the licensee in any case would have had to buy substitute power to meet the consequent shortfall in availability.

# Cost of energy

277. The Commission, in its computation of cost of energy, has adopted the station-wise variable costs of APGENCO's existing thermal stations based on Table 8 in paragraph 234 of its Tariff Order for FY 2007-08 as proposed by the DISCOMs. The variable cost of RTPP Stage II is taken as Rs.1.47/kWh. These costs are shown in the Table below:

Table 16: Cost of Energy

	(Rs./kWh)
Station	Variable cost
VTPS(I,II,III)	1.2583
RTPP Stage I	1.6296
RTPP Stage II	1.4700
KTPS (A,B,C)	0.9953
KTPS-D (KTPS-V)	1.0118
RTS-B	1.2089

# Costing of power generated from SSLBPH

278. For Srisailam Left Bank Power House (SSLBPH), the DISCOMs have proposed a weighted average variable cost of Rs.1.06/unit (Nonmonsoon = Rs.1.63/unit, Monsoon = Rs. 0.64/unit). They have considered the period from June to October as monsoon period and November to May as non-monsoon period. The Commission has adopted this rate only for the purpose of estimation of power purchase cost for FY 2008-09. As mentioned in paragraph 167 of Tariff Order dated 23<sup>rd</sup> March, 2006 for Distribution Tariffs and Retail Supply Tariffs (for FY 2006-07 to 2008-09 and 2006-07, respectively), the Commission has, however, decided that the payment for the power generated from SSLBPH will continue to be made as per the methodology specified in paragraphs 475 to 477 of Tariff Order for 2004-05 (and reiterated in paragraph 375 of Tariff Order for 2005-06) as reproduced below:

<sup>&</sup>quot; 475. The Commission by its order dated: 19.03.2004 on the review petition filed by APGENCO, directed that the energy generated

from SLBH over and above the effective capacity of right bank power house from the live storage to meet the peak demand during non-monsoon months shall be paid at the rate mutually agreed and consented by the Commission. The Commission therefore, decided to consider payment at the marginal variable cost of the purchases from thermal stations by APTRANSCO. This power from SSLBH will be priced at marginal variable cost of the purchases from Thermal Power Stations by APTRANSCO consented by the Commission.

- 476. Similarly, in the event of surplussing too, if and when extra energy is generated over and above the capacity of SRBH, the power shall be paid for at the lowest variable cost of the purchase from Thermal Power Stations by APTRANSCO consented by the Commission.
- 477. The Commission reiterates that in fairness to consumers, fixed capacity charges of SLBH will be considered for inclusion in the PPA of APGENCO only after its pump mode operation is established."
- "375. The Commission has issued directions in paragraphs 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 generations 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 15<sup>th</sup> May 2005."
- 279. To ensure avoidable loss of hydro-power during surplussing season (monsoon period), the Commission deems it desirable to re-iterate its directive under paragraph 267 of Tariff Order for Distribution and Retail Tariffs dated 23<sup>rd</sup> March, 2006, as reproduced below:

DISCOMs should closely coordinate with APGENCO to ensure that no unit of Srisailam complex (Left Bank Power House and Right Bank Power House) is backed down or shut down during the surplussing season. In case of generation of surplus energy by them over and above the requirements of DISCOMs and other users of energy, they should shut down some unit(s) of Thermal Power Stations with marginal variable cost in the merit order if reduction of generation up to backing down limit does not help bring down the frequency to a safe level.

# **Central Generating Stations (CGS)**

280. The Commission has accepted the fixed charges and variable charges for CGS as filed by the DISCOMs. The DISCOMs have considered the variable costs of September, 2007 for projecting the power purchase costs of CGS for FY 2008-09. These costs are shown in the Table below

Table 17: CGS - Power Purchase Cost

Station	Capacity allocated to AP (MW)	Fixed cost for FY 2008- 09(Rs.Crs.)	Variable charges (Rs./kWh)
NTPC - SR (Ramagundam) Stage I & II (2100 MW)	735.21	167.95	1.05
NTPC - SR (Ramagundam) Stage III (500 MW)	183.85	96.82	1.14
NLC TPS II Stage I	126.81	23.38	1.25
NLC TPS II Stage II	218.40	46.25	1.25
NPC-MAPS (440 MW)	47.08	18.51	1.16
NPC-Kaiga unit I	148.32	154.82	1.01
NPC-Kaiga unit II	144.32	171.86	1.01
NTPC Talcher Stage-2	430.30	213.20	0.74
NTPC Simhadri	1000.00	459.54	1.12

281. The DISCOMs have also projected Rs.12.16 Crs for NTPC (SR) (Rs.9.97 Crs. for NTPC SR Stage I & II, Rs.2.18 Crs. for NTPC SR Stage III) and Rs.1.87 Crs. for NTPC Talcher Stage -2 towards incentive amount for FY 2008-09 and the same have been accepted by the Commission.

# **APGPCL**

282. The DISCOMs have proposed the following cost structure for purchase of energy from A.P.Gas Power Corporation Limited (APGPCL) as per the existing Memorandum of Understanding:

Table 18: APGPCL - Power Purchase Cost

APGPCL	Demand Charge(Rs./kVA)	Fixed Cost (Rs.Crs)	Variable Cost (Rs./kWh)
Station-I	75	3.34	1.14
Station-II		9.32	1.03

#### **IPPs**

283. The Commission has accepted the fixed charges and variable charges of IPPs as filed by the DISCOMs. The DISCOMs have considered the variable costs of September, 2007 for projecting the overall cost for FY 2008-09. These costs are shown in the Table below:

Table 19: IPPs- Power Purchase Cost

Station	Capacity (MW)	Fixed cost for FY 2008-09(Rs.Crs.)	7
GVK	216.82	128.97	0.97
Spectrum	208.31	144.91	0.97
Kondapalli	351.49	289.73	1.10
BSES/Reliance	220.00	150.30	0.91
GVK Extension	220.00	24.68	1.57
Vemagiri	370.00	36.80	1.57
Gautami	464.00	43.98	1.57
Konaseema	445.00	35.90	1.57

#### Other sources

# a) Mini Power Plants

284. The DISCOMs have projected availability of 110.21 MU from Mini power plants like Srivathsa (17.20 MW - 110.21 MU) @Rs. 1.211/kWh and LVS (36.80 MW - 'nil' availability as the plant remains shut down because of high variable charges @Rs.5.07/kWh). The Fixed Cost of Srivathsa works out to Rs.12.83 Crs. and that of LVS is Rs.27.78 Crs.

# b) Non-Conventional Energy (NCE) sources

285. The DISCOMs have projected purchase of 2516.79 MUs from NCE sources. The cost break-up of this quantum of energy is given in the Table below:

Table 20: NCE - Power Purchase Cost

Station	Energy (MU)	Other cost for FY 2008-09(Rs. Crs.)	Variable charges (Rs./kWh)
NCE - Biomass	1,229.22		3.17
NCE - Bagasse	748.19		2.94
NCE - Municipal Waste to Energy	71.11		3.7
NCE - Industrial Waste to Energy	129.98		3.13
NCE - Wind Power	148.84		2.92
NCE - Mini Hydel	169.08		2.19
NCE - NCL Energy Ltd.	20.36		1.78
Total	2,516.79		3.03

286. The Commission has treated the power purchase of 45.54 MUs from Mini Hydel Stations of APGENCO, each with the capacity not exceeding 20 MW, such as PABR (20 MW yielding 8.02 MU), Nizamsagar PH (10 MW; 10.69 MU), Singur PH (15 MW; 6.83 MU) and Mini Hydro & others (14.16 MW; 20 MU) as purchase from NCE sources. The purchase from NCE

sources as a percentage of total purchase by all four DISCOMs works out to 4.86% as against 5.00% specified by the Commission.

287. As far as purchase from NCE sources is concerned, EPDCL, NPDCL and SPDCL have NCE availability of up to 5.49%, 5.77% and 8.43% respectively of their power purchases, whereas CPDCL has NCE availability of 2.53%. Appreciating that the allocation of NCE projects to the DISCOMs, on the basis of their location was only to ensure that the project developers are not put to avoidable inconvenience by having to deal with more than one DISCOM, and not that some of the DISCOMs are disadvantaged due to the higher cost of electricity from these projects, the Commission has decided to distribute the cost of purchases from NCE sources among the four DISCOMs equally.

# c) Bilateral market purchases

288. In case of shortages where market purchases are required, the Commission has accepted the Discoms' probable rate of Rs.7.00/unit for the purpose of estimation of power purchase cost.

#### PGCIL & ULDC charges

289. The DISCOMs have filed the PGCIL Transmission and ULDC Charges as amounting to Rs.310.19 Crs. The Commission has accepted these charges to be counted towards power purchase cost and allocated these costs to the four DISCOMs, in the ratio of their respective percentage allocation of energy from Central Generating Stations (CGS).

#### Power purchase cost for FY2008-09

#### State level

290. The power purchase costs as filed by the DISCOMs and as approved by the Commission are summarized for the State in the tables below:

Table 21:Source-wise Power Purchase Costs (As filed - All DISCOMs)

Source	Power purchase	Fixed cost	Variable cost	Tax, incentive, Other charge	Total cost	Average cost
	(MU)	(Rs. Crs.)	(Rs. Crs.)	(Rs. Crs.)	(Rs. Crs.)	(Rs. / Unit)
APGenco	32427.40	2049.15	3179.85	101.08	5330.08	1.64
Thermal	24435.98		2959.01	101.08		
Hydel	7991.43		220.83	0.00		
CGS (Excluding NTPC - Simhadri)	13549.37	892.80	1388.98	102.32	2384.10	1.76
NTPC-Simhadri	7305.00	459.54	816.11	20.56	1296.21	1.77
APGPCL-I&II	355.55	12.66	37.32	0.00	49.98	1.41
IPPs	6849.91	855.27	778.07	0.00	1633.34	2.38
Others (NCE & Mini Power Plant - Srivathsa & LVS)	2627.00	40.61	774.29	0.00	814.91	3.10
Traders / Naphtha (Market & Other Short Term Sources)	3637.16	0.00	2546.01	0.00	2546.01	7.00
Additional power purchase for new Govt. Lift Irrigation Schemes	1033.66	0.00	891.03	0.00	891.03	8.62
Total	67785.05	4310.00	10411.67	223.96	14945.67	2.20

Table 22:Source-wise Power Purchase Costs (As approved by APERC)

Source	Power purchase	Fixed cost	Variable cost	Tax, incentive, Other charge	Total cost	Average cost
304100	(MU)	(Rs. Crs.)	(Rs. Crs.)	(Rs. Crs.)	(Rs. Crs.)	(Rs. / Unit)
APGenco	32562.40	1998.01	3048.08	113.66	5159.75	1.52
Thermal	23516.83	1998.01	2827.25	113.66	4938.92	1.98
Hydel	9045.55		220.83		220.83	0.24
CGS (Excluding NTPC - Simhadri)	13884.65	892.80	1413.80	82.31	2388.91	1.72
NTPC-Simhadri	7400.00	459.54	826.73	27.48	1313.75	1.78
APGPCL-I&II	355.55	12.66	37.32	0.00	49.98	1.41
IPPs	6691.02	855.27	753.12	0.00	1608.39	2.35
Others (NCE & Mini Power Plant - Srivathsa & LVS)	2617.98	40.61	758.98	0.00	799.59	3.06
Traders / Naphtha (Market & Other Short Term Sources)	2.98	0.00	2.09	0.00	2.09	7.00
Total	63514.56	4258.89	6840.12	223.45	11322.47	1.78

# Impact of PGCIL and ULDC Costs

291. After taking into account PGCIL & ULDC costs, the power purchase costs work out as given in the Table below:

Table 23:Power Purchase Cost and PGCIL Cost for FY 2008-09

Cost element	Fixed cost filed (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)
Power Purchase	4310.03	4258.89	1.54	1.08	2.2	1.78
PGCIL Transmission & ULDC Charges	310.19	310.19		1	0.05	0.05

292. The average power purchase cost for all four DISCOMs works out to Rs.1.78/kWh (excluding PGCIL cost and ULDC charges) as against Rs.2.20/kWh filed by the DISCOMs, and Rs.1.83/kWh inclusive of the PGCIL cost and ULDC charges. The estimated variable cost per kWh, month-wise, as also the allowable power purchases are given in the table below. The variable costs to be adopted for FSA calculations are given in the last column of the table.

Table 24: Month-wise Variable Cost as adopted by APERC for FY2008-09

Month/ Quarter	Purchase requirement as EHT input (Mus)	Total despatch for DISCOM sales only (MUs)	Total Variable Cost (Rs.Crs.)	Variable Cost per kWh (Rs.)
Apr-08	4944.72	4944.72	550.82	1.1140
May-08	5084.16	5084.16	587.98	1.1565
Jun-08	4785.73	4785.73	551.25	1.1519
QRT 1 @	14814.61	14814.61	1690.05	1.1408
Jul-08	5106.73	5106.73	528.42	1.0348
Aug-08	5438.50	5438.50	543.04	0.9985
Sep-08	5156.37	5156.37	541.05	1.0493
QRT 2 @	15701.61	15701.61	1612.52	1.0270
Oct-08	5483.78	5483.78	548.51	1.0002
Nov-08	5051.83	5051.83	546.28	1.0814
Dec-08	5351.69	5348.71	589.30	1.1018
QRT 3 @	15887.30	15884.33	1684.09	1.0602
Jan-09	5630.81	5630.81	624.28	1.1087
Feb-09	5476.61	5476.61	601.15	1.0977
Mar-09	6003.61	6003.61	625.94	1.0426
QRT 4 @	17111.04	17111.04	1851.38	1.0820
Total	63514.56	63511.59 *	6838.04	1.0767

Exclusive of additional power purchase of 2.98 MU from market at Rs. 7/kWh

293. The Commission approved 63514.56 MUs as the power purchase requirement of all the four Discoms. Within this approved quantum, each Discom has to pay for both the Fixed Costs and the Variable Costs. Adjustments are made at the Discom-level after making adjustments for

<sup>@</sup> QRT = Quarter of the year Discom-level

i) NCE cost adjustments; ii) cost adjustment for D-to-D energy transfer; and iii) Market transactions

# i) NCE cost adjustment

As the Commission has decided (as also decided vide paragraph No.246 of Tariff Order for FY2007-08) in paragraph 287 of this order to proportionately distribute the cost of purchase from NCE sources among the four DISCOMs, the cost of power from this sources is adjusted at the weighted average cost of purchase, i.e. Rs.3.03/kWh.

Table 25:Power Purchase Cost after NCE Cost Adjustment

DISCOM	Allocation from NCE sources (MU)	•	Surplus /(Deficit) (MU) after adjusting to RPPO order	Energy costbefore NCE cost adjustment (Rs. Crs.)	Energy costafter NCE cost adjustment (Rs. Crs.)
APEPDCL	484.62	522.86	-209.69	1908.23	1844.72
APCPDCL	604.86	1315.44	710.58	4765.83	4981.44
APNPDCL	447.02	522.18	-209.42	1917.64	1855.36
APSPDCL	1016.82	726.75	-291.46	2728.68	2638.87
Total	2553.31	3087.24	0.00	11320.39	11320.39

# ii) Cost adjustment for D-to-D energy transfer

In response to the Directive given by the Commission in paragraph 246 of Tariff Order for FY2007-08, regarding the appropriate methodology for costing of D-to-D energy transfers, two Discoms, namely, CPDCL and EPDCL have responded on the basis of a proto-type model that the appropriate cost should be with reference to the marginal cost. Accepting this as the appropriate methodology, the energy traded between the DISCOMs is priced at the marginal variable cost of Rs. 1.63/kWh corresponding to highest variable cost, namely, of RTPP-I, as follows:

Table 26:Power Purchase Cost after DISCOM-to-DISCOM Energy Transfer

DISCOM	Allocation from total approved energy(MU)	Energy purchase Required (MU)	Surplus / (Deficit) (MU)	Energy cost before D-to-D transfer (Rs. Crs.)	Energy cost after D-to-D transfer (Rs. Crs.)
APEPDCL	10756.45	10414.86	341.59	1844.72	1789.04
APCPDCL	27061.60	29101.29	-2039.69	4981.44	5313.42
APNPDCL	10742.51	9443.51	1299.00	1855.36	1643.62
APSPDCL	14951.03	14554.91	396.12	2638.87	2574.30
Total	63511.59	63514.56	-2.98	11320.39	11320.39

# iii) Market transactions

The sales/purchases from the market of each Discom are shown in the table below

**Table 27: Market Transactions** 

DISCOM	Market Purchases (-) /Sales (+)(MU)	Energy cost before market transactions (Rs. Crs.)	Energy cost after market transactions (Rs. Crs.)
APEPDCL	3.31	1789.04	1787.26
APCPDCL	-43.82	5313.42	5337.44
APNPDCL	30.40	1643.62	1627.30
APSPDCL	7.13	2574.30	2570.47
Total	-2.98	11320.39	11322.47

# PART-B TARIFF DESIGNING AND COST- TO- SERVE

- 294. Sections 61 and 62 of the Electricity Act, 2003, require the Commission to determine the tariff for the retail sale of electricity. The tariffs are designed to progressively reflect the cost of supply/cost to serve (CoS) of electricity and in line with Section 61(g). The Commission in determining the Retail Supply Tariffs and allocation of cross-subsidy uses the CoS model, a practice followed since the first Tariff Order. Since then, the CoS model has undergone changes to reflect the changes in the structure of the electricity industry as a result of the reforms. These include allocation of PPAs to the DISCOMs, open access, non-discriminatory transmission and wheeling tariffs.
- 295. The basic structure is to allocate the costs of generation, transmission and distribution to the different consumer categories as per the categories' cost-causation on the electrical system. The power purchase cost for each consumer category is determined by allocating the generation fixed cost, based on the coincident peak as per the practice of using coincident peak in the system planning exercise, where capacity additions are based on the system peak requirements. The Transmission and Distribution costs are allocated, based on the contracted capacity of the consumer categories and non-coincident peak in line with the Commission's Regulations No.4 & 5 of 2005.
- 296. In this Part, the steps involved in arriving at the Commission-determined Tariffs are outlined for each DISCOM. Outlined below are the steps which explain the manner in which the cross-subsidy available within a surplus DISCOM is estimated and apportioned among different consumer categories and the process followed in a deficit DISCOM. The one surplus DISCOM is APEPDCL while the deficit DISCOMs are APCPDCL, APNPDCL and APSPDCL.

#### **Commission Determined Tariffs**

- 297. The very first step in this process is to allocate the costs using the CoS model for each category of consumers and in some industrial categories, the CoS is computed at different voltage levels. As step two, tariffs are determined and revenue computed for each consumer category or tariff block within a category.
- 298. In allocating the approved revenue requirement to various consumer categories /classes, the Commission, as per the earlier practice, has followed the embedded cost methodology. In this methodology, the cost is allocated to consumer classes based on class loads, class contribution to the system peak and class load factor. In this way, each class gets the cost allocated according to its cost-causation to the system. The costs allocation levels are therefore, sensitive to contracted loads, contribution to the peak and load factor (utilization).
- 299. Further, for determination of tariffs for 2008-09 as well, the Commission has continued with the class coincident and load factors employed for FY2007-08, as the statistics filed by the Discoms for FY 2008-09 are at variance with the load factors used in previous years. No explanation has been provided by the Discoms for the changed load factors in some of the categories. The Commission's decision is based on the consideration that it is appropriate to continue with the load factors of FY2007-08 since consumption levels and behavior are unlikely to change in the short term to significantly impact on the cost allocation among consumer classes. Furthermore, the Commission is sensitive to the fact that costs at present are far away from tariffs and the electrical system is yet to reach one- to-one correspondence between the costs and tariffs. However, in keeping with Section 61 (g) of the Electricity Act, 2003, and the provisions of the Tariff Policy, the exercise of aligning costs to tariffs is important and continues to be a primary concern. The importance of load studies, based on accurate field measurements, can also not be

undermined and it was in this context that the Commission had in Tariff Order for FY2005-06(paragraph 693) directed the DISCOMs to.

"set up a separate Load Research Cell which undertakes load survey and consumer profiling"

300. The Commission understands that the CoS submitted by the DISCOMs is indeed based on empirical work done by these cells. However, as the output thereof is not up to an acceptable level as mentioned above, the Commission directs that:

The Discoms shall submit quarterly reports of the load curve analysis of major consumer categories based on the studies done by their Load Research Cells. They shall also arrange to make every quarter, before the submission of the report for that quarter, a presentation to the Commission, with the first presentation being made in mid-August, 2008.

- 301. The Commission also points out that the evening peak is still the dominant peak and does not accept the Discoms' proposal of using average of the two peaks (morning and evening) for as opined in earlier Tariff Orders, the system peak to be considered is the peak without agriculture load, which is the evening peak. Agricultural load is met offpeak since, as of now, a rotation system is used by the Discoms to provide supply to agriculture during off-peak hours of the day, also known as 'shoulder' part of the system's load curve.
- 302. In step three, the category/tariff block surplus/deficit consequent to steps one and two is computed as the difference between the CoS and total revenue from tariffs and charges. The sum of surplus available from all categories/blocks (cross- subsidy) is apportioned among the deficit categories in proportion to the respective deficit of each such category to the total deficit of all deficit consumer categories. Wherever possible and considered just and proper, the Commission re-adjusted the

tariffs for certain subsidizing categories/classes so as to reduce their level of cross-subsidisation in line with the Electricity Act, 2003, and the Tariff Policy, though the Commission is yet to take up the issue of bringing this trajectory down to +/- twenty percent of the cost and will be taking it up as soon as possible.

- 303. In step four, the surplus/deficit for each consumer category/class has been recomputed after apportionment in step three of the available cross-subsidy. Even after such apportionment in the case of CPDCL, NPDCL and SPDCL some consumer categories/tariff blocks are left with a deficit while some consumer categories/classes in EPDCL have surplus.
- 304. In step five, the Commission has revised the energy tariff for the consumer categories/classes in the deficit categories of the deficit Discoms in such a manner that the net class deficit is covered through the revised tariff.
- 305. Calculations relating to cost allocation, etc., are detailed in Annexures I(i) to I(iv).

# CHAPTER - VIII RETAIL SUPPLY TARIFFS OF APCPDCL PART A - REVENUE REQUIREMENT

# Filings in brief

- 306. The Discom (APCPDCL) filed its Aggregate Revenue Requirement (ARR) and Revenue at proposed tariffs for determination of the retail supply tariffs for FY 2008-09, which is the third and last year of the first Control Period. The retail supply business of the Discom refers to purchase, and sale of electricity with reference to its licenced area. The Discom projected the sales to different categories of consumers and reckoned the losses to compute the power purchase requirement for FY 2008-09.
- 307. The projected sales to different consumer categories were based on historical information and likely variations in loads, number of consumers, etc. The filed sales volume of 24811 MU, was later revised to 25193 MU\* on account of upward revision of sales to HT- Agriculture Consumer Category (Government Lift Irrigation Scheme). For LT Agriculture, the Discom appears to have relied upon the DTR meter readings and other information available to it.
- 308. The revised power purchase requirement is 30850 MUs and the aggregate revenue requirement or ARR (expenditure) is Rs. 7969 Crs\*.
- 309. The revenue at proposed tariffs from the sale of 25193 MUs and other charges from different categories of consumers is estimated at Rs.6562 Crs.
- 310. The revenue gap as per the filing works out to Rs. 1407 Crs. The gap has not been adjusted by the Discom on account of additional sales and purchase referred to earlier and has consequently been understated.

<sup>\*</sup> The difference in 1 MU and Rs. 1 Cr. from corresponding figures appearing elsewhere in this order due to rounding.

The details of revenue requirement, revenue from tariffs and other sources and the revenue gap are given below:

Table 28: APCPDCL: Revenue Requirement for FY 2008-09 - As per Filings (Rs. Crs.)

Particulars	Amount
Revenue requirement	7969
Revenue from tariffs & other sources	6562
Revenue gap(-)/Surplus (+) (2-1)	-1407

#### **COMMISSION ANALYSIS**

#### Sales forecast

311. The Commission after having reckoned the revised sales volume of the Discom concluded that the sales volume for LT agricultural consumers is high and decided to peg the same at 5938 MU, the same volume as approved for the current year i.e. 2007-08 as suggested by the Commission's Staff and as explained in paragraph 175. Sales to all other categories of consumers are approved as projected by the Discom. The consumer category-wise sales volumes as approved by the Commission for FY 2008-09 are given below:

Table 29: Category-wise Sales Volumes for FY 2008-09

(MU)

Category	Category	APCPDCL	APERC
LT I	Domestic	4701	4701
LT II	Non-Domestic/Commercial	1523	
LT III	Industrial	1220	1220
LT IV	Cottage Industry	16	16
LT V	Agriculture	7231	5938
LT VI	Public Lighting	442	442
LT VII	General Purpose	55	55
LT VIII	Temporary Supply	8	8
HT I	Industry	7624	7624
HT II	Non-Industrial	1339	1340
HT IV	Irrigation & Agricultural	839	839
HT V	Railway Traction	95	95
HT VI	Townships/Colonies	89	89
HT VII	Temporary & RESCO	11	11
Total		25193	23900

Note: Numbers have been rounded

# Distribution losses and power purchase volumes

312. The approved sales volume and the loss trajectory for FY 2008-09 approved by the Commission under MYT Regulatory framework have been reckoned to arrive at the power purchase requirement for FY 2008-09 in keeping with the Commission's commitment towards regulatory certainty. The power purchase volume for the Discom accordingly worked out at 29101 MU for FY 2008-09 as detailed in Chapter VII, paragraph 266.

Table 30: Sales, Energy Losses and Energy Purchases

(MU)

		· - /
Sales, Purchases and Losses	APCPDCL	APERC
Energy Sales	25193	23900
Energy Losses	5657	5201
Energy Purchases	30850	29101

# Power purchase cost

313. The projected power purchase cost at revised power purchase volumes as per the filings is Rs.6728 Crs. for projected procurement of 30850 MU. The Commission recomputed the power purchase cost at Rs. 5337Crs. based on power purchase requirement of 29101 MU and the procedure adopted for computing the power purchase cost (vide paragraphs 266 to 290). Details of power purchase cost are given in Annexure - G(i).

#### **Network cost**

314. The Discom filed the transmission and distribution costs for FY 2008-09 as per the Multi Year Tariff Regulatory framework approved by the Commission. The SLDC cost at Rs. 11 Crs. as filed is in accordance with the Commission's Order on SLDC charges from FY 2007-08 to FY 2008-09 and accordingly taken as part of network costs. Further, the PGCIL and ULDC charges at Rs. 135 Crs. as filed by the Discom are admitted.

#### Other costs

315. The Discom filed the interest cost on Consumer security deposits at Rs. 60 Crs. for FY 2008-09 and the Commission re-computed at Rs. 45 Crs. The Commission as per its earlier decision (in Order dated 23<sup>rd</sup> March, 2006 for Retail Supply Tariffs for 2006-07 in O.P.Nos. 2 to 5 of 2006), provided Rs. 8 Crs. as supply margin.

# Other adjustments

316. As explained in paragraph 204, the Commission has deemed it fit to provide Rs. 1.00 Cr.to the Discom as carrying cost for one year to raise some funds to examine and experiment with the use of CFL lamps as an energy conservation measure.

# Revenue requirement

317. For FY 2008-09, the ARR for retail supply business is Rs. 7969 Crs as per the Discom and is placed at Rs. 6584 Crs. as per the Commission's alternate calculations. Details of Revenue Requirement are shown in the table below:

Table 31: Revenue Requirement for FY 2008-09

(Rs. Crs)

			, ,
SI.No	Revenue requirement	APCPDCL	APERC
1	Transmission cost	290	310
2	SLDC cost	11	11
3	PGCIL and ULDC cost	135	135
4	Distribution Cost	744	737
5	Network and SLDC Cost (1+2+3+4)	1181	1193
6	Power Purchase / Procurement Cost	6728	5337
7	Interest On Consumer Security Deposits	60	45
8	Supply margin in Retail Supply Business	0	8
9	Other Costs(carrying cost for CFL Lamps)	0	1
10	Supply Related Cost (6+7+8+9)	6788	5392
11	Aggregate revenue requirement (5+10)	7969	6584

Note: Numbers have been rounded

# Revenue from tariffs and charges

318. For FY 2008-09, the revenue from tariffs and charges estimated by the Discom is at Rs. 6562 Crs. and as per the Commission's calculations, it works out to Rs. 6551 Crs. The revenue is net of HT Incentive and includes the computed interest income on consumer security deposits. The details are given below:

Table 32: Revenue from Tariffs and Charges for FY 2008-09

(Rs. Crs.)

Category	Purpose	APCPDCL	APERC
LT I	Domestic	1317	1329
LT II	Non-Domestic/Commercial	916	915
LT III	Industrial	537	542
LT IV	Cottage Industry	3	3
LT V	Agriculture	33	33
LT VI	Public Lighting	108	109
LT VII	General Purpose	23	23
LT VIII	Temporary Supply	5	5
HT I	Industry, General	2663	2635
HT II	Non-Industrial	691	684
HT IV	Irrigation & Agricultural	189	191
HT V	Railway Traction	39	39
HT VI	Townships/Colonies	31	36
HT VII	Temporary & RESCO	7	7
Total		6562	6551

319. The Revenue Deficit / Surplus for the Discom for the FY 2008-09 is shown in the table below.

Table 33: Revenue Deficit/Surplus

(Rs. Crs.)

SI.No.	Particulars	APCPDCL	APERC
1	Aggregate Revenue Requirement	7969	6584
2	Revenue from Tariff	6475	6465
3	Revenue from Other Charges (Non-Tariff Income)	87	87
4	Revenue from Tariff & Other Charges	6562	6551
5	Revenue Deficit (-) / Surplus (+)	-1407	-33

# **PART B - RETAIL TARIFFS**

320. The Commission determined Retail Tariffs for APCPDCL for FY 2008-09 in accordance with Section 62 of the Electricity Act, 2003 are given in the table below. The tariff so finalized is communicated to GoAP. Given below is the schedule of tariffs proposed by DISCOMs and Commission-determined tariffs for FY 2008-09.

