STATE LOAD DESPATCH CENTRE (SLDC) FEE & CHARGES

For the period FY2009-10 to FY2013-14



ORDER

20th March 2009

ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION Singareni Bhavan, Red Hills, Lakdi-Ka-Pool, Hyderabad - 500 004

ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION HYDERABAD

Date: 20-03-2009

Present

A. Raghotham Rao, Chairman R. Radha Kishen, Member C.R. Sekhar Reddy, Member

O.P No. 22 of 2008

Transmission Corporation of Andhra Pradesh Limited Applicant

This came up for public hearing before several consumers, the representatives of various consumer organizations, generators and other stakeholders, on 11-02-2009 at Hyderabad, and having stood over for consideration till this day, the Commission passed the following

ORDER

Part I: Filing and Order Procedures

General

- 1. Sub-section (1) of section 31 of the Electricity Act, 2003 (Act), provides that the State Government shall establish a State Load Despatch Centre (SLDC) while sub-section (2) of the Section 31 provides that the said SLDC shall be operated by a Government company or any authority or Corporation constituted by or under any State Act and that until such company /authority /corporation is notified by the State Government, the State Transmission Utility (STU) shall operate the SLDC. Pending establishment of such a company/authority/corporation, the Government of Andhra Pradesh (GOAP) notified in GO Ms.No.8 dated 17-01-2004 that the existing SLDC shall continue as SLDC and be operated by the Transmission Corporation of Andhra Pradesh Ltd., (APTRANSCO or Applicant) being the STU.
- 2. Section 32(3) of the Act provides for levy and collection of such fees and charges from the generating companies and licensees engaged in the intra-

State transmission of electricity as may be specified by the State Commission.

- 3. In exercise of powers conferred under Section 32(3) read with Section 181(2)(g) of the Electricity Act 2003 and all other powers enabling it in that behalf, the Andhra Pradesh Electricity Regulatory Commission (APERC or Commission) notified on 27.07.2006, the APERC (Levy and collection of fees and charges by State Load Despatch Centre) Regulation No.1 of 2006 (Regulation 1 of 2006) for the levy and collection of fees and charges from all users.
- 4. Applicant, the STU as per G.O.Ms.No.8 and the Applicant herein, submitted in accordance with Regulation No. 1 of 2006 its filing for proposed Annual Fee and Operating Charge for its SLDC (as distinct from its other business of transmission of electricity) for the Control Period of five years from FY2009-10 to FY2013-14 on 29.11.2008.
- 5. Thus the Commission has to determine the SLDC fees and charge for each year of the control period from FY2009-10 to FY 2013-14, based on the application of the Applicant, as filed, and after considering the objections/suggestions received/heard from general public and other stakeholders, on those filings.

Notice calling for objections / suggestions

6. The Applicant, was directed to serve a public notice through publication, on 24-12-2008 in at least two daily newspapers in English and two in Telugu having circulation in the State informing the general public that it (the Applicant) had made its filings on SLDC fees and charge for FY2009-10 to FY2013-14 with the APERC as per the APERC Regulation No.1 of 2006, and that copies of the filings (together with supporting materials) were available with Chief Engineer/ RAC, Reforms & IT, APTRANSCO, Vidyut Soudha, Hyderabad, and with the Chief Engineer/TL&SS at Visakhapatnam, Vijayawada, Kadapa, Hyderabad and Warangal for inspection /perusal / purchase by interested persons and that objections/suggestions can be filed on these proposals with the Secretary, APERC, by 27-01-2009.

Objections/suggestions received

- 7. Following the public notice, three persons have sent their objections/suggestions to the Secretary, APERC on the Tariff proposals of the Applicant by the due date i.e., 27-01-2009.
- 8. The Commission directed the Applicant vide its letter dated 21-01-2009 to send replies on all the objections / suggestions by 02-02-2009 and also supply a copy of the same to the Objector by the same date duly posting the copies of replies on the Applicant's official website.
- 9. Applicant had been informed of the date and venue of the public hearing on 28-01-2009. The objectors who had expressed their desire to be heard in person were also informed in writing about the venue and the date on which he would be heard. General public were also informed of the date of public hearing and through a press release, on 28-01-2009.
- 10. The objectors who had desired to be heard in person appeared and represented before the Commission during the public hearing on 11-02-2009. The objectors' names are given in Annexure-B.

Hearing

11. During the hearing:

- a) the Applicant made an opening presentation at the commencement of the public hearing on its filings, as directed by the Commission, vide its letter dated: 21-01-2009.
- b) then, the Commission heard all the objectors desiring to be heard in person; and,
- c) the Applicant gave its responses on the issues raised by the objector during the hearing.

Meeting of the State Advisory Committee

12. The issues concerned with the proposals for SLDC fees and charges were discussed in the State Advisory Committee (SAC) meeting held on 19-01-2009 and suggestions made by the members of SAC have been taken into consideration by the Commission while finalizing this Order.

Part II: Filings for 2nd MYT control period from 2009-10 to 20013-14

General

13. APTRANSCO filed the annual fee and monthly operating charge to recover the capital cost and operating cost respectively from the users of the SLDC services for the MYT control period of 2009-10 to 20013-14. As per the filings, the proposed annual fee and operating charge are to be levied on users of SLDC services based on users' generation capacity. The details of capital cost, operating cost and the generation capacity likely to use SLDC services, annual fee and monthly operating charge have been filed for each year of the control period. The filings broadly confirm with the Regulation-1 of 2006 issued by the Commission for the purpose of fixing the annual fee and operating charge for SLDC services.

Generation Capacity

14. APTRANSCO estimated the generation capacity (in terms of MW) based on contracted generation capacities by four distribution companies and other generators (such as open access and captive users) who are likely to use the SLDC services to transport the electricity to their chosen destinations. The generation capacity arrived in this manner will be the base on which the proposed fee and charge are to be levied. APTRANSCO projected the generation capacity to reach 20222 MW by the last year of the control period, while giving the details for each year of the control period. The details of the generation capacity in terms of MW filed by APTRANSCO are given in Table-1.