Table 34: Commission Determined Tariffs FY 2008-09

APCPDCI	.: RETIAL SUPPLY TARIF	F FOR F	Y2008-09				
CONSUMER CATEGORY		Cos	HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs
			,	J	Ene	rgy Charge	(Rs/unit)
LTI	DOMESTIC						
LT01	Slab 1 (0-50)		0.00	0.00	1.45	1.45	1.48
LT01	Slab 2 (51-100)		0.00	0.00	2.80	2.80	2.81
LT01	Slab 3 (101-200)	3.71	0.00	0.00	3.05	3.05	3.06
LT01	Slab 4 (201-300)		0.00	0.00	4.75	4.75	4.75
LT01	Slab 5 (>300)		0.00	0.00	5.50	5.50	5.50
LT II	NON-DOMESTIC		0.00	0.00			
LT02	Slab 1 (0-50)	3.79	0.00	0.00	3.95	3.95	3.85
LT02	Slab 2 (>50)	3.19	0.00	0.00	6.25	6.25	6.20
LT IIIa	INDUSTRIAL NORAML						
LT03	Industrial Normal		37.00	0.00	3.75	3.75	3.75
	Off Seasonal Tariff for Seasonal Loads		37.00	0.00	3.75	4.40	4.40
LT03	Industrial Optional		0.00	0.00	3.75	3.75	3.75
	Off Seasonal Tariff for Seasonal Loads	3.14	37.00	0.00	3.75	4.40	4.40
LT03	Pisciculture/Prawn culture		0.00	0.00	0.90	0.90	0.90
LT03	Sugarcane crushing		0.00	0.00	0.50	0.50	0.50
LT IIIb	INDUSTRIAL OPTIONAL						
LT03	SSI Units		0.00	100.00	3.75	3.75	3.75
LT03	Off Seasonal Tariff for Seasonal Loads	3.14	0.00	100.00	0.00	4.40	4.40

APCPDCI	APCPDCL: RETIAL SUPPLY TARIFF FOR FY2008-09							
CONSUMER CATEGORY		Cos	HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs	
				-	Ene	rgy Charge	(Rs/unit)	
LT IV	COTTAGE INDUSTRIES	3.14	10.00	0.00	1.80	1.80	1.82	
LT V	IRRIGATION AND ARICULTURE							
LT05	With DSM Measures							
LT05	Corporate Farmers & IT Assesses		0.00	0.00	1.00	1.00	1.02	
LT05	Wet Land Farmers (Holdings >2.5 acre)		0.00	0.00	0.20	0.20	0.24	
LT05	Dry Land Farmers (Connections > 3 nos.)	2.34	0.00	0.00	0.20	0.20	0.24	
LT05	Wet Land Farmers (Holdings <= 2.5 acre)		0.00	0.00	0.00	0.00	0.04	
LT05	Dry Land Farmers (Connections <= 3 nos.)		0.00	0.00	0.00	0.00	0.04	
LT05	Without DSM Measures							
LT05	Corporate Farmers & IT Assesses		0.00	0.00	2.00	2.00	2.00	
LT05	Wet Land Farmers (Holdings >2.5 acre)		0.00	0.00	0.50	0.50	0.53	
LT05	Dry Land Farmers (Connections > 3 nos.)	2.34	0.00	0.00	0.50	0.50	0.53	
LT05	Wet Land Farmers (Holdings <= 2.5 acre)		0.00	0.00	0.20	0.20	0.20	
LT05	Dry Land Farmers (Connections <= 3 nos.)		0.00	0.00	0.20	0.20	0.20	
LTVb	AGRICULTURE (TATKAL)	2.34	0.00	0.00	0.20	0.20	0.23	
LT Via	LOCAL BODIES, STREET LIGHTING AND PWS SCHEMES							
LT06	Street Lighting		0.00	0.00				
LT06	Minor Panchayats	3.65	0.00	0.00	1.56	1.56	1.59	
LT06	Major Panchayats		0.00	0.00	2.08	2.08	2.11	
LT06	Nagarpalikas & Municipalities (Gr 3)		0.00	0.00	2.74	2.74	2.75	
LT06	Municipalities (Gr 1&2)		0.00	0.00	3.26	3.26	3.27	

CONSUMER CATEGORY		Cos	HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs
			(ito/inioitory	ge,e.	Ene	rgy Charge	(Rs/unit)
LT06	Municipalities Selection Special Group		0.00	0.00	3.53	3.53	3.53
LT06	Corporations		0.00	0.00	3.79	3.79	3.79
LT Vib	PWS Schemes						
LT06	Minor/ Major Panchayats						
LT06	Upto 2500 units/Yr	3.65	0.00	0.00	0.20	0.20	0.26
LT06	Above 2500 units/Yr	3.03	0.00	0.00	0.50	0.50	0.55
LT06	All Nagarpalikas & Municipalities						
LT06	Upto 1000 units	3.65	20.00	0.00	3.75	3.75	3.75
LT06	More than 1000 units	3.00	20.00	0.00	4.05	4.05	4.05
LT06	Municipal Corporations						
LT06	Upto 1000 units	2 / 5	20.00	0.00	4.05	4.05	4.05
LT06	More than 1000 units	3.65	20.00	0.00	4.60	4.60	4.60
LT VII	GENERAL PURPOSE	3.65	0.00	0.00	4.00	4.00	4.00
LT VIII	TEMPORARY SUPPLY						
	Temporary Supply to Agriculture		0.00	0.00	6.20	2.30	2.30
LT08	Temporary Supply to Other than Agriculture	3.65	0.00	0.00	2.30	6.20	6.20
HT I	INDUSTRY GENERAL						
HT01	132 KV and above	2.05	0.00	250.00	2.80	2.80	2.75
HT01	33KV	2.19	0.00	230.00	3.10	3.10	3.00
HT01	11 KV and below	2.62	0.00	195.00	3.30	3.30	3.25
HT lb	FERRO ALLOYS	2.62	0.00	0.00	2.55	2.55	2.45
HT01	Lights and Fans						
	132 KV and above	2.05	0.00	0.00	4.40	4.40	4.40
	33KV	2.19	0.00	0.00	4.40	4.40	4.40
	11 KV and below	2.62	0.00	0.00	4.40	4.40	4.40
HT01	Colony		0.00	0.00			
	132 KV and above	2.05	0.00	0.00	3.50	3.50	4.00
	33KV	2.19	0.00	0.00	3.50	3.50	4.00

APCPDCL: RETIAL SUPPLY TARIFF FOR FY2008-09								
CONSUMER CATEGORY		Cos	HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs	
			(,g		Ene	Energy Charge (Rs/unit)		
	11 KV and below	2.62	0.00	0.00	3.50	3.50	4.00	
HT01	Seasonal Industries							
	132 KV and above	2.05	0.00	250.00	3.65	3.65	3.60	
	33KV	2.19	0.00	230.00	3.90	3.90	3.80	
	11 KV and below	2.62	0.00	195.00	4.40	4.40	4.30	
HT II	INDUSTRY OTHERS							
HT02	132 KV and above	2.40	0.00	250.00	3.65	3.65	3.60	
HT02	33KV	2.51	0.00	230.00	3.90	3.90	3.80	
HT02	11 KV and below	3.08	0.00	195.00	4.40	4.40	4.30	
HT IV	IRRIGATION AND AGRICULTURE							
HT03	Government Lift Irrigation Schmes	1.22	0.00	0.00	2.36	2.36	2.36	
HT03	Agriculture	2.98	0.00	0.00	0.00	0.00	0.00	
HT V	RAILWAY TRACTION	2.58	0.00	0.00	4.10	4.10	4.00	
HT VI	TOWNSHIPS AND RESIDENTIAL COLONIES	3.11	0.00	0.00	3.50	3.50	4.00	
HT OTHERS	OTHER SALES							
HT07	Temporary	9.17	0.00	\$	0.00	6.60	6.64	
НТ	Green Power						6.70	
ALL	TOTAL							

<sup>\$ -</sup> One-and-a-half times the rates set out for HT Categories.

# **Government Policy Direction**

321. Under Section 108 of the Electricity Act 2003, the GoAP issued policy direction that the tariffs be uniform across the State. The Commission in tune with this policy directive has readjusted the tariffs. The GoAP further informed that it will provide the necessary subsidy to APCPDCL for the subsidized categories. Details of the subsidy allocation for various subsidized categories are given in the table below:

Table 35: Details of Subsidy Allocation in FY 2008-09 (Rs. Crs)

Particulars	Amount	
LT I - Domestic	8.73	
LT IV - Cottage Industries	0.03	
LT V - Irrigation & Agriculture	22.80	
LT VI - Local Bodies, Street Lighting PWS Schemes	0.96	
HT IV - Irrigation & Agriculture	0.21	
HT VII - Temporary	0.04	
Total	32.76	

322. The GoAP has further decided to continue with the "single bulb scheme" for the FY 2008-09. Accordingly, the GoAP also agreed to pay additional subsidy to the utilities for effecting supplies under this scheme.

# Administration of Subsidy

- 323. 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 in respect of the subsidized categories specified in Annexure D.
  - (b) Each Discom gets the subsidy commensurate to the extent of energy sales volumes approved by the Commission and not to cover the additional power purchases made by the Discom over and above the Tariff Order at the instance or with the approval of GoAP, or otherwise.
  - (c) The subsidy allocation to each Discom as above must be paid by the GoAP to the respective DISCOMs in monthly installments, in advance.
  - (d) The Subsidy administration mechanism Directive outlined in paragraph 860 of the Tariff Order for FY2004-05 and reiterated in paragraph 701 of Tariff Order FY2005-06 and 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

324. The schedule of Retail Supply Tariff applicable for all categories of consumers for FY2008-09 is provided in **Annexure-D**.

# CHAPTER - IX RETAIL SUPPLY TARIFFS OF APEPDCL PART A - REVENUE REQUIREMENT

# Filings in brief

- 325. The Discom (APEPDCL) filed its Aggregate Revenue Requirement (ARR) and Revenue at proposed tariffs for determination of the retail supply tariffs for FY 2008-09, which is the third and last year of the first Control Period. The retail supply business of the Discom refers to purchase, and sale of electricity with reference to its licenced area. The Discom projected the sales to different categories of consumers and reckoned the losses to compute the power purchase requirement for FY 2008-09.
- 326. The projected sales to different consumer categories were based on historical information and likely variations in loads, number of consumers etc. The filed sales volume of 8685 MU, was later revised to 8864 MU\* on account of upward revision of sales to HT- Agriculture Consumer Category (Government Lift Irrigation Scheme). For LT Agriculture, the Discom appears to have relied upon the DTR meter readings and other information available to it.
- 327. The revised power purchase requirement is 10488 MUs and the aggregate revenue requirement or ARR (expenditure) is Rs. 3161 Crs. •
- 328. The revenue at proposed tariffs from the sale of 8864 MUs and other charges from different categories of consumers is estimated at Rs.2535 Crs.
- 329. The revenue gap as per the filing works out to Rs. 626 Crs. The gap has not been adjusted by the Discom on account of additional sales and purchases referred to earlier and has consequently been understated. The details of revenue requirement, revenue from tariffs and other sources and the revenue gap are given below:

<sup>•</sup> The difference in 1 MU and Rs.1 Cr. from corresponding figures appearing elsewhere in this order is due to rounding.

Table 36: APEPDCL: Revenue Requirement for FY 2008-09- As per filings Rs. Crs.)

Particulars	Amount
Revenue requirement	3161
Revenue from tariffs & other sources	2535
Revenue gap (-) / Surplus (+) (2-1)	- 626

#### COMMISSION ANALYSIS

#### Sales forecast:

330. The Commission after having reckoned the revised sales volume of the Discom, concluded that the sales volume for LT agricultural consumers is high and decided to peg the same at 1260 MU, the same volume as approved for the current year i.e., 2007-08 as suggested by the Commission's Staff and as explained in paragraph 175. Sales to all other categories of consumers are approved as projected by the Discom except for two Rural Electric Supply Co-Operatives(RESCOs) falling within the jurisdiction of the Discom, in whose case a reduction of 16 MU has been effected on account of pegging on agricultural sales too at current levels. The consumer category-wise sales volumes as approved by the Commission for the FY 2008-09 are given below:

Table 37: Category-wise Sales Volumes for FY 2008-09

(MU)

Category	Category	APEPDCL	APERC
LT I	Domestic	2507	2507
LT II	Non-Domestic/Commercial	527	527
LT III	Industrial	472	472
LT IV	Cottage Industry	2	2
LT V	Agriculture	1282	1260
LT VI	Public Lighting	225	225
LT VII	General Purpose	32	32
LT VIII	Temporary Supply	2	2
HT I	Industry, General	2696	2697
HT II	Non-Industrial	233	233
HT IV	Irrigation & Agricultural	202	201
HT V	Railway Traction	494	494
HT VI	Townships/Colonies	24	24
HT VII	Temporary & RESCOs	166	150
Total		8864	8825

Note: Numbers have been rounded

# Distribution losses and power purchase volumes

331. The approved sales volume and the loss trajectory for FY 2008-09 approved by the Commission under MYT Regulatory framework have been reckoned to arrive at the power purchase requirement for FY 2008-09 in keeping with the Commission's commitment towards regulatory certainty. The power purchase volume for the Discom accordingly worked out at 10415 MU for FY 2008-09 as detailed in Chapter VII, paragraph 266.

Table 38: Sales, Energy Losses and Energy Purchases

(MUs)

Sales, Purchases and Losses	APEPDCL	APERC
Energy Sales	8864	8825
Energy Losses	1624	1590
Energy Purchases	10488	10415

# Power purchase cost

332. The projected power purchase cost at revised power purchase volumes as per the filings is Rs.2575 Crs. for projected procurement of 10488 MU. The Commission recomputed the power purchase cost at Rs. 1787 Crs. based on power purchase requirement of 10415 MUs and the procedure adopted for computing the power purchase cost (vide paragraphs 266 to 290). Details of power purchase cost are given in Annexure - G(ii).

#### **Network cost**

as per the Multi Year Tariff Regulatory framework approved by the Commission. The SLDC cost at Rs. 5 Crs. as filed is in accordance with the Commission's Order on SLDC charges from FY 2007-08 to FY 2008-09 and accordingly taken as part of network costs. Further, the PGCIL and ULDC charges at Rs. 52 Crs. as filed by the Discom are admitted.

#### Other costs

334. The Discom filed the interest cost on Consumer security deposits at Rs.27 Crs. for FY 2008-09 and the Commission re-computed at Rs. 28 Crs. The Commission as per its earlier decision (in order dated 23<sup>rd</sup> March, 2006 for Retail Supply Tariffs for 2006-07 in O.P.Nos.2 to 5 of 2006), provided Rs. 3 Crs. as supply margin.

# **Other Adjustments**

335. As explained in paragraph 204, the Commission has deemed it fit to provide Rs.1.00 Cr. to the Discoms as carrying cost for one year to raise some funds to examine and experiment with the use of CFL lamps as an energy conservation measure. Further, the Commission has provided Rs. 1.32 Crs. for EPDCL to electrify inaccessible tribal hamlets in its operation through Solar Photovoltaic Energy Schemes.

# Revenue requirement

336. For FY 2008-09, the ARR for retail supply business is Rs. 3161 Crs. as per the Discom and is placed at Rs.2388 Crs. as per the Commission's alternate calculations. Details of revenue requirement are shown in the table below:

Table 39: Revenue Requirement for FY 2008-09

(Rs. Crs.)

Sl.No	Revenue requirement	APEPDCL	APERC
1	Transmission cost	115	124
2	SLDC cost	5	4
3	PGCIL and ULDC cost	52	52
4	Distribution Cost	386	386
5	Network and SLDC Cost (1+2+3+4)	558	566
6	Power Purchase / Procurement Cost	2575	1787
7	Interest On Consumer Security Deposits	27	28
8	Supply margin in Retail Supply Business	0	3
9	Other Costs (carrying cost for CFL Lamps)	0	2
10	Supply Related Cost (6+7+8+9)	2602	1820
11	Aggregate revenue requirement (5+10)	3161	2388

Note: Numbers have been rounded

# Revenue from tariffs and charges

337. For FY 2008-09, the revenue from tariffs and charges estimated by the Discom is at Rs. 2535 Crs. and as per the Commission's calculations, it works out to Rs. 2548 Crs. The revenue is net of HT Incentive and includes the computed interest income on consumer security deposits. The details are given below:

Table 40: Revenue from Tariffs for FY 2008-09

(Rs. Crs.)

Category	Purpose	APEPDCL	APERC
LT I	Domestic	622	632
LT II	Non-Domestic/Commercial	312	313
LT III	Industrial	189	192
LT IV	Cottage Industry	0	0
LT V	Agriculture	15	15
LT VI	Public Lighting	43	44
LT VII	General Purpose	14	14
LT VIII	Temporary Supply	1	1
HT I	Industry, General	940	937
HT II	Non-Industrial	127	126
HT IV	Irrigation & Agricultural	46	46
HT V	Railway Traction	204	202
HT VI	Townships/Colonies	10	11
HT VII	Temporary & RESCOs	12	11
Total		2535	2548

Note: Numbers have been rounded

338. The Revenue Deficit / Surplus for the Discom for the FY 2008-09 is shown in the table below.

Table 41: Revenue Deficit/Surplus

(Rs.Crs.)

SI.No	Particulars	APEPDCL	APERC
1	Aggregate Revenue Requirement	3161	2388
2	Revenue from Tariff	2485	2498
3	Revenue from Other Charges (Non-Tariff Income)	50	50
4	Revenue from Tariff and Other Charges	2535	2548
5	Revenue Deficit (-) / Surplus (+)	-626	160

# PART B RETAIL TARIFFS

339. The Commission determined Retail Tariffs for APEPDCL for FY 2008-09 in accordance with Section 62 of the Electricity Act, 2003 are given in the table below. The tariff so finalized is communicated to GoAP. Given below is the schedule of tariffs proposed by DISCOMs and Commission-determined tariffs for FY 2008-09.

Table 42: Commission Determined Tariffs FY 2008-09

APEPDC	L: RETIAL SUPPLY TARIFF F	OR FY	2008-09				
CONSUMER CATEGORY		Cos	HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs
					Ene	rgy Charge (	(Rs/unit)
LT I	DOMESTIC						
LT01	Slab 1 (0-50)		0.00	0.00	1.45	1.45	1.45
LT01	Slab 2 (51-100)		0.00	0.00	2.80	2.80	2.80
LT01	Slab 3 (101-200)	3.51	0.00	0.00	3.05	3.05	3.05
LT01	Slab 4 (201-300)		0.00	0.00	4.75	4.75	4.75
LT01	Slab 5 (>300)		0.00	0.00	5.50	5.50	5.50
LT II	NON-DOMESTIC						
LT02	Slab 1 (0-50)	3.56	0.00	0.00	3.95	3.95	3.85
LT02	Slab 2 (>50)	3.30	0.00	0.00	6.25	6.25	6.20
LT IIIa	INDUSTRIAL NORAML						
LT03	Industrial Normal		37.00	0.00	3.75	3.75	3.75
	Off Seasonal Tariff for Seasonal Loads		37.00	0.00	3.75	4.40	4.40
LT03	Industrial Optional		0.00	0.00	3.75	3.75	3.75
	Off Seasonal Tariff for Seasonal Loads	2.90	37.00	0.00	3.75	4.40	4.40
LT03	Pisciculture/Prawn culture		0.00	0.00	0.90	0.90	0.90
LT03	Sugarcane crushing		0.00	0.00	0.50	0.50	0.50
LT IIIb	INDUSTRIAL OPTIONAL						
LT03	SSI Units		0.00	100.00	3.75	3.75	3.75
LT03	Off Seasonal Tariff for Seasonal Loads	2.90	0.00	100.00	0.00	4.40	4.40
LT IV	COTTAGE INDUSTRIES	2.90	10.00	0.00	1.80	1.80	1.80

APEPDC	L: RETIAL SUPPLY TARIFF I	OR FY	2008-09				
С	CONSUMER CATEGORY		HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs
				-	Ene	rgy Charge	(Rs/unit)
LT V	IRRIGATION AND ARICULTURE						
LT05	With DSM Measures						
LT05	Corporate Farmers & IT Assesses		0.00	0.00	1.00	1.00	1.00
LT05	Wet Land Farmers (Holdings >2.5 acre)		0.00	0.00	0.20	0.20	0.20
LT05	Dry Land Farmers (Connections > 3 nos.)	2.51	0.00	0.00	0.20	0.20	0.20
LT05	Wet Land Farmers (Holdings <= 2.5 acre)		0.00	0.00	0.00	0.00	0.00
LT05	Dry Land Farmers (Connections <= 3 nos.)		0.00	0.00	0.00	0.00	0.00
LT05	Without DSM Measures						
LT05	Corporate Farmers & IT Assesses		0.00	0.00	2.00	2.00	2.00
LT05	Wet Land Farmers (Holdings >2.5 acre)		0.00	0.00	0.50	0.50	0.50
LT05	Dry Land Farmers (Connections > 3 nos.)	2.51	0.00	0.00	0.50	0.50	0.50
LT05	Wet Land Farmers (Holdings <= 2.5 acre)		0.00	0.00	0.20	0.20	0.20
LT05	Dry Land Farmers (Connections <= 3 nos.)		0.00	0.00	0.20	0.20	0.20
LTVb	AGRICULTURE (TATKAL)	2.51	0.00	0.00	0.20	0.20	0.20
LT Via	LOCAL BODIES, STREET LIGHTING AND PWS SCHEMES						
LT06	Street Lighting						
LT06	Minor Panchayats		0.00	0.00	1.56	1.56	1.56
LT06	Major Panchayats		0.00	0.00	2.08	2.08	2.08
LT06	Nagarpalikas & Municipalities (Gr 3)	2 77	0.00	0.00	2.74	2.74	2.74
LT06	Municipalities (Gr 1&2)	3.77	0.00	0.00	3.26	3.26	3.26
LT06	Municipalities Selection Special Group		0.00	0.00	3.53	3.53	3.53
LT06	Corporations		0.00	0.00	3.79	3.79	3.79
LT Vib	PWS Schemes						
LT06	Minor/ Major Panchayats		0.00	0.00			
LT06	Upto 2500 units/Yr	_	0.00	0.00	0.20	0.20	0.20
LT06	Above 2500 units/Yr	3.77	0.00	0.00	0.50	0.50	0.50

CONSUMER CATEGORY		Cos	HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs
			(ICS/IVIOTICIT)	Charge/Month	Ene	rgy Charge (	
LT06	All Nagarpalikas & Municipalities						
LT06	Upto 1000 units	3.77	20.00	0.00	3.75	3.75	3.75
LT06	More than 1000 units	3.77	20.00	0.00	4.05	4.05	4.05
LT06	Municipal Corporations						
LT06	Upto 1000 units	2 77	20.00	0.00	4.05	4.05	4.05
LT06	More than 1000 units	3.77	20.00	0.00	4.60	4.60	4.60
LT VII	GENERAL PURPOSE	3.77	0.00	0.00	4.00	4.00	4.00
LT VIII	TEMPORARY SUPPLY						
	Temporary Supply to Agriculture		0.00	0.00	6.20	2.30	2.30
LT08	Temporary Supply to Other than Agriculture	3.77	0.00	0.00	2.30	6.20	6.20
HT I	INDUSTRY GENERAL						
HT01	132 KV and above	1.86	0.00	250.00	2.80	2.80	2.75
HT01	33KV	1.92	0.00	230.00	3.10	3.10	3.00
HT01	11 KV and below	2.30	0.00	195.00	3.30	3.30	3.25
HT lb	FERRO ALLOYS	2.30	0.00	0.00	2.55	2.55	2.45
HT01	Lights and Fans						
	132 KV and above	1.86	0.00	0.00	4.40	4.40	4.40
	33KV	1.92	0.00	0.00	4.40	4.40	4.40
	11 KV and below	2.30	0.00	0.00	4.40	4.40	4.40
HT01	Colony						
	132 KV and above	1.86	0.00	0.00	3.50	3.50	4.00
	33KV	1.92	0.00	0.00	3.50	3.50	4.00
	11 KV and below	2.30	0.00	0.00	3.50	3.50	4.00
HT01	Seasonal Industries						
	132 KV and above	1.86	0.00	250.00	3.65	3.65	3.60
	33KV	1.92	0.00	230.00	3.90	3.90	3.80
	11 KV and below	2.30	0.00	195.00	4.40	4.40	4.30
HT II	INDUSTRY OTHERS						
HT02	132 KV and above	2.24	0.00	250.00	3.65	3.65	3.60
HT02	33KV	2.17	0.00	230.00	3.90	3.90	3.80
HT02	11 KV and below	2.68	0.00	195.00	4.40	4.40	4.30
HT IV	IRRIGATION AND						

APEPDC	APEPDCL: RETIAL SUPPLY TARIFF FOR FY2008-09								
CONSUMER CATEGORY		Cos	HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs		
			,	3	Ene	rgy Charge (	Rs/unit)		
	AGRICULTURE								
HT03	Government Lift Irrigation Schmes	1.25	0.00	0.00	2.36	2.36	2.36		
HT03	Agriculture	1.84	0.00	0.00	0.00	0.00	0.00		
HT V	RAILWAY TRACTION	2.26	0.00	0.00	4.10	4.10	4.00		
HT VI	TOWNSHIPS AND RESIDENTIAL COLONIES	2.51	0.00	0.00	3.50	3.50	4.00		
HT OTHERS	OTHER SALES	1.77	0.00	0.00	0.00	0.66	0.66 <sup>\$\$</sup>		
HT07	Temporary	0.00	0.00	\$	0.00	\$	6.60 \$		
HT	Green Power						6.70		
ALL	TOTAL								

<sup>\$ -</sup> One- and- a-half times the rates set out for HT Categories

#### **Government Policy Direction**

- 340. Under Section 108 of the Electricity Act 2003, the GoAP issued policy direction that the tariffs be uniform across the State. The Commission in tune with this policy directive has readjusted the tariffs.
- 341. The GoAP has further decided to continue with the "single bulb scheme" for the FY 2008-09. Accordingly, the GoAP also agreed to pay additional subsidy to the Utilities for effecting supplies under this scheme.

#### **Final Retail Tariffs**

342. The schedule of Retail Supply Tariff applicable for all categories of consumers for FY2008-09 is provided in **Annexure-D**.

<sup>\$\$ -</sup> Rural Electric Supply Co-Operatives(RESCOs).

# CHAPTER - X RETAIL SUPPLY TARIFFS OF APNPDCL PART A - REVENUE REQUIREMENT

#### Filings in brief

- 343. The Discom (APNPDCL) filed its Aggregate Revenue Requirement (ARR) and Revenue at proposed tariffs for determination of the retail supply tariffs for FY 2008-09, which is the third and last year of the first Control Period. The retail supply business of the Discom refers to purchase, and sale of electricity with reference to its licenced area. The Discom projected the sales to different categories of consumers and reckoned the losses to compute the power purchase requirement for FY 2008-09.
- 344. The projected sales to different consumer categories were based on historical information and likely variations in loads, number of consumers, etc. The filed sales volume of 8538 MU, was later revised to 8789 MU\* on account of upward revision of sales to HT- Agriculture Consumer Category (Government Lift Irrigation Scheme). For LT Agriculture, the Discom appears to have relied upon the DTR meter readings and other information available to it.
- 345. The revised power purchase requirement is 10807 MUs and the aggregate revenue requirement or ARR (expenditure) is Rs. 3233 Crs<sup>\*</sup>.
- 346. The revenue at proposed tariffs from the sale of 8789 MUs and other charges from different categories of consumers is estimated at Rs. 1465 Crs.
- 347. The revenue gap as per the filing works out to Rs. 1768 Crs. The gap has not been adjusted by the Discom on account of additional sales and purchase referred to earlier and has consequently been understated. The details of revenue requirement, revenue from tariffs and sources and the revenue gap are given below:

The difference in 1 MU and Rs. 1 Cr. from corresponding figures appearing elsewhere in this order due to rounding.

Table 43: APNPDCL: Revenue Requirement for FY 2008-09 - As per filings (Rs. Crs.)

Particulars	Amount
Revenue requirement	3233
Revenue from tariffs & other sources	1465
Revenue gap (-) /Surplus (+) (2-1)	-1768

#### **COMMISSION ANALYSIS**

#### Sales forecast

348. The Commission after having reckoned the revised sales volume of the Discom concluded that the sales volume for LT agricultural consumers is high and decided to peg the same at 2909 MU, the same volume as approved for the current year i.e. 2007-08 as suggested by the Commission's Staff and as explained in paragraph 175. Sales to all other categories of consumers are approved as projected by the Discom except for one Rural Electric Supply Co-Operative(RESCO) falling within the jurisdiction of the Discom, in whose case a reduction of 102 MU has been effected on account of pegging on agricultural sales too at current levels. The consumer category-wise sales volumes as approved by the Commission for the FY 2008-09 are given below:

Table 44: Category-wise Sales Volumes for FY2008-09

(MUs)

Category	Category	APNPDCL	APERC
LT I	Domestic	1563	1563
LT II	Non-Domestic/Commercial	314	314
LT III	Industrial	346	346
LT IV	Cottage Industry	6	6
LT V	Agriculture	3851	2909
LT VI	Public Lighting	279	279
LT VII	General Purpose	23	23
LT VIII	Temporary Supply	0	0
HT I	Industry, General	907	907
HT II	Non-Industrial	60	61
HT IV	Irrigation & Agricultural	477	477
HT V	Railway Traction	315	315
HT VI	Townships/Colonies	133	133
HT VII	Temporary & RESCO	515	414
Total		8789	7746

Note: Numbers have been rounded

#### Distribution losses and power purchase volumes

349. The approved sales volume and the loss trajectory for FY 2008-09 approved by the Commission under MYT Regulatory framework have been reckoned to arrive at the power purchase requirement for FY 2008-09 in keeping with the Commission's commitment towards regulatory certainty. The power purchase volume for the Discom accordingly worked out at 9444 MU for FY 2008-09 as detailed in Chapter VII, paragraph 266.

Table 45: Sales, Energy Losses and Energy Purchases

(MU)

		(
Sales, Purchases and Losses	APNPDCL	APERC
Energy Sales	8789	7746
Energy Losses	2018	1697
Energy Purchases	10807	9444

Note: Numbers have been rounded

#### Power purchase cost

350. The projected power purchase cost at revised power purchase volumes as per the filings is Rs. 2641 Crs. for projected procurement of 10807 MU. The Commission recomputed the power purchase cost at Rs. 1627 Crs. based on power purchase requirement of 9444 MUs and the procedure adopted for computing the power purchase cost (vide paragraphs 266 to 290). Details of power purchase cost are given in Annexure - G(iii).

#### **Network cost**

as per the Multi Year Tariff Regulatory framework approved by the Commission. The SLDC cost at Rs. 4 Crs. as filed is in accordance with the Commission's Order on SLDC charges from FY 2007-08 to FY 2008-09 and accordingly taken as part of network costs. Further, the PGCIL and ULDC charges at Rs. 52 Crs. as filed by the Discom are admitted.

#### Other costs

352. The Discom filed the interest cost on Consumer security deposits at Rs. 13 Crs. for FY 2008-09 and the Commission re-computed at Rs 12 Crs. The Commission as per its earlier decision (in Order dated 23<sup>rd</sup> March, 2006 for Retail Supply Tariffs for 2006-07 in O.P NOs.2 to 5 of 2006), provided Rs. 5 Crs. as supply margin.

#### Other adjustments

353. As explained in paragraph 204, the Commission has deemed it fit to provide Rs.1.00 Cr. to the Discom as carrying cost for one year to raise some funds to examine and experiment with the use of CFL lamps as an energy conservation measure.

#### Revenue requirement

354. For FY 2008-09, the ARR for retail supply business is Rs. 3233 Crs. as per the Discom and is placed at Rs.2229 Crs. as per the Commission's alternate calculations. Details of Revenue Requirement are given in table below:

Table 46: Revenue Requirement for FY 2008-09

(Rs. Crs.)

SI.No	Revenue requirement	APNPDCL	APERC
1	Transmission cost	114	121
2	SLDC cost	5	4
3	PGCIL and ULDC cost	52	52
4	Distribution Cost	408	408
5	Network and SLDC Cost (1+2+3+4)	579	585
6	Power Purchase / Procurement Cost	2641	1627
7	Interest On Consumer Security Deposits	13	12
8	Supply margin in Retail Supply Business	0	5
9	Other Costs (carrying cost for CFL Lamps)	0	1
10	Supply Related Cost (6+7+8+9)	2654	1644
11	Aggregate revenue requirement (5+10)	3233	2229

Note: Numbers have been rounded

#### Revenue from tariffs and charges

355. For FY 2008-09, the revenue from tariffs and charges estimated by the Discom is at Rs. 1465 Crs. and as per the Commission's calculations, it works out to Rs. 1479 Crs. The revenue is net of HT Incentive and includes the computed interest income on consumer security deposits. The details are given below:

Table 47: Revenue from Tariffs and other Charges for FY 2008-09

(Rs. Crs.)

Category	Purpose	APNPDCL	APERC
LT I	Domestic	387	393
LT II	Non-Domestic/Commercial	184	184
LT III	Industrial	156	158
LT IV	Cottage Industry	1	1
LT V	Agriculture	38	42
LT VI	Public Lighting	39	40
LT VII	General Purpose	9	10
LT VIII	Temporary Supply	0	0
HT I	Industry, General	308	307
HT II	Non-Industrial	32	32
HT IV	Irrigation & Agricultural	109	111
HT V	Railway Traction	130	129
HT VI	Townships/Colonies	47	55
HT VII	Temporary & RESCO	23	19
Total		1465	1479

Note: Numbers have been rounded

356. The Revenue Deficit / Surplus for the Discom for the FY 2008-09 is shown in the table below.

Table 48: Revenue Deficit/Surplus

(Rs. Crs.)

S.No.	Particulars	APNPDCL	APERC
1	Aggregate Revenue Requirement	3233	2229 <sup>*</sup>
2	Revenue from Tariff	1431	1445
3	Revenue from Other Charges (Non-Tariff Income)	34	34
4	Revenue from Tariff and Other Charges	1465	1479 <sup>*</sup>
5	Revenue Deficit (-) / Surplus (+)	-1768	-749 <sup>*</sup>

<sup>\*</sup>Difference of 1 Cr. is due to rounding

## **PART B - RETAIL TARIFFS**

357. The Commission determined Retail Tariffs for APNPDCL for FY 2008-09 in accordance with Section 62 of the Electricity Act, 2003 are given in the table below. The tariff so finalized is communicated to GoAP. Given below is the schedule of tariffs proposed by DISCOMs and Commission-determined tariffs for FY 2008-09

Table 49: Commission Determined Tariffs FY 2008-09

APNPDC	L: RETIAL SUPPLY TARIFF FO	R FY200	08-09				
C	CONSUMER CATEGORY		HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs
			,	3	Ener	gy Charge (	Rs/unit)
LTI	DOMESTIC						
LT01	Slab 1 (0-50)		0.00	0.00	1.45	1.45	2.89
LT01	Slab 2 (51-100)		0.00	0.00	2.80	2.80	3.30
LT01	Slab 3 (101-200)	4.02	0.00	0.00	3.05	3.05	3.46
LT01	Slab 4 (201-300)		0.00	0.00	4.75	4.75	4.75
LT01	Slab 5 (>300)		0.00	0.00	5.50	5.50	5.50
LT II	NON-DOMESTIC						
LT02	Slab 1 (0-50)	4.58	0.00	0.00	3.95	3.95	3.96
LT02	Slab 2 (>50)	4.30	0.00	0.00	6.25	6.25	6.20
LT IIIa	INDUSTRIAL NORAML						
LT03	Industrial Normal		37.00	0.00	3.75	3.75	3.75
	Off Seasonal Tariff for Seasonal Loads		37.00	0.00	3.75	4.40	4.40
LT03	Industrial Optional		0.00	0.00	3.75	3.75	3.75
	Off Seasonal Tariff for Seasonal Loads	3.45	37.00	0.00	3.75	4.40	4.40
LT03	Pisciculture/Prawn culture		0.00	0.00	0.90	0.90	0.90
LT03	Sugarcane crushing		0.00	0.00	0.50	0.50	0.50
LT IIIb	INDUSTRIAL OPTIONAL						
LT03	SSI Units		0.00	100.00	3.75	3.75	3.75
LT03	Off Seasonal Tariff for Seasonal Loads	3.45	0.00	100.00	0.00	4.40	4.40
LT IV	COTTAGE INDUSTRIES	3.45	10.00	0.00	1.80	1.80	2.60

CONSUMER CATEGORY		Cos	s HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs
			(K3/MOTITI)	Charge/Month	Ener	gy Charge (	
LT V	IRRIGATION AND ARICULTURE						
LT05	With DSM Measures						
LT05	Corporate Farmers & IT Assesses		0.00	0.00	1.00	1.00	1.96
LT05	Wet Land Farmers (Holdings >2.5 acre)		0.00	0.00	0.20	0.20	1.72
LT05	Dry Land Farmers (Connections > 3 nos.)	2.45	0.00	0.00	0.20	0.20	1.72
LT05	Wet Land Farmers (Holdings <= 2.5 acre)		0.00	0.00	0.00	0.00	1.59
LT05	Dry Land Farmers (Connections <= 3 nos.)		0.00	0.00	0.00	0.00	1.62
LT05	Without DSM Measures						
LT05	Corporate Farmers & IT Assesses		0.00	0.00	2.00	2.00	2.00
LT05	Wet Land Farmers (Holdings >2.5 acre)		0.00	0.00	0.50	0.50	0.50
LT05	Dry Land Farmers (Connections > 3 nos.)	2.45	0.00	0.00	0.50	0.50	0.50
LT05	Wet Land Farmers (Holdings <= 2.5 acre)		0.00	0.00	0.20	0.20	0.20
LT05	Dry Land Farmers (Connections <= 3 nos.)		0.00	0.00	0.20	0.20	0.20
LTVb	AGRICULTURE (TATKAL)	2.45	0.00	0.00	0.20	0.20	1.71
LT Via	LOCAL BODIES, STREET LIGHTING AND PWS SCHEMES						
LT06	Street Lighting						
LT06	Minor Panchayats		0.00	0.00	1.56	1.56	3.58
LT06	Major Panchayats		0.00	0.00	2.08	2.08	3.75
LT06	Nagarpalikas & Municipalities (Gr 3)		0.00	0.00	2.74	2.74	3.95
LT06	Municipalities (Gr 1&2)	4.57	0.00	0.00	3.26	3.26	4.09
LT06	Municipalities Selection Special Group		0.00	0.00	3.53	3.53	4.17
LT06	Corporations		0.00	0.00	3.79	3.79	4.25
LT Vib	PWS Schemes						
LT06	Minor/ Major Panchayats						
LT06	Upto 2500 units/Yr	4.57	0.00	0.00	0.20	0.20	3.15

С	CONSUMER CATEGORY		CONSUMER CATEGORY		CONSUMER CATEGORY		CONSUMER CATEGORY		HP Charge (Rs/Month)	kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs
			(1137 WOTTER)	orial germonth	Energy Charge (Rs/unit)								
LT06	Above 2500 units/Yr		0.00	0.00	0.50	0.50	3.30						
LT06	All Nagarpalikas & Municipalities												
LT06	Upto 1000 units	4.57	20.00	0.00	3.75	3.75	3.75						
LT06	More than 1000 units	4.37	20.00	0.00	4.05	4.05	4.35						
LT06	Municipal Corporations												
LT06	Upto 1000 units	4 57	20.00	0.00	4.05	4.05	4.05						
LT06	More than 1000 units	4.57	20.00	0.00	4.60	4.60	4.60						
LT VII	GENERAL PURPOSE	4.57	0.00	0.00	4.00	4.00	4.24						
LT VIII	TEMPORARY SUPPLY												
	Temporary Supply to Agriculture		0.00	0.00	6.20	2.30	2.30						
LT08	Temporary Supply to Other than Agriculture	0.00	0.00	0.00	2.30	6.20	6.20						
HT I	INDUSTRY GENERAL												
HT01	132 KV and above	2.01	0.00	250.00	2.80	2.80	2.75						
HT01	33KV	2.25	0.00	230.00	3.10	3.10	3.00						
HT01	11 KV and below	3.00	0.00	195.00	3.30	3.30	3.25						
HT lb	FERRO ALLOYS	3.00	0.00	0.00	2.55	2.55	2.45						
HT01	Lights and Fans												
	132 KV and above	2.01	0.00	0.00	4.40	4.40	4.40						
	33KV	2.25	0.00	0.00	4.40	4.40	4.40						
	11 KV and below	3.00	0.00	0.00	4.40	4.40	4.40						
HT01	Colony												
	132 KV and above	2.01	0.00	0.00	3.50	3.50	4.00						
	33KV	2.25	0.00	0.00	3.50	3.50	4.00						
	11 KV and below	3.00	0.00	0.00	3.50	3.50	4.00						
HT01	Seasonal Industries												
	132 KV and above	2.01	0.00	250.00	3.65	3.65	3.60						
	33KV	2.25	0.00	230.00	3.90	3.90	3.80						
	11 KV and below	3.00	0.00	195.00	4.40	4.40	4.30						
HT II	INDUSTRY OTHERS												
HT02	132 KV and above	4.53	0.00	250.00	3.65	3.65	3.60						
HT02	33KV	2.39	0.00	230.00	3.90	3.90	3.80						
HT02	11 KV and below	3.23	0.00	195.00	4.40	4.40	4.30						

APNPDCL	APNPDCL: RETIAL SUPPLY TARIFF FOR FY2008-09							
CONSUMER CATEGORY		TEGORY Cos HP Charge (Rs/Month) Cha		kVA Charge/Month	Current tariffs	Proposed tariffs	Commission- determined Tariffs	
				Ü	Ener	gy Charge (	Rs/unit)	
HT IV	IRRIGATION AND AGRICULTURE							
HT03	Government Lift Irrigation Schmes	0.95	0.00	0.00	2.36	2.36	2.36	
HT03	Agriculture	3.89	0.00	0.00	0.00	0.00	0.00	
HT V	RAILWAY TRACTION	2.83	0.00	0.00	4.10	4.10	4.00	
HT VI	TOWNSHIPS AND RESIDENTIAL COLONIES	3.04	0.00	0.00	3.50	3.50	4.00	
HT OTHERS	OTHER SALES	2.00	0.00	0.00	0.00	0.40	1.48 \$\$	
HT07	Temporary	0.00	0.00	\$	0.00	\$	6.60 \$	
НТ	Green Power						6.70	
ALL	TOTAL							

<sup>\$ -</sup> One - and - a - half times the rates set out for HT Categories

### **Government Policy Direction**

358. Under Section 108 of the Electricity Act 2003, the GoAP issued policy direction that the tariffs be uniform across the State. The Commission in tune with this policy directive has readjusted the tariffs. The GoAP further informed that it will provide the necessary subsidy to APNPDCL for the subsidized categories. Details of the Subsidy allocation for various subsidized categories are given in the table below:

Table 50: Details of Subsidy Allocation in FY 2008-09

(Rs. Crs)

Particulars	Amount
LT I - Domestic	169.40
LT II - Non - Domestic/Commercial	0.91
LT IV - Cottage Industries	0.50
LT V - Irrigation & Agriculture	466.74
LT VI - Local Bodies, Street Lighting PWS Schemes	61.48
LT VII - General	0.54
HT IV - Irrigation & Agriculture	5.01
HT VII - Rural Co-operative	44.55
Total	749.13

<sup>\$\$ -</sup> Rural Electric Co-Operative(RESCO)

359. The GoAP has further decided to continue with the "single bulb scheme" for the FY 2008-09. Accordingly, the GoAP also agreed to pay additional subsidy to the Utilities for effecting supplies under this scheme.

#### Administration of Subsidy

- 360. 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 in respect of the subsidized categories specified in Annexure D.
  - (b) Each Discom gets the subsidy commensurate to the extent of energy sales volumes approved by the Commission and not to cover the additional power purchases made by the Discom over and above the Tariff Order at the instance or with the approval of GoAP, or otherwise.
  - (c) The subsidy allocation to each Discom as above must be paid by the GoAP to the respective DISCOMs in monthly installments, in advance.
  - (d) The Subsidy administration mechanism Directive outlined in paragraph 860 of the Tariff Order for FY2004-05 and reiterated in paragraph 701 of Tariff Order FY2005-06 and 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

361. The schedule of Retail Supply Tariff applicable for all categories of consumers for FY 2008-09 is provided in **Annexure - D**.

# CHAPTER - XI RETAIL SUPPLY TARIFFS OF APSPDCL PART A - REVENUE REQUIREMENT

#### Filings in brief

- 362. The Discom (APSPDCL) filed its Aggregate Revenue Requirement (ARR) and Revenue at proposed tariffs for determination of the retail supply tariffs for FY 2008-09, which is the third and last year of the first Control Period. The retail supply business of the Discom refers to purchase, and sale of electricity with reference to its licenced area. The Discom projected the sales to different categories of consumers and reckoned the losses to compute the power purchase requirement for FY 2008-09.
- 363. The projected sales to different consumer categories were based on historical information and likely variations in loads, number of consumers, etc. The filed sales volume of 12701 MU, was later revised to 12873 MU\* on account of upward revision of sales to HT Agriculture Consumer Category (Government Lift Irrigation Scheme). For LT Agriculture, the Discom appears to have relied upon the DTR meter readings and other information available to it.
- 364. The revised power purchase requirement is 15641 MUs and the aggregate revenue requirement or ARR (expenditure) is Rs. 4269 Crs\*\*.
- 365. The revenue at proposed tariffs from the sale of 12873 MUs and other charges from different categories of consumers is estimated at Rs.2920 Crs.
- 366. The revenue gap as per the filing works out to Rs.1349 Crs. The gap has not been adjusted by the Discom on account of additional sales and purchase referred to earlier and has consequently been understated. The details of revenue requirement, revenue from tariffs and other sources and the revenue gap are given below:

<sup>\*</sup> The difference in 1 MU and Rs. 1 Cr. from corresponding figures appearing elsewhere in this order due to rounding.

Table 51: Revenue Requirement for FY 2008-09 As per filings (Rs. Crores)

Particulars	Amount
Revenue requirement	4269
Revenue from tariffs & other sources	2920
Revenue gap (-) / surplus (+) (2-1)	-1349

#### **COMMISSION ANALYSIS**

#### Sales forecast

367. The Commission after having reckoned the revised sales volume of the Discom concluded that the sales volume for LT agricultural consumers is high and decided to peg the same at 3291 MU, the same volume as approved for the current year i.e.2007-08 as suggested by the Commission's Staff and as explained in paragraph 175. Sales to all other categories of consumers are approved as projected by the Discom except for one Rural Electric Supply Co-Operative(RESCO) falling within the jurisdiction of the Discom, in whose case a reduction of 29 MU has been effected on account of pegging on agricultural sales too at current levels. The consumer category-wise sales volumes as approved by the Commission for the FY 2008-09 are given below:

Table 52: Category-wise Sales Volumes for FY2008-09

(MU)

Category	Category	APSPDCL	APERC
LT I	Domestic	3063	3063
LT II	Non-Domestic/Commercial	672	672
LT III	Industrial	707	707
LT IV	Cottage Industry	24	24
LT V	Agriculture	4079	3291
LT VI	Public Lighting	495	494
LT VII	General Purpose	44	44
LT VIII	Temporary Supply	2	2
HT I	Industry, General	2574	2574
HT II	Non-Industrial	229	229
HT IV	Irrigation & Agricultural	228	228
HT V	Railway Traction	486	486
HT VI	Townships/Colonies	42	42
HT VII	Temporary & RESCO	228	199
Total		12873	12056

Note: Numbers have been rounded

#### Distribution losses and power purchase volumes

368. The approved sales volume and the loss trajectory for FY 2008-09 approved by the Commission under MYT Regulatory framework have been reckoned to arrive at the power purchase requirement for FY 2008-09 in keeping with the Commission's commitment towards regulatory certainty. The power purchase volume for the Discom accordingly worked out at 14555 MU for FY 2008-09 as detailed in Chapter VII, Paragraph 266.

Table 53: Sales, Energy Losses and Energy Purchases

(MUs)

Sales, Purchases and Losses	APSPDCL	APERC
Energy Sales	12873	12056
Energy Losses	2768	2499
Energy Purchases	15641	14555

#### Power purchase cost

369. The projected power purchase cost at revised power purchase volumes as per the filings is Rs. 3515 Crs. for projected procurement of 15641 MU. The Commission recomputed the power purchase cost at Rs. 2570 Crs. based on power purchase requirement of 14555 MUs and the procedure adopted for computing the power purchase cost (vide paragraphs 266 to 290). Details of power purchase cost are given in Annexure - G(iv).

#### **Network cost**

370. The Discom filed the transmission and distribution costs for FY 2008-09 as per the Multi Year Tariff Regulatory framework approved by the Commission. The SLDC cost at Rs. 6 Crs. as filed in accordance with the Commission's Order on SLDC charges from FY 2007-08 to FY 2008-09 and accordingly taken as part of network costs. Further, the PGCIL and ULDC charges at Rs. 71 Crores as filed by the Discom are admitted.

#### Other costs

371. The Discom filed the interest cost on Consumer security deposits at Rs.28 Crs. for FY 2008-09 and the Commission re-computed at Rs. 23 Crs. The Commission as per its earlier decision (in Order dated 23<sup>rd</sup> March, 2006 for Retail Supply Tariffs for 2006-07 in O.P.Nos. 2 to 5 of 2006), provided Rs. 3 Crs. as supply margin.

#### Other adjustments

372. As explained in paragraph 204, the Commission has deemed to fit to provide Rs.1.00 Cr. to the Discom as carrying cost for one year to raise some funds to examine and experiment with the use of CFL lamps as an energy conservation measure.

#### Revenue requirement

373. For FY 2008-09, the ARR for retail supply business is Rs. 4269 Crs. as per the Discom and is placed at Rs.3333 Crs. as per the Commission's alternate calculations. Details of Revenue Requirement are shown in table below:

Table 54: Revenue Requirement for FY 2008-09

(Rs. Crs.)

SI.No	Revenue requirement	APSPDCL	APERC
1	Transmission cost	156	167
2	SLDC cost	6	6
3	PGCIL and ULDC cost	71	71
4	Distribution Cost	493	491
5	Network and SLDC Cost (1+2+3+4)	726	735
6	Power Purchase / Procurement Cost	3515	2570
7	Interest On Consumer Security Deposits	28	23
8	Supply margin in Retail Supply Business	0	3
9	Other Costs (carrying cost for CFL Lamps)	0	1
10	Supply Related Cost (6+7+8+9)	3543	2597
11	Aggregate revenue requirement (5+10)	4269	3333

Note: Numbers have been rounded

#### Revenue from tariffs and charges

374. For FY 2008-09, the revenue from tariffs and charges estimated by the Discom is at Rs. 2920 Crs. and as per the Commission's calculations, it

works out to Rs. 2932 Crs. The revenue is net of HT incentive and includes the computed interest income on consumer security deposits. The details are given below:

Table 55: Revenue from Tariffs and Charges for FY 2008-09

(Rs. Crs.)

Category	Purpose	SPDCL	APERC
LT I	Domestic	797	808
LT II	Non-Domestic/Commercial	391	392
LT III	Industrial	281	285
LT IV	Cottage Industry	5	5
LT V	Agriculture	53	52
LT VI	Public Lighting	79	80
LT VII	General Purpose	19	19
LT VIII	Temporary Supply	1	1
HT I	Industry, General	900	896
HT II	Non-Industrial	123	123
HT IV	Irrigation & Agricultural	47	48
HT V	Railway Traction	203	200
HT VI	Townships/Colonies	15	18
HT VII	Temporary & RESCO	6	6
Total		2920	2932

Note: Numbers have been rounded

375. The Revenue Deficit / Surplus for the Company for the FY 2008-09 is shown in the table below.

Table 56: Revenue Deficit/Surplus

(Rs. Crs.)

		APSPDC	
S.No.	Particulars	L	<b>APERC</b>
1	Aggregate Revenue Requirement	4269	3333
2	Revenue from Tariff	2830	2845
	Revenue from Other Charges (Non-Tariff		
3	Income)	90	87
4	Revenue from Tariff and Other Charges	2920	2932
5	Revenue Deficit (-) / Surplus(+) (4-1)	-1349	-400

# PART B RETAIL TARIFFS

376. The Commission determined Retail Tariffs for APSPDCL for FY2008-09 in accordance with Sec 62 of the Electricity Act, 2003 as given in the table below. The tariff so finalized is communicated to GoAP. Given below is the schedule of tariffs proposed by Discoms and Commission-determined tariffs for FY 2008-09.

Table 57: Commission Determined Tariffs FY 2008-09

	TIAL SUPPLY TARIFF FOR FY						
CONSUMER CATEGORY		Cos	HP Charge (Rs/Month)	kVA Charge/Mo nth	Current tariffs	Proposed tariffs	Commission Determined Tariffs
					Energy (	Charge (Rs.	/unit)
LT I	DOMESTIC						
LT01	Slab 1 (0-50)		0.00	0.00	1.45	1.4	5 1.93
LT01	Slab 2 (51-100)		0.00	0.00	2.80	2.8	2.86
LT01	Slab 3 (101-200)	3.45	0.00	0.00	3.05	3.0	3.05
LT01	Slab 4 (201-300)		0.00	0.00	4.75	4.7	5 4.75
LT01	Slab 5 (>300)		0.00	0.00	5.50	5.5	5.50
LT II	NON-DOMESTIC						
LT02	Slab 1 (0-50)	3.63	0.00	0.00	3.95	3.9	3.85
LT02	Slab 2 (>50)	3.03	0.00	0.00	6.25	6.2	6.20
LT IIIa	INDUSTRIAL NORAML						
LT03	Industrial Normal		37.00	0.00	3.75	3.7	3.75
	Off Seasonal Tariff for Seasonal Loads		37.00	0.00	3.75	4.4	0 4.40
LT03	Industrial Optional		0.00	0.00	3.75	3.7	3.75
	Off Seasonal Tariff for Seasonal Loads Pisciculture/Prawn	2.91	37.00	0.00	3.75	4.4	0 4.40
LT03	culture		0.00	0.00	0.90	0.9	0 1.53
LT03	Sugarcane crushing		0.00	0.00	0.50	0.5	0.50
LT IIIb	INDUSTRIAL OPTIONAL						
LT03	SSI Units		0.00	100.00	3.75	3.7	3.75
LT03	Off Seasonal Tariff for Seasonal Loads	2. / 1	0.00	100.00	0.00	4.4	0 4.40
LT IV	COTTAGE INDUSTRIES	2.91	10.00	0.00	1.80	1.8	2.05
LT V	IRRIGATION AND ARICULTURE						
LT05	With DSM Measures						

APSPDCL: I	RETIAL SUPPLY TARIFF FOR FY2	2008-0	)9				
С	ONSUMER CATEGORY	Cos	HP Charge (Rs/Month)	kVA Charge/Mo nth	Current tariffs	Proposed tariffs	Commission Determined Tariffs
					Energy (	Charge (Rs/	'unit)
LT05	Corporate Farmers & IT Assesses		0.00	0.00	1.00	1.0	0 1.39
LT05	Wet Land Farmers (Holdings >2.5 acre)		0.00	0.00	0.20	0.2	0 0.86
LT05	Dry Land Farmers (Connections > 3 nos.)	2.20	0.00	0.00	0.20	0.2	0 0.86
LT05	Wet Land Farmers (Holdings <= 2.5 acre)		0.00	0.00	0.00	0.0	0 0.73
LT05	Dry Land Farmers (Connections <= 3 nos.)		0.00	0.00	0.00	0.0	0 0.73
LT05	Without DSM Measures						
LT05	Corporate Farmers & IT Assesses		0.00	0.00	2.00	2.0	0 2.00
LT05	Wet Land Farmers (Holdings >2.5 acre)		0.00	0.00	0.50	0.5	0 0.50
LT05	Dry Land Farmers (Connections > 3 nos.)	2.20	0.00	0.00	0.50	0.5	0 0.50
LT05	Wet Land Farmers (Holdings <= 2.5 acre)		0.00	0.00	0.20	0.2	0 0.20
LT05	Dry Land Farmers (Connections <= 3 nos.) AGRICULTURE		0.00	0.00	0.20	0.2	0 0.20
LTVb	(TATKAL)  LOCAL BODIES, STREET	2.20	0.00	0.00	0.20	0.2	0 0.86
LT Via	LIGHTING AND PWS SCHEMES						
LT06	Street Lighting						
LT06	Minor Panchayats		0.00				
LT06	Major Panchayats		0.00	0.00	2.08	2.0	8 2.72
LT06	Nagarpalikas & Municipalities (Gr 3)	4.07	0.00	0.00	2.74	2.7	4 3.15
LT06	Municipalities (Gr 1&2)		0.00	0.00	3.26	3.2	6 3.49
LT06	Municipalities Selection Special Group		0.00	0.00	3.53	3.5	3 3.67
LT06	Corporations		0.00	0.00	3.79	3.7	9 3.84
LT Vib	PWS Schemes Minor/ Major						
LT06	Panchayats		0.00	0.00	0.20	0.2	0 1 40
LT06 LT06	Upto 2500 units/Yr Above 2500 units/Yr	4.07	0.00				
LT06	All Nagarpalikas & Municipalities						

							Commission
(	CONSUMER CATEGORY	Cos	HP Charge (Rs/Month)	kVA Charge/Mo nth	Current tariffs	Proposed tariffs	Determined Tariffs
					Energy (	Charge (Rs/	'unit)
LT06	Upto 1000 units	4.07	20.00	0.00	3.75	3.7	5 3.75
LT06	More than 1000 units	4.07	20.00	0.00	4.05	4.0	5 4.05
LT06	Municipal Corporations						
LT06	Upto 1000 units  More than 1000	4.07	20.00	0.00	4.05	4.0	5 4.05
LT06	More than 1000 units		20.00	0.00	4.60	4.6	0 4.60
LT VII	GENERAL PURPOSE	4.07	0.00	0.00	4.00	4.0	0 4.00
LT VIII	TEMPORARY SUPPLY						
	Temporary Supply to Agriculture	4.07	0.00	0.00	6.20	2.3	0 2.30
LT08	Temporary Supply to Other than Agriculture		0.00	0.00	2.30	6.2	0 6.20
HT I	INDUSTRY GENERAL						
HT01	132 KV and above	1.92	0.00	250.00	2.80	2.8	0 2.75
HT01	33KV	2.08	0.00	230.00	3.10	3.1	0 3.00
HT01	11 KV and below	2.53	0.00	195.00	3.30	3.3	0 3.25
HT lb	FERRO ALLOYS	2.53	0.00	0.00	2.55	2.5	5 2.45
HT01	Lights and Fans						
	132 KV and above	1.92	0.00	0.00	4.40	4.4	0 4.40
	33KV	2.08	0.00	0.00	4.40	4.4	0 4.40
	11 KV and below	2.53	0.00	0.00	4.40	4.4	0 4.40
HT01	Colony						
	132 KV and above	1.92	0.00	0.00	3.50	3.5	0 4.00
	33KV	2.08	0.00	0.00	3.50	3.5	0 4.00
	11 KV and below	2.53	0.00	0.00	3.50	3.5	0 4.00
HT01	Seasonal Industries						
	132 KV and above	1.92	0.00	250.00	3.65	3.6	5 3.60
	33KV	2.08	0.00	230.00	3.90	3.9	0 3.80
	11 KV and below	2.53	0.00	195.00	4.40	4.4	0 4.30
HT II	INDUSTRY OTHERS						
HT02	132 KV and above	0.00	0.00	250.00	3.65	3.6	5 3.60
HT02	33KV	2.33	0.00	230.00	3.90	3.9	0 3.80
HT02 HT IV	11 KV and below IRRIGATION AND AGRICULTURE	2.93	0.00	195.00	4.40	4.4	0 4.30
HT03	Government Lift Irrigation Schmes	1.55	0.00	0.00	2.36	2.3	6 2.36
HT03	Agriculture	2.86	0.00				
HT V	RAILWAY TRACTION	2.55	0.00				0 4.00
HT VI	TOWNSHIPS AND RESIDENTIAL COLONIES	3.00	0.00	0.00	3.50		

APSPDCL: RETIAL SUPPLY TARIFF FOR FY2008-09								
CONSUMER CATEGORY		Cos	HP Charge (Rs/Month)	kVA Charge/Mo nth	Current tariffs	Proposed tariffs	Commission Determined Tariffs	
					Energy Charge (Rs/unit)			
HT OTHERS	OTHER SALES	2.10	0.00	0.00	0.00	0.2	0.82 \$\$	
HT07	Temporary	2.41	0.00	\$	0.00		\$ 6.60 \$	
HT	Green Power						6.70	
ALL	TOTAL							

<sup>\$ -</sup> One - and - a - half times the rates set out for HT Categories.

#### **Government Policy Direction**

377. Under Section 108 of the Electricity Act 2003, the GoAP issued policy direction that the tariffs be uniform across the State. The Commission in tune with this policy directive has readjusted the tariffs. The GoAP further informed that it will provide the necessary subsidy to SPDCL for the subsidized categories. Details of the Subsidy allocation for various subsidized categories are given in the table below:

Table 58: Details of Subsidy Allocation in FY 2008-09

(Rs. Crs)

	(113. 013)
Particulars	Amount
LT I - Domestic	98.23
LT III- Industrial Normal	7.93
LT IV - Cottage Industries	0.61
LT V - Irrigation & Agriculture	236.92
LT VI - Local Bodies, Street Lighting PWS Schemes	41.54
HT IV - Irrigation & Agriculture	2.78
HT VII - Rural Co-operative	12.24
Total	400.25

378. The GoAP has further decided to continue with the "single bulb scheme" for the FY 2008-09. Accordingly, the GoAP also agreed to pay additional subsidy to the Utilities for effecting supplies under this scheme.

<sup>\$\$ -</sup> Rural Electric Supply Co-Operative(RESCO).

#### Administration of Subsidy

- 379. 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 in respect of the subsidized categories specified in Annexure D.
  - (b) Each Discom gets the subsidy commensurate to the extent of energy sales volumes approved by the Commission and not to cover the additional power purchases made by the Discom over and above the Tariff Order at the instance or with the approval of GoAP, or otherwise.
  - (c) The subsidy allocation to each Discom as above must be paid by the GoAP to the respective DISCOMs in monthly installments, in advance.
  - (d) The Subsidy administration mechanism Directive outlined in paragraph 860 of the Tariff Order for FY2004-05 and reiterated in paragraph 701 of Tariff Order FY2005-06 and 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**

380. The schedule of Retail Supply Tariff applicable for all categories of consumers for FY2008-09 is provided in **Annexure-D**.

# All DISCOMS

- 381. The schedule of Retail Supply Tariff applicable for all categories of consumers for FY 2008-09 is provided in **Annexure-D**.
- 382. These tariffs take effect from 01st April, 2008.

This Order is signed on the 20<sup>th</sup> day of March, 2008

Sd/-(R.RADHA KISHEN) MEMBER Sd/-(SURINDER PAL) MEMBER

#### ANNEXURE - A

#### LIST OF DIRECTIVES BROUGHT FORWARD FOR CONTINUED COMPLIANCE

#### 1. Energy Audit

The DISCOMs 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.

The Licensee shall henceforth reconcile the energy accounting figures annually and file reconciliation statements along with the audited Annual Accounts every year.

#### 2. Management of Industrial Feeders

The DISCOMs 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.

#### 3. Availability of copies of ARR/Tariff filings

The Licensees shall invariably make copies of their ARR/Tariff filings available at all the district headquarters.

#### 4. Agricultural consumption estimates

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 25<sup>th</sup> of every month.

#### 5. Metering & Billing

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.

- (a) 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 30th September, 2008.
- (b) The DISCOMs shall file a Metering, Billing and Collection (MBC) report based on sales database, by 25<sup>th</sup> of every month without fail.

#### 6. Multiple connections

The DISCOMs to conduct a door-to-door checking of all services and to remove all multiple connections and on a continuous basis

#### 7. Subsidy Administration

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. 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.

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.

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.

#### 8. Defaulters' List

The Licensees shall 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 31<sup>st</sup> March shall be posted by 1<sup>st</sup> May and that as on 30<sup>th</sup> September by 1<sup>st</sup> of the following November on the respective websites of the DISCOMs.

#### 9. Market Survey

The Licensee shall carry out a census of all HT consumers covering aspects like type of activity, connected load, contracted load, captive capacity, types of loads, sources of power purchase including third parties, and other technical and commercial parameters and <u>file a report thereon with the Commission every year by 30<sup>th</sup> September</u>.

#### 10. Generation of Power from Hydel Stations of APGENCO

The DISCOMs should closely coordinate with APGENCO to ensure that no unit of Srisailam complex (Left Bank Power House and Right Bank Power House) is backed down or shut down during the surplus season. In case of generation of surplus energy by them over and above the requirements of DISCOMs and other users of energy, they should shut down some unit(s) of Thermal Power Stations with marginal variable cost in the merit order if reduction of generation up to backing down limit does not help bring down the frequency to a safe level.

#### 11. Consumer Pass Books

The licensees shall take up the implementation of the Commission's directive to issue passbooks to all consumers in right earnest and submit a progress report thereon every 30<sup>th</sup> July and 31<sup>st</sup> January. However, it will be the consumer's responsibility to get the passbook updated at the time of meter reading / issue of the bill.

#### 12. Break-up of voltage-wise losses in Distribution Network

The DISCOMs shall invariably submit the break-up of losses at each voltage - level such as LT, 11 kV and 33 kV for grossing-up of month-wise sales to arrive at the power purchase requirement consistent with MYT losses.

#### 13. Merit Order Dispatch deviation

The DISCOMs to furnish a monthly report on deviations along with reasons for such deviations in actual dispatch of Generating Stations in Merit Order compared to the monthly dispatch schedule adopted in this Tariff Order showing the quantum of energy in MU for each generating station. This monthly report must be placed on the DISCOMs' websites. They are also directed to follow the directive of the Commission vide paragraph 479 of Tariff

Order 2005-06 on maintenance schedule based on demand & supply position in different months.

#### 14. Fixing meters on poles

The Central Power Distribution Company (CPDCL) to furnish the data of loss-reduction on 11 kV feeders and also improvement in revenues from services in the areas where pole-mounted metering was implemented. This information may be filed with the Commission every year by 30<sup>th</sup> September and may also be kept on the DISCOMs' website.

#### 15 Compensation for default in Standards of Performance

The DISCOMs shall duly submit the presented monthly and annual reports to the Commission furnishing inter-alia the details of compensation paid to the affected consumers pursuant to the default in complying with the "Guaranteed Standards of Performance" specified in the Regulation No.7 of 2004, as required under clause 5 thereof.

#### 16. Copies of Test Reports on Testing of Meters

The SPDCL in particular and all other DISCOMs in general will ensure that copies of the Test Reports on the tests conducted on the consumer meters are invariably made available to consumers to afford an opportunity to them to record their comments

#### 17. Un-authorized Agricultural connections:

The Licensees to conduct a census of the un-authorized agricultural connections and submit the same by 31-05-2008. The DISCOMs shall be at liberty to take up the matter with the State Government for regularization; if any regularization is contemplated under Government Policy. The DISCOMs shall file their action plans in this regard by 31-07-2008.

## 18. Telugu version of important documents:

The Licensees shall bring out the Telugu version of the GTCS at the earliest, and make available copies of the same to the needy persons at a reasonable cost. Similarly, the Licensees shall take action to bring out Telugu versions of all important documents like Annual reports etc.