Table 1:Filings - Generation Capacities, FY2009-10 to 20013-14, MWs.

| Financial | Financial Distribution | | Other | Total |
|-----------|------------------------|-------------|---------------|-------------|
| Year | Companies | Generators, | Generators, | Capacity in |
| i eai | Companies | Open Access | Third Parties | the State |
| 1 | 2 | 3 | 4 | 5(2+3+4) |
| 2009-10 | 13511 | 0 | 462 | 13973 |
| 2010-11 | 14700 | 0 | 462 | 15162 |
| 2011-12 | 17169 | 0 | 462 | 17631 |
| 2012-13 | 17741 | 0 | 462 | 18203 |
| 2013-14 | 19760 | 0 | 462 | 20222 |

Capital Cost

15. The capital cost for SLDC for each year of the control period is the sum of annual capital costs on previous investments (which are yet to be recovered

in full) plus on proposed investments for respective year of the control period. For example, the capital cost for FY2009-10 is equal to annual capital cost on previous investments plus capital cost on proposed investment for FY2009-10. The annual capital cost (amortized investments) is derived through a formulae specified in the Regulation 1 of 2006 with two key parameters, a) the investment recovery period (10 years) and b) the cost of capital (150 percent of the bank rate).

16. APTRANSCO placed the cumulative investment up to end of FY2008-09 at Rs.49.68 cr. and proposed to invest an amount of Rs.36.58 cr. during the control period. It has been proposed to recover a sum of Rs.66.60 cr. as capital cost on these investments during the control period. The capital cost worked out in this manner is given for each year of the control period in the filing since the reference for levy of charges is one year. The details of historic and future investments and capital cost on these investments are given in Table-2.

Table 2: Filings-Investments and Capital Costs for FY2009-10 to 2013-14, Rs.Cr.

| Financial Year | Proposed Capital Cost* Annual on Proposed Investments Investments | | Capital Cost* on Previous Investments | Total Capital Cost | |
|--------------------------------|---|--------------|---|-----------------------|--|
| 1 | 2 | 3 | 4 | 5(3+4) | |
| End of 2008-09 | 49.68 | 4.13 | 4.10 | 8.23 | |
| 2009-10 | 15.27 | 2.70 | 8.23 | 10.94 | |
| 2010-11 | 9.98 | 1.77 | 10.94 | 12.70 | |
| 2011-12 | 6.92 | 1.22 | 12.70 | 13.93 | |
| 2012-13 | 2.21 | 0.39 | 13.93 | 14.32 | |
| 2013-14 | 2.20 | 0.39 | 14.32 | 14.71 | |
| Total for Control Period | 36.58 | 6.47 | 60.12 | 66.60 | |
| *The amoun | t of amortized | investments. | | | |

Operating Cost

17. The operating cost for SLDC consist of expenses on three major heads, a) Employee costs, b) Administration and General Expenses and c) Repairs and Maintenance expenses. These expenses are recurring in nature and related

to operating aspects of SLDC. These expenses for each year of the control period are estimated based historical information, investment levels, and likely major changes that will have an impact on these costs. The Regulation 1 of 2006 specifies that the operating cost is to be recovered in full in every year through the levy of monthly operating charge.

18. APTRANSCO estimated a sum of Rs.166.36 cr. operating cost for the control period of five years while giving the details for each year of the control period. The operating cost is the major cost item in SLDC total cost and within the Operating cost, employee cost constitute significant portion. The operating cost, as per filings, consists of Rs.116.65 cr. Employee cost, Rs.17.59 cr. Administration and General Expenses and Rs.32.12 cr. Repairs and Maintenance expenses for the control period of five years. The details of Employee cost, Administration and General Expenses and Repairs and Maintenance expenses are given in Table-3.

Table 3:Filings - Operating Costs for FY2009-10 to 2013-14, Rs.Cr.

| Financial Year | Employee cost | Administration and General Expenses | Repairs and Maintenance expenses | Total Operating Cost |
|-------------------|---------------|---|--|----------------------------|
| 1 | 2 | 3 | 4 | 5(2+3+4) |
| 2009-10 | 19.74 | 2.95 | 6.11 | 28.80 |
| 2010-11 | 21.63 | 3.21 | 6.41 | 31.25 |
| 2011-12 | 23.25 | 3.49 | 5.68 | 32.42 |
| 2012-13 | 25.04 | 3.80 | 6.15 | 34.99 |
| 2013-14 | 26.99 | 4.14 | 7.77 | 38.90 |
| Total | 116.65 | 17.59 | 32.12 | 166.36 |

Fee and Charge

19. To recover the capital cost, APTRANSCO proposed to levy the Annual Fee (Rs./MW/Year) for each year of the control period based on estimated generation capacity. To recover operating cost, APTRANSCO proposed to levy the monthly Operating Charge (Rs/MW/month) on estimated generation capacity. Through, levying of fee and charge on users of SLDC services, APTRANSCO will be in a position to recover the entire estimated annual cost of SLDC from the users. This will be so since the fee and charges are

worked using the estimated generation capacity. The details of fee and charge filed are given in table-4.

Table 4: Filings-Annual Fee and Operating Charge FY2009-10 to 2013-14

| Financial Year | (anacity | | Capacity Cost Cost | | Annual Fee (Rs/MW/Yr) | Operating charges (Rs/MW/Month) | | |
|-------------------|-----------|-------|--------------------|---------|-----------------------------|---------------------------------|--|--|
| 1 | 2 | 3 | 4 | 5=(3/2) | 6=4/(2X12) | | | |
| 2009-10 | 13973 | 10.94 | 28.80 | 7827.26 | 1717.60 | | | |
| 2010-11 | 15162 | 12.70 | 31.25 | 8378.40 | 1717.56 | | | |
| 2011-12 | 17631 | 13.93 | 32.42 | 7899.75 | 1532.34 | | | |
| 2012-13 | 18203 | 14.32 | 34.99 | 7866.39 | 1601.84 | | | |
| 2013-14 | 20222 | 14.71 | 38.90 | 7273.54 | 1603.04 | | | |

Conclusion

20. APTRANSCO filing for SLDC is broadly in conformity with the Regulation 1 of 2006 issued for the purpose of fixation of the fee and charge. APTRANSCO requested that the filing may be examined and fix the charge and fee for each year of the control period. The Commission analyzed the filings in detail and determined the costs and capacity for each year of the control period. Based on these workings, the Commission fixed the fee and charge for each year of the control period 2009-10 to 2013-14. The Commission analysis on these filings wherever there is a change is detailed in Part V.

Part III: Issues Raised by General Public and APTRANSCO Responses Rationale for Fee and Charges

- 21. What is rationale to collect operating charges and annual fee also to cover the SLDC Charges?
- 22. APTRANSCO: APERC had introduced the concept of SLDC charges which includes (i) operating charges (i.e., employee cost, administration & general charges, repairs and maintenance & other charges) and (ii) annual fees (i.e. recovery of capital invested and cost of capital interest thereon) vide Regulation No.1 of 2006 (levy of collection fees and charged by State Load Dispatch Centre).

23. Thus, the regulation has come into effect/implementation with effect from FY 2007-08 and Commission had already issued Multi Year Tariff Order in respect of SLDC for the first control period of two years i.e. FY 2007-08 to FY 2008-09. Similarly, APTRANSCO had submitted ARR proposals for the second control period of 5 years.

Reasons for Variation in Charges

- 24. The reasons for variations in the SLDC operating charges during 2nd Control Period.
- 25. **APTRANSCO**: The total expenditure of SLDC for the year 2009-10 is Rs.28.8Cr, for the year 2010-11 is31.25Cr, for the year 2011-12 isRs32.42Cr, for the year 2012-13 is Rs34.99Cr and for the year 2013-14 is Rs38.9Cr. The expenditure is increasing steadily from year to year. But Generation capacity to be wheeled is for 2009-10 is 13973MW, for 2010-11 I s 15162MW, for 2011-12 is 17631MW, for 2012-13 is 18203MW, for 2013-14 is 20222MW.Hence the main reason for variation in operating charges is due to variation in O&M cost and addition of generation capacities in the Control Period
- 26. The proposed capital expenditure is increasing steadily due to capital expenditure towards SLDC system improvement, communication network etc., to cater needs of new generation capacities, open access, power exchanges etc., as provided in the Electricity Act, 2003. Variation in addition of generation capacities in the Control Period also contributes to the variation in annual fee

Part IV: Commission Analysis of Select Issues

Accounting Practices Relating to SLDC Activity

27. Some objectors during the public hearings raised the issue of accounting practices followed by APTRANSCO before the Commission. The Commission also noted that APTRANSO is yet to segregate the accounts as contemplated in Regulation 1 of 2006. Clause 7 of Regulation 1 of 2006 reads as;

..... shall be required to maintain separate accounts for SLDC activity and till such time as the accounts are not so segregated, it shall apportion its costs on the basis of an Allocation Statement to be submitted to the Commission with all relevant details.

28. Though APTRNSCO indicated the details in Profit and Loss Account about the SLDC activity, the assets pertaining to SLDC activity are not separately identified. Segregation of SLDC assets is essential in view of prescribed regulatory method of 100% investment recovery in 10 years period without any return on capital employed. In this context, the Commission directs that:

APTRANSCO shall segregate the SLDC accounts in full shape within a year, i.e. by 31st March 2010 and also immediately start maintaining separate asset registers on prospective basis. These asset registers will be inspected by the Commission Staff from time to time.

Claw Back of Previously Allowed Capital Cost

29. The Commission further took note of non-spending of previously allowed investment of Rs.10.16 Cr. for FY2008-09 for which the capital cost is allowed at Rs.1.58 Cr. The capital cost allowed for that year has already been/will be recovered through the annual fee during the FY2008-09. Therefore, it is prudent that the amount already collected without having incurred the cost shall be *clawed back*. Accordingly, the Commission has reduced the total operating cost for FY2009-10 by Rs.1.58 cr for SLDC. In this context, the Commission directs that;

APTRANSCO shall file the details of completed capital works pertaining to SLDC operations along with Project Completion Certificate (PCC) and Financial Completion Certificate (FCC) as is being done for transmission projects. APTRANSCO shall also file a monthly report with the Commission on progress in capital works pertaining to SLDC operations by 25th of every month for the previous month.

Entering into Other Business

30. Several objectors during the public hearing mentioned before the Commission that it is worthwhile to explore possibility for APTRANSCO to enter other businesses using its asset base especially the Optical Fiber Cable (OFC) network. The Commission also feels that APTRANSCO should seriously explore the possibilities in scale economies in laying the OFC network and of leasing out the surplus capacities for others on commercial basis. In this context, the Commission directs that;

APTRANSCO shall file with the Commission an approach paper on its OFC network duly indicating a) existing capacities, b) planned future capacities, c) expected surplus capacity available and d) possible ways and means to utilize the surplus capacity by November 30, 2009.

Merit Order Despatch

31. The SLDC being apex body is also responsible for economic operation of the grid in the state. Section 32(2)(e) stipulates that the SLDC shall;

be responsible for carrying out real time operations for grid control and despatch of electricity within the State through secure and economic operation of the State grid in accordance with the Grid Standards and the State Grid Code.

- 32. Given the existence of numerous categories of generators, generators supplying electricity to such as a) distribution companies, b) captive consumers, c) directly to consumers, and d) traders, merit order dispatch of conventional type based on variable cost of generation will make a real challenge to SLDC.
- 33. It involves collection variable cost of each participating generating station on daily basis subject to technical constraints (backing down limitations) and requiring high cost generating stations to back down as and when low cost generation is available to substitute high cost generation.
- 34. Further, if the supply contract requirement of high cost generator is met through low cost generation available on the grid, the issue of compensation to low cost generator will arise as high cost generator saves the operating cost but continue take the revenue from his customer. The operating cost saved by the high cost generator may be simply transferred to the low cost generator who supplied electricity without reference to the variable cost of the low cost generator.
- 35. To formulate the merit order procedure for real time operations, APTRANSCO shall start collecting the information on variable cost (including backing down limitations) along with daily despatch schedule from each generating station at the earliest. In this context, the Commission directs that:

APTRANSCO to collect variable cost information including backing down limitation from each generating station on daily basis along with generation schedule for a complete period of three months. Using this information, it should analyze the perceived merit order benefits on expost basis for the three months period and make a presentation on this issue to the Commission by December 31, 2009.