# ANNEXURE - B PART-I

# LIST OF DIRECTIVES NOT COMPLIED BY DISCOMS AND TO BE COMPLIED WITH BY THE DATES STIPULATED IN

#### 1. Fixing meters on poles

The Central Power Distribution Company (CPDCL) to furnish the data of loss-reduction on 11 kV feeders and also improvement in revenues from services in the areas where pole-mounted metering was implemented. This information may be filed with the Commission every year by 30<sup>th</sup> September and may also be kept on the DISCOMs' website.

#### 2. Implementation of Energy Conservation Act 2005

The DISCOMs shall submit a report on the action taken to implement the provisions of the Energy Conservation Act, 2005. They shall also submit proposals for offering suitable incentives to the Industrial consumers who comply with the provisions of the Energy Conservation Act, 2005. The report along with proposals on incentives may be submitted to the Commission by 30.09.2008

#### 3. Safety Measures

The Licensees shall file the action plan to adhere to appropriate safety standards, to periodically inspect their electrical installations, to take prompt action to rectify any shortcomings noticed or brought to their notice and to lay down a time schedule therefore as required to be filed by them in terms of Para 186 of the Tariff Order 2006-07, by 30-09-2008.

#### 4. Compensation to the victims of accidents

The DISCOMs to work out, and display on their website, a transparent procedure for determination and payment of compensation in accident cases, by 30-09-2008.

## 5. Merit Order Dispatch / Centralised Dispatch

The Commission directs DISCOMs to furnish a monthly report on deviations along with reasons for such deviations in actual dispatch of Generating Stations in Merit Order compared to the monthly dispatch schedule adopted in this Tariff Order showing the quantum of energy in MU for each generating station. They are also directed to follow the directive of the Commission issued vide paragraph 479 in Tariff Order for 2005-06 on maintenance schedule based on demand and supply position in different months.

# PART II FRESH DIRECTIVES

#### 1. Deficiency in filings

The licensees in their ARR filings for the years 2009-10 onwards shall provide data (along with similar data pertaining to the preceding year) on the following items as an addendum to their filings, in case Guidelines already issued by the Commission for filing of ARRs do not already provide for the depiction of these data in the ARR filings; they shall also place these data on their website:

- i. Compensation paid by the Licensee to consumers for deficiency of service as per the Regulations of the Commission.
- ii. Details of electrical accidents and ex-gratia paid, if any during previous year and current year.
- iii. Replacement of burnt transformers, installation of additional transformers.
- iv. Number of burnt-out, non-functioning or faulty meters (categorywise and Circle-wise).
- v. Performance with regard to attending to fuse-off calls.
- vi. Breakdowns and interruptions in power supply to urban and rural consumers (Circle-wise) and time taken for restoration.
- vii. Frequency and voltage at various levels of interface over the period.
- viii. Pending applications and connections released to different categories of consumers.
  - ix. Arrears of consumers over Rs.50,000 pending for over six months and details of bad debts written off.
  - x. Court cases involving the Licensee and steps being taken to resolve them.
  - xi. Number of cases filed in respect of pilferage of power in various categories giving comparative picture with previous year.
- xii. Compliance with directives issued by the Commission in the relevant Tariff Order(s).
- xiii. Investment details, including capital expenditure on system improvement, HVDS and RGGVY.

(Paragraph 172)

# 2. Recovery of compensation for non-compliance with Standards of Performance (SoPs)

The compensation payable/paid by a licensee for non-compliances with the Standards of Performance as laid down by the Commission from time to time shall not be a charge on the consumer tariffs and should be recovered by the licensees concerned from the person(s) held responsible for such non-compliance. (Paragraph 195)

#### 3. Disconnection charges

No licensee shall levy and collect any disconnection charges from a consumer in case the consumer's connection was not actually disconnected. In case, however, such a collection is effected, the Commission re-iterates that the Licensee shall adjust all such unauthorized collections in the future CC bills along with interest @ 24% p.a. with a minimum of Rs.75. Further, the affected consumers are entitled to approach the respective Forums for Redressal of Consumer Grievances. (Paragraph 202)

#### 4. Energy conservation

Each of the DISCOMs shall ascertain and intimate to the Commission by 31.12.2008 the likely adverse effects of adoption of CFL lamps of low Power Factor, as also the environmental concerns regarding the disposal of such lamps and the steps taken / proposed to be taken by them to minimize / eliminate such adverse effects and their own evaluation whether or not support from the Commission in this endeavour should be continued. (Paragraph 204)

#### 5. Treatment of Income from Trading

DISCOMS shall submit to the Commission by 30.09.2008 a detailed note on its trading activities during the last three years detailing therein the various steps taken to locate and / or procure surplus power from different sources for trading, the methodology adopted for price discovery for sale, as well as for

purchase, if any resorted to for this activity, the volumes, and the financial results for each year, estimated and the actuals. (Paragraph 214)

#### 6. Safety issues and Compensation

The distribution licensees will chalk out by 30.09.2008, a cogent and viable plan of action to adhere to appropriate safety standards, in particular to periodically inspect their electrical installations to take prompt action to rectify any shortcomings noticed or brought to their notice and to lay down a time schedule therefor. They will also work out and display on their website a transparent procedure for determination and payment of compensation in respect of electrical accidents involving humans as well as animals.

(Paragraph 215)

#### 7. HT Incentive Scheme

Each DISCOM shall prepare a consultative paper on the incentive scheme applicable to HT-industrial consumers, duly indicating the number of consumers who have availed the incentive and their consumption pattern over a period of time in terms of load factor, power factor, contracted and recorded loads. The DISCOMs shall submit this consultative paper to the Commission by end- August 2008, to enable the Commission to take a view on the continuity or otherwise of the scheme for future years in its present form or in some modified form. (Paragraph 219)

#### 8. Short-term Power Purchases

Each DISCOM shall immediately design and create a web-based platform with facilities for online trading to be operationalised by 31st August 2008. For this purpose, a prototype model that has in-built features for settlement as well as a balancing mechanism on a half-hourly basis has to be developed and put on the website. The Discoms have to show to the Commission's satisfaction by 30th June, 2008, the modus operandi they intend to adopt for attracting a large

number of players as also the methodology they plan to adopt for arriving at the acceptable bid prices. (Paragraph 231)

# 9. Tariff for shopping malls and hoardings

As the hoardings have all the attributes to be covered under LT Category Non-Domestic and Commercial, and consume electricity mainly during evening peak hours, the Discoms shall confirm to the Commission by 30.09.2008 that the tariff actually charged from them is LT-II- Non-Domestic & Commercial, irrespective of their location, atop the residential apartment complexes, etc. They shall also come up with appropriate proposals, if considered desirable, for any revision of tariff for hoardings and the shopping malls while filing their ARRs, etc. for the next Control Period commencing from FY 2009-10.

(Paragraph 239)

#### 10. Passbooks

All DISCOMs shall ensure that passbooks are issued to all consumers desiring the issue thereof. The specific reservations of the DISCOMs, if any, on this issue must be brought to the notice of the Commission by 31.08.2008.

(Paragraph 247)

# 11. Certification for LT Category IV - Cottage industries

In respect of LTCategory IV - Cottage Industries and Dhobighats, the DISCOMs shall first enquire of the District Officer of the concerned Department of GoAP whether or not that Department is issuing the certificates that a particular unit is indeed a Cottage Industry, etc. In case such certificates are issued by the Department concerned, the certification will be insisted upon for extending the benefit of tariff under this category. The certificate shall not be insisted upon and it will be the Officers of the DISCOM concerned, not below rank of the Divisional Engineer who will decide whether or not a particular unit falls under this category, when however, the department concerned is not issuing such certificates. (Paragraph 252)

# 12. Agreements in Telugu

The DISCOMs shall ensure by 31.08.2008 that the agreement formats for fresh connections are also available in Telugu also and confirm by 31.10.2008 that the consumers have indeed been provided with the option of executing the agreements in Telugu, if so desired by them.

(Paragraph 258)

# 13. 24-hour supply to rural areas

The DISCOMS shall submit half-yearly reports to the Commission by 31st October and 30th April indicating therein the status on separation of feeders as on 30th September and 31st March, respectively. A gist of these reports may also be displayed by the DISCOMs on their website. They may also report by 31.10.2008 as to why not the minimum charges payable by the consumers in rural areas where the supply is provided only for a limited number of hours a day on a continuous basis throughout the year should not be suitably reduced.

(Paragraph 260)

# 14. Non-compliance with Commission's directives by DISCOMs

The Commission expresses its displeasure on the DISCOMs not complying with a number of its directives issued in the Tariff Order for 2007-08 and some even in earlier orders, which are listed in Part-I of Annexure-B to this Tariff Order. The Commission expects the DISCOMs to fully comply with these directives by the revised dates indicated therein. Any failure to do so will be taken a serious note of.

(Paragraph 261)

#### 15. Commission Determined Tariffs

The Discoms shall submit quarterly reports of the load curve analysis of major consumer categories based on the studies done by their Load Research Cells. They shall also arrange to make every quarter, before the submission of the report for that quarter, a presentation to the Commission, with the first presentation being made in mid-August, 2008. (Paragraph 300)

# ANNEXURE - C

# WAIVERS REQUESTED BY DISCOMS

No waivers were requested by DISCOMs.

# ANNEXURE - D

# SCHEDULE OF RETAIL TARIFF RATES AND TERMS & CONDITIONS IN RESPECT OF THE FOUR DISTRIBUTION COMPANIES FOR FY - 2008-09

# 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 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

DEMAND CHARGES & ENERGY CHARGES			
Voltage	Demand Charges	<b>Energy Charges</b>	
of Supply	Rs/kVA/month of	Paise/unit	
or suppry	Billing Demand		
132kV and	250	275	
above	230	213	
33Kv	230	300	
331(1	230	300	
11kV	195	325	
TINV	173	323	

# **IMPORTANT**

- 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.
- iii. FSA will be extra as applicable

# B) FERRO ALLOY UNITS

**DEMAND CHARGES & ENERGY CHARGES** 

	Demand Charges		Energy Charges	
			Paise/unit	
	Billing Demand			
Ferro	Nil		245	
Alloys				

# **Conditions**

- i. 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.
- ii. The consumer shall draw his entire power requirement from DISCOMs only.
- iii. Not eligible for HT I Load Factor incentive.

FSA will be extra as applicable

#### Notes:

#### 1) Incentive

a) The following incentives are applicable for HT-category-I (A) consumers:

Load Factor (LF)	Discount applicable on the energy rates
More than 50% up to 70%	25% on the energy above 50% LF
More than 70%	25% on the energy above 40% LF

b) The incentive scheme is applicable for the consumption with the above mentioned load factors. This scheme will be effective till 31 March 2009.

# 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 400 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 & ENERGY CHARGES**

Voltage of	Demand Charges #		Energy Charges
supply	Rs/kVA/month	Rs/kVA/month of	
	Billing Demand		
132kV and	250		360
above	230		300
33kV	230		380
11kV	195		430

<sup>#</sup> Based on the Recorded Maximum Demand or 30% of the Contracted Demand whichever is higher

# FSA will be extra as applicable

This concession is subject to the following conditions:

- 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 (Non - Industrial)

This tariff is applicable to all H.T. Consumers other than those covered under other H.T. Categories:

DEMAND CHARGES & ENERGY CHARGES			
Voltage of supply	Demand Charges	Energy Charges	
voltage of supply	Rs/kVA/month of Billing Paise/unit Demand		
132kV and above	250	360	
33kV	230	380	
11kV	195	430	

DEMAND CHARGES & ENERGY CHARGES

#### **IMPORTANT**

- i) The billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand, whichever is higher
- 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

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 of A.P.

#### **ENERGY CHARGES:**

For all units consumed during ... 236 paise/unit the month

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:

- i. 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 4 in Part 'D' of this Annexure.
- ii. The metering is mandatory for both categories IV A&B and Energy reading shall be taken even if the supply is free.
- iii. The Customer Charges are payable as per PART 'C' herein.
- iv. 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 400 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 exclusively for (i) Townships and Residential colonies of Cooperative group housing societies who own the premises and avail supply at single point for making electricity available to the members of such society residing in the same premises at HT and (ii) any person who avails supply at single point at HT for making electricity available to his employees residing in contiguous premises, the supply in all cases being only for domestic purposes, 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

10% of total connected load

Street Light put together

Non-domestic/Commercial & General purpose put together

10% of total connected load

NO DEMAND CHARGES ENERGY CHARGES

For all units consumed ... 400 paise per unit

#### **IMPORTANT**

Energy Charges will be billed on the basis of actual consumption or 25 units per kVA of Contracted Demand, whichever is higher.

FSA will be extra as applicable

The above provisions shall not in any way affect the right of a person residing in the housing unit sold or leased by such Cooperative Group Housing Society, to demand supply of electricity directly from the distribution licensee of the area.

# Green Power (Likely to be launched from October, 2008)

Green Power Tariff is applicable to all consumers who wish to avail of power from non-conventional sources of energy voluntarily, and show their support to an environmental cause as per Paras 220 to 222. This Tariff will be effective from October, 2008.

Energy Charges (Tentative)

Rs.6.70/Unit

Detailed Terms and Conditions of consumption Green Power shall follow but essentially;

- i) The Tariff shall be an optional Tariff
- ii) A consumer shall be entitled to Renewable Energy Certificates (RECs) as may be admissible

#### 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 where transformation to required voltage takes place 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:

- i. The consumer should have an exclusive dedicated feeder from the substation where transformation to required voltage takes place.
- ii. 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**

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:

SI	Contracted demand with Licensee and	Voltage at which supply should be	Voltage at which	_	ites r Normal Rate
No	other sources	availed	consumer is availing supply	Demand Charge/KVA	Energy Charge/Kwh
	kVA	kV	kV		
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 through independent feeders.

SI.	Contracted Demand with DISCOM and other sources	Voltage at Which supply should be availed	Voltage at Which Consumer is availing supply	Rate % Extra Ove Rate	r Normal
	kVA	kV	kV	Demand Charge/kVA	Energy Charge/ kWh
1	70 to 2500	11	6.6 or below	12%	10%
2	2501 to 10,000	33	11 or below	12%	10%
3	Above 10,000	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) 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% of C.C.charges bill of that month
1.	Below 0.90 & upto 0.85	for every 0.01 fall in Power
		Factor from 0.90
		1.5% of C.C. charges bill of that
2.	Below 0.85 & Upto 0.80	month for every 0.01 fall in Power
		Factor from 0.85
		2% of C.C.charges bill of that month
3.	Below 0.80 & Upto 0.75	for every 0.01 fall in Power Factor from
	-	0.80
		3% of C.C.charges bill of that month
4.	Below 0.75	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.

# (6) 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.

#### (7) TEMPORARY SUPPLY AT HT

- i. <u>For new connections:</u> 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.

#### (8) ADDITIONAL CHARGES FOR BELATED PAYMENT OF CHARGES

The Licensees shall charge the delayed payment surcharge (DPS) at the revised rate 5 paise/Rs.100/day and the interest leviable on the outstanding amounts in case of grant of installments at 18% per annum and the two shall not be levied at the same time. These revised charges would come into effect from 01.04.2008 (without waiting for the consequent amendments, wherever necessary), and will remain in force for one year whereafter these may reviewed by the Commission on the basis of their impact on the licensees' receivables and other relevant factors.

# (9) 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.

#### (10) 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.

#### (11) 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.

- (12). The Tariffs are exclusive of Electricity duty payable as per the provisions of AP Electricity Duty Act.
- (13). These rates are applicable in the areas of operation of 4 (four) Distribution Companies viz., Eastern Power Distribution Company of A.P. Limited, Central Power Distribution Company of A.P. Limited, Northern Power Distribution Company of A.P. Limited and Southern Power Distribution Company of A.P. 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 L.T. Category 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. Category-II Non-Domestic/Commercial.
- 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.

# 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
Above 50 Units/ month

Monthly Minimum Charges

.. 385 Paise per Unit

.. 620 Paise per Unit

.. 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.

#### 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. The Information Technology (IT) units identified and approved by the Consultative Committee on IT Industry (CCITI) constituted by GoAP also fall under this category. 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:

#### Industrial - Normal

	Fixed Charges/ Demand Charges	Energy Charges Paise/unit
(i) Industry(Normal)	Rs37/HP/month of connected load	375
(ii) Industry (Optional)	Rs.100/kVA/month	375
(iii) Tariff for Pisciculture and Prawn culture units with Contracted Load below 10 HP		90
(iv) Sugar cane crushing		50

#### Note:

Consumers with connected load between 50 and 75 HP can opt for a two part optional tariff.

# IMPORTANT FOR LT III(A) INDUSTRIAL-OPTIONAL Demand Tariff Consumers

- 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

# NOTE:

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 (11 kV supply).
- 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.
  - In case of poultry farms, the limit of 10% lighting load restriction is not applicable with effect from 1-4-2008.
- iv. Sugar cane crushing operations will be allowed under existing agricultural connections with the specific permission of DE (Operation).
- v. A demand meter shall be provided for the consumers with connected load 20HP to below 50HP.
- vi. For loads 50 HP to 75 HP the metering will be provided on HT side of the Distribution Transformer.
- vii. The consumers provided with metering capable of measuring active and reactive power as per the provisions in (v) and (vi) above shall be required to pay LPF surcharge as applicable for HT consumers for the power factor obtaining during billing month subject to ceiling of the level of capacitor surcharge specified for LT consumers under Part-D herein.
- viii. The Low Power Factor (LPF) surcharge is applicable as in the case of HT consumers for LT Category III (A) Industrial (ii) 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:		
	Demand Charges	Energy Charges
III(B) Industry	Rs. 100/kVA/month	375 paise/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.

#### 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 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 (11 kV supply).
- iii. The consumer should erect his own Distribution Transformer and structure initially along with necessary switchgear. 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) 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 Category also.

#### (II) Seasonal Industries

Where a consumer avails supply of energy under L.T. Category - III (A)(i)(ii) and L.T. Category - 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 Rs.100per kVA/Month.

whichever is higher

**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 5 H.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 1

- 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.)	*Rs.210/HP/Year	20
	Wet Land Farmers (Holdings<=2.5 Acres)	*Rs.210/HP/Year	20
	Dry Land Farmers (Connections > 3 Nos.) Wet Land Farmers (Holdings >2.5 Acres) Corporate Farmers & IT Assesses	*Rs.525/HP/Year *Rs.525/HP/Year	50 50 200
	* Equivalent flat rate tariff		

# LT CATEGORY - V(B) - AGRICULTURAL

Out of Turn Allotment - Tatkal scheme : Energy Charge with DSM measures : 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 with by 30-06-2006(as per GoAP letter dated 31-05-2006.

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

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 schemes in the Local Bodies viz., Panchayats/ Municipalities/ Municipal Corporations. Metering is compulsory irrespective of tariff structure.

#### Rates:

# A). <u>Street Lighting</u>:

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

contracted load subject

Balance Units : 405 Paise/Unit to a minimum of

Rs. 100/-

**Municipal Corporations:** 

Up to 1000 Units : 405 Paise/Unit Rs. 20/HP/month of contracted load subject to a minimum of Rs.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:

			Fixed charges per month
			where the cost of
SI.	Fittings for	Month where the	fittings is borne by the
No	i ittiligs for	cost of fittings is	Local Body but
		borne by Licensee	maintenance by
		J	Licensee
(1)	(2)	(3)	(4)
		(Rs.)	(Rs.)
1.	Ordinary Filament Lamp	2.00	1.00

SI. No	Fittings for	Fixed charges Per Month where the cost of fittings is borne by Licensee	Fixed charges per month where the cost of fittings is borne by the Local Body but maintenance by Licensee
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, Crematoriums, 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),

recognised service institutions and old age homes run by recognized 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 the units consumed : 620 paise per unit

: Rs.125 per KW or part thereof of

contracted load for first 30 days or part

Minimum charges 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

Temporary supply for Agriculture Purpose:

Rates

For all the units consumed : 230 paise per unit

: 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

Minimum charges 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 with effect from 01.04.2008 belated payment charges on the bill amount at the revised rate of five(5) 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., Eastern Power Distribution Company of A.P. Limited (APEPDCL), Central Power Distribution Company of A.P. Limited (APCPDCL), Northern Power Distribution Company of A.P. Limited (APNPDCL) and Southern Power Distribution Company of A.P. 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 situated 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 Servicesii). U.G. ServicesRs. 50/-Rs. 100/-

(b) High Tension Services.

i). 11 kV : Rs. 300/ii). 33 kV : Rs. 500/iii). 132/220 kV : Rs. 1000/-

III. TESTING

L.T H.T

(a) Installations:

(i) The first test and inspection of a new : installation or of an extension to an

Nil

Nil

existing installation.

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 pop-

fault in the installation or to non-compliance of the conditions of supply.

Rs.20/-

Rs.200/-

(b) Meters:

i). A.C. Single Phase Energy meter Rs.10/-

Rs.30/ii). A.C. Three Phase Energy meter

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 : Rs.100/- per sample equipment received at the same time

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 day or part thereof any function or temporary illumination provided a Fuseman/Wireman can be spared for such work

Rs.100/- for each

c) Charges for Infructuous visit of Licensee : Rs.25/- for each visit employees to the consumer's premises.

when there is no defect in Licensee's equipment.

V. MISCELLANEOUS CHARGES

a) Application Registration Fees

i) For LT Agricultural & Domestic Rs.25/-

Rs.50/ii) For all other LT Categories

iii) For all HT Categories Rs. 100/-

Rs.10/b) Revision of estimates

c) Fee for rerating of consumer's installation : Rs. 20/-

at the request of the consumer.

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 : Rs.5/-

premises

ii) M.D. Indicator meters and other : Rs.100/-

apparatus in the consumer's premises

(The aforesaid charges do not include the additional charges payable by the consumer for breaking the seals)

L.T H.T

For changing meter only at the request : Rs.25/- Rs.100/-

(e) For changing meter only at the request : of the consumer (where it is not necessitated by increase in demand permanently)

(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 : Rs.20/- per

Agricultural services

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 kV : Rs.1500/- per

month

(h) Urgency charges for temporary supply at : Rs. 100/-

short notice

(i) Special rates chargeable for Theft / : As per the General pilferage, and unauthorized use of Terms & Conditions of

electricity Supply(GTCS)

approved by the

Commission from time

to time.

(j) Supervision / Inspection & checking

charges

i) For LT Agricultural and Domestic : Rs. 50/-

ii) For all other LT categories : Rs. 150/-

iii) For HT Services : Rs.300/-

#### 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). Every H.T. Agricultural Consumer and every LT consumer using induction motors and/or welding transformers shall install L.T. Shunt capacitors of the rating specified by the Licensees in the General Terms and Conditions of supply approved by the Commission from time to time. 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.
- (2). New connections under HT Category IV(A),(B), LT Category III(A),(B), LT Category IV and LT Category V shall not be given unless the capacitors of required ratings are installed.
- (3). 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.
- (4). In the case of consumers not covered by Low Power Factor (LPF) surcharge as per note VII and VIII under LT category III(A) and note LT category III(B), 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.
- (5). The LT category III(A) consumers who are provided with metering capable of measuring active and reactive power under the orders of the Commission, shall be required to pay low power factor surcharge as per the rates applicable for HT consumers for the power factor obtaining during the month subject to the ceiling of the level of capacitor surcharge mentioned in item 4 herein.
- (6). Low Power factor surcharge is to be levied for the consumers falling under LT Category III(A)(ii) Industrial (Optional) and LT III (B) Industrial categories as applicable to HT consumers.

## ANNEXURE - E (i) STATION-WISE AND MONTH-WISE AVAILABILITY OF ENERGY

(Reference: Paragraph 265 of the Order)

FY 2008-09	9					Ener	gy Avai	lability	(MUs)					
Generating Station	Variable Cost (Rs./ kWh)	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
APGENCO														
Thermal														
VTPS I	1.26	260.71	269.40	260.71	269.40	204.22	260.71	269.40	260.71	204.22	269.40	243.32	269.40	3041.60
VTPS II	1.26	260.71	269.40	260.71	269.40	204.22	260.71	204.22	130.35	252.02	265.05	243.32	269.40	2889.52
VTPS III	1.26	260.71	269.40	260.71	204.22	269.40	195.53	247.67	260.71	265.05	269.40	243.32	269.40	3015.52
VTPS IV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.88	13.88	133.20	137.64	206.46	505.05
RTPP I	1.63	259.99	268.66	259.99	203.66	203.66	259.99	268.66	259.99	268.66	268.66	242.65	268.66	3033.22
RTPP Stage-II	1.47	211.68	250.00	241.92	250.00	189.51	241.92	250.00	241.92	250.00	250.00	225.80	250.00	2852.75
RTPP Stage-III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KTPS A	1.00	148.24	153.18	148.24	153.18	134.66	129.71	109.95	129.71	151.95	153.18	138.34	153.18	1703.52
KTPS B	1.00	148.24	153.18	148.24	116.13	153.18	74.12	140.83	148.24	153.18	153.18	138.36	153.18	1680.07
KTPS C	1.00	148.24	153.18	148.24	116.13	116.13	148.24	153.18	148.24	153.18	153.18	138.36	153.18	1729.48
KTPS D	1.01	309.51	319.83	309.51	319.83	242.45	232.13	319.83	309.51	314.67	319.83	288.88	319.83	3605.79
KTPS Stage VI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RTS B	1.21	37.31	38.45	37.31	38.45	38.45	37.31	38.45	37.31	38.45	36.63	0.00	1.37	379.47
NTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kakatiya Thermal Power Plant Stage I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kakatiya Thermal Power Plant Stage II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL THERMAL		2045.32	2144.69	2075.56	1940.40	1755.88	1840.36	2002.20	1940.55	2065.27	2271.72	2039.98	2314.07	24435.98
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MACHKUND PH AP Share	0.00	32.27	30.29	23.46	28.31	29.40	32.77	34.06	32.27	31.28	31.78	29.50	29.80	365.21
TUNGBHADRA PH AP Share	0.00	1.58	0.30	0.20	8.91	22.47	20.49	20.30	15.54	12.97	13.37	9.90	8.61	134.64

FY 2008-09	9					Ener	nv Avai	lability	(MUs)					
Generating Station	Variable Cost (Rs./ kWh)	April	Мау	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
USL	0.00	33.46	29.01	26.93	35.94	39.60	35.05	34.16	32.18	39.40	44.95	46.63	52.57	449.86
LSR	0.00	93.56	78.21	70.29	85.83	92.17	89.69	89.89	83.85	94.94	105.44	105.44	115.43	1104.74
DONKARAYI	0.00	7.13	4.85	4.06	5.05	7.43	8.12	8.51	8.81	10.20	11.19	10.79	11.29	97.42
SSLM	0.00	43.46	14.95	18.02	233.95	293.04	164.92	240.03	83.21	83.26	40.59	91.87	142.17	1449.46
NSPH	0.00	81.28	34.25	42.97	267.11	306.21	205.51	273.29	112.61	96.62	43.36	85.14	159.30	1707.65
NSRCPH	0.00	1.09	0.00	0.00	0.89	14.85	25.54	31.19	29.01	22.67	14.95	9.01	5.45	154.64
NSLCPH	0.00	0.20	0.00	0.00	0.59	7.52	13.27	16.24	13.76	10.30	6.24	2.28	0.99	71.38
POCHAMPAD PH	0.00	1.49	0.00	0.00	1.78	10.20	13.17	14.95	13.07	10.00	9.31	7.13	5.94	87.02
NIZAMSAGAR PH	0.00	0.79	0.20	0.00	0.10	0.59	1.19	2.18	0.79	0.50	1.49	1.39	1.49	10.69
PABM	0.00	0.00	0.00	0.00	0.00	1.19	1.29	1.58	1.88	1.19	0.50	0.10	0.30	8.02
MINI HYDRO&OTHERS	0.00	0.59	0.00	0.20	0.50	1.39	1.49	1.78	1.88	1.49	1.29	1.19	0.99	12.77
SINGUR	0.00	0.40	0.10	0.10	0.40	0.59	1.19	1.58	0.20	0.20	0.50	0.50	1.09	6.83
SSLM LCPH	1.01	65.57	22.59	27.16	301.89	441.78	299.39	324.17	113.08	175.47	71.49	88.50	254.13	2185.22
Nagarjunasagar Tail Pond Dam Power House	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Priyadarshini Jurala Hydro Electric Project- AP Share	0.00													
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lower Jurala Hydro Electric Project	0.00	0.00	0.00	1.78	20.85	26.63	41.68	41.68	7.43	5.84	0.00	0.00	0.00	145.89
TOTAL HYDRO		362.87	214.75	215.16	992.09	1295.06	954.75	1135.58	549.57	596.32	396.40	489.36	789.53	7991.43
TOTAL APGENCO		2408.19	2359.43	2290.72	2932.49	3050.94	2795.11	3137.78	2490.12	2661.58	2668.12	2529.33	3103.59	32427.41
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Central Generating Stations		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NTPC		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NTPC (SR)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NTPC (SR)	1.05	449.20	463.90	412.09	422.59	425.04	352.57	364.12	438.35	463.90	463.90	419.09	463.90	5138.66
NTPC (SR) Stage III	1.14	112.89	116.57	112.89	82.74	55.53	112.89	116.57	112.89	116.57	116.57	105.53	116.57	1278.18

FY 2008-0	9					Ener	gy Avai	lability	(MUs)					
Generating Station	Variable Cost (Rs./ kWh)	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
Total NTPC(SR)		562.09	580.47	524.98	505.33	480.57	465.46	480.69	551.24	580.47	580.47	524.62	580.47	6416.85
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NTPC (ER)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Farakka	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kahalgaon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Talcher - Stage 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Talcher Stage 2	0.74	219.24	271.73	262.91	203.75	262.91	65.84	271.73	262.91	271.73	271.73	245.49	271.73	2881.72
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total NTPC(ER)		219.24	271.73	262.91	203.75	262.91	65.84	271.73	262.91	271.73	271.73	245.49	271.73	2881.72
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total NTPC		781.33	852.21	787.89	709.07	743.48	531.29	752.42	814.15	852.21	852.21	770.11	852.21	9298.57
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NLC TS-II		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NLC - I	1.25	75.98	82.61	75.78	82.61	72.96	53.47	67.74	52.26	45.23	61.71	74.77	82.61	827.72
NLC - II	1.25	129.46	128.15	123.98	111.97	101.27	123.98	94.48	107.27	130.50	133.63	121.10	134.68	1440.46
Total NLC		205.43	210.76	199.75	194.58	174.23	177.44	162.22	159.53	175.73	195.34	195.88	217.29	2268.18
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NPC		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NPC-MAPS	1.16	22.26	22.90	11.13	22.90	22.90	22.26	22.90	22.26	22.90	22.90	21.40	22.90	259.61
NPC-Kaiga unit I	1.01	70.10	72.12	70.10	36.06	72.12	70.10	72.12	70.10	72.12	72.12	67.40	72.12	816.58
NPC-Kaiga unit II	1.01	34.21	80.25	77.95	80.25	80.25	77.95	80.25	77.95	80.25	80.25	76.63	80.25	906.44
Total NPC		126.57	175.27	159.18	139.21	175.27	170.31	175.27	170.31	175.27	175.27	165.43	175.27	1982.63
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NTPC - Simhadri		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NTPC Simhadri Stage I	1.12	628.00	649.00	628.00	393.00	569.00	628.00	649.00	628.00	649.00	649.00	586.00	649.00	7305.00
NTPC Simhadri	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stage II Total NTPC- Simhadri		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total NTFO- SillillaUII		628.00	649.00	628.00	393.00	569.00	628.00	649.00	628.00	649.00	649.00	586.00	649.00	7305.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

FY 2008-09	9					Ener	gy Avai	lability	(MUs)					
Generating Station	Variable Cost (Rs./ kWh)	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
CGS - New		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL CGS		1741.33	1887.24	1774.82	1435.86	1661.98	1507.04	1738.91	1771.99	1852.20	1871.81	1717.42	1893.76	20854.37
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
APGPCL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
APGPCL I - Allocated capacity	1.14	4.96	5.28	4.96	5.28	7.52	4.96	5.28	5.28	5.28	5.28	4.80	5.28	64.16
APGPCL I - Unutilised capacity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
APGPCL II - Allocated capacity	1.03	25.13	25.88	25.13	25.88	12.19	25.13	25.88	25.13	25.88	25.88	23.39	25.88	291.39
APGPCL II - Unutilised capacity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total APGPCL		30.09	31.16	30.09	31.16	19.71	30.09	31.16	30.41	31.16	31.16	28.19	31.16	355.55
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
IPPS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
GVK	0.97	94.00	94.00	93.00	95.00	96.00	93.00	97.00	91.00	94.00	94.00	87.00	96.00	1124.00
Spectrum	0.97	103.68	107.14	103.68	107.14	65.70	103.68	107.14	103.68	107.14	107.14	96.77	107.14	1220.01
Kondapalli (Naphtha)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kondapalli (Gas)	1.10	174.32	180.13	174.32	180.13	180.13	174.32	180.13	174.32	180.13	180.13	162.69	180.13	2120.84
BSES	0.91	72.23	74.64	72.23	74.64	74.64	72.23	74.64	72.23	74.64	74.64	69.83	74.64	881.23
GVK Extension	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.48	88.48	85.62	262.58
Vemagiri	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	131.91	131.91	127.65	391.47
Gautami	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	157.65	157.65	152.56	467.86
Konaseema	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	128.69	128.69	124.54	381.92
TOTAL IPPS		444.23	455.90	443.23	456.90	416.47	443.23	458.90	441.23	455.90	962.63	923.02	948.27	6849.91
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NCE		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