Part V: Commission Analysis and Decisions on Filings

Generation Capacity

- 36. The Commission examined the generation capacity details filed by APTRANSCO for the purpose of levying the fee and charge. The Commission has effected the following changes with reference to the generation capacity filed by APTRANSCO;
 - a) Based on discussions held with Generation Corporation of Andhra Pradesh (APGENCO) and APTRANSCO, the ex-bus generation capacities have been revised in tune with schedules of upcoming generating stations.
 - b) The conventional generation capacities and non-conventional energy generation capacity have been reworked for each Distribution Company based on Third Transfer Scheme as announced by GOAP.
 - c) Based on proposed amendments to Power Purchase Agreements, 20 percent of ex-bus generation capacity of four upcoming gas based thermal stations is considered as Open Access (OA) capacity.
 - d) The available information suggest that there would be a potential for 1000 MW (including 660 MW NTPC Simhadri Expansion) OA capacity. This number is also reckoned in the computations.
- 37. APTRANSCO filed that the Generating Capacity could reach to 20,222MW by horizon year, whereas it is determined by the Commission that the Generating Capacity could be 21,222 MW for the ultimate year of the control period. The details of the capacity determined by the Commission are given in table-5.

Table 5:APERC-Generation Capacities, FY2009-10 to 20013-14, MW.

| Financial Year | Distribution Companies | Other Generators, Open Access | Other Generators, Third Parties | Total Capacity in the State |
|-------------------|---------------------------|-------------------------------------|---------------------------------------|-----------------------------------|
| 1 | 2 | 3 | 4 | 5(2+3+4) |
| 2009-10 | 12891 | 391 | 462 | 13744 |
| 2010-11 | 14038 | 1041 | 462 | 15541 |
| 2011-12 | 14410 | 1091 | 462 | 15963 |
| 2012-13 | 16274 | 1141 | 462 | 17877 |
| 2013-14 | 19469 | 1291 | 462 | 21222 |

Capital Cost

- 38. The Commission examined the investment proposals made by APTRANSCO for SLDC operations for each year of the control period of five years. The major investments for SLDC operations take place in telecommunications and associated areas. The Commission has effected the following changes in capital cost filed by APTRANSCO for SLDC operations.
 - a) The proposed investment level has been placed at Rs.38.40 cr for the entire control period based on the discussions held with APTRANSCO.
 - b) The pattern of investment across five years in the control period has been altered based on likely investments for each year of the control period.
 - c) The capital cost has been computed using 150 percent of the bank rate as specified in the Regulation 1 of 2006.
 - d) The capital cost on investments previously allowed by the Commission but not invested by APTRANSCO has been disallowed.
- 39. APTRANSCO had proposed to recover a sum of Rs.66.60 cr. capital cost during the control period. As per the Commission's calculations, the capital cost is placed at Rs.40.58 cr. for the control period. Major sources for reduction in capital cost in Commission's calculations are;
 - a) Disallowing the capital cost on investments that had not taken place during the period prior 2009-10, and
 - b) Application 150% bank rate at 9% instead of 12% as done by APTRANSCO in capital cost calculation.

40. The capital cost worked out by the Commission is less by 26.12 cr. compared with filings made by APTRANSCO. The details of Commission's calculations are given in table-6.

Table 6: APERC - Investments and Capital Costs for FY2009-10 to 2013-14. Rs.Cr.

| Financial | Proposed | Capital Cost* | Capital Cost* | Total |
|---------------------------------------|-------------|---------------|---------------|---------|
| Year | Annual | on Proposed | on Previous | Capital |
| rear | Investments | Investments | Investments | Cost |
| 1 | 2 | 3 | 4 | 5(3+4) |
| End of 2008-09 | 26.37 | 0.00 | 4.10 | 4.10 |
| 2009-10 | 9.16 | 1.43 | 4.10 | 5.54 |
| 2010-11 | 9.76 | 1.52 | 5.54 | 7.06 |
| 2011-12 | 9.69 | 1.51 | 7.06 | 8.57 |
| 2012-13 | 4.83 | 0.75 | 8.57 | 9.32 |
| 2013-14 | 4.96 | 0.77 | 9.32 | 10.09 |
| Total for the Control Period | 38.40 | 5.98 | 34.59 | 40.58 |

Operating Cost

- 41. The Commission examined the operating cost proposals made by APTRANSCO for each year of the control period. Major component in operating cost is the employee cost for SLDC operations. The Commission has effected the following changes to the operating cost amount filed by APTRANSCO.
 - a) Employee cost for each year of the control period has been moderated downwards based on historical information and likely future changes.
 - b) The Administration and General expenses were altered/recasted as per the previous trends and likely changes for the next five years.
 - c) With regard to Repair and Maintenance expenses, the Commission altered the expenses based on previous period actual expenses and

modified/altered investments pattern across years for the control period.

42. With the above changes on operating cost, the Commission has placed the operating cost for SLDC at Rs.151.77 Cr. for the control period. The operating cost as per the Commission's alternate calculations is less by Rs.14.59 cr. compared with the filings made by APTRANSCO. The details of Commission's calculations on operating cost are given table-7.

Table 7: APERC - Operating Costs for FY2009-10 to 2013-14, Rs.Cr.

| Financial Year | Employee cost | Administration and General Expenses | Repairs and Maintenance expenses | Cost* Clawed Back | Total Operating Cost |
|-------------------|------------------|---|--|-------------------------|----------------------------|
| 1 | 2 | 3 | 4 | 5 | 6-(2+3+4-5) |
| 2009-10 | 19.36 | 2.89 | 3.66 | 1.58 | 24.33 |
| 2010-11 | 21.00 | 3.14 | 3.96 | 0.00 | 28.10 |
| 2011-12 | 22.85 | 3.42 | 4.24 | 0.00 | 30.51 |
| 2012-13 | 24.85 | 3.71 | 4.46 | 0.00 | 33.02 |
| 2013-14 | 26.99 | 4.14 | 4.68 | 0.00 | 35.81 |
| Total | 115.05 | 17.30 | 21.00 | 1.58 | 151.77 |

^{*} The capital cost on investment that had been approved for earlier years but not invested.

Annual Fee and Monthly Charges

- 43. To recover the approved cost for each year of the control period, the Commission has fixed two instruments for SLDC. These are:
 - a) Annual Fee (Rs/MW/Year)= Capital cost/Generation Capacity
 - b) Operating Charge (Rs/MW/Month)=Operating Cost/(Generation Capacityx12)

Through annual fee, the SLDC will recover the approved capital cost in full for each year of the control period. Through operating charge, the SLDC will recover the approved operating cost in full for each year of the control period. The schedule of Fee and Charge is given in Annexure-A and is applicable as stated in the notes therein. The details of Commission's calculations on Fee and Charge are given in Table-8.

Table 8:APERC- Annual Fee and Operating Charge FY2009-10 to 2013-14

| Financial Year | Generation Capacity MW | Capital Cost (Rs. Cr.) | Operating Cost (Rs. Cr.) Operating Annual Fee (Rs/MW/Yr) | | Operating Charges (Rs/MW/Month) |
|-------------------|------------------------------|------------------------------|---|--------------|---------------------------------------|
| 1 | 2 | 3 | 4 | 5=(3/2)*10^4 | 6=(4/2)/(12)*10^4 |
| 2009-10 | 13744 | 5.5363 | 24.3336 | 4028.15 | 1475.41 |
| 2010-11 | 15541 | 7.0571 | 28.0980 | 4540.95 | 1506.66 |
| 2011-12 | 15963 | 8.5670 | 30.5103 | 5366.78 | 1592.76 |
| 2012-13 | 17877 | 9.3196 | 33.0215 | 5213.18 | 1539.29 |
| 2013-14 | 21222 | 10.0925 | 35.8078 | 4755.66 | 1406.08 |

Notes on fee and charge

- 1) The SLDC charges (Annual Fee & Operating Charge) shall be paid by Generating Companies (including Captive Generating Plants), Distribution Licensees and Trading Licensees using the intra-State Transmission Network.
- 2) The Annual Fee shall be paid by all the Users in advance in two equal installments, by 10^{th} of April and by 10^{th} of October every financial year starting from 2007-08 onwards:

Provided that in case where the usage of intra-state transmission system commences after the 10th of April or the 10th October of a year, the fee for the period up to 30th September of the year and 31st March of the subsequent year respectively shall be required to be paid before the commencement of intra-state transmission.

- 3) The operating charges shall be paid monthly.
- 4) If the Fee and Charges as the case may be are not paid by the due date(s), surcharge at the rate of two percent per month shall be levied on the unpaid amounts.
- 5) An amount equivalent to two months' Operating Charges shall have to be deposited in advance by every User as security against default in payment of Operating Charges.

Commission Intervention in Case of Variations in Cost and Revenues

44. The Commission approved the costs and the recovery of the approved cost through a) Annual Fee and b) Monthly Operating Charge to be levied on the approved generation capacity as detailed in this Order for each year of the control period. The details are given in Table-9.

Table 9: APERC Approved Cost and Annual and Cumulative Recovery, Rs.Cr.

| SI. | SLDC | YEAR | | | | | |
|-----|-------------------|--|---------|---------|---------|---------|--------|
| No. | Cost Item | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | Period |
| 1 | Capital Cost | 5.54 | 7.06 | 8.57 | 9.32 | 10.09 | 40.58 |
| 2 | Operating Cost | 24.33 | 28.10 | 30.51 | 33.02 | 35.81 | 151.77 |
| 3 | Total | 29.87 | 35.16 | 39.08 | 42.34 | 45.90 | 192.35 |
| 4 | Total Recovery | Service Control of the Control of th | 29.87 | 65.03 | 104.11 | 146.45 | 13 |

- 45. If the cumulative actual cost is less than 10% of cumulative approved cost at the beginning of the financial year starting from 2010-11, the Commission may require the SLDC to explain the reasons for cost variations. If necessary, the Commission may also require SLDC to file the Annual fee and operating charge for the rest of the control period of five years.
- 46. If the cumulative actual revenue is more than 10% of cumulative approved revenue at the beginning of the financial year starting from 2010-11, the Commission may require the SLDC to explain the reasons for revenue variations. If necessary, the Commission may also require SLDC to file the Annual fee and operating charge for the rest of the control period of five years.
- 47. If the actual recovery of revenue through fee and charge is less than 10% of the actual cost, the SLDC may file the details with the Commission seeking the remedy for under recovery of the cost. The Commission, upon examination of these details may pass an appropriate Order or show the ways and means to address issue of the under recovery of the cost.
- 48. For the purpose of monitoring the actual cost and revenue, the Commission will issue a format for filing of actual costs and revenues. In this context, the Commission directs that;

APTRANSCO shall file the actual costs and revenues by 25th of every month for the previous month in the format prescribed for this purpose by the Commission. APTRANSCO may also state its own observations on cost, revenues and capacities along with the monthly report.

49. The aforementioned fee and charge fixed for each year of the control period are applicable from 1st April to 31st March of the respective year.

This Order is signed on the 20th day of March 2009.

Sd/-**MEMBER**

Sd/-MEMBER

Sd/-C.R. SEKHAR REDDY R. RADHA KISHEN A. RAGHOTHAM RAO **CHAIRMAN**

Annexure-A: Schedule of Fee and Operating Charge for FY2009-10 to 2013-14

SLDC ANNUAL FEE AND OPERATING CHARGES FOR FY 2009-10 TO 2013-14

| Year | Annual Fee (Rs./MW/Year) | Operating Charge (Rs/MW/Month) |
|---------|-----------------------------|--------------------------------|
| 2009-10 | 4028.15 | 1475.41 |
| 2010-11 | 4540.95 | 1506.66 |
| 2011-12 | 5366.78 | 1592.76 |
| 2012-13 | 5213.18 | 1539.29 |
| 2013-14 | 4755.66 | 1406.08 |

Notes:

Users of SLDC services shall pay both Annual Fee and Operating Charge as per the terms and conditions prescribed by Andhra Pradesh Electricity Regulatory Commission (APERC) from time to time.

Notes on fee and operating charge

- 1) The SLDC charges (Annual Fee & Operating Charge) shall be paid by Generating Companies (including Captive Generating Plants), Distribution Licensees and Trading Licensees using the intra-State Transmission Network.
- 2) The Annual Fee shall be paid by all the Users in advance in two equal installments, by 10^{th} of April and by 10^{th} of October every financial year starting from 2009-10 onwards:

Provided that in case where the usage of intra-state transmission system commences after the 10th of April or the 10th October of a year, the fee for the period up to 30th September of the year and 31st March of the subsequent year respectively shall be required to be paid before the commencement of intra-state transmission.

- 3) The operating charges shall be paid monthly.
- 4) If the Fee and Charges as the case may be are not paid by the due dates, surcharge at the rate of two percent per month shall be levied on the unpaid amounts.
- 5) An amount equivalent to two months' Operating Charges shall have to be deposited in advance by every User as security against default in payment of Operating Charges.