FY 2008-09						Fner	αν Δνai	lability	(MUs)					
Generating Station	Variable Cost (Rs./ kWh)	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
NCE - Bio-Mass	3.17	104.40	101.03	104.40	101.03	104.40	104.40	101.03	104.40	101.03	104.40	104.40	94.30	1229.22
NCE - Bagasse	2.94	59.69	57.76	59.69	57.76	59.69	59.69	57.76	59.69	57.76	75.33	75.33	68.04	748.19
NCE - Municipal Waste to Energy	3.70	6.04	5.84	6.04	5.84	6.04	6.04	5.84	6.04	5.84	6.04	6.04	5.45	71.11
NCE - Industrial Waste based power project	3.13	9.75	9.44	9.75	9.44	9.75	9.75	9.44	9.75	9.44	14.98	14.98	13.53	129.99
NCE - Wind Power	2.92	9.56	9.25	9.56	9.25	9.56	14.86	14.38	14.86	14.38	14.86	14.86	13.43	148.84
NCE - Mini Hydel	2.19	13.87	13.51	13.87	13.51	13.87	13.87	13.51	13.87	13.51	13.87	16.57	15.26	169.08
NCE - NCL Energy Ltd	1.78	1.70	1.66	1.72	1.66	1.72	1.72	1.72	1.66	1.70	1.66	1.72	1.72	20.34
NCE-Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non Conventional		205.01	198.50	205.03	198.50	205.02	210.33	203.69	210.27	203.67	231.14	233.90	211.72	2516.77
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
OTHERS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Srivathsa	1.21	10.56	10.56	10.56	10.56	10.56	8.93	8.16	8.16	8.16	8.16	8.16	7.68	110.21
LVS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vishakapatnam Steel Plant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NB Ferro Alloys	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL OTHERS		10.56	10.56	10.56	10.56	10.56	8.93	8.16	8.16	8.16	8.16	8.16	7.68	110.21
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MARKET		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PTC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RCL and Short-Term Sources(IG Wells,Kesoram)	0.00													
,	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CPDCL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPDCL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NPDCL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPDCL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

FY 2008-09	9					Ener	gy Avai	lability	(MUs)					
Generating Station	Variable Cost (Rs./ kWh)	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
UI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Short Term Sources	7.00	455.23	527.32	223.92	453.10	436.66	338.49	312.24	239.42	220.11	6.96	171.00	252.72	3637.16
Pool Purchases	2.28	222.22	198.55	288.17	237.56	283.75	242.68	83.58	179.91	104.23	144.74	177.67	86.58	2249.63
Bi-lateral Sales( PTC etc.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UI Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pool Sales	0.00	-222.22	-198.55	-288.17	-237.56	-283.75	-242.68	-83.58	-179.91	-104.23	-144.74	-177.67	-86.58	-2249.63
	0.00													0.00
TOTAL MARKET		455.23	527.32	223.92	453.10	436.66	338.49	312.24	239.42	220.11	6.96	171.00	252.72	3637.16
TOTAL (From All Sources)		5294.62	5470.11	4978.37	5518.57	5801.35	5333.21	5890.83	5191.59	5432.79	5779.99	5611.02	6448.92	66751.38

## ANNEXURE - E (ii) STATION-WISE AND MONTH-WISE AVAILABILITY OF ENERGY

(Reference: Paragraph 265 of the Order)

)					Energ	gy Avai	lability (	(MUs)					
Variable Cost (Rs./ kWh)	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
1.26	265.52	274.49	265.52	274.49	207.25	265.52	274.49	265.52	207.25	274.49	256.56	274.49	3105.61
1.26	263.12	272.09	263.12	272.09	204.85	263.12	200.37	128.65	254.16	272.09	254.16	272.09	2919.92
1.26	263.01	271.97	263.01	204.74	271.97	128.54	249.56	263.01	271.97	271.97	254.04	271.97	2985.78
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.88	13.88	133.20	137.64	206.46	505.05
1.63	264.79	273.73	264.79	206.68	206.68	264.79	273.73	264.79	273.73	273.73	255.85	273.73	3097.05
1.47	200.86	264.72	255.60	264.72	196.30	255.60	264.72	255.60	264.72	264.72	246.47	264.72	2998.74
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00	149.50	154.60	149.50	154.60	135.48	130.39	110.00	130.39	154.60	154.60	144.40	154.60	1722.66
1.00	151.02	156.12	151.02	117.89	156.12	74.56	143.37	151.02	156.12	156.12	145.92	156.12	1715.39
1.00	150.98	156.07	150.98	117.84	117.84	150.98	156.07	150.98	156.07	156.07	145.88	156.07	1765.84
1.01	318.40	329.04	318.40	329.04	249.22	238.58	329.04	318.40	329.04	329.04	307.75	329.04	3724.98
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.21	39.67	41.01	39.67	41.01	41.01	39.67	41.01	39.67	41.01	38.33	0.88	0.88	403.84
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2066.88	2193.84	2121.61	1983.10	1786.74	1811.75	2042.37	1981.90	2122.55	2324.37	2149.57	2360.17	24944.85
0.00	32.27	30.29	23.46	28.31	29.40	32.77	34.06	32.27	31.28	31.78	29.50	29.80	365.21
0.00	1 58	0.30	0.20	8 01	22 47	20.49	20.30	15 54	12 97	13 37	g an	8 61	134.64
	•												527.04
	Variable Cost (Rs./ kWh)  1.26 1.26 1.26 0.00 1.63 1.47 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.0	Variable Cost (Rs./ kWh)         April           1.26         265.52           1.26         263.12           1.26         263.01           0.00         0.00           1.63         264.79           1.47         200.86           0.00         0.00           1.00         151.02           1.01         318.40           0.00         0.00           1.21         39.67           0.00         0.00           0.00         0.00           0.00         0.00           2066.88         0.00           0.00         1.58	Variable Cost (Rs./ kWh)         April         May           1.26         265.52         274.49           1.26         263.12         272.09           1.26         263.01         271.97           0.00         0.00         0.00           1.63         264.79         273.73           1.47         200.86         264.72           0.00         0.00         0.00           1.00         149.50         154.60           1.00         151.02         156.12           1.00         150.98         156.07           1.01         318.40         329.04           0.00         0.00         0.00           1.21         39.67         41.01           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         0.00         0.00           0.00         32.27         30.29           0.00         1.58         0.30	Variable (Rs./ kWh)         April         May         June           1.26         265.52         274.49         265.52           1.26         263.12         272.09         263.12           1.26         263.01         271.97         263.01           0.00         0.00         0.00         0.00           1.63         264.79         273.73         264.79           1.47         200.86         264.72         255.60           0.00         0.00         0.00         0.00           1.00         149.50         154.60         149.50           1.00         151.02         156.12         151.02           1.00         150.98         156.07         150.98           1.01         318.40         329.04         318.40           0.00         0.00         0.00         0.00           1.21         39.67         41.01         39.67           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.0	Variable (Rs./ kWh)         April         May         June         July           1.26         265.52         274.49         265.52         274.49           1.26         263.12         272.09         263.12         272.09           1.26         263.01         271.97         263.01         204.74           0.00         0.00         0.00         0.00         0.00           1.63         264.79         273.73         264.79         206.68           1.47         200.86         264.72         255.60         264.72           0.00         0.00         0.00         0.00         0.00           1.00         149.50         154.60         149.50         154.60           1.00         151.02         156.12         151.02         117.89           1.01         318.40         329.04         318.40         329.04           0.00         0.00         0.00         0.00         0.00           1.21         39.67         41.01         39.67         41.01           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00<	Variable (Rs./ kWh)         April         May         June         July         Aug           1.26         265.52         274.49         265.52         274.49         207.25           1.26         263.12         272.09         263.12         272.09         204.85           1.26         263.01         271.97         263.01         204.74         271.97           0.00         0.00         0.00         0.00         0.00         0.00           1.63         264.79         273.73         264.79         206.68         206.68           1.47         200.86         264.72         255.60         264.72         196.30           0.00         0.00         0.00         0.00         0.00         0.00           1.00         149.50         154.60         149.50         154.60         135.48           1.00         151.02         156.12         151.02         117.89         156.12           1.01         318.40         329.04         318.40         329.04         249.22           0.00         0.00         0.00         0.00         0.00         0.00           1.21         39.67         41.01         39.67         41.01         41.	Variable Cost (Rs./ kWh)         April         May         June         July         Aug         Sept           1.26         265.52         274.49         265.52         274.49         207.25         265.52           1.26         263.12         272.09         263.12         272.09         204.85         263.12           1.26         263.01         271.97         263.01         204.74         271.97         128.54           0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00           1.63         264.79         273.73         264.79         206.68         206.68         264.79           1.47         200.86         264.72         255.60         264.72         196.30         255.60           0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00           1.00         149.50         154.60         149.50         154.60         135.48         130.39           1.00         150.98         156.12         151.02         117.89         156.12         74.56           1.01         318.40         329.04         318.40         329.04         249.22         238.5	Variable Cost (Rs./ kWh)         April         May         June         July         Aug         Sept         Oct           1.26         265.52         274.49         265.52         274.49         207.25         265.52         274.49           1.26         263.12         272.09         263.12         272.09         204.85         263.12         200.37           1.26         263.01         271.97         263.01         204.74         271.97         128.54         249.56           0.00	Variable (Rs./ kWh)         April (Rs./ kWh)         May         June         July         Aug         Sept         Oct         Nov           1.26         265.52         274.49         265.52         274.49         207.25         265.52         274.49         265.52           1.26         263.12         272.09         263.12         272.09         204.85         263.12         200.37         128.65           1.26         263.01         271.97         263.01         204.74         271.97         128.54         249.56         263.01           0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         13.88           1.63         264.79         273.73         264.79         206.68         206.68         264.79         273.73         264.79           1.47         200.86         264.72         255.60         264.72         196.30         255.60         264.72         255.60           0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	Variable (Rs./ kWh)         April         May         June         July         Aug         Sept         Oct         Nov         Dec           1.26         265.52         274.49         265.52         274.49         207.25         265.52         274.49         265.52         207.25           1.26         263.12         272.09         263.12         272.09         204.85         263.12         200.37         128.65         254.16           1.26         263.01         271.97         263.01         204.74         271.97         128.54         249.56         263.01         271.97           0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         13.88         13.88           1.63         264.79         273.73         264.79         206.68         206.68         264.79         273.73         264.79         273.73           1.47         200.86         264.72         255.60         264.72         196.30         256.00         264.72         255.60         264.72         255.60         264.72         196.30         256.00         264.72         255.60         264.72         255.60         264.72         196.30         256.00         26	Variable Cost (Rs./ kWh)         April         May         June         July         Aug         Sept         Oct         Nov         Dec         Jan           1.26         265.52         274.49         265.52         274.49         207.25         265.52         274.49         265.52         207.25         264.52         207.49         265.52         274.49         207.25         265.52         274.49         265.52         207.25         274.49         207.25         265.52         274.49         265.52         207.25         274.49         207.25         265.52         274.49         265.52         207.25         274.49         207.25         265.52         274.49         265.52         207.25         274.49         207.25         265.52         274.49         265.52         207.25         274.49         206.68         263.01         200.00         0.00         0.00         0.00         13.88         138.8         133.80         138.84         133.84         133.84         133.40         290.66         264.79         273.73         264.72         265.60         264.72         255.60         264.72         255.60         264.72         255.60         264.72         256.60         264.72         256.60         264.72         264.7	Variable Cost (Rs./ kWh)         April (Rs./ kWh)         May         June         July         Aug         Sept         Oct         Nov         Dec         Jan         Feb           1.26         265.52         274.49         265.52         274.49         207.25         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.52         274.49         265.66         1.26         263.01         271.97         263.01         204.74         271.97         128.54         249.56         263.01         271.97         271.97         254.04           0.00         0.00         0.00         0.00         0.00         0.00         0.00         1.00         13.88         133.89         133.20         137.64           1.63         264.79         273.73         264.79         273.73         264.79         273.73         264.72         265.60         264.72         255.60         264.72	Variable Cost (Rs./ kWh)

FY 2008-09	9					Ener	gy Avai	lability (	(MUs)					
Generating Station	Variable Cost (Rs./ kWh)	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
LSR	0.00	103.25	87.91	79.99	95.53	101.87	99.39	99.59	93.55	104.64	115.13	115.13	125.13	1221.14
DONKARAYI	0.00	7.13	4.85	4.06	5.05	7.43	8.12	8.51	8.81	10.20	11.19	10.79	11.29	97.42
SSLM	0.00	78.82	50.31	53.38	269.31	328.40	200.28	275.39	118.57	118.62	75.95	127.23	177.53	1873.78
NSPH	0.00	109.17	62.14	70.85	295.00	334.09	233.40	301.18	140.50	124.51	71.24	113.03	187.18	2042.29
NSRCPH	0.00	5.16	4.07	4.07	4.96	18.92	29.61	35.25	33.07	26.74	19.02	13.08	9.51	203.45
NSLCPH	0.00	3.99	3.80	3.80	4.39	11.32	17.06	20.03	17.56	14.09	10.03	6.07	4.79	116.92
POCHAMPAD PH	0.00	1.49	0.00	0.00	1.78	10.20	13.17	14.95	13.07	10.00	9.31	7.13	5.94	87.02
NIZAMSAGAR PH	0.00	0.79	0.20	0.00	0.10	0.59	1.19	2.18	0.79	0.50	1.49	1.39	1.49	10.69
PABM	0.00	0.00	0.00	0.00	0.00	1.19	1.29	1.58	1.88	1.19	0.50	0.10	0.30	8.02
MINI HYDRO&OTHERS	0.00	1.20	0.60	0.80	1.10	1.99	2.09	2.38	2.48	2.09	1.89	1.79	1.59	20.00
SINGUR	0.00	0.40	0.10	0.10	0.40	0.59	1.19	1.58	0.20	0.20	0.50	0.50	1.09	6.83
SSLM LCPH	1.01	65.57	22.59	27.16	301.89	441.78	299.39	324.17	113.08	175.47	71.49	88.50	254.13	2185.22
Nagarjunasagar Tail Pond Dam Power House	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Priyadarshini Jurala Hydro Electric Project- AP Share														
	0.00	12.16	12.16	12.16	12.16	12.16	12.16	12.16	12.16	12.16	12.16	12.16	12.16	145.89
Lower Jurala Hydro Electric Project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL HYDRO		462.87	314.75	313.38	1071.25	1368.43	1013.07	1193.90	642.14	690.48	496.40	589.36	889.53	9045.55
TOTAL APGENCO		2529.75	2508.59	2435.00	3054.34	3155.17	2824.82	3236.27	2624.05	2813.03	2820.77	2738.92	3249.70	33990.41
Central Generating Stations														
NTPC														
NTPC (SR)														
NTPC (SR)	1.05	449.20	463.90	412.09	422.59	425.04	352.57	364.12	438.35	463.90	463.90	419.09	463.90	5138.66
NTPC (SR) Stage III	1.14	112.89	116.57	112.89	82.74	55.53	112.89	116.57	112.89	116.57	116.57	105.53	116.57	1278.18
Total NTPC(SR)		562.09	580.47	524.98	505.33	480.57	465.46	480.69	551.24	580.47	580.47	524.62	580.47	6416.85

FY 2008-09	9					Energ	gy Avail	ability (	MUs)					
Generating Station	Variable Cost (Rs./ kWh)	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
NTPC (ER)														
Farakka	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kahalgaon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Talcher - Stage 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Talcher Stage 2	0.74	288.00	248.00	212.00	255.00	315.00	300.00	315.00	285.00	223.00	240.00	226.00	310.00	3217.00
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total NTPC(ER)		288.00	248.00	212.00	255.00	315.00	300.00	315.00	285.00	223.00	240.00	226.00	310.00	3217.00
Total NTPC		850.09	828.47	736.98	760.33	795.57	765.46	795.69	836.24	803.47	820.47	750.62	890.47	9633.85
NLC TS-II														
NLC - I	1.25	75.98	82.61	75.78	82.61	72.96	53.47	67.74	52.26	45.23	61.71	74.77	82.61	827.72
NLC - II	1.25	129.46	128.15	123.98	111.97	101.27	123.98	94.48	107.27	130.50	133.63	121.10	134.68	1440.46
Total NLC		205.43	210.76	199.75	194.58	174.23	177.44	162.22	159.53	175.73	195.34	195.88	217.29	2268.18
NPC														
NPC-MAPS	1.16	22.26	22.90	11.13	22.90	22.90	22.26	22.90	22.26	22.90	22.90	21.40	22.90	259.61
NPC-Kaiga unit I	1.01	70.10	72.12	70.10	36.06	72.12	70.10	72.12	70.10	72.12	72.12	67.40	72.12	816.58
NPC-Kaiga unit II	1.01	34.21	80.25	77.95	80.25	80.25	77.95	80.25	77.95	80.25	80.25	76.63	80.25	906.44
Total NPC		126.57	175.27	159.18	139.21	175.27	170.31	175.27	170.31	175.27	175.27	165.43	175.27	1982.63
NTPC - Simhadri														
NTPC Simhadri Stage I	1.12	656.00	683.00	661.00	325.00	490.00	556.00	680.00	661.00	683.00	683.00	639.00	683.00	7400.00
NTPC Simhadri Stage II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total NTPC- Simhadri		656.00	683.00	661.00	325.00	490.00	556.00	680.00	661.00	683.00	683.00	639.00	683.00	7400.00
CGS - New														

FY 2008-09	9					Ener	gy Avai	lability (	(MUs)					
Generating Station	Variable Cost (Rs./ kWh)	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
TOTAL CGS		1838.09	1897.50	1756.91	1419.12	1635.07	1669.21	1813.18	1827.08	1837.47	1874.08	1750.93	1966.03	21284.65
APGPCL														
APGPCL I - Allocated capacity	1.14	4.96	5.28	4.96	5.28	7.52	4.96	5.28	5.28	5.28	5.28	4.80	5.28	64.16
APGPCL I - Unutilised capacity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
APGPCL II - Allocated capacity	1.03	25.13	25.88	25.13	25.88	12.19	25.13	25.88	25.13	25.88	25.88	23.39	25.88	291.39
APGPCL II - Unutilised capacity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total APGPCL		30.09	31.16	30.09	31.16	19.71	30.09	31.16	30.41	31.16	31.16	28.19	31.16	355.55
IPPS														
GVK	0.97	94.00	94.00	93.00	95.00	96.00	93.00	97.00	91.00	94.00	94.00	87.00	96.00	1124.00
Spectrum	0.97	103.68	107.14	103.68	107.14	65.70	103.68	107.14	103.68	107.14	107.14	96.77	107.14	1220.01
Kondapalli (Naphtha)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kondapalli (Gas)	1.10	174.32	180.13	174.32	180.13	180.13	174.32	180.13	174.32	180.13	180.13	162.69	180.13	2120.84
BSES	0.91	72.23	74.64	72.23	74.64	74.64	72.23	74.64	72.23	74.64	74.64	69.83	74.64	881.23
GVK Extension	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		88.48	85.62	262.58
Vemagiri	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	131.91	131.91	127.65	391.47
Gautami	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		157.65	152.56	467.86
Konaseema	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		128.69	124.54	381.92
TOTAL IPPS		444.23	455.90	443.23	456.90	416.47	443.23	458.90	441.23	455.90	962.63	923.02	948.27	6849.91
NCE														
NCE - Bio-Mass	3.17	104.40	101.03	104.40	101.03	104.40	104.40	101.03	104.40	101.03	104.40	104.40	94.30	1229.22
NCE - Bagasse	2.94	59.69	57.76	59.69	57.76	59.69	59.69	57.76	59.69	57.76	75.33	75.33	68.04	748.19
NCE - Municipal Waste to Energy	3.70	6.04	5.84	6.04	5.84	6.04	6.04	5.84	6.04	5.84	6.04	6.04	5.45	71.11

FY 2008-09	9					Energ	gy Avai	lability	(MUs)					
Generating Station	Variable Cost (Rs./ kWh)	April	Мау	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
NCE - Industrial Waste based power project	3.13	9.75	9.44	9.75	9.44	9.75	9.75	9.44	9.75	9.44	14.98	14.98	13.53	129.99
NCE - Wind Power	2.92	9.56	9.25	9.56	9.25	9.56	14.86	14.38	14.86	14.38	14.86	14.86	13.43	148.84
NCE - Mini Hydel	2.19	13.17	12.84	13.17	12.84	13.17	13.17	12.84	13.17	12.84	13.17	15.46	14.23	160.09
NCE - NCL Energy Ltd	1.78	1.70	1.66	1.72	1.66	1.72	1.72	1.72	1.66	1.70	1.66	1.72	1.72	20.34
NCE-Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non Conventional	19.84	204.31	197.82	204.33	197.82	204.33	209.63	203.02	209.57	203.00	230.45	232.79	210.70	2507.77
OTHERS														
Srivathsa	1.21	10.56	10.56	10.56	10.56	10.56	8.93	8.16	8.16	8.16	8.16	8.16	7.68	110.21
LVS	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Vishakapatnam Steel Plant	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0.00
NB Ferro Alloys	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0.00
TOTAL OTHERS		10.56	10.56	10.56	10.56	10.56	8.93	8.16	8.16	8.16	8.16	8.16	7.68	110.21
TOTAL (From All Sources)		5057.03	5101.54	4880.11	5169.91	5441.31	5185.91	5750.68	5140.50	5348.71	5927.24	5682.02	6413.53	65098.50

## ANNEXURE - E (iii) STATION-WISE AND MONTH-WISE DESPATCH OF ENERGY

(Reference: Paragraph 272 of the Order)

FY 2008-09	9				 		y Des	patch	(MUs	s)				
Station Name	Variable Cost (Rs./ kWh)		May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
NPC-Kaiga unit I	1.01	70	72	70	36	72	70	72	70	72	72	67	72	817
NPC-Kaiga unit II	1.01	34	80	78	80	80	78	80	78	80	80	77	80	906
NPC-MAPS	1.16	22	23	11	23	23	22	23	22	23	23	21	23	260
Total Non														
Conventional	19.84	204	198	204	198	204	210	203	210	203	230	233	211	2,508
VTPS IV	0.00	0	0	0	0	0	0	0	14	14	133	138	206	505
RTPP Stage-III	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
KTPS Stage VI	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
NTS	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
Kakatiya Thermal Power Plant Stage		0	0	0	0	0	0	0	0	0	0	0	0	0
Kakatiya Thermal Power Plant Stage II		0	0	0	0	0	0	0	0	0	0	0	0	0
MACHKUND PH AP Share	0.00	32	30	23	28	29	33	34	32	31	32	30	30	365
TUNGBHADRA														
PH AP Share	0.00			_	9	22	20	20		13				135
USL	0.00					46	41	41	39	46	51	53		
LSR	0.00	103			96	102	99	100	94	105	115	115	125	
DONKARAYI	0.00	7	5	4	5	7	8	9	9	10	11	11	11	97

FY 2008-09	9				iiici <u>gy</u>		y Des	patch	(MUs	5)				
Station Name	Variable Cost (Rs./ kWh)		Мау	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
SSLM	0.00	79	50	53	269	328	200	275	119	119	76	127	178	1,874
NSPH	0.00	109	62	71	295	334	233	301	140	125	71	113	187	2,042
NSRCPH	0.00	5	4	4	5	19	30	35	33	27	19	13	10	203
NSLCPH	0.00	4	4	4	4	11	17	20	18	14	10	6	5	117
POCHAMPAD PH	0.00	1	0		2	10	13	15	13	10	9	7	6	87
NIZAMSAGAR PH	0.00		0	_	0	1	1	2	1	0	1	1		11
PABM	0.00	0	0	0	0	1	1	2	2	1	0	0	0	8
MINI HYDRO&OTHERS SINGUR	0.00		1	1	1	2	2	2	2	2	2	2		20 7
Nagarjunasagar Tail Pond Dam Power House						0			0	0		0		-
Priyadarshini Jurala Hydro Electric Project- AP Share		12	12	12	12	12	12	12	12	12	12	12	12	146
Lower Jurala Hydro Electric Project		0	0	0	0	0	0	0	0	0	0	0	0	0
Farakka	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
Kahalgaon	0.00	0	0	0	0	0	0	0	0	0	0	0	0	
Talcher - Stage 1	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
NTPC Simhadri Stage II PTC	0.00		0		0	0	0	0	0	0		0		0
FIC	0.00	U	U	U	U	U	U	U	U	U	U	U	U	U

FY 2008-09	•				iiici <u>gy</u>		y Des	patch	(MUs	5)				
Station Name	Variable Cost (Rs./ kWh)		Мау	June		Aug	Sept		Nov	Dec	Jan	Feb	March	Total
Kondapalli	,													
(Naphtha)	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
Vishakapatnam														
Steel Plant	0.00				0	0	0	0	0	0		0	1	0
NB Ferro Alloys	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
RCL and Short- Term Sources(IG														
Wells,Kesoram)	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
LVS	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
Talcher Stage 2	0.74	288	248	212	255	315	300	315	285	223	240	226	310	3,217
BSES	0.91	72	75	72	75	75	72	75	72	75	75	70	75	881
GVK	0.97	94	94	93	95	96	93	97	91	94	94	87	96	1,124
Spectrum	0.97	104	107	104	107	66	104	107	104	107	107	97	107	1,220
KTPS A	1.00	150	155	150	155	135	130	110	130	155	155	144	155	1,723
KTPS B	1.00	151	156	151	118	156	75	143	151	156	156	146	156	1,715
KTPS C	1.00	151	156	151	118	118	151	156	151	156	156	146	156	1,766
SSLM LCPH	1.01	66	23	27	302	442	299	324	113	175	71	89	254	2,185
APGPCL II -														
Allocated capacity	1.03	25	26	25	26	12	25	26	25	26	26	23	26	291
NTPC (SR)	1.05	449	464	412	423	425	353	364	438	464	464	419	464	5,139
KTPS D	1.01	318	329	318	329	249	239	329	318	329	329	308	329	3,725
Kondapalli (Gas)	1.10	174	180	174	180	180	174	180	174	180	180	163	180	2,121
NTPC Simhadri Stage I	1.12	656	683	661	325	490	556	680	661	683	683	639	683	7,400
APGPCL I - Allocated capacity	1.14		5		5	8		5	5	5		5		64

FY 2008-09	<u> </u>				nergy		y Des	natch	/MH Is	٠١				
Station Name	Variable Cost (Rs./ kWh)		May	June		_			Nov	Dec	Jan	Feb	March	Total
NTPC (SR) Stage														
III	1.14					56			113		117	106		1,278
Srivathsa	1.21	11			11	11	9	8	8	8	8	8	8	110
RTS B	1.21	40	41	40	41	41	40	41	40	41	38	1	1	404
NLC - II	1.25	129	128	124	112	101	124	94	107	131	134	121	135	1,440
NLC – I	1.25	76	83	76	83	73	53	68	52	45	62	75	83	828
VTPS I	1.26	266	274	266	274	207	266	274	266	207	274	257	274	3,106
VTPS II	1.26	263	272	263	272	205	263	200	129	254	272	254	272	2,920
VTPS III	1.26	263	272	263	205	272	129	250	263	272	272	254	272	2,986
RTPP Stage-II	1.47	201	265	256	265	196	256	265	256	265	265	246	265	2,999
GVK Extension	1.57	0	0	0	0	0	0	0	0	0	88	88	86	263
Vemagiri	1.57	0	0	0	0	0	0	0	0	0	132	132	128	391
Gautami	1.57	0	0	0	0	0	0	0	0	0	158	158	141	456
Konaseema	1.57	0	0	0	0	0	0	0	0	0	106	129	0	235
RTPP I	1.63	152	256	170	144	204	235	7	176	274	0	50	0	1,669
Other Short Term					_	_								
Sources	7.00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		4,945	5,084	4,786	5,107	5,439	5,156	5,484	5,052	5,349	5,631	5,477	6,004	63,512

# ANNEXURE F POWER PURCHAGE (IN MU) WITH SALES AND LOSSES (Reference: Paragraph 266 of the Order)

Discom	Voltage	Losses (%)	Sales (MU)	Input upto 33 kV	Requirement/Input at EHT (MU)
	upto 33 kV	15.89%	21059.66	25038.24	26135.95
CPDCL	EHT	4.20%	2840.80		2965.34
	Total	21.76%	23900.46		29101.29
	upto 33 kV	14.53%	6780.11	7932.74	8280.52
EPDCL	EHT	4.20%	2044.70		2134.34
	Total	18.02%	8824.81		10414.86
	upto 33 kV	17.08%	6314.51	7615.19	7949.05
NPDCL	EHT	4.20%	1431.70		1494.46
	Total	21.91%	7746.21		9443.51
	upto 33 kV	14.94%	10746.27	12633.75	13187.63
SPDCL	EHT	4.20%	1309.85		1367.27
	Total	20.73%	12056.12		14554.91
	upto 33 kV	23.72%	44900.55	58866.56	55553.14
State	EHT	4.38%	7627.04		7961.42
	Total	20.92%	52527.59		63514.56

## ANNEXURE - G(i)

## **APCPDCL**

(Reference: Paragraph 313 of the Order)

Source of Power	Load Dispatch (MUs)	Fixed Cost (Rs crores)	Total Variable Cost (Rs crores)	Incentive, Income Tax & Others (Rs crores)	Total Cost (Rs crores)	Avg. Cost/ unit (Rs/ unit)
APGENCO	14099.44	890.97	1382.60	43.95	2317.52	1.64
Thermal	10624.76	890.97	1286.58	43.95	2221.50	2.09
Hydel	3474.67	0.00	96.02	0.00	96.02	0.28
CGS-SR	5891.27	388.19	603.93	44.49	1036.61	1.76
NTPC Simhadri Stage I	3176.21	199.81	354.85	8.94	563.60	1.77
APGPCL I & II	154.59	5.50	16.23	0.00	21.73	1.41
IPPs	2978.34	371.87	338.30	0.00	710.18	2.38
NCE & Others	585.00	0.00	173.74	0.00	173.74	2.97
Total of allocated sources	26884.84	1856.34	2869.65	97.38	4823.38	1.79
Other short term sources	1581.44		1107.01		1107.01	7.00
Sale to other DISCOMs (pool sales)	1980.87		451.30		451.30	2.28
Net after D-to-D	30447.22	1856.34	4427.95	97.38	6381.67	2.10
Energy required for Govt Lift Irrigation schemes as per addeadum	402.41		346.88		346.88	8.62
Grand Total	30849.63	1856.34	4774.83	97.38	6728.55	2.18

APCPDCL Power Purchase Cost for FY 2008-09 as approved by APERC

Source of Power	Load Dispatch (MUs)	Fixed Cost (Rs crores)	Total Variable Cost (Rs crores)	Incentive, Income Tax & Others (Rs crores)	Total Cost (Rs crores)	Avg. Cost/ unit (Rs/ unit)
APGENCO	14158.12	868.73	1325.31	49.42	2243.46	1.58
Thermal	10225.12	868.73	1229.29	49.42	2147.44	2.10
Hydel	3933.01	0.00	96.02	0.00	96.02	0.24
CGS	6037.05	388.19	614.72	35.79	1038.70	1.72
NTPC Simhadri Stage I	3217.52	199.81	359.46	11.95	571.22	1.78
APGPCL	154.59	5.50	16.23	0.00	21.73	1.41
IPPs	2909.26	371.87	327.46	0.00	699.33	2.40
NCE & OTHERS	585.06	17.66	173.74	0.00	191.39	3.27
GRAND TOTAL	27061.60	1851.77	2816.91	97.16	4765.83	1.76