Annexure-B: List of Objectors

| Sl.No | Name of the Objector |
|-------|---|
| 1 | Sri B.V.Raghavulu Secretary, A.P.State Committee, Communist Party of India (Marxist), Hyderabad |
| 2 | Sri G.Narendranath EC Member, Rashtriya Raithu Seva Samithi, Hyderabad |
| 3 | Sri M.Venugopala Rao, Special Correspondent, Prajashakti Telugu Daily, Hyderabad |

Annexure-C: List of Directives

- APTRANSCO shall segregate the SLDC accounts in full shape within a year, i.e. by 31st March 2010 and also immediately start maintaining separate asset registers on prospective basis. These asset registers will be inspected by the Commission Staff, from time to time. (Para28)
- 2. APTRANSCO shall file the details of completed capital works pertaining to SLDC operations along with Project Completion Certificate (PCC) and Financial Completion Certificate (FCC) as is being done for transmission projects. APTRANSCO shall also file a monthly report with the Commission on progress in capital works pertaining to SLDC operations by 25th of every month for the previous month (Para 29).
- 3. APTRANSCO shall file with the Commission an approach paper on its OFC network duly indicating a) existing capacities, b) planned future capacities c) expected surplus capacity available and d) possible ways and means to utilize the surplus capacity by November 30, 2009 (Para 30).
- 4. APTRANSCO to collect variable cost information including backing down limitation from each generating station on daily basis along with generation schedule for a complete period of three months. Using this information, it should analyze the perceived merit order benefits on expost basis for the three months period and make a presentation on this issue to the Commission by December 31, 2009(Para 35).
- 5. APTRANSCO shall file the actual costs and revenues by 25th of every month for the previous month in the format prescribed for this purpose by the Commission. APTRANSCO may also state its own observations on cost, revenues and capacities along with the monthly report (Para 48).

| Generating | APTRANSCO | | | | | APERC | | | | |
|------------------------------|-----------|---------|------------|------------|------------|---------|----------|------------|------------|------------|
| Station/Source | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| APGENCO | | | | | | | | | | |
| VTPS I | 381 | 381 | 381 | 381 | 381 | 381 | 381 | 381 | 381 | 381 |
| VTPS II | 381 | 381 | 381 | 381 | 381 | 381 | 381 | 381 | 381 | 381 |
| VTPS III | 381 | 381 | 381 | 381 | 381 | 381 | 381 | 381 | 381 | 381 |
| RTPP I | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 | 380 |
| KTPS A | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 217 |
| KTPS B | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 217 |
| KTPS C | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 217 |
| KTPS D | 453 | 453 | 453 | 453 | 453 | 453 | 453 | 453 | 453 | 453 |
| KTPS VI | 0 | 453 | 453 | 453 | 453 | 0 | 453 | 453 | 453 | 453 |
| RTS B | 57 | 57 | 57 | 57 | 57 | 57 | 57 | 57 | 57 | 57 |
| RTPP-II | 382 | 382 | 382 | 382 | 382 | 382 | 382 | 382 | 382 | 382 |
| VTPS IV | 463 | 463 | 463 | 463 | 463 | 463 | 463 | 463 | 463 | 463 |
| RTPP-III | 191 | 191 | 191 | 191 | 191 | 0 | 191 | 191 | 191 | 191 |
| RTPP-IV | 0 | 0 | 546 | 546 | 546 | 0 | 0 | 0 | 546 | 546 |
| Kakatiya TPS Stage 1 | 455 | 455 | 455 | 455 | 455 | 455 | 455 | 455 | 455 | 455 |
| Kakatiya TPS Stage II | 0 | 0 | 546 | 546 | 546 | 0 | 0 | 0 | 546 | 546 |
| IGCC Plant at Dr. NTTPS | 0 | 0 | 121 | 121 | 121 | 0 | 0 | 0 | 121 | 121 |
| Krishnapatnam TPP (JVP) | 0 | 0 | 0 | 0 | 1456 | 0 | 0 | 0 | 0 | 1456 |
| TOTAL THERMAL | 4174 | 4626 | 5840 | 5840 | 7296 | 3983 | 4626 | 4626 | 5840 | 7296 |
| MACHKUND PH AP Share | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 |
| TUNGBHADRA PH AP Share | 57 | 57 | 57 | 57 | 57 | 57 | 57 | 57 | 57 | 57 |
| USL | 238 | 238 | 238 | 238 | 238 | 238 | 238 | 238 | 238 | 238 |
| LSR | 455 | 455 | 455 | 455 | 455 | 455 | 455 | 455 | 455 | 455 |
| DONKARAYI | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| SSLM | 762 | 762 | 762 | 762 | 762 | 762 | 762 | 762 | 762 | 762 |
| SSLM LCPH | 896 | 896 | 896 | 896 | 896 | 896 | 896 | 896 | 896 | 896 |
| NSPH | 807 | 807 | 807 | 807 | 807 | 807 | 807 | 807 | 807 | 807 |
| NSRCPH | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| NSLCPH | 59 | 59 | 59 | 59 | 59 | 59 | 59 | 59 | 59 | 59 |
| POCHAMPAD PH | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| NIZAMSAGAR PH | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| PABM | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| SINGUR | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| JURALA HES | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 |
| LOWER JURALA | 0 | 79 | 198 | 238 | 238 | 0 | 0 | 198 | 238 | 238 |
| | 50 | 50 | 50 | 50 | 50 | 0 | 50 | 50 | 50 | 50 |
| Nagarjuna Sagar Tail Pond | | | | | | | | | | |
| | 89 | 119 | 119 | 119 | 119 | 0 | 119 | 119 | 119 | 119 |
| Tail Pond | 89 | 119 | 119 154 | 119 309 | 119 309 | 0 | 119 0 | 119 154 | 119 309 | 119 309 |

| Annexure-D: | Genera | ation C | apacity | for Co | ontrol I | Period | 2009-1 | 10 to 2 | 013-14 | ,MW |
|---|---------|---------|-----------|---------|----------|---------|---------|---------|---------|---------|
| Generating Station/Source | | A | APTRANSCO | 0 | | APERC | | | | |
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| POLAVARAM | 0 | 0 | 0 | 238 | 475 | 0 | 0 | 0 | 238 | 475 |
| SATTUPALLY | 0 | 0 | 594 | 594 | 594 | 0 | 0 | 0 | 0 | 594 |
| TOTAL HYDRO | 3922 | 4031 | 4977 | 5528 | 5766 | 3784 | 3952 | 4304 | 4934 | 5766 |
| MINI HYDRO&OTHERS | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Wind | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total A.P. Genco | 8110 | 8671 | 10831 | 11382 | 13075 | 7780 | 8592 | 8945 | 10788 | 13075 |
| Central Generating Stations (CGS) NTPC(SR) | | | | | | | | | | |
| Ramagundam- U1- U6 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 |
| NTPC (SR) Ramagundam -U7 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 |
| NLC TS-II Stage-I | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 114 |
| NLC TS-II Stage-II | 197 | 197 | 197 | 197 | 197 | 197 | 197 | 197 | 197 | 197 |
| NPC-MAPS | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Talcher Stage 2 | 398 | 398 | 398 | 398 | 398 | 398 | 398 | 398 | 398 | 398 |
| NTPC- Simhadri | 925 | 925 | 925 | 925 | 925 | 925 | 925 | 925 | 925 | 925 |
| SIMHADRI EXPANSION | 0 | 311 | 311 | 311 | 311 | 0 | 311 | 311 | 311 | 311 |
| Kaiga (Nuclear) Plant I&II | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 |
| Kaiga (Nuclear) Plant III | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 |
| Total Central Sector | 2715 | 3025 | 3025 | 3025 | 3025 | 2715 | 3025 | 3025 | 3025 | 3025 |
| Joint Sector Power | | | | | | | | | | |
| APGPCL-I | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| APGPCL-I | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| Total Joint Sector | 53 | 53 | 53 | 53 | 53 | 53 | 53 | 53 | 53 | 53 |
| IPPs (Independent Power Projects) | | | | | | | | | | |
| GVK | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 |
| Spectrum | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 |
| Kondapalli | 341 | 341 | 341 | 341 | 341 | 341 | 341 | 341 | 341 | 341 |
| BSES | 215 | 215 | 215 | 215 | 215 | 215 | 215 | 215 | 215 | 215 |
| GVK Extension | 213 | 213 | 213 | 213 | 213 | 171 | 171 | 171 | 171 | 171 |
| Vemagiri | 359 | 359 | 359 | 359 | 359 | 287 | 287 | 287 | 287 | 287 |
| Gowthami | 450 | 450 | 450 | 450 | 450 | 360 | 360 | 360 | 360 | 360 |
| Konaseema | 432 | 432 | 432 | 432 | 432 | 345 | 345 | 345 | 345 | 345 |
| Krishnapatnam (Ultra Mega) | 0 | 0 | 0 | 0 | 310 | 0 | 0 | 0 | 0 | 310 |
| BPL-R | 0 | 291 | 582 | 582 | 582 | 0 | 0 | 0 | 0 | 582 |
| Total IPPs | 2422 | 2713 | 3004 | 3004 | 3314 | 2131 | 2131 | 2131 | 2131 | 3023 |
| Non- Conventional Sources | | | | | | | | | | |
| Bagasee (Cogeneration) | | | | | 399 | | | | | 399 |

| Annexure-D: | Genera | ation C | apacity | for Co | ontrol I | Period | 2009-1 | 10 to 2 | 013-14 | ,MW |
|--------------------------------|-----------|---------|---------|---------|----------|---------|---------|---------|---------|---------|
| Generating Station/Source | APTRANSCO | | | | | APERC | | | | |
| Station/ Source | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Biomass Power Projects | | | | | 229 | | | | | 229 |
| Biomass (Cogeneration) | | | | | 29 | | | | | 29 |
| Mini Hydel | | | | | 274 | | | | | 274 |
| Wind | | | | | 701 | | | | | 701 |
| Waste Head (Cogeneration) | | | | | 41 | | | | | 41 |
| Municipal /Indstrl waste | | | | | 132 | | | | | 132 |
| Total Non conventional | 160 | 185 | 204 | 225 | 240 | 160 | 185 | 204 | 225 | 240 |
| MPP - (Mini Power Projects) | | | | | | | | | | |
| 1) Sri Vatsa power Ltd | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| 2) M/s LVS Power Ltd | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 |
| Total MPPS | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| OTHERS (Open Access) | | | | | | 391 | 1041 | 1091 | 1141 | 1291 |
| Third Party Sales | 462 | 462 | 462 | 462 | 462 | 462 | 462 | 462 | 462 | 462 |
| Grand Total | 13973 | 15162 | 17631 | 18203 | 20222 | 13744 | 15541 | 15963 | 17877 | 21222 |

Annexure-E: Amortization of Capital Cost for Control Period 2009-10 to 2013-14, Rs.Cr.

| Annexare E. Annorazation of capital cost for control relied 2007 to to 2013 14, 13.cr. | | | | | | | | |
|--|---------------|-----------|-------------------------------------|---|---|---|--|--|
| Year | Opn. Value | New Invst | Total value (Opn + New Invst) | Full value of amortisation per year (Annuity factor X Total Value) | Principle portion of Un-amortized value at the year end | Remarks (on New Investments) | | |
| 2009-10 | 22.74 | 9.16 | 31.90 | 5.53 | 29.24 | At Rs.1.427 Cr of amortisation, principle portion get terminated in year 2018-19 | | |
| 2010-11 | 29.24 | 9.76 | 39.00 | 7.05 | 35.45 | At Rs.1.521 Cr of amortisation, principle portion get terminated in year 2019-20 | | |
| 2011-12 | 35.45 | 9.69 | 45.14 | 8.56 | 40.64 | At Rs.1.510 Cr of amortisation, principle portion get terminated in year 2020-21 | | |
| 2012-13 | 40.64 | 4.83 | 45.47 | 9.31 | 40.24 | At Rs.0.753 Cr of amortisation, principle portion get terminated in year 2021-22 | | |
| 2013-14 | 40.24 | 4.96 | 45.20 | 10.08 | 39.17 | At Rs.0.773 Cr of amortisation, principle portion get terminated in year 2022-23 | | |

Annexure-F: Capital Investment Plan for Control Period, 2009-10 to 2013-14, Rs.Cr.

| • • • • • • • • • • • • • • • • • • • | | | , | | , |
|---------------------------------------|---------|---------|---------|---------|---------|
| ltem | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Opening Balance | 22.74 | 31.90 | 41.66 | 51.35 | 56.18 |
| New Investment | | | | | |
| SCADA pending filed inputs | 2.00 | 2.00 | 2.00 | 1.83 | 1.96 |
| New RTU | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 |
| Transducers | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| 400 KV SS OFC channel ALDC/SLDC | 2.16 | 2.76 | 3.33 | 0.00 | 0.00 |
| Micro Wave Links repl. With OFC | 2.00 | 2.00 | 1.36 | 0.00 | 0.00 |
| Total (Rs. Cr) | 9.16 | 9.76 | 9.69 | 4.83 | 4.96 |
| Grand Total | 31.90 | 41.66 | 51.35 | 56.18 | 61.14 |