## ANNEXURE - G(ii)

### **APEPDCL**

## (Reference: Paragraph 332 of the Order)

Source of Power	Load Dispatch (MUs)	Fixed Cost (Rs crores)	Total Variable Cost (Rs crores)	Incentive, Income Tax & Others (Rs crores)	Total Cost (Rs crores)	Avg. Cost/ unit (Rs/ unit)
APGENCO	5415.38	342.21	531.03	16.88	890.12	1.64
Thermal	4080.81	342.21	494.16	16.88	853.24	2.09
Hydel	1334.57	0.00	36.88	0.00	36.88	0.28
CGS-SR	2262.74	149.10	231.96	17.09	398.15	1.76
NTPC Simhadri Stage I	1219.94	76.74	136.29	3.43	216.47	1.77
APGPCL I & II	59.38	2.11	6.23	0.00	8.35	1.41
IPPs	1143.93	142.83	129.94	0.00	272.77	2.38
NCE & Others	587.22	40.61	159.71	0.00	200.32	3.41
Total of allocated sources	10688.59	753.60	1195.17	37.40	1986.18	1.86
Other short term sources	607.41		425.18		425.18	7.00
Sale to other DISCOMs (pool sales)	(-) 1006.31		(-) 516.13		(-) 516.13	
Net after D-to-D	10289.68	753.60	1104.22	37.40	1895.23	1.84
Energy required for Govt Lift Irrigation schemes as per addeadum			163.72		163.72	8.62
Grand Total	10479.61	753.60	1267.94	37.40	2058.95	1.96

APEPDCL Power Purchase Cost for FY 2008-09 as approved by APERC

Source of Power	Load Dispatch (MUs)	Fixed Cost (Rs crores)	Total Variable Cost (Rs crores)	Incentive, Income Tax & Others (Rs crores)	Total Cost (Rs crores)	Avg. Cost/ unit (Rs/ unit)
APGENCO	5437.92	333.67	509.03	18.98	861.68	1.58
Thermal	3927.31	333.67	472.15	18.98	824.80	2.10
Hydel	1510.61	0.00	36.88	0.00	36.88	0.24
CGS	2318.74	149.10	236.11	13.75	398.95	1.72
NTPC Simhadri Stage I	1235.80	76.74	138.06	4.59	219.40	1.78
APGPCL	59.38	2.11	6.23	0.00	8.35	1.41
IPPs	1117.40	142.83	125.77	0.00	268.60	2.40
NCE & OTHERS	587.22	6.78	144.47	0.00	151.25	2.58
GRAND TOTAL	10756.45	711.24	1159.67	37.32	1908.22	1.77

## ANNEXURE - G(iii)

### **APNPDCL**

(Reference: Paragraph 350 of the Order)

Source of Power	Load Dispatch (MUs)	Fixed Cost (Rs crores)	Total Variable Cost (Rs crores)	Incentive, Income Tax & Others (Rs crores)	Total Cost (Rs crores)	Avg. Cost/ unit (Rs/ unit)
APGENCO	5486.72	346.72	538.03	17.10	901.85	1.64
Thermal	4134.57	346.72	500.67	17.10	864.48	2.09
Hydel	1352.15	0.00	37.37	0.00	37.37	0.28
CGS-SR	2292.55	151.07	235.01	17.31	403.39	1.76
NTPC Simhadri Stage I	1236.01	77.75	138.09	3.48	219.32	1.77
APGPCL I & II	60.16	2.14	6.31	0.00	8.46	1.41
IPPs	1159.00	144.71	131.65	0.00	276.36	2.38
NCE & Others	439.31	0.00	130.65	0.00	130.65	2.97
Total of allocated sources	10673.75	722.39	1179.75	37.89	1940.03	1.82
Other short term sources	615.41		430.79		430.79	7.00
Sale to other DISCOMs (pool sales)	(-) 745.34		(-) 727.03		(-) 727.03	
Net after D-to-D	10543.82	722.39	883.51	37.89	1643.79	1.56
Energy required for Govt Lift Irrigation schemes as per addeadum	262.86		226.59		226.59	8.62
Grand Total	10806.68	722.39			1870.38	

APNPDCL Power Purchase Cost for FY 2008-09 as approved by APERC

Source of Power	Load Dispatch (MUs)	Fixed Cost (Rs crores)	Total Variable Cost (Rs crores)	Incentive, Income Tax & Others (Rs crores)	Total Cost (Rs crores)	Avg. Cost/ unit (Rs/ unit)
APGENCO	5509.55	338.06	515.74	19.23	873.03	1.58
Thermal	3979.05	338.06	478.37	19.23	835.67	2.10
Hydel	1530.51	0.00	37.37	0.00	37.37	0.24
CGS	2349.28	151.06	239.22	13.93	404.20	1.72
NTPC Simhadri Stage I	1252.08	77.75	139.88	4.65	222.29	1.78
APGPCL	60.16	2.14	6.31	0.00	8.46	1.41
IPPs	1132.12	144.71	127.43	0.00	272.14	2.40
NCE & OTHERS	439.31	6.87	130.65	0.00	137.52	3.13
GRAND TOTAL	10742.51	720.60	1159.23	37.81	1917.64	1.79

## ANNEXURE - G(iv)

### **APSPDCL**

(Reference: Paragraph 369 of the Order)

Source of Power	Load Dispatch (MUs)	Fixed Cost (Rs crores)	Total Variable Cost (Rs crores)	Incentive, Income Tax & Others (Rs crores)	Total Cost (Rs crores)	Avg. Cost/ unit (Rs/ unit)
APGENCO	7425.88	469.25	728.19	23.15	1220.59	1.64
Thermal	5595.84	469.25	677.61	23.15	1170.02	2.09
Hydel	1830.04	0.00	50.57	0.00	50.57	0.28
CGS-SR	3102.80	204.46	318.08	23.43	545.97	1.76
NTPC Simhadri Stage I	1672.85	105.23	186.89	4.71	296.83	1.77
APGPCL I & II	81.42	2.90	8.55	0.00	11.45	1.41
IPPs	1568.63	195.86	178.18	0.00	374.03	2.38
NCE & Others	1006.39	0.00	310.12	0.00	310.12	3.08
Total of allocated sources	14857.97	977.70	1730.00	51.29	2758.99	1.86
Other short term sources	832.91		583.04		583.04	7.00
Sale to other DISCOMs (pool sales)	(-) 229.22		(-) 160.45		(-) 160.45	
Net after D-to-D	15461.66	977.70	2152.59	51.29	3181.58	2.06
Energy required for Govt Lift Irrigation schemes as per						
addeadum	179.81		155.00		155.00	8.62
Grand Total	15641.47	977.70	2307.59	51.29	3336.58	2.13

**APSPDCL**Power Purchase Cost for FY 2008-09 as approved by APERC

Source of Power	Load Dispatch (MUs)	Fixed Cost (Rs crores)	Total Variable Cost (Rs crores)	Incentive, Income Tax & Others (Rs crores)	Total Cost (Rs crores)	Avg. Cost/ unit (Rs/ unit)
APGENCO	7456.79	457.54	698.01	26.03	1181.58	1.58
Thermal	5385.35	457.54	647.44	26.03	1131.01	2.10
Hydel	2071.43	0.00	50.57	0.00	50.57	0.24
cgs	3179.59	204.45	323.76	18.85	547.06	1.72
NTPC Simhadri Stage I	1694.60	105.23	189.32	6.29	300.85	1.78
APGPCL	81.42	2.90	8.55	0.00	11.45	1.41
IPPs	1532.24	195.86	172.46	0.00	368.32	2.40
NCE & OTHERS	1006.39	9.30	310.12	0.00	319.42	3.17
GRAND TOTAL	14951.03	975.29	1702.22	51.17	2728.68	1.83

## ANNEXURE - H (i) CATEGORY-WISE AND MONTHLY SALES FOR FY 2008-09

(Reference: Paragraph 266 of the Order)
ALL DISCOMS

Voltage and Consumer Category							Mus						
Voltage and Consumer Category	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
LT Category	2560.33	2685.80	2359.55	2636.01	2755.06	2515.58	2942.68	2538.19	2744.19	2887.74	2767.46	3274.29	32666.88
Category I Domestic	932.82	1026.41	1085.64	999.59	990.52	1044.75	1045.69	1011.87	958.31	907.48	884.79	946.89	11834.76
Category II - Non-domestic/Commercial	236.55	258.52	278.33	253.02	260.87	263.71	260.80	250.71	249.16	239.25	235.65	249.44	3036.01
Category III (A & B) - Industrial	216.92	227.44	241.77	217.46	213.75	207.27	213.48	202.55	230.28	259.16	257.16	258.24	2745.47
Category IV - Cottage Industries & Dhobighats	3.80	3.84	4.01	3.48	4.57	4.17	3.84	4.13	4.34	4.34	3.68	4.24	48.43
Category V - Irrigation and Agriculture	1043.85	1044.29	628.65	1042.24	1158.65	871.18	1285.59	927.89	1170.26	1343.15	1204.72	1677.31	13397.80
Category VI - Local Bodies, St. Lighting & PWS	111.84	113.07	109.78	108.78	113.31	110.13	118.18	126.41	117.09	120.78	167.50	123.58	1440.46
Category VII - General Purpose	12.44	11.52	10.63	10.71	12.68	13.76	14.24	13.87	13.77	12.75	12.99	13.57	152.95
Category VIII-Temporary Supply	2.10	0.71	0.74	0.74	0.70	0.60	0.84	0.76	0.98	0.83	0.96	1.03	10.99
HT Category at 11 KV	521.65	534.74	549.37	518.59	552.65	558.14	534.21	537.40	564.06	566.56	586.04	583.13	6606.55
HT-I Industry Segregated	306.24	330.17	346.01	321.63	339.81	343.11	328.56	336.29	362.07	351.82	360.91	341.63	4068.25
Lights & Fans	6.04	6.24	6.73	6.23	6.74	6.83	5.71	5.83	5.72	5.56	6.03	6.06	73.70
Colony consumption	0.46	0.52	0.51	0.50	0.48	0.53	0.53	0.53	0.50	0.47	0.47	0.51	6.00
Seasonal Industries	0.32	0.12	0.11	0.12	0.15	0.18	0.18	0.51	0.79	0.91	0.91	0.90	5.20
HT-I (B) Ferro-Alloys	0.19	0.45	0.67	0.67	0.66	0.66	0.59	0.69	0.66	0.73	0.69	0.64	7.30
HT-II Industrial Non-Segregated	113.54	126.45	126.18	113.72	118.85	121.14	110.40	108.47	109.10	105.70	113.24	122.33	1389.12
HT-IV A Govt. Lift Irrigation Schemes	6.58	2.54	2.12	2.02	5.34	6.04	7.67	6.42	6.44	8.02	9.17	8.09	70.44
HT-IV B Agriculture	6.98	4.23	3.22	3.11	4.69	6.56	6.79	6.96	6.75	9.32	8.44	8.19	75.25
HT-VI Townships and Residential Colonies	12.29	12.52	13.01	11.83	12.68	12.94	10.32	10.71	10.04	10.12	10.50	10.50	137.45
RESCOs	68.12	50.60	49.92	57.87	62.36	59.26	62.53	60.09	61.06	73.02	74.77	83.39	762.99
Temporary Supply	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90	10.85

Voltage and Consumer Category							Mus						
Voltage and Consumer Category	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
HT Category at 33 KV	415.70	440.63	475.37	467.15	509.92	505.27	419.23	440.04	461.07	502.83	509.96	479.96	5627.13
HT-I Industry Segregated	349.94	370.76	401.20	390.96	411.30	408.06	334.52	355.98	385.80	421.83	418.38	403.74	4652.47
Lights & Fans	4.05	4.23	4.59	4.35	4.70	5.06	3.75	4.07	4.15	4.54	4.55	4.34	52.37
Colony consumption	0.69	0.75	0.82	0.80	0.84	0.82	0.74	0.77	0.73	0.77	0.80	0.78	9.31
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-I (B) Ferro-Alloys	4.14	4.87	5.66	6.21	6.08	6.22	4.53	4.79	5.16	4.93	4.96	6.77	64.32
HT-II Industrial Non-Segregated	30.82	35.61	37.02	33.82	36.05	34.02	32.33	32.32	30.64	30.61	34.47	36.50	404.22
HT-IV A Govt. Lift Irrigation Schemes	19.54	18.87	19.54	24.90	42.99	43.66	33.61	32.27	26.24	30.93	36.96	18.87	348.40
HT-IV B Agriculture	1.23	0.49	0.64	0.49	2.58	1.92	2.93	3.30	2.36	3.03	3.52	2.74	25.23
HT-VI Townships and Residential Colonies	5.28	5.06	5.90	5.62	5.38	5.51	6.81	6.53	5.99	6.20	6.32	6.21	70.81
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Category at 132 KV	591.82	533.14	576.33	599.96	684.45	698.04	634.76	673.34	659.20	702.57	665.63	607.80	7627.04
HT-I Industry Segregated	290.87	287.49	352.07	354.38	378.03	369.77	333.64	334.29	329.33	338.73	349.46	310.07	4028.13
Lights & Fans	0.46	0.47	0.53	0.57	0.65	0.61	0.49	0.50	0.50	0.55	0.60	0.52	6.45
Colony consumption	1.71	1.74	1.91	1.91	2.10	2.00	1.84	1.80	1.79	1.90	2.06	1.89	22.66
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-I (B) Ferro-Alloys	66.47	63.26	67.15	69.23	71.23	65.58	66.19	68.33	66.54	68.06	69.54	64.59	806.18
HT-II Industrial Non-Segregated	5.21	6.05	7.05	5.45	6.12	6.50	5.54	5.49	5.13	4.59	6.05	5.43	68.62
HT-IV A Govt. Lift Irrigation Schemes	99.18	50.73	21.92	44.51	99.49	124.87	117.24	142.72	137.34	165.71	112.89	109.50	1226.10
HT-IV B Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-V Railway Traction	121.00	116.05	118.15	116.74	120.84	122.15	101.08	113.26	112.85	117.40	119.26	110.42	1389.22
HT-VI Townships and Residential Colonies	6.92	7.34	7.54	7.17	5.99	6.56	8.74	6.94	5.72	5.63	5.76	5.37	79.68
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4089.50	4194.31	3960.61	4221.71	4502.08	4277.04	4530.87	4188.98	4428.51	4659.70	4529.09	4945.18	52527.59

# ANNEXURE - H (ii) CATEGORY-WISE AND MONTHLY SALES FOR FY 2008-09

(Reference: Paragraph 311 of the Order)

APCPDCL

Voltage and Consumer Category							Mus						
Voltage and Consumer Category	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
LT Category	1117.93	1120.38	1038.30	1128.07	1179.43	1061.12	1175.60	1074.26	1189.32	1237.81	1185.48	1395.84	13903.55
Category I Domestic	401.21	423.94	456.06	378.45	386.30	401.22	382.75	377.49	376.44	377.70	361.94	377.58	4701.08
Category II - Non-domestic/Commercial	123.24	132.58	143.67	126.11	127.79	128.63	125.33	123.28	124.51	123.29	119.77	124.61	1522.81
Category III (A & B) - Industrial	96.58	100.52	104.24	98.44	95.28	98.47	98.64	93.88	106.19	113.27	107.56	107.38	1220.45
Category IV - Cottage Industries & Dhobighats	1.36	1.38	1.33	1.28	1.37	1.42	1.24	1.32	1.42	1.43	1.30	1.56	16.41
Category V - Irrigation and Agriculture	450.86	418.08	291.02	483.76	527.48	389.96	527.41	437.16	540.54	581.35	553.49	736.88	5938.00
Category VI - Local Bodies, St. Lighting & PWS	39.20	38.91	37.11	35.35	35.91	35.80	34.87	35.82	34.80	35.62	36.49	42.25	442.13
Category VII - General Purpose	4.77	4.31	4.16	4.01	4.68	5.05	4.78	4.72	4.74	4.52	4.22	4.93	54.89
Category VIII-Temporary Supply	0.71	0.66	0.71	0.67	0.62	0.57	0.58	0.59	0.68	0.63	0.71	0.65	7.78
HT Category at 11 KV	260.33	286.24	291.35	266.40	288.37	296.55	265.42	272.62	291.86	290.28	294.19	295.58	3399.19
HT-I Industry Segregated	166.11	184.63	191.20	175.48	189.22	196.46	174.37	181.13	199.86	199.36	196.30	187.71	2241.83
Lights & Fans	4.82	5.14	5.55	5.01	5.43	5.54	4.51	4.66	4.54	4.26	4.49	4.61	58.56
Colony consumption	0.34	0.34	0.33	0.32	0.33	0.34	0.34	0.34	0.35	0.32	0.34	0.36	4.05
Seasonal Industries	0.31	0.07	0.05	0.05	0.05	0.07	0.10	0.50	0.79	0.91	0.91	0.90	4.71
HT-I (B) Ferro-Alloys	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-II Industrial Non-Segregated	75.66	85.27	83.86	75.72	80.05	80.05	73.57	73.07	74.41	73.15	79.15	88.46	942.42
HT-IV A Govt. Lift Irrigation Schemes	3.67	1.19	0.73	0.61	3.30	3.84	2.90	2.63	1.88	2.45	2.79	3.11	29.10
HT-IV B Agriculture	2.67	2.66	2.57	2.61	2.80	2.95	2.89	3.15	3.23	2.93	3.23	3.30	34.99
HT-VI Townships and Residential Colonies	5.85	6.04	6.16	5.70	6.29	6.40	5.84	6.24	5.90	6.00	6.08	6.23	72.73
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Temporary Supply	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	10.80
HT Category at 33 KV	266.27	293.56	313.85	305.85	340.52	340.86	283.20	295.58	314.66	339.38	341.64	321.57	3756.92
HT-I Industry Segregated	229.50	252.15	269.60	258.21	272.71	274.77	230.45	243.30	269.85	289.83	282.64	276.67	3149.68
Lights & Fans	3.64	3.94	4.33	4.20	4.42	4.30	3.68	3.96	3.93	4.08	4.13	4.06	48.67

Voltage and Consumer Category	Mus													
Voltage and Consumer Category	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total	
Colony consumption	0.50	0.54	0.60	0.58	0.61	0.59	0.51	0.55	0.54	0.56	0.57	0.56	6.71	
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-I (B) Ferro-Alloys	4.14	4.87	5.66	6.21	6.08	6.22	4.53	4.79	5.16	4.93	4.96	6.77	64.32	
HT-II Industrial Non-Segregated	25.87	30.16	31.10	28.97	30.80	28.51	27.55	27.82	26.00	26.10	29.25	31.40	343.53	
HT-IV A Govt. Lift Irrigation Schemes	0.67	0.00	0.67	6.03	24.12	24.79	14.74	13.40	7.37	12.06	18.09	0.00	121.92	
HT-IV B Agriculture	0.55	0.46	0.50	0.45	0.50	0.43	0.41	0.44	0.56	0.58	0.63	0.70	6.21	
HT-VI Townships and Residential Colonies	1.40	1.44	1.39	1.20	1.28	1.25	1.33	1.32	1.25	1.24	1.37	1.41	15.88	
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT Category at 132 KV	232.28	194.86	190.70	226.29	290.29	282.89	251.06	275.50	223.63	255.73	218.42	199.15	2840.80	
HT-I Industry Segregated	131.79	132.77	152.12	163.24	185.15	173.13	140.12	141.97	143.45	155.74	169.82	149.25	1838.55	
Lights & Fans	0.46	0.47	0.53	0.57	0.65	0.61	0.49	0.50	0.50	0.55	0.60	0.52	6.45	
Colony consumption	1.14	1.15	1.32	1.41	1.60	1.50	1.21	1.23	1.24	1.35	1.47	1.29	15.91	
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-I (B) Ferro-Alloys	14.17	12.94	16.76	18.83	17.26	15.39	15.17	15.76	14.39	15.80	14.36	13.95	184.78	
HT-II Industrial Non-Segregated	3.84	4.51	4.92	4.45	5.04	4.99	4.63	4.42	4.03	3.83	4.48	4.50	53.64	
HT-IV A Govt. Lift Irrigation Schemes	72.68	35.64	6.99	29.96	72.33	78.93	82.01	104.22	52.20	70.50	19.41	21.69	646.56	
HT-IV B Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-V Railway Traction	8.20	7.38	8.06	7.83	8.26	8.34	7.43	7.40	7.82	7.96	8.28	7.95	94.91	
HT-VI Townships and Residential Colonies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	1876.81	1895.05	1834.20	1926.61	2098.61	1981.42	1975.27	1917.96	2019.46	2123.20	2039.73	2212.15	23900.46	

## ANNEXURE -H (iii) CATEGORY-WISE AND MONTHLY SALES FOR FY 2008-09

(Reference: Paragraph 330 of the Order)

APEPDCL

Voltage and Consumer Category	Mus												
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
LT Category	376.80	420.94	412.53	396.06	411.03	392.56	470.70	429.56	449.23	428.62	406.78	431.05	5025.86
Category I Domestic	176.95	202.73	216.33	217.52	215.13	230.79	242.38	236.33	214.21	190.92	176.88	187.28	2507.46
Category II - Non-domestic/Commercial	38.96	42.64	46.74	42.10	45.89	44.75	49.68	44.80	46.40	42.20	41.74	41.46	527.34
Category III (A & B) - Industrial	37.38	45.44	41.97	34.07	32.24	29.11	34.60	33.85	42.12	49.75	47.14	44.16	471.84
Category IV - Cottage Industries & Dhobighats	0.14	0.14	0.15	0.14	0.15	0.14	0.12	0.11	0.14	0.13	0.13	0.12	1.60
Category V - Irrigation and Agriculture	104.56	112.01	89.73	84.16	97.73	67.34	121.07	90.74	120.65	120.51	116.21	134.98	1259.68
Category VI - Local Bodies, St. Lighting & PWS	16.34	15.85	15.63	15.87	17.23	17.58	19.63	20.40	22.21	22.07	21.81	19.89	224.51
Category VII - General Purpose	2.41	2.09	1.95	2.14	2.57	2.81	3.04	3.21	3.24	2.88	2.71	2.81	31.88
Category VIII-Temporary Supply	0.06	0.05	0.03	0.06	0.07	0.03	0.17	0.13	0.25	0.16	0.17	0.36	1.54
HT Category at 11 KV	88.22	94.11	97.88	92.25	98.82	97.83	95.56	94.33	92.76	85.56	90.85	92.39	1120.54
HT-I Industry Segregated	58.85	64.63	67.46	65.08	68.54	66.31	65.07	65.30	65.41	59.27	65.34	63.92	775.18
Lights & Fans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colony consumption	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-I (B) Ferro-Alloys	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-II Industrial Non-Segregated	13.20	15.11	15.84	14.67	14.91	15.76	15.22	14.40	13.52	11.99	12.39	13.45	170.46
HT-IV A Govt. Lift Irrigation Schemes	0.67	0.52	0.73	0.73	1.22	1.09	1.67	1.57	1.16	0.93	0.80	0.83	11.92
HT-IV B Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-VI Townships and Residential Colonies	1.80	1.86	1.96	1.77	1.88	1.94	0.26	0.26	0.23	0.22	0.25	0.25	12.67
RESCOs	13.70	11.99	11.89	10.00	12.26	12.74	13.33	12.80	12.44	13.15	12.07	13.93	150.31
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Category at 33 KV	50.75	51.88	55.46	55.71	59.87	54.76	50.58	50.79	47.96	56.40	50.73	48.82	633.71
HT-I Industry Segregated	31.49	32.41	35.37	36.48	38.41	33.66	27.60	28.22	26.55	35.52	29.69	28.10	383.50
Lights & Fans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Voltage and Consumer Category	Mus													
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total	
Colony consumption	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-I (B) Ferro-Alloys	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-II Industrial Non-Segregated	4.10	4.30	4.78	3.85	4.24	4.46	3.96	3.79	3.90	3.73	4.37	4.21	49.68	
HT-IV A Govt. Lift Irrigation Schemes	14.88	14.88	14.88	14.88	14.88	14.88	14.88	14.88	14.88	14.88	14.88	14.88	178.56	
HT-IV B Agriculture	0.02	0.03	0.14	0.04	2.05	1.47	2.52	2.39	1.16	0.86	0.26	0.11	11.04	
HT-VI Townships and Residential Colonies	0.26	0.27	0.29	0.45	0.29	0.29	1.62	1.51	1.48	1.40	1.54	1.52	10.93	
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT Category at 132 KV	149.38	154.61	183.87	173.04	185.79	190.19	193.66	172.08	164.73	161.22	164.45	151.68	2044.70	
HT-I Industry Segregated	54.38	61.85	92.28	83.24	89.09	97.08	102.10	76.25	70.33	65.04	64.76	60.30	916.70	
Lights & Fans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Colony consumption	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-I (B) Ferro-Alloys	52.30	50.32	50.39	50.40	53.97	50.19	51.02	52.57	52.15	52.26	55.18	50.64	621.40	
HT-II Industrial Non-Segregated	1.09	1.32	1.71	0.80	0.85	1.29	0.77	0.93	0.96	0.65	1.47	0.76	12.58	
HT-IV A Govt. Lift Irrigation Schemes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-IV B Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-V Railway Traction	41.61	41.13	39.50	38.60	41.89	41.64	39.76	42.33	41.29	43.26	43.04	39.99	494.02	
HT-VI Townships and Residential Colonies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	665.14	721.54	749.73	717.06	755.50	735.34	810.50	746.76	754.68	731.79	712.82	723.94	8824.81	

# ANNEXURE - H (iv) CATEGORY-WISE AND MONTHLY SALES FOR FY 2008-09

(Reference: Paragraph 348 of the Order)

## APNPDCL

Voltage and Concumer Category	Mus												
Voltage and Consumer Category	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
LT Category	398.29	398.66	303.79	426.62	480.17	413.83	549.31	408.42	446.67	508.40	502.50	603.26	5439.94
Category I Domestic	105.07	125.96	133.42	137.06	123.18	130.61	148.92	146.74	135.09	120.68	121.60	134.53	1562.87
Category II - Non-domestic/Commercial	21.44	25.99	27.57	28.69	25.65	26.61	28.22	28.13	26.62	24.61	23.80	26.40	313.72
Category III (A & B) - Industrial	24.24	22.17	25.69	28.81	24.31	22.81	26.01	23.72	26.15	36.91	42.81	42.30	345.91
Category IV - Cottage Industries & Dhobighats	0.42	0.48	0.46	0.51	0.50	0.52	0.53	0.55	0.59	0.56	0.57	0.60	6.29
Category V - Irrigation and Agriculture	225.60	200.27	94.06	207.11	279.75	210.11	319.82	183.14	231.09	298.24	285.98	373.89	2909.06
Category VI - Local Bodies, St. Lighting & PWS	19.79	21.86	21.18	23.21	25.03	21.22	23.62	24.11	24.97	25.34	25.87	23.25	279.45
Category VII - General Purpose	1.73	1.94	1.41	1.24	1.76	1.95	2.19	2.04	2.16	2.06	1.86	2.30	22.64
Category VIII-Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Category at 11 KV	58.07	44.91	45.89	49.77	53.98	53.23	53.79	55.63	58.97	67.97	68.64	71.95	682.80
HT-I Industry Segregated	14.42	14.08	14.64	12.89	13.68	13.92	11.36	14.09	16.31	17.54	17.62	14.33	174.88
Lights & Fans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colony consumption	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seasonal Industries	0.01	0.05	0.06	0.07	0.10	0.11	0.08	0.01	0.00	0.00	0.00	0.00	0.49
HT-I (B) Ferro-Alloys	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-II Industrial Non-Segregated	5.44	5.68	5.39	4.66	4.81	5.27	4.76	4.50	4.12	3.95	4.35	4.47	57.41
HT-IV A Govt. Lift Irrigation Schemes	0.54	0.44	0.42	0.43	0.40	0.61	0.62	0.81	0.66	0.78	0.83	0.87	7.41
HT-IV B Agriculture	2.18	0.49	0.28	0.34	1.10	2.79	2.08	1.57	1.32	2.00	2.40	2.20	18.74
HT-VI Townships and Residential Colonies	1.01	0.91	0.97	0.81	0.79	0.89	0.89	0.85	0.79	0.74	0.82	0.87	10.35
RESCOs	34.47	23.26	24.13	30.57	33.10	29.65	34.00	33.79	35.77	42.95	42.62	49.21	413.53
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Category at 33 KV	14.20	14.17	15.02	14.87	15.59	16.36	18.46	17.72	16.44	16.83	16.52	15.59	191.77
HT-I Industry Segregated	6.90	7.15	7.14	7.24	8.09	8.73	10.93	10.34	9.50	9.62	9.44	8.63	103.71
Lights & Fans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Voltage and Consumer Category	Mus													
Voltage and Consumer Category	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total	
Colony consumption	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-I (B) Ferro-Alloys	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-II Industrial Non-Segregated	0.08	0.08	0.08	0.06	0.08	0.06	0.07	0.07	0.07	0.05	0.06	0.06	0.81	
HT-IV A Govt. Lift Irrigation Schemes	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	43.89	
HT-IV B Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-VI Townships and Residential Colonies	3.57	3.29	4.16	3.91	3.76	3.91	3.81	3.65	3.21	3.51	3.36	3.24	43.37	
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT Category at 132 KV	100.56	85.81	86.36	84.44	100.25	123.60	100.60	108.03	155.89	167.87	164.39	153.89	1431.70	
HT-I Industry Segregated	54.19	51.59	50.05	49.55	54.24	56.55	46.01	51.99	54.18	55.18	54.00	50.61	628.15	
Lights & Fans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Colony consumption	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-I (B) Ferro-Alloys	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-II Industrial Non-Segregated	0.29	0.22	0.42	0.21	0.23	0.22	0.14	0.14	0.14	0.11	0.11	0.17	2.40	
HT-IV A Govt. Lift Irrigation Schemes	12.10	0.69	0.53	0.15	12.76	31.54	20.83	24.10	70.75	80.81	79.09	73.40	406.74	
HT-IV B Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HT-V Railway Traction	27.07	25.97	27.82	27.37	27.03	28.73	24.87	24.85	25.10	26.14	25.43	24.34	314.73	
HT-VI Townships and Residential Colonies	6.92	7.34	7.54	7.17	5.99	6.56	8.74	6.94	5.72	5.63	5.76	5.37	79.68	
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	571.13	543.56	451.07	575.71	649.98	607.02	722.15	589.80	677.98	761.07	752.04	844.69	7746.21	

## ANNEXURE - H (v) CATEGORY-WISE AND MONTHLY SALES FOR FY 2008-09

(Reference: Paragraph 367 of the Order)

APSPDCL

Voltage and Consumer Category	Mus												
Voltage and Consumer Category	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
LT Category	667.31	745.82	604.92	685.25	684.43	648.08	747.07	625.95	658.97	712.91	672.70	844.14	8297.53
Category I Domestic	249.58	273.79	279.82	266.56	265.91	282.12	271.64	251.32	232.56	218.17	224.38	247.50	3063.36
Category II - Non- domestic/Commercial	52.92	57.31	60.35	56.12	61.54	63.72	57.57	54.50	51.63	49.15	50.35	56.97	672.14
Category III (A & B) - Industrial	58.72	59.31	69.86	56.14	61.91	56.89	54.24	51.09	55.82	59.23	59.65	64.40	707.27
Category IV - Cottage Industries & Dhobighats	1.89	1.84	2.08	1.56	2.55	2.09	1.95	2.15	2.18	2.22	1.67	1.96	24.13
Category V - Irrigation and Agriculture	262.84	313.92	153.84	267.21	253.69	203.77	317.30	216.86	277.99	343.05	249.04	431.55	3291.06
Category VI - Local Bodies, St. Lighting & PWS	36.51	36.45	35.86	34.35	35.14	35.53	40.06	46.09	35.10	37.76	83.33	38.20	494.36
Category VII - General Purpose	3.53	3.19	3.12	3.31	3.67	3.95	4.23	3.90	3.63	3.29	4.20	3.54	43.54
Category VIII-Temporary Supply	1.33	0.00	0.00	0.01	0.00	0.00	0.08	0.05	0.05	0.04	0.08	0.02	1.67
HT Category at 11 KV	115.04	109.47	114.26	110.16	111.48	110.53	119.45	114.82	120.46	122.76	132.36	123.22	1404.01
HT-I Industry Segregated	66.86	66.82	72.71	68.17	68.37	66.42	77.77	75.77	80.50	75.65	81.64	75.68	876.36
Lights & Fans	1.22	1.10	1.18	1.22	1.31	1.29	1.20	1.17	1.18	1.30	1.54	1.45	15.14
Colony consumption	0.12	0.18	0.18	0.18	0.15	0.19	0.19	0.19	0.15	0.15	0.13	0.15	1.95
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-I (B) Ferro-Alloys	0.19	0.45	0.67	0.67	0.66	0.66	0.59	0.69	0.66	0.73	0.69	0.64	7.30
HT-II Industrial Non-Segregated	19.24	20.40	21.09	18.66	19.07	20.06	16.85	16.50	17.05	16.61	17.36	15.95	218.83
HT-IV A Govt. Lift Irrigation Schemes	1.70	0.38	0.23	0.25	0.42	0.50	2.48	1.41	2.74	3.86	4.75	3.28	22.01
HT-IV B Agriculture	2.13	1.08	0.37	0.16	0.80	0.83	1.83	2.24	2.21	4.39	2.81	2.69	21.53
HT-VI Townships and Residential Colonies	3.63	3.71	3.92	3.55	3.72	3.71	3.33	3.36	3.12	3.16	3.34	3.15	41.70
RESCOs	19.95	15.35	13.90	17.30	17.00	16.87	15.19	13.49	12.85	16.92	20.09	20.24	199.15