Annexure-G: Generation Capacity, MW. Comparative Statement

| Financial Year | Distribution Companies | | Other Generators, Open Access | | Other Generators, Third Parties | | Total Capacity in the State | |
|-------------------|---------------------------|-------|-------------------------------------|-------|---------------------------------------|-------|-----------------------------|-------|
| i cui | FILING | APERC | FILING | APERC | FILING | APERC | FILING | APERC |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2009-10 | 13511 | 12891 | 0 | 391 | 462 | 462 | 13973 | 13744 |
| 2010-11 | 14700 | 14038 | 0 | 1041 | 462 | 462 | 15162 | 15541 |
| 2011-12 | 17169 | 14410 | 0 | 1091 | 462 | 462 | 17631 | 15963 |
| 2012-13 | 17741 | 16274 | 0 | 1141 | 462 | 462 | 18203 | 17877 |
| 2013-14 | 19760 | 19469 | 0 | 1291 | 462 | 462 | 20222 | 21222 |

Annexure-H: Capital Cost, Rs.Cr. Comparative Statement

| Financial Year | Proposed Annual Investments | | Capital Cost* on Proposed Investments | | Capital Cost* on Previous Investments | | Total Capital Cost | |
|-------------------|--------------------------------|-------|---|-------|---|-------|-----------------------|-------|
| | FILING | APERC | FILING | APERC | FILING | APERC | FILING | APERC |
| End of 2008-09 | 49.68 | 26.37 | 4.13 | 0.00 | 4.10 | 4.10 | 8.23 | 4.10 |
| 2009-10 | 15.27 | 9.16 | 2.70 | 1.43 | 8.23 | 4.10 | 10.94 | 5.54 |
| 2010-11 | 9.98 | 9.76 | 1.77 | 1.52 | 10.94 | 5.54 | 12.70 | 7.06 |
| 2011-12 | 6.92 | 9.69 | 1.22 | 1.51 | 12.70 | 7.06 | 13.93 | 8.57 |
| 2012-13 | 2.21 | 4.83 | 0.39 | 0.75 | 13.93 | 8.57 | 14.32 | 9.32 |
| 2013-14 | 2.20 | 4.96 | 0.39 | 0.77 | 14.32 | 9.32 | 14.71 | 10.09 |
| Total | 36.58 | 38.40 | 6.47 | 5.98 | 60.12 | 34.59 | 66.60 | 40.58 |

^{*}The amount of amortized investments.

Notes: Row totals exclusive of first row. Totals may not tally due to rounding off.

Annexure-I: Operating Cost, Rs.Cr. Comparative Statement

| Financial Year | Employee Cost | | Administration and General Expenses | | Repairs and Maintenance Expenses | | Total Operating Cost | |
|-------------------|---------------|--------|---|-------|--|-------|-------------------------|--------|
| | FILING | APERC | FILING | APERC | FILING | APERC | FILING | APERC |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2009-10 | 19.74 | 19.36 | 2.95 | 2.90 | 6.11 | 3.66 | 28.80 | 24.33* |
| 2010-11 | 21.63 | 21.00 | 3.21 | 3.14 | 6.41 | 3.95 | 31.25 | 28.10 |
| 2011-12 | 23.25 | 22.85 | 3.49 | 3.42 | 5.68 | 4.24 | 32.42 | 30.51 |
| 2012-13 | 25.04 | 24.85 | 3.80 | 3.72 | 6.15 | 4.46 | 34.99 | 33.02 |
| 2013-14 | 26.99 | 26.99 | 4.14 | 4.14 | 7.77 | 4.68 | 38.90 | 35.81 |
| Total | 116.65 | 115.05 | 17.59 | 17.31 | 32.12 | 20.99 | 166.36 | 151.77 |

^{*} After deducting 1.58 Cr. claw back amount. **Notes:** Totals may not tally due to rounding off.

Annexure-J: Annual Fee and Operating Charge, Comparative Statement

| Financial | | al Fee W/Yr) | Operating Charges (Rs/MW/Month) | | |
|-----------|---------|-----------------|------------------------------------|---------|--|
| Year | FILING | APERC | FILING | APERC | |
| 1 | 2 | 3 | 4 | 5 | |
| 2009-10 | 7827.26 | 4028.15 | 1717.60 | 1475.41 | |
| 2010-11 | 8378.40 | 4540.95 | 1717.56 | 1506.66 | |
| 2011-12 | 7899.75 | 5366.78 | 1532.34 | 1592.76 | |
| 2012-13 | 7866.39 | 5213.18 | 1601.84 | 1539.29 | |
| 2013-14 | 7273.54 | 4755.66 | 1603.04 | 1406.08 | |

Acronyms and Abbreviations

ABT Availability Based Tariff
ALDCs Area Load Dispatch Centers
AMC Annual maintenance Contract

APERC Andhra Pradesh Electricity Regulatory Commission

ARR Annual Revenue Requirement

CC Capital Cost

CGS Central Generating Stations

Crs Crores

DISCOMs Distribution Companies

EMS Energy Management System

EBC Energy Billing Centre
FPT Filing on Proposed Tariffs

GoAP Government of Andhra Pradesh

Gol Government of India

IPPs Independent Power Producers

LD center Load Despatch Centre

LTSA Long Term Service Agreement MNCs Multi- National Companies

MWs Mega-watts

MYT Multi-Year Tariff

NCE Non- Conventional Energy
NLDC National Load Dispatch Centre

NTPC National Thermal Power Corporation Ltd.

O & M Operation and Maintenance

OA Open Access

PLCC Power Line Carrier Communication

POWERGRID Power Grid Corporation of India Limited

R&M Repairs and Maintenance

RDCC Regional data collection centers
RLDC Regional Load Despatch Centre

RTUs Remote Terminal Units
SAC State Advisory Committee

SCADA Supervisory Control and Data Acquisition

SEMs Special Energy Meters
STU State Transmission Utility
ULDC Unified Load Despatch Centre

UPS systems Uninterrupted Power Supply Systems

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