Voltage and Canaumar Catagory							Mus						
Voltage and Consumer Category	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.00	0.00	0.00	0.05
HT Category at 33 KV	84.48	81.02	91.04	90.73	93.95	93.30	66.99	75.95	82.00	90.22	101.08	93.98	1044.73
HT-I Industry Segregated	82.05	79.05	89.10	89.03	92.09	90.90	65.53	74.12	79.90	86.86	96.61	90.34	1015.59
Lights & Fans	0.41	0.29	0.26	0.15	0.28	0.76	0.07	0.11	0.22	0.46	0.42	0.28	3.70
Colony consumption	0.19	0.21	0.22	0.22	0.23	0.23	0.23	0.22	0.19	0.21	0.23	0.22	2.60
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-I (B) Ferro-Alloys	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-II Industrial Non-Segregated	0.78	1.08	1.06	0.94	0.93	0.99	0.75	0.65	0.67	0.73	0.79	0.83	10.19
HT-IV A Govt. Lift Irrigation Schemes	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	4.03
HT-IV B Agriculture	0.66	0.00	0.00	0.00	0.03	0.02	0.01	0.46	0.65	1.58	2.64	1.93	7.98
HT-VI Townships and Residential	0.06	0.06	0.07	0.06	0.05	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.64
Colonies													
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Category at 132 KV	109.60		115.39	116.19				117.74				103.06	
HT-I Industry Segregated	50.51	41.28		58.35	49.56		45.41	64.08	61.36	62.76	60.88	49.92	644.73
Lights & Fans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colony consumption	0.57	0.59	0.59	0.50	0.50	0.50	0.63	0.57	0.55	0.55	0.59	0.60	
Seasonal Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-I (B) Ferro-Alloys	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-II Industrial Non-Segregated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-IV A Govt. Lift Irrigation Schemes	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	172.80
HT-IV B Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-V Railway Traction	44.12	41.58	42.78	42.94	43.67	43.44	29.01	38.68	38.64	40.04	42.50	38.15	485.56
HT-VI Townships and Residential	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colonies													
RESCOs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Temporary Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	976.43	1034.16	925.61	1002.33	997.99	953.26	1022.95	934.45	976.39	1043.64	1024.50	1164.40	12056.12

## ANNEXURE - I (i) COST TO SERVICE MODEL

(Reference: Paragraph 320 of the Order)

CPDCL			Genera	ation		
		Demand			Energy	
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA/ Month	Cost (Rs Crores)	Recovery Basis - Energy Sales (MU)	CoS - Rs/kWh
LT Cat I – Domestic	691.98	1,562.10	369.15	752.57	4,701.08	1.60
LT Cat II - Non-domestic	226.57	520.75	362.56	252.96	1,522.81	1.66
LT Cat III (A & B) – Industrial	127.05	291.45	363.28	200.70	1,220.45	1.64
LT Cat IV - Cottage Industries & Dhobighats	1.71	3.92	363.28	2.70	16.41	1.64
LT Cat V - Irrigation and Agriculture	141.61	1,963.27	60.11	857.22	5,938.00	1.44
LT Cat VI - Local Bodies, St. Lighting & PWS	65.03	147.64	367.05	68.18	442.13	1.54
LT Cat VII - General Purpose	8.07	18.33	367.05	8.46	54.89	1.54
LT Cat VIII – Temporary	1.14	2.60	367.05	1.20	7.78	1.54
HT Cat I - Industry - General (11 kV)	172.86	700.71	205.58	292.79	2,309.15	1.27
HT Cat I - Industry - General (33 kV)	234.69	652.02	299.95	392.96	3,269.38	1.20
HT Cat I - Industry - General (220/132 kV)	133.87	406.51	274.42	243.98	2,045.69	1.19
HT Cat II - Industry - Other (11 kV)	86.71	357.35	202.21	133.05	942.42	1.41
HT Cat II - Industry - Other (33 kV)	29.06	118.94	203.64	41.29	343.53	1.20
HT Cat II - Industry - Other (220/132 kV)	4.28	23.12	154.30	6.40	53.64	1.19
HT Cat IV - Irrigation & Agriculture (11 kV)	2.71	21.57	104.77	6.23	41.20	1.51
HT Cat IV - Irrigation & Agriculture (33 kV)	0.00	0.00	NA	95.87	797.58	1.20
HT Cat V - Railway Traction (EHT)	10.15	30.83	274.47	11.32	94.91	1.19
HT Cat VI - Colony Consumption	10.43	24.04	361.43	12.22	88.61	1.38
HT Rural Co-operatives (11 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Temporary	0.99	2.43	341.08	8.43	10.80	7.80
Open Access - 33 kV			-			
Open Access - 11 kV			-			
TOTAL	1,948.93	6,847.57	237.18	3,388.51	23,900.46	1.42

CPDCL	Transmission			Transmission		
	- Inter-State			- Intra-State	_	
	D	emand		D	emand	1
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA/ Month	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA/ Month
LT Cat I - Domestic	24.93	1,562.10	13.30	59.41	1,562.10	31.69
LT Cat II - Non-domestic	8.31	520.75	13.30	19.80	520.75	31.69
LT Cat III (A & B) - Industrial	4.65	291.45	13.30	11.08	291.45	31.69
LT Cat IV - Cottage Industries & Dhobighats	0.06	3.92	13.30	0.15	3.92	31.69
LT Cat V - Irrigation and Agriculture	31.34	1,963.27	13.30	74.67	1,963.27	31.69
LT Cat VI - Local Bodies, St. Lighting & PWS	2.36	147.64	13.30	5.61	147.64	31.69
LT Cat VII - General Purpose	0.29	18.33	13.30	0.70	18.33	31.69
LT Cat VIII - Temporary	0.04	2.60	13.30	0.10	2.60	31.69
HT Cat I - Industry - General (11 kV)	18.93	700.71	22.51	45.11	700.71	53.64
HT Cat I - Industry - General (33 kV)	17.62	652.02	22.51	41.97	652.02	53.64
HT Cat I - Industry - General (220/132 kV)	10.98	406.51	22.51	26.17	406.51	53.64
HT Cat II - Industry - Other (11 kV)	9.65	357.35	22.51	23.00	357.35	53.64
HT Cat II - Industry - Other (33 kV)	3.21	118.94	22.51	7.66	118.94	53.64
HT Cat II - Industry - Other (220/132 kV)	0.62	23.12	22.51	1.49	23.12	53.64
HT Cat IV - Irrigation & Agriculture (11 kV)	0.34	21.57	13.30	0.82	21.57	31.69
HT Cat IV - Irrigation & Agriculture (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Cat V - Railway Traction (EHT)	0.83	30.83	22.51	1.98	30.83	53.64
HT Cat VI - Colony Consumption	0.65	24.04	22.51	1.55	24.04	53.64
HT Rural Co-operatives (11 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Temporary	0.04	2.43	13.30	0.09	2.43	31.69
Open Access - 33 kV			_			
Open Access - 11 kV						
TOTAL	134.87	6,847.57	16.41	321.36	6,847.57	39.11

CPDCL		Distribution		R	etail Supp	ly
		Demand			Energy	
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP T-D interface (MW)	CoS - Rs/kVA/ Month	Cost (Rs Crores)	Rate Basis - Energy Sales (MU)	CoS - Rs/kVA/ Month
LT Cat I - Domestic	201.41	1,356.87	123.70	11.80	4,701	0.03
LT Cat II - Non-domestic	65.24	439.53	123.70	3.97	1,523	0.03
LT Cat III (A & B) - Industrial	36.91	248.65	123.70	3.15	1,220	0.03
LT Cat IV - Cottage Industries & Dhobighats	0.50	3.34	123.70	0.04	16	0.03
LT Cat V - Irrigation and Agriculture	271.36	1,828.14	123.70	13.45	5,938	0.02
LT Cat VI - Local Bodies, St. Lighting & PWS	19.35	130.33	123.70	1.07	442	0.02
LT Cat VII - General Purpose	2.40	16.18	123.70	0.13	55	0.02
LT Cat VIII - Temporary	0.34	2.29	123.70	0.02	8	0.02
HT Cat I - Industry - General (11 kV)	70.98	670.58	88.20	4.59	2,309	0.02
HT Cat I - Industry - General (33 kV)	23.54	623.98	31.43	6.16	3,269	0.02
HT Cat I - Industry - General (220/132 kV)	0.00		NA	3.83	2,046	0.02
HT Cat II - Industry - Other (11 kV)	36.20	341.98	88.20	2.09	942	0.02
HT Cat II - Industry - Other (33 kV)	4.29	113.82	31.43	0.65	344	0.02
HT Cat II - Industry - Other (220/132 kV)	0.00		NA	0.10	54	0.02
HT Cat IV - Irrigation & Agriculture (11 kV)	2.06	19.43	88.20	0.10	41	0.02
HT Cat IV - Irrigation & Agriculture (33 kV)	0.00	0.00	NA	1.50	798	0.02
HT Cat V - Railway Traction (EHT)	0.00		NA	0.18	95	0.02
HT Cat VI - Colony Consumption	2.52	23.76	88.20	0.19	89	0.02
HT Rural Co-operatives (11 kV)	0.00	0.00	NA	0.00	0	NA
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0	NA
HT Temporary	0.22	2.12	88.20	0.13	11	0.12
Open Access - 33 kV	0.00	0.00	NA	0.00	0	NA
Open Access - 11 kV	0.00	0.00	NA	0.00	0	NA
TOTAL	737.31	5,821.02	105.55	53.15	23,900	0.02

CPDCL	Cost Allocation (Rs Crores)				Cost All (Rs		Total Cost	Sales	Per unit Cost
	Demand - G	Demand - T	Demand - D	Energy	Demand	Energy			Total
LT	Rs Crores				Rs Cı	ores	Rs Crores	MUs	Rs/Unit
LT Cat I – Domestic	691.98	84.34	201.41	764.37	977.74	764.37	1,742.11	4,701.08	3.71
LT Cat II - Non-domestic	226.57	28.12	65.24	256.93	319.92	256.93	576.85	1,522.81	3.79
LT Cat III (A & B) - Industrial	127.05	15.74	36.91	203.85	179.70	203.85	383.54	1,220.45	3.14
LT Cat IV - Cottage Industries & Dhobighats	1.71	0.21	0.50	2.74	2.42	2.74	5.16	16.41	3.14
LT Cat V - Irrigation and Agriculture	141.61	106.00	271.36	870.67	518.98	870.67	1,389.64	5,938.00	2.34
LT Cat VI - Local Bodies, St. Lighting & PWS	65.03	7.97	19.35	69.25	92.35	69.25	161.59	442.13	3.65
LT Cat VII – General Purpose	8.07	0.99	2.40	8.60	11.46	8.60	20.06	54.89	3.65
LT Cat VIII - Temporary	1.14	0.14	0.34	1.22	1.62	1.22	2.84	7.78	3.65
HT Cat I - Industry - General (11 kV)	172.86	64.04	70.98	297.38	307.87	297.38	605.25	2,309.15	2.62
HT Cat I - Industry - General (33 kV)	234.69	59.59	23.54	399.13	317.81	399.13	716.94	3,269.38	2.19
HT Cat I - Industry - General (220/132 kV)	133.87	37.15	0.00	247.80	171.02	247.80	418.82	2,045.69	2.05
HT Cat II - Industry - Other (11 kV)	86.71	32.66	36.20	135.13	155.57	135.13	290.70	942.42	3.08
HT Cat II - Industry - Other (33 kV)	29.06	10.87	4.29	41.94	44.23	41.94	86.16	343.53	2.51
HT Cat II - Industry - Other (220/132 kV)	4.28	2.11	0.00	6.50	6.39	6.50	12.89	53.64	2.40
HT Cat IV - Irrigation & Agriculture (11 kV)	2.71	1.16	2.06	6.33	5.93	6.33	12.26	41.20	2.98
HT Cat IV - Irrigation & Agriculture (33 kV)	0.00	0.00	0.00	97.37	0.00	97.37	97.37	797.58	1.22
HT Cat V - Railway Traction (EHT)	10.15	2.82	0.00	11.50	12.97	11.50	24.47	94.91	2.58
HT Cat VI - Colony Consumption	10.43	2.20	2.52	12.41	15.14	12.41	27.55	88.61	3.11
HT Rural Co-operatives (11 kV)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Rural Co-operatives (33 kV)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Temporary	0.99	0.13	0.22	8.56	1.35	8.56	9.91	10.80	9.17
Open Access - 33 kV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Access - 11 kV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	1,948.93	456.23	737.31	3,441.66	3,142.47	3,441.66	6,584.13	23,900.46	2.75

### ANNEXURE - I (ii) COST TO SERVICE MODEL

(Reference: Paragraph 339 of the Order)

EPDCL			Generat	tion		
				Г		
		Demand			Energy	ı
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA/ Month	Cost (Rs Crores)	Sales (MU)	CoS - Rs/kWh
LT Cat I – Domestic	323.18		327.76	325.08	2,507.46	1.30
LT Cat II - Non-domestic	69.68					
LT Cat III (A & B) – Industrial	41.28	115.05	299.01	63.36	471.84	1.34
LT Cat IV - Cottage Industries & Dhobighats	0.14	0.39		0.22		
LT Cat V - Irrigation and Agriculture	29.85				1,259.68	
LT Cat VI - Local Bodies, St. Lighting & PWS	31.18	83.02			224.51	1.36
LT Cat VII - General Purpose	4.43			4.35	31.88	1.36
LT Cat VIII – Temporary	0.21	0.57	313.00	0.21	1.54	1.36
HT						
HT Cat I - Industry - General (11 kV)	54.23					
HT Cat I - Industry - General (33 kV)	25.26	84.92	247.85			
HT Cat I - Industry - General (220/132 kV)	87.50	438.91	166.14		1,538.09	1.00
HT Cat II - Industry - Other (11 kV)	14.12	77.04	152.72	19.45	170.46	1.14
HT Cat II - Industry - Other (33 kV)	3.29	22.94	119.72	5.00	49.68	1.01
HT Cat II - Industry - Other (220/132 kV)	0.77	8.36	76.69	1.26	12.58	1.00
HT Cat IV - Irrigation & Agriculture (33 kV)	0.29	3.99	61.20	1.27	11.04	1.15
HT Cat IV - Irrigation & Agriculture (11 kV)	4.07	0.00			189.92	1.01
HT Cat V - Railway Traction (EHT)	49.57	125.38	329.47	49.38	494.02	1.00
HT Cat VI - Colony Consumption	2.38	5.86	337.67	2.57	23.60	1.09
HT Rural Co-operatives (11 kV)	7.12	30.93	191.88	15.51	150.31	1.03
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Temporary	0.00	0.00	NA	0.00	0.00	NA
Open Access - 33 kV						
Open Access - 11 kV						
TOTAL	748.55	2,704.19	230.68	1,038.71	8,824.25	1.18

EPDCL	Trans	mission - Inter	-State	Transmission - Intra-State				
		Demand			Demand			
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA/ Month	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA/ Month		
LT Cat I – Domestic	12.40	821.68	12.58	30.80	821.68	31.24		
LT Cat II - Non-domestic	2.62	173.53	12.58	6.50	173.53	31.24		
LT Cat III (A & B) - Industrial	1.74	115.05	12.58	4.31	115.05	31.24		
LT Cat IV - Cottage Industries & Dhobighats	0.01	0.39	12.58	0.01	0.39	31.24		
LT Cat V - Irrigation and Agriculture	6.76	447.64	12.58	16.78	447.64	31.24		
LT Cat VI - Local Bodies, St. Lighting & PWS	1.25	83.02	12.58	3.11	83.02	31.24		
LT Cat VII - General Purpose	0.18	11.79	12.58	0.44	11.79	31.24		
LT Cat VIII – Temporary	0.01	0.57	12.58	0.02	0.57	31.24		
нт								
HT Cat I - Industry - General (11 kV)	6.54	252.19	21.60	16.23	252.19	53.64		
HT Cat I - Industry - General (33 kV)	2.20	84.92	21.60	5.47	84.92	53.64		
HT Cat I - Industry - General (220/132 kV)	11.37	438.91	21.60	28.25	438.91	53.64		
HT Cat II - Industry - Other (11 kV)	2.00	77.04	21.60	4.96	77.04	53.64		
HT Cat II - Industry - Other (33 kV)	0.59	22.94	21.60	1.48	22.94	53.64		
HT Cat II - Industry - Other (220/132 kV)	0.22	8.36	21.60	0.54	8.36	53.64		
HT Cat IV - Irrigation & Agriculture (33 kV)	0.06	3.99	12.58	0.15	3.99	31.24		
HT Cat IV - Irrigation & Agriculture (11 kV)	0.00	0.00	NA	0.00	0.00	NA		
HT Cat V - Railway Traction (EHT)	3.25	125.38	21.60	8.07	125.38	53.64		
HT Cat VI - Colony Consumption	0.15	5.86	21.60	0.38	5.86	53.64		
HT Rural Co-operatives (11 kV)	0.47	30.93	12.58	1.16	30.93	31.24		
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0.00	NA		
HT Temporary	0.00	0.00	NA	0.00	0.00	NA		
Open Access - 33 kV								
Open Access - 11 kV								
TOTAL	51.80	2,704.19	15.96	128.67	2,704.19	39.65		

EPDCL		Distribution		Retail Supply		
		Domond			Energy	
		Demand			Energy	/ 
LT	Cost (Rs Crores)	I -D Interface	CoS - Rs/kVA/ Month	Cost (Rs Crores)	Rate Basis - Energy Sales (MU)	CoS - Rs/kWh
LT Cat I – Domestic	178.86	719.48	207.16	10.50	2,507	0.04
LT Cat II - Non-domestic	37.62	151.31	207.16	2.24	527	0.04
LT Cat III (A & B) - Industrial	24.11	96.99	207.16	2.05	472	0.04
LT Cat IV - Cottage Industries & Dhobighats	0.08	0.33	207.16	0.01	2	0.04
LT Cat V - Irrigation and Agriculture	102.69	413.08	207.16	5.03	1,260	0.04
LT Cat VI - Local Bodies, St. Lighting & PWS	17.47	70.28	207.16	0.99	225	0.04
LT Cat VII - General Purpose	2.48	9.98	207.16	0.14	32	0.04
LT Cat VIII - Temporary	0.12	0.48	207.16	0.01	2	0.04
нт						
HT Cat I - Industry - General (11 kV)	14.74	241.35	50.90	2.72	775	0.04
HT Cat I - Industry - General (33 kV)	0.99	81.27	10.13	1.25	383	0.03
HT Cat I - Industry - General (220/132 kV)	0.00		NA	4.97	1,538	0.03
HT Cat II - Industry - Other (11 kV)	4.50	73.73	50.90	0.63	170	0.04
HT Cat II - Industry - Other (33 kV)	0.27	21.95	10.13	0.16	50	0.03
HT Cat II - Industry - Other (220/132 kV)	0.00		NA	0.04	13	0.03
HT Cat IV - Irrigation & Agriculture (33 kV)	0.22	3.59	50.90	0.04	11	0.04
HT Cat IV - Irrigation & Agriculture (11 kV)	0.00	0.00	NA	0.62	190	0.03
HT Cat V - Railway Traction (EHT)	0.00		NA	1.60	494	0.03
HT Cat VI - Colony Consumption	0.35	5.76	50.90	0.08	24	0.04
HT Rural Co-operatives (11 kV)	1.79	29.37	50.90	0.50	150	0.03
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0	NA
HT Temporary	0.00	0.00	NA	0.00	0	NA
Open Access - 33 kV	0.00	0.00	NA			
Open Access - 11 kV	0.00	0.00	NA			
TOTAL	386.30	1,918.96	167.76	33.56	8,824	0.04

EPDCL	Cost	Allocation	on (Rs Cr	ores)	Cost Allocation (Rs Cr.)		Total Cost	Sales	Per Unit Cost
	Demand - G	Demand - T	Demand - D	Energy	Demand	Energy			Total
LT	Rs Crores				Rs Cro	ores	Rs Crores	MUs	Rs/Unit
LT Cat I - Domestic	323.18	43.20	178.86	335.58	545.24	335.58	880.82	2,507.46	3.51
LT Cat II - Non-domestic	69.68	9.12	37.62	71.46	116.42	71.46	187.88	527.34	3.56
LT Cat III (A & B) - Industrial	41.28	6.05	24.11	65.41	71.44	65.41	136.86	471.84	2.90
LT Cat IV - Cottage Industries & Dhobighats	0.14	0.02	0.08	0.22	0.24	0.22	0.46	1.60	2.90
LT Cat V - Irrigation and Agriculture	29.85	23.53	102.69	160.69	156.07	160.69	316.76	1,259.68	2.51
LT Cat VI - Local Bodies, St. Lighting & PWS	31.18	4.36	17.47	31.60	53.02	31.60	84.61	224.51	3.77
LT Cat VII - General Purpose	4.43	0.62	2.48	4.49	7.53	4.49	12.02	31.88	3.77
LT Cat VIII - Temporary	0.21	0.03	0.12	0.22	0.36	0.22	0.58	1.54	3.77
нт									
HT Cat I - Industry - General (11 kV)	54.23	22.77	14.74	86.78	91.74	86.78	178.52	775.18	2.30
HT Cat I - Industry - General (33 kV)	25.26	7.67	0.99	39.87	33.91	39.87	73.78	383.50	1.92
HT Cat I - Industry - General (220/132 kV)	87.50	39.63	0.00	158.71	127.13	158.71	285.84	1,538.09	1.86
HT Cat II - Industry - Other (11 kV)	14.12	6.96	4.50	20.08	25.58	20.08	45.65	170.46	2.68
HT Cat II - Industry - Other (33 kV)	3.29	2.07	0.27	5.16	5.63	5.16	10.80	49.68	2.17
HT Cat II - Industry - Other (220/132 kV)	0.77	0.75	0.00	1.30	1.52	1.30	2.82	12.58	2.24
HT Cat IV - Irrigation & Agriculture (33 kV)	0.29	0.21	0.22	1.31	0.72	1.31	2.03	11.04	1.84
HT Cat IV - Irrigation & Agriculture (11 kV)	4.07	0.00	0.00	19.74	4.07	19.74	23.81	189.92	1.25
HT Cat V - Railway Traction (EHT)	49.57	11.32	0.00	50.98	60.89	50.98	111.87	494.02	2.26
HT Cat VI - Colony Consumption	2.38	0.53	0.35	2.66	3.26	2.66	5.91	23.60	2.51
HT Rural Co-operatives (11 kV)	7.12	1.63	1.79	16.01	10.54	16.01	26.56	150.31	1.77
HT Rural Co-operatives (33 kV)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Temporary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Access - 33 kV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Access - 11 kV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	748.55	180.47	386.30	1,072.27	1,315.33	1,072.27	2,387.60	8,824.25	2.71

### ANNEXURE - I (iii) COST TO SERVICE MODEL

(Reference: Paragraph 357 of the Order)

NPDCL			Generati	ion		
		Demand			Energy	
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)		Cost (Rs Crores)	(MU)	CoS - Rs/kWh
LT Cat I – Domestic	287.75	493.89	485.51	192.03	1,562.87	1.23
LT Cat II - Non-domestic	65.12	119.38	454.58	45.57	313.72	1.45
LT Cat III (A & B) – Industrial	49.67	87.13	475.11	43.19	345.91	1.25
LT Cat IV - Cottage Industries & Dhobighats	0.90	1.58	475.11	0.79	6.29	1.25
LT Cat V - Irrigation and Agriculture	93.27	934.50	83.18	322.89	2,909.06	1.11
LT Cat VI - Local Bodies, St. Lighting & PWS	60.54	105.50	478.24	36.44	279.45	1.30
LT Cat VII - General Purpose	4.90	8.55	478.24	2.95	22.64	1.30
LT Cat VIII – Temporary	0.00	0.00	NA	0.00	0.00	NA
нт	0.00			0.00		
HT Cat I - Industry - General (11 kV)	20.38	58.22	291.76	20.51	175.37	1.17
HT Cat I - Industry - General (33 kV)	10.88	21.48	422.19	9.72	103.71	0.94
HT Cat I - Industry - General (220/132 kV)	55.91	115.44	403.61	58.42	628.15	0.93
HT Cat II - Industry - Other (11 kV)	6.69	16.84	331.18	8.42	57.41	1.47
HT Cat II - Industry - Other (33 kV)	0.09	0.24	310.60	0.08	0.81	0.94
HT Cat II - Industry - Other (220/132 kV)	0.25	6.69	31.11	0.22	2.40	0.93
HT Cat IV - Irrigation & Agriculture (11 kV)	2.27	11.02	171.80	3.13	18.74	1.67
HT Cat IV - Irrigation & Agriculture (33 kV)	0.00	0.00	NA	42.93	458.04	0.94
HT Cat V - Railway Traction (EHT)	50.68	93.21	453.11	29.27	314.73	0.93
HT Cat VI - Colony Consumption	20.63	32.69	526.09	13.17	133.39	0.99
HT Rural Co-operatives (11 kV)	28.45	78.90	300.48	39.15	413.53	0.95
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Temporary	0.00	0.00	NA	0.00	0.00	NA
Open Access - 33 kV						
Open Access - 11 kV						
TOTAL	758.41	2,185.24	289.22	868.88	7,746.21	1.12

NPDCL	Transmission			Transmission		
	- Inter-State			- Intra-State	_	
	D	emand		D	emand	
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA/ Month	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA/ Month
LT Cat I - Domestic	11.58	493.89	19.55	27.59	493.89	46.56
LT Cat II - Non-domestic	2.80	119.38	19.55	6.67	119.38	46.56
LT Cat III (A & B) - Industrial	2.04	87.13	19.55	4.87	87.13	46.56
LT Cat IV - Cottage Industries & Dhobighats	0.04	1.58	19.55	0.09	1.58	46.56
LT Cat V - Irrigation and Agriculture	21.92	934.50	19.55	52.21	934.50	46.56
LT Cat VI - Local Bodies, St. Lighting & PWS	2.47	105.50	19.55	5.89	105.50	46.56
LT Cat VII - General Purpose	0.20	8.55	19.55	0.48	8.55	46.56
LT Cat VIII - Temporary	0.00	0.00	NA	0.00	0.00	NA
нт						
HT Cat I - Industry - General (11 kV)	1.57	58.22	22.52	3.75	58.22	53.64
HT Cat I - Industry - General (33 kV)	0.58	21.48	22.52	1.38	21.48	53.64
HT Cat I - Industry - General (220/132 kV)	3.12	115.44	22.52	7.43	115.44	53.64
HT Cat II - Industry - Other (11 kV)	0.46	16.84	22.52	1.08	16.84	53.64
HT Cat II - Industry - Other (33 kV)	0.01	0.24	22.52	0.02	0.24	53.64
HT Cat II - Industry - Other (220/132 kV)	0.18	6.69	22.52	0.43	6.69	53.64
HT Cat IV - Irrigation & Agriculture (11 kV)	0.26	11.02	19.55	0.62	11.02	46.56
HT Cat IV - Irrigation & Agriculture (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Cat V - Railway Traction (EHT)	2.52	93.21	22.52	6.00	93.21	53.64
HT Cat VI - Colony Consumption	0.88	32.69	22.52	2.10	32.69	53.64
HT Rural Co-operatives (11 kV)	1.85	78.90	19.55	4.41	78.90	46.56
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Temporary	0.00	0.00	NA	0.00	0.00	NA
Open Access - 33 kV						
Open Access - 11 kV			_			
TOTAL	52.48	2,185.24	20.01	125.02	2,185.24	47.68

NPDCL		Distribution		Ret	tail Sup	ply
		Demand			Energy	/
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP T-D interface (MW)	CoS - Rs/kVA/ Month			CoS - Rs/kVA/ Month
LT Cat I - Domestic	105.88	445.94	197.86	3.58	1,563	0.02
LT Cat II - Non-domestic	22.70	95.62	197.86	0.85	314	0.03
LT Cat III (A & B) - Industrial	18.67	78.63	197.86	0.80	346	0.02
LT Cat IV - Cottage Industries & Dhobighats	0.34	1.43	197.86	0.01	6	0.02
LT Cat V - Irrigation and Agriculture	215.41	907.27	197.86	6.01	2,909	0.02
LT Cat VI - Local Bodies, St. Lighting & PWS	21.70	91.41	197.86	0.68	279	0.02
LT Cat VII - General Purpose	1.76	7.40	197.86	0.05	23	0.02
LT Cat VIII - Temporary	0.00	0.00	NA	0.00	0	NA
HT						
HT Cat I - Industry - General (11 kV)	6.05	55.72	90.55	0.38	175	0.02
HT Cat I - Industry - General (33 kV)	0.61	20.56	24.71	0.18	104	0.02
HT Cat I - Industry - General (220/132 kV)	0.00		NA	1.09	628	0.02
HT Cat II - Industry - Other (11 kV)	1.75	16.12	90.55	0.16	57	0.03
HT Cat II - Industry - Other (33 kV)	0.01	0.23	24.71	0.00	1	0.02
HT Cat II - Industry - Other (220/132 kV)	0.00		NA	0.00	2	0.02
HT Cat IV - Irrigation & Agriculture (11 kV)	0.95	8.77	90.55	0.06	19	0.03
HT Cat IV - Irrigation & Agriculture (33 kV)	0.00	0.00	NA	0.80	458	0.02
HT Cat V - Railway Traction (EHT)	0.00		NA	0.55	315	0.02
HT Cat VI - Colony Consumption	3.49	32.08	90.55	0.25	133	0.02
HT Rural Co-operatives (11 kV)	8.22	75.64	90.55	0.73	414	0.02
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0	NA
HT Temporary	0.00	0.00	NA	0.00	0	NA
Open Access - 33 kV	0.00	0.00	NA			
Open Access - 11 kV	0.00	0.00	NA			
TOTAL	407.54	1,836.81	184.89	16.18	7,746	0.02

NPDCL	Cost Allocation (Rs Crores)				Cost Allocation (Rs Cr.)		Total Cost	Sales	Per unit Cost
	Demand - G	Demand - T	Demand - D	Energy	Demand	Energy			Total
LT	Rs Crores				Rs Cr	ores	Rs Crores	MUs	Rs/Unit
LT Cat I - Domestic	287.75	39.18	105.88	195.61	432.80	195.61	628.41	1,562.87	4.02
LT Cat II - Non-domestic	65.12	9.47	22.70	46.42	97.29	46.42	143.71	313.72	4.58
LT Cat III (A & B) - Industrial	49.67	6.91	18.67	44.00	75.25	44.00	119.25	345.91	3.45
LT Cat IV - Cottage Industries & Dhobighats	0.90	0.13	0.34	0.80	1.37	0.80	2.17	6.29	3.45
LT Cat V - Irrigation and Agriculture	93.27	74.13	215.41	328.90	382.81	328.90	711.72	2,909.06	2.45
LT Cat VI - Local Bodies, St. Lighting & PWS	60.54	8.37	21.70	37.12	90.62	37.12	127.74	279.45	4.57
LT Cat VII - General Purpose	4.90	0.68	1.76	3.01	7.34	3.01	10.35	22.64	4.57
LT Cat VIII - Temporary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
нт									
HT Cat I - Industry - General (11 kV)	20.38	5.32	6.05	20.89	31.76	20.89	52.65	175.37	3.00
HT Cat I - Industry - General (33 kV)	10.88	1.96	0.61	9.90	13.46	9.90	23.36	103.71	2.25
HT Cat I - Industry - General (220/132 kV)	55.91	10.55	0.00	59.51	66.46	59.51	125.97	628.15	2.01
HT Cat II - Industry - Other (11 kV)	6.69	1.54	1.75	8.58	9.99	8.58	18.56	57.41	3.23
HT Cat II - Industry - Other (33 kV)	0.09	0.02	0.01	0.08	0.12	0.08	0.19	0.81	2.39
HT Cat II - Industry - Other (220/132 kV)	0.25	0.61	0.00	0.23	0.86	0.23	1.09	2.40	4.53
HT Cat IV - Irrigation & Agriculture (11 kV)	2.27	0.87	0.95	3.19	4.10	3.19	7.29	18.74	3.89
HT Cat IV - Irrigation & Agriculture (33 kV)	0.00	0.00	0.00	43.73	0.00	43.73	43.73	458.04	0.95
HT Cat V - Railway Traction (EHT)	50.68	8.52	0.00	29.82	59.20	29.82	89.02	314.73	2.83
HT Cat VI - Colony Consumption	20.63	2.99	3.49	13.41	27.11	13.41	40.52	133.39	3.04
HT Rural Co-operatives (11 kV)	28.45	6.26	8.22	39.87	42.93	39.87	82.80	413.53	2.00
HT Rural Co-operatives (33 kV)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Temporary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Access - 33 kV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Access - 11 kV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	758.41	177.51	407.54	885.06	1,343.46	885.06	2,228.52	7,746.21	2.88

## ANNEXURE - I (iv) COST TO SERVICE MODEL

(Reference: Paragraph 376 of the Order)

SPDCL	Generation					
		Demand	Energy			
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA / Month	Cost (Rs Crores)	Recovery Basis - Energy Sales (MU)	CoS - Rs/kWh
LT Cat I – Domestic	418.57		381.80			1.38
LT Cat II - Non-domestic	97.90		377.15	95.73	672.14	1.42
LT Cat III (A & B) – Industrial	66.63		332.81	100.57	707.27	1.42
LT Cat IV - Cottage Industries & Dhobighats	2.27	5.69	332.81	3.43	24.13	1.42
LT Cat V - Irrigation and Agriculture	76.07	1,037.06	61.13	419.51	3,291.06	1.27
LT Cat VI - Local Bodies, St. Lighting & PWS	79.33	215.82	306.32	71.35	494.36	1.44
LT Cat VII - General Purpose	6.99	19.01	306.32	6.28	43.54	1.44
LT Cat VIII – Temporary	0.27	0.73	306.32	0.24	1.67	1.44
нт						
HT Cat I - Industry - General (11 kV)	69.49	228.07	253.92	106.99	900.75	1.19
HT Cat I - Industry - General (33 kV)	75.34	194.39	322.97	112.19	1,021.89	1.10
HT Cat I - Industry - General (220/132 kV)	42.92	109.08	327.87	71.16	651.48	1.09
HT Cat II - Industry - Other (11 kV)	17.48	90.32	161.28	26.66	218.83	1.22
HT Cat II - Industry - Other (33 kV)	0.81	3.64	185.94	1.12	10.19	1.10
HT Cat II - Industry - Other (220/132 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Cat IV - Irrigation & Agriculture (11 kV)	1.88	15.05	104.03	3.74	29.51	1.27
HT Cat IV - Irrigation & Agriculture (33 kV)	0.00	95.46	0.00	21.83	198.84	1.10
HT Cat V - Railway Traction (EHT)	55.50	156.22	296.08	53.04	485.56	1.09
HT Cat VI - Colony Consumption	4.80	12.06	331.88	5.15	42.34	1.22
HT Rural Co-operatives (11 kV)	10.20	47.82	177.65	22.23	199.15	1.12
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Temporary	0.00	0.01	324.84	0.01	0.05	1.22
Open Access - 33 kV						
Open Access - 11 kV						
TOTAL	1,026.46	3,527.16	242.51	1,544.01	12,056.12	1.28

SPDCL	Tra	nsmission - Inte	Transmission - Intra-State			
		Demand		Demand		
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA/ Month	Cost (Rs Crores)	Rate Basis - Contracts/NCP G-T interface (MW)	CoS - Rs/kVA/ Month
LT Cat I - Domestic	16.75	913.58	15.28	40.92	913.58	37.32
LT Cat II - Non-domestic	3.97	216.33	15.28	9.69	216.33	37.32
LT Cat III (A & B) - Industrial	3.06	166.85	15.28	7.47	166.85	37.32
LT Cat IV - Cottage Industries & Dhobighats	0.10	5.69	15.28	0.25	5.69	37.32
LT Cat V - Irrigation and Agriculture	19.01	1,037.06	15.28	46.45	1,037.06	37.32
LT Cat VI - Local Bodies, St. Lighting & PWS	3.96	215.82	15.28	9.67	215.82	37.32
LT Cat VII - General Purpose	0.35	19.01	15.28	0.85	19.01	37.32
LT Cat VIII - Temporary	0.01	0.73	15.28	0.03	0.73	37.32
HT						
HT Cat I - Industry - General (11 kV)	6.01	228.07	21.96	14.68	228.07	53.64
HT Cat I - Industry - General (33 kV)	5.12	194.39	21.96	12.51	194.39	53.64
HT Cat I - Industry - General (220/132 kV)	2.87	109.08	21.96	7.02	109.08	53.64
HT Cat II - Industry - Other (11 kV)	2.38	90.32	21.96	5.81	90.32	53.64
HT Cat II - Industry - Other (33 kV)	0.10	3.64	21.96	0.23	3.64	53.64
HT Cat II - Industry - Other (220/132 kV)	0.00	0.00	NA	0.00	0.00	NA
gation & Agriculture (11 kV)	0.28	15.05	15.28	0.67	15.05	37.32
HT Cat IV - Irrigation & Agriculture (33 kV)	1.75	95.46	15.28	4.28	95.46	37.32
HT Cat V - Railway Traction (EHT)	4.12	156.22	21.96	10.06	156.22	53.64
HT Cat VI - Colony Consumption	0.32	12.06	21.96	0.78	12.06	53.64
HT Rural Co-operatives (11 kV)	0.88	47.82	15.28	2.14	47.82	37.32
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Temporary	0.00	0.01	15.28	0.00	0.01	37.32
Open Access - 33 kV						
Open Access - 11 kV						
TOTAL	71.03	3,527.16	16.78	173.51	3,527.16	40.99

SPDCL	Distribution			Retail Supply			
	Demand			Energy			
LT	Cost (Rs Crores)	Rate Basis - Contracts/NCP T-D interface (MW)	CoS - Rs/kVA/ Month	Cost (Rs Crores)	Rate Basis - Energy Sales (MU)	CoS - Rs/kVA / Month	
LT Cat I - Domestic	151.39	815.75		7.27	3,063		
LT Cat II - Non-domestic	35.29	190.17	154.65			0.02	
LT Cat III (A & B) - Industrial	26.61	143.36	154.65	1.73	707	0.02	
LT Cat IV - Cottage Industries & Dhobighats	0.91	4.89	154.65	0.06	24	0.02	
LT Cat V - Irrigation and Agriculture	180.32	971.65	154.65	7.22	3,291	0.02	
LT Cat VI - Local Bodies, St. Lighting & PWS	35.60	191.83	154.65	1.23	494	0.02	
LT Cat VII - General Purpose	3.14	16.89	154.65	0.11	44	0.02	
LT Cat VIII - Temporary	0.12	0.65	154.65	0.00	2	0.02	
HT							
HT Cat I - Industry - General (11 kV)	28.84	218.26	110.10	1.84	901	0.02	
HT Cat I - Industry - General (33 kV)	5.36	186.03	24.01	1.93	1,022	0.02	
HT Cat I - Industry - General (220/132 kV)	0.00		NA	1.22	651	0.02	
HT Cat II - Industry - Other (11 kV)	11.42	86.43	110.10	0.46	219	0.02	
HT Cat II - Industry - Other (33 kV)	0.10	3.48	24.01	0.02	10	0.02	
HT Cat II - Industry - Other (220/132 kV)	0.00		NA	0.00	0	NA	
HT Cat IV - Irrigation & Agriculture (11 kV)	1.82	13.75	110.10	0.06	30	0.02	
HT Cat IV - Irrigation & Agriculture (33 kV)	2.63	91.22	24.01	0.38	199	0.02	
HT Cat V - Railway Traction (EHT)	0.00		NA	0.91	486	0.02	
HT Cat VI - Colony Consumption	1.56	11.77	110.10	0.09	42	0.02	
HT Rural Co-operatives (11 kV)	6.01	45.47	110.10	0.38	199	0.02	
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0	NA	
HT Temporary	0.00	0.01	110.10	0.00	0	0.02	
Open Access - 33 kV	0.00	0.00					
Open Access - 11 kV	0.00	0.00	NA				
TOTAL	491.10	2,991.62	136.80	26.56	12,056	0.02	

SPDCL	C	Cost Allocat	ion (Rs Cro	res)	Cost Allocation (Rs Cr.)		Total Cost	Sales	Per unit Cost
	Demand - G	Demand - T	Demand - D	Energy	Demand	Energy			Total
LT		Rs (	Crores		Rs Ci	rores	Rs Crores	MUs	Rs/Unit
LT Cat I - Domestic	418.57	57.67	151.39	430.06	627.62	430.06	1,057.69	3,063.36	3.45
LT Cat II - Non-domestic	97.90	13.65	35.29	97.37	146.85	97.37	244.23	672.14	3.63
LT Cat III (A & B) - Industrial	66.63	10.53	26.61	102.30	103.77	102.30	206.07	707.27	2.91
LT Cat IV - Cottage Industries & Dhobighats	2.27	0.36	0.91	3.49	3.54	3.49	7.03	24.13	2.91
LT Cat V - Irrigation and Agriculture	76.07	65.46	180.32	426.73	321.86	426.73	748.58	3,291.06	2.27
LT Cat VI - Local Bodies, St. Lighting & PWS	79.33	13.62	35.60	72.58	128.55	72.58	201.14	494.36	4.07
LT Cat VII - General Purpose	6.99	1.20	3.14	6.39	11.32	6.39	17.71	43.54	4.07
LT Cat VIII - Temporary	0.27	0.05	0.12	0.25	0.43	0.25	0.68	1.67	4.07
нт	0.00								
HT Cat I – Industry - General (11 kV)	69.49	20.69	28.84	108.83	119.02	108.83	227.85	900.75	2.53
HT Cat I – Industry - General (33 kV)	75.34	17.64	5.36	114.12	98.33	114.12	212.45	1,021.89	2.08
HT Cat I – Industry - General (220/132 kV)	42.92	9.90	0.00	72.39	52.81	72.39	125.20	651.48	1.92
HT Cat II - Industry - Other (11 kV)	17.48	8.19	11.42	27.12	37.09	27.12	64.21	218.83	2.93
HT Cat II - Industry - Other (33 kV)	0.81	0.33	0.10	1.14	1.24	1.14	2.38	10.19	2.33
HT Cat II - Industry - Other (220/132 kV)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Cat IV - Irrigation & Agriculture (11 kV)	1.88	0.95	1.82	3.80	4.64	3.80	8.45	29.51	2.86
HT Cat IV - Irrigation & Agriculture (33 kV)	0.00	6.03	2.63	22.21	8.65	22.21	30.86	198.84	1.55
HT Cat V - Railway Traction (EHT)	55.50	14.17	0.00	53.95	69.68	53.95	123.63	485.56	2.55
HT Cat VI - Colony Consumption	4.80	1.09	1.56	5.24	7.45	5.24	12.69	42.34	3.00
HT Rural Co-operatives (11 kV)	10.20	3.02	6.01	22.61	19.22	22.61	41.83	199.15	2.10
HT Rural Co-operatives (33 kV)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT Temporary	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.05	2.41
Open Access – 33 kV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Access – 11 kV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	1,026.46	244.55	491.10	1,570.57	1,762.11	1,570.57	3,332.68	12,056.12	2.76

## **ANNEXURE-J**

# (Reference: Paragraph 14 of the Order) List of Objectors on filings of DISCOMs

SI.No.	Name of the Objector	DISCOM	Whether Wanted to be heared in Person
1	Sri. K.Rajendra Reddy, President, M/s. Rashtriya Raithu Seva Samithi, Chittoor	APSPDCL	Yes
2	Sri. T.V.R.Krishna Rao, General Secretary, M/s. Vizanagaram District Electricity Consumers Service & Protection Association & Public Welfare Organisation	APEPDCL	Not mentioned
3	Sri. M. Anantha Reddy, President, M/s. Indian Nurserymen Association, Andhra Pradesh Chapter, Hyderabad	APCPDCL	Yes
4	Sri. Katuri Harikishore Kumar Reddy, President, M/s. Bharatiya Kisan Sangh, Vijayawada	APSPDCL	Yes
5	Sri.Padala Subba Reddy, President, M/s. Anaparthy Region Poultry Famers Welfare Society,Anaparthi	APEPDCL	Not mentioned
6	Sri. Cherukuri Venugopala Rao, Vice President, M/s. Adarana Yuvaana Seva Swachandha Samastha, Guntupalli		Yes
7	Sri.D.V.Lakshmi Narayana, Vice President,M/s. Consumers Assistance & Welfare Centre, Vijayawada		Yes
8	Sri.M.Krishna Murthy, SAO (Retd.,) ,Hyderabad – 18	APNPDCL	Yes
9	D.Ramaswami Reddy, Retd., (S.E.), Cuddapah - 516 001	All Discoms	Not mentioned
10	Sri.Pavuri Sambasiva Varaprasad, Prakasam Dist	APSPDCL	Yes
11	Sri.G.Nadamuni Naidu, K.V.B.Puram Mandal Chittoor district	APSPDCL	Yes
12	Sri.Santaram J Pawar, (Ex Chairman Srikalahasti, Municipality), Srikalahasti	APSPDCL	Yes

SI.No.	Name of the Objector	DISCOM	Whether Wanted to be heared in Person
13	Sri.Venkateswara Chowdary, Kothapeta, Srikalahasti	APSPDCL	Yes
14	Sri.S.Mohan Rao, Secretary, Rythuseva Sangham, Kondamattu Vedhi, Srikalahasti	APSPDCL	Yes
15	Sri. Vayalla Krishna Reddy, (Secretary, Rythusamakya),Sriramnagar Colony, Srikalahasti	APSPDCL	Yes
16	Sri. Vayalla Manohara Reddy, BJP District Secretary, Muchipulu gramam, Chittoor District		Yes
17	Sri.K.Viajaykumar Reddy, Totamchedy Mandalum, Chittoor District	APSPDCL	Yes
18	Sri.Venkateswara Chowdary, Kothapeta, Srikalahasti	APSPDCL	Yes
19	Sri.Gunturu Venkatachandra Muralikrishnam Raju, peddapudi, Ambajipeta Mandalam, East Godavari	APEPDCL	Yes
20	Sri.Donga Nageswara Rao, Bharatiya Kisan Sangh, Ambajipeta Mdl., East Godavari	APEPDCL	Yes
21	Sri. Mutayala Sriram Prasad, President, B.K.S. Balaramsena, East Godavari	APEPDCL	Yes
22	Sri.Chelikam Krishna Reddy, Vice President, Rythu Samakya, Chittoor	APSPDCL	Yes
23	Sri.U.Bhaskara Rao, Vice President, Bharatiya Kisan Sangh, Visakhapatnam, Amalapuram Mandalam	APEPDCL	Yes
24	Sri.Dangelu Venkata Giridhar, Amalapuram Mnadalam, East Godavari	APEPDCL	Yes
25	Sri.Shek John Basha, Kothapeta, Srikalahasti	APSPDCL	Yes
26	Sri. CH. Venu Gopal Rao, M/s. Federation of Farmers Associations, Guntupalli - 521 241, Krihsna District.	APSPDCL	Yes

SI.No.	Name of the Objector	DISCOM	Whether Wanted to be heared in Person
27	Sri. Gadagotu Sri Rambabu, Yaddanapudi Mandalam, Prakasam District	APSPDCL	Yes
28	Sri. Samineni Rama Rao (AP Raithu Sangam, Hyderabad - 500 020	All Discoms	Yes
29	Sri. M.R.Prasad, General Secretary, A.P.Ferro Alloys Producers Assoication, Hyderabad	All Discoms	Yes
30	Sri.P.Adinarayana, President, Town Consumer Welfare Society, Narasaraopet	APSPDCL	Yes
31	Sri. M.Venugopala Rao, Special Correspondent, Prajasakti Telugu Daily, Hyderabad - 500 016	All Discoms	Yes
32	Sri.Y.Siddaya Naidu, President, Chittor District Raithu Samakya, Chittoor	APSPDCL	Yes
33	Sri.A.Bhaskar Reddy, Pakala, Chittoor	APSPDCL	Yes
34	Sri.N.Krishna Reddy, Pakala, Chittoor	APSPDCL	Yes
35	Sri.N.Raja Reddy, Pakala, Chittoor	APSPDCL	Yes
36	Sri.B.Raja Reddy, Pakala, Chittoor	APSPDCL	Yes
37	Sri. R.V.Rama Mohan, Nacharam, Hyderabad	APCPDCL	Yes
38	Sri.T.V.Ratna Prasad, Secretary, Kurnool District Chamber of Commerce & Industry, Kurnool	APCPDCL	Yes
39	Sri.S.LAL,Chief Electricial Distribution Engineer, South Central Railways, Secunderabad	APCPDCL	Yes
40	Sri.V.Narayana Swamy, Pakala Post, Chittoor	APSPDCL	Yes

SI.No.	Name of the Objector	DISCOM	Whether Wanted to be heared in Person
41	Sri.S.Surendra Babu, Pakala Mandal, Chittoor	APSPDCL	Yes
42	Sri.P.Anjanayalu, Pakala Mandal, Chittoor	APSPDCL	Yes
43	Sri.A.Narasimhulu Naidu, Pakala, Chittoor	APSPDCL	Yes
44	Sri.P.Sambaiah Naidu, Pakala, Chittoor	APSPDCL	Yes
45	Sri.K.Nagulu Naidu, Pakala, Chittoor	APSPDCL	Yes
46	Sri.P.Rajeswara Reddy, Pakala Mandal, Chittoor	APSPDCL	Yes
47	Sri.R. Sudhakar Naidu, Pakala Mandal, Chittoor	APSPDCL	Yes
48	Sri. P.Siddaiah Naidu, Pakala Mandal, Chittoor	APSPDCL	Yes
49	Sri. N.Lakshmi Narayana Chowdary, Pakala Mandal, Chittoor	APSPDCL	Yes
50	Sri. K.Balakrishna Reddy, President, Chittoor Farmers Association, Chittoor	APSPDCL	Yes
51	Sri. K.Muniratnam Naidu, Tavanampalli Mandal, Chittoor	APSPDCL	Yes
52	Sri. Siva Prasad, General Manager, Hindustan Zinc Limited, Visakhapatnam	APEPDCL	Yes
53	Sri. Kandharapu Murali, Secretary, Communist Party of India ( MARXIST), Tirupati	All Discoms	Yes
54	Sri. M.Bhaskaraiah, M.G.Street, Srikalahasti	APSPDCL	Yes

SI.No.	Name of the Objector	DISCOM	Whether Wanted to be heared in Person
55	Sri.Gadda Venkateswara Rao, Madha Rice Mill, Nalgonda	APCPDCL	Not mentioned
56	Sri.K.Changal Reddy, Pakala Mandal, Chittoor District	APSPDCL	Yes
57	Sri.P.Dhanraj Reddy, Pakala Mnadal, Chittoor District	APSPDCL	Yes
58	Sri.V.Babu Naidu, Pakala Mandal, Chittoor District	APSPDCL	Yes
59	Sri.V.Raja, Pakala Mandal, Chittoor District	APSPDCL	Yes
60	Sri.V.Subramanyam Naidu, Pakala Mandal, Chittoor District	APSPDCL	Yes
61	Sri.K.Doraswamy, Pakala Mandal, Chittoor District	APSPDCL	Yes
62	Sri.Eswar Babu, Pakala Mandal, Chittoor District	APSPDCL	Yes
63	Sri.N.Sankara Naidu, Pakala Mandal, Chittoor District	APSPDCL	Yes
64	Sri. K.Murali, Pakala Mandal, Chittoor District	APSPDCL	Yes
65	Sri.K.Lakshmipati Reddy, Pakalamandal, Chittoor District	APSPDCL	Yes
66	Sri.B.Sri Ramulu, Pakala Mandal, Chittoor District	APSPDCL	Yes
67	Sri.J.Surendera Reddy, Secretary, Pakala Mandala Rythu Sangham, Chittoor	APSPDCL	Yes
68	Sri.B.Naga Raju, Pakala Mandal, Chittoor District	APSPDCL	Yes

Name of the Objector	DISCOM	Whether Wanted to be heared in Person
Sri.A.Bhaskar Naidu, Pakala Mandal Post, Chittoor District	APSPDCL	Not mentioned
Sri.B.Yaraiah, Pakalamandal, Chittoor District	APSPDCL	Yes
Sri.P.Rangaiah, Pakalamandal, Chittoor District	APSPDCL	Yes
Sri.K.Jaganadha Reddy, Pakala Mandalam, Chittoor District	APSPDCL	Yes
Sri. N Damodara Reddy, Pakala Mandal, Chittoor District	APSPDCL	Yes
Sri. T.Ramachandraiah, Pakala Mandal, Chittoor District	APSPDCL	Yes
Sri.B.Bhaskar Naidu, Pakala Mandalam, Chittoor District	APSPDCL	Not mentioned
Sri.R.Tyagaraja Naidu, Pakala Mandal Post, Chittoor District	APSPDCL	Not mentioned
Sri.K.Vanadri Naidu, Pakala Post, Chittoor District	APSPDCL	Yes
Sri.S.Narayana Swamy Naidu, Peddagorpadu Post, Pakala Mandal, Chittoor District	APSPDCL	Yes
Sri.N.Muniratnam Reddy, Peddaramapuram Post, Pakala Mandalam, Chittoor District	APSPDCL	Yes
Sri.G.Kodanda Naidu, Neladani Pella, Pakala Mandalam, Chittoor District	APSPDCL	Not mentioned
Sri.A.Punna Rao, Ashok Nagar, Vijayawada	All Discoms	Yes
Sri. P.Madana Mohana Rao, Member (CORE), LOK SATTA, Hyderabad	All Discoms	Yes
	Sri.A.Bhaskar Naidu, Pakala Mandal Post, Chittoor District  Sri.B.Yaraiah, Pakalamandal, Chittoor District  Sri.P.Rangaiah, Pakalamandal, Chittoor District  Sri.K.Jaganadha Reddy, Pakala Mandalam, Chittoor District  Sri. N Damodara Reddy, Pakala Mandal, Chittoor District  Sri. T.Ramachandraiah, Pakala Mandal, Chittoor District  Sri.B.Bhaskar Naidu, Pakala Mandalam, Chittoor District  Sri.R.Tyagaraja Naidu, Pakala Mandal Post, Chittoor District  Sri.K.Vanadri Naidu, Pakala Post, Chittoor District  Sri.S.Narayana Swamy Naidu, Peddagorpadu Post, Pakala Mandal, Chittoor District  Sri.N.Muniratnam Reddy, Peddaramapuram Post, Pakala Mandalam, Chittoor District  Sri.G.Kodanda Naidu, Neladani Pella, Pakala Mandalam, Chittoor District  Sri.A.Punna Rao, Ashok Nagar, Vijayawada  Sri. P.Madana Mohana Rao, Member	Sri.A.Bhaskar Naidu, Pakala Mandal Post, Chittoor District  Sri.B.Yaraiah, Pakalamandal, Chittoor District  Sri.P.Rangaiah, Pakalamandal, Chittoor District  Sri.K.Jaganadha Reddy, Pakala Mandalam, Chittoor District  Sri. N Damodara Reddy, Pakala Mandal, Chittoor District  Sri. T.Ramachandraiah, Pakala Mandal, Chittoor District  Sri. T.Ramachandraiah, Pakala Mandal, Chittoor District  Sri. T.Ramachandraiah, Pakala Mandal, APSPDCL  Sri.B.Bhaskar Naidu, Pakala Mandalam, Chittoor District  Sri.R.Tyagaraja Naidu, Pakala Mandal Post, Chittoor District  Sri.K.Vanadri Naidu, Pakala Post, Chittoor District  Sri.S.Narayana Swamy Naidu, Peddagorpadu Post, Pakala Mandal, Chittoor District  Sri.N.Muniratnam Reddy, Peddaramapuram Post, Pakala Mandalam, Chittoor District  Sri.G.Kodanda Naidu, Neladani Pella, Pakala Mandalam, Chittoor District  Sri.G.Kodanda Naidu, Neladani Pella, Pakala Mandalam, Chittoor District  Sri.A.Punna Rao, Ashok Nagar, Vijayawada All Discoms  Sri. P.Madana Mohana Rao, Member

SI.No.	Name of the Objector	DISCOM	Whether Wanted to be heared in Person
83	Sri.B.V.Raghavulu, Secretary, A.P. State Committee Communist Party of India ( Marxist), Hyderabad	All Discoms	Yes
84	Sri.CH.Divakar Babu, Secretary, Consumer Guidance Society, Vijayawada	All Discoms	Yes
85	Sri.R.Sudha Bhaskar, President, Centre of Indian Trade Unions (CITU)	All Discoms	Yes
86	Sri.K.Sai Reddy, State Organizing Secretary, Bharatiya Kisan Sangham, Hyderabad	All Discoms	Yes
87	Sri.Rachamallu Punnamacharyulu, Chief Convener, Akhila Bharatheeya Vishwakarma Parishad, Hyderabad	All Discoms	Yes
88	Sri.G.Malyadri, Former Municipal Councilor, Tirupati	APSPDCL	Yes
89	Sri.MD.Hafizuddin, Cashier, Nellore Road Margin Business Welfare Society, Nellore	APSPDCL	Yes
90	Sri.P.Sriramulu, Ramasamudram Panchayati, Chittor	APSPDCL	Not mentioned
91	Sri.Sangapu Lakshmaiah, Kasipeta Mandalm, Adilabad	APNPDCL	Not mentioned
92	Sri.B.Venkat, Secretary, AP Farmers Association, Hyderabad	APNPDCL	Not mentioned
93	Sri.P.A.N.Raju, Anakapalli Mandalam, Visakhapatnam	APEPDCL	Not mentioned
94	Sri.Pradeep Jain, Chief Electrical Distribution Engineer, Chandrasekharpur, Bhubaneswar	APEPDCL	Yes
95	Sri.A.Subramanyam, Dist., Convener, M.R.Palli, Tirupati	APSPDCL	Yes
96	Sri.Yellapu Suryanarayana, Secretary, Bharatiya Kisan Sangh, East Godavari	APEPDCL	Yes

SI.No.	Name of the Objector	DISCOM	Whether Wanted to be heared in Person
97	Sri.Dr.B.Saranga Pani, Reader and Head, The Hindu College, Machilipatnam	APSPDCL	Yes
98	Sri.B.Venkat, Secreary, AP Agriculture Labour Society, Hyderabad	APSPDCL	Yes
99	Sri.R.Chakravarthi, Peddagorpadu post, Pakala Mandal, Chittoor	APSPDCL	Not mentioned
100	Sri.K.Sankara Reddy, BA.B.L, Advocate, Laxmi Nagar Colony, CHITTOOR	All Discoms	Yes
101	Sri.K.Madhava Reddy, Irayala Mandalam, Chittoor	APSPDCL	Yes
102	Sri,A.Rajendra Naidu, Pakalamandalam, Chittoor District	APSPDCL	Yes
103	Sri.S.Tyagarajulu Naidu, Pakala Mandalam, Chittoor	APSPDCL	Yes
104	Sri.K.Nagaraja Naidu, Pakala Mandalam, Chittoor District	APSPDCL	Yes
105	Sri.G.Venkata Siddaiah Naidu, President, Chittoor District Rythu Seva Sangaham, Chittoor	APSPDCL	Yes
106	Sri.B.Uttaraiah, Pakala Mandal, Chittoor Dist	APSPDCL	Yes
107	Sri.B.Reddappa Naidu, Pakala Mandal, Chittoor Dist.	APSPDCL	Yes
108	Sri.M.Sriramulu Reddy & K. Jaganadha Reddy, Chittoor District	APSPDCL	Yes
109	Sri.S.Muniratnam Naidu, Pakala Mandalam, Chittoor District	APSPDCL	Yes
110	Sri. R.Kesavulunaidu, Secretary, Pakala Mandal Farmers Service Society, Chittoor	APSPDCL	Yes

SI.No.	Name of the Objector	DISCOM	Whether Wanted to be heared in Person
111	Sri.S.R.Vijayakar, Convener. LOK SATTA, Hyderabad	All Discoms	Yes
112	Sri.Chinta Venkateswara Rao, President, M/s. Gudurupadu Raitula Samkshema Sangam, Guntupalli	APSPDCL	Yes
113	Sri.Kolli.Sridhar Reddy, BKS, Vice President, Nellore District	APSPDCL	Yes
114	V.S.Krishna, State Secretary, Human Rights Forum, Visakhapatnam	APEPDCL	Yes
115	Sri.T.Rama Chandra Guru Murthy, Headmaster, Govt., High School for Deaf, Kakinada	APEPDCL	Not mentioned
116	Sri.M.Thimma Reddy, Convener, Peoples Monitoring Group on Electricity Regulation, Hyderabad	APEPDCL	Yes
117	Sri.M.Thimma Reddy, Convener, Peoples Monitoring Group on Electricity Regulation, Hyderabad	APCPDCL	Yes
118	Sri.M.Thimma Reddy, Convener, Peoples Monitoring Group on Electricity Regulation, Hyderabad	APNPDCL	Yes
119	Sri.M.Thimma Reddy, Convener, Peoples Monitoring Group on Electricity Regulation, Hyderabad	APSPDCL	Yes
120	Sri. Jeevan Kumar, Convener, Human Rights Form, Hyderabad	APCPDCL	Yes
121	CE/Comml.,APGENCO, Hyderabad	All Discoms	Not mentioned

#### **GLOSSARY**

A.P. Andhra Pradesh

APCPDCL / CPDCL Central Power Distribution Company of Andhra Pradesh Limited

APDRP Accelerated Power Development and Reform Programme

APEPDCL / EPDCL Eastern Power Distribution Company of Andhra Pradesh Limited

APERC Andhra Pradesh Electricity Regulatory Commission

APGENCO Andhra Pradesh Power Generation Corporation Limited

APGPCL Andhra Pradesh Gas Power Corporation Limited

APNPDCL / NPDCL Northern Power Distribution Company of Andhra Pradesh

Limited

APPCC Andhra Pradesh Power Coordination Committee

APSPDCL / SPDCL Southern Power Distribution Company of Andhra Pradesh

Limited

ARR Aggregate Revenue Requirement
ATE Appellate Tribunal for Electricity
BSES Bombay Suburban Electric Supply

C.C. Current Consumption

CCITI Consultative Committee on IT Industry

CDM Clean Development Mechanism

Central Act Electricity Act 2003 (Act 36 of 2003)

CERC Central Electricity Regulatory Commission

CGS Central Generating Station

CMD. Contracted Maximum Demand Also read as Chairman and

Managing director according to the context.

COD Commercial Operation Date

Cost of supply

**DISCOMs** Distribution Companies

**DSM** Demand Side Management

D-to-D DISCOM to DISCOM

DTR Distribution Transformer

**DPE** Detection of Pilferage Of Energy

DPS Delayed Payment Surcharge

e-filing Electronic Filing

EHT Extra High Tension

**ERC** Expected Revenue From Charges

**ERO** Electricity Revenue Office

FCA Fuel Cost Adjustment

FPT Filing of Proposal of Tariff
FSA Fuel Surcharge Adjustment

GHG Green House Gas

GoAP Government of Andhra Pradesh

Gol Government of India

GTCS General Terms and Conditions of Supply

HDPE High Density Poly Ethylene

HP Horse PowerHT High Tension

HVDS High Voltage Distribution System

IPPs Independent Power Producers

ISI Indian Standards Institution (Present BIS)

kWh Kilo-Watt hour

**LPF** Low Power Factor

LT Low Tension
LV Low Voltage
MU Million units
MW Mega Watt(s)

MYT Multi- Year Tariff

NCE Non-conventional Energy

**O&M** Operations and Maintenance

O.P. Original Petition

ONGC Oil and Natural Gas Company Ltd

PF Power Factor

PGCIL Power Grid Corporation of India Limited

PLF Plant Load Factor

PPA Power Purchase Agreement
PTC Power Trading Corporation

PWS Scheme Protected Water Supply Scheme

RAC Regulatory Affairs Cell

RECs Renewable Energy Certificates

Reform Act A.P. Electricity Reform Act 1998

**RESCOs** Rural Electric Supply Co-operatives

RGGVY Rajiv Gandhi Grameen Vidhuteekaran Yojana

ROE Return on Equity

RPPO Renewable Power Purchase Obligation

**RST** Retail Supply Tariff'

RTPP Rayalaseema Thermal Power Project

SAC State Advisory Committee

SI System Improvement

SLDC State Load Despatch Centre

SSLBPH/SLBH Srisailam Left Bank Power House

T & D Transmission and Distribution

TOD Time-of-Day

UI Un-Scheduled Interchanges

ULDC Unified Load Despatch Centre

UNFCCC United Nations Framework Convention of Climate Change

W&RST Wheeling and Retail Sale of Electricity

W.P. Writ Petition

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