

TARIFF ORDER
of
CSPDCL for FY 2014-15
and
Final True-up for Previous Years
of
CSPGCL, CSPTCL, SLDC & CSPDCL

Chhattisgarh State Power Generation Company Limited
[Petition No. 05 of 2014]

Chhattisgarh State Power Transmission Company Limited
[Petition No. 06 of 2014]

Chhattisgarh State Load Dispatch Centre, CSPTCL
[Petition No. 08 of 2014]

Chhattisgarh State Power Distribution Company Limited
[Petition No. 07 of 2014]

CHHATTISGARH STATE
ELECTRICITY REGULATORY COMMISSION, RAIPUR

12th JUNE 2014

**CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION
RAIPUR**



| | | |
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| Chhattisgarh State Power Generation Co. Ltd. | | P. No. 05/2014(T) |
| Chhattisgarh State Power Transmission Co. Ltd | | P. No. 06/2014(T) |
| Chhattisgarh State Load Dispatch Centre | | P. No. 08/2014(T) |
| Chhattisgarh State Power Distribution Co. Ltd. | | P. No. 07/2014(T) |

**Present: Narayan Singh, Chairman
 Vinod Shrivastava, Member**

In the matter of –

1. Chhattisgarh State Power Generation Company Ltd. (CSPGCL) for final true up for FY 2011-12 & FY 2012-13 for thermal plants and final true up for FY 2010-11 to FY 2012-13 for Hasdeo Bango and Small Hydro Plant (SHPs).
2. Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) for final true up for FY 2011-12 & FY 2012-13 and revision of ARR and determination of Transmission tariff for FY 2014-15,
3. Chhattisgarh State Load Dispatch Centre (SLDC) for final true up for FY 2010-11 to FY 2012-13 and revision of ARR for FY 2014-15 and
4. Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) for approval of final true up for 2011-12, provisional true up for FY 2012-13, revision of ARR for FY 2014-15 and retail tariff determination for FY 2014-15.

ORDER

(Passed on 12.06.2014)

1. As per provisions of the Electricity Act, 2003 (hereinafter referred as 'the Act') and the Tariff Policy the Commission has notified the Chhattisgarh State Electricity Regulatory Commission (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2012 (hereinafter referred as 'MYT Regulations, 2012') for determination of tariff for generating company and licensees. The Commission has also notified Chhattisgarh State Electricity Regulatory Commission (Fees and charges of State Load Despatch Centre and other related matters) Regulations, 2012 (hereinafter referred as 'SLDC fee and charges Regulations, 2012') for determination of fees and charges of SLDC.
2. This order is passed in respect of the petitions filed by the (i) Chhattisgarh State Power Generation Company Ltd. (CSPGCL) for final true up for FY 2011-12 & FY 2012-13 for thermal plants and final true up for FY 2010-11 to FY 2012-13 for Hasdeo Bango and SHPs (ii) Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) for final true up for FY 2011-12 & FY 2012-13 and revision of ARR and determination of Transmission tariff for FY 2014-15, (iii) State Load Dispatch Centre (SLDC) for final true up for FY 2010-11 to FY 2012-13 and revision of ARR for FY 2014-15 and (iv) Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) for approval of final true up for 2011-12, provisional true up for FY 2012-13, revision of ARR for FY 2014-15 and retail tariff determination for FY 2014-15.
3. This order is passed under the provisions of Section 32(3), Section 45 and 62 read with Section 86(1) of the Act. This combined order is passed by the Commission on the four separate petitions filed by CSPGCL, CSPTCL, SLDC and CSPDCL after having considered all the information and documents filed with the said petitions, the information made available to the Commission after technical validation, and after having heard the applicant companies, the consumers, their representatives and other stakeholders in the hearings held by the Commission.

4. The petitions submitted by CSPGCL, CSPTCL, SLDC and CSPDCL were found to be deficient in information to be provided as per the requirements specified in the "MYT Regulations, 2012" and "SLDC fee and charges Regulations, 2012" for which the Commission issued a letter highlighting the data gaps / shortcomings in the petitions and the response for the same was provided by Companies and SLDC. Subsequently the petitions were registered for CSPGCL (Petition no. 5 of 2014), CSPTCL (Petition no. 6 of 2014), SLDC (Petition no. 8 of 2014) and CSPDCL (Petition no. 7 of 2014) on 31/12/2013, 30/12/2013, 31/12/2013 and 31/12/2013 respectively.
5. The petitions were made available on the website of the Commission as well as the petitioners and were also made available at the offices of the petitioners. A public notice along with the gist of the petitions was also published in the newspapers. Suggestions / objections were invited as per the procedure laid down in the Regulations. Further, the Commission conducted a hearing at Raipur on the Petitions on 21.05.2014. Subsequently, on 22.05.2014 representatives from industries / HT Consumers / Industrial Associations were invited separately to present their suggestions / objections. Commission has also convened a meeting with Members of State advisory Committee for seeking their valuable suggestions and comments. Taking into account all the suggestions / objections and after performing necessary due diligence on each of the issue, the Commission has finalised its views. The summary of the Commission's views in the matter of the said petitions is outlined in the subsequent paragraphs.
6. In the tariff order for FY 2013-14 passed on 12.07.2013, the Commission had approved the final true up till FY 2010-11 and provisional true up of ARR for the FY 2011-12 and ARR for FY 2013-14 to FY 2015-16 for CSPGCL, CSPTCL and CSPDCL. In the Tariff Order dated 09.07.2013 the Commission had approved the ARR for SLDC for the control period form FY 2013-14 to FY 2015-16.
7. As per MYT Regulations, 2012, no revision in the ARR for FY 2014-15 is permitted for CSPGCL and CSPTCL while for CSPDCL, only the power purchase cost is allowed to revised based on latest available projections pertaining to the quantum and cost of power. In line with the same, the Commission has undertaken the final true up for FY 2011-12 and FY 2012-13 for CSPGCL (Thermal plants), CSPTCL and

CSPDCL. For SLDC and CSPGCL (Hasdeo Bango and SHPs), the final true-up for FY 2010-11 to FY 2012-13 has been undertaken. In this tariff order, the Commission has also complied with the directions given by the Hon'ble Appellate Tribunal in the matter of appeal No. 173 of 2012 and review petition no. 5/2014.

- 8.** For Final True up of FY 2011-12 and FY 2012-13, the provisions of the CSERC (Terms and Conditions of determination of tariff according to Multi-Year Tariff principles) Regulations, 2010 have been considered and the provisions of the MYT Regulations, 2012 have been considered for the determination of Tariff for FY 2014-15. These Regulations embody the principles for determination of tariff enunciated in the Act. In passing this order, the Commission has also been guided by the National Electricity Policy (NEP), 2005 and Tariff Policy, as mandated under the provisions of the Act. The Commission has taken care to ensure that the revenue requirements of the companies are based, on reasonable and prudent expenditure required to serve the consumers efficiently and effectively.
- 9.** For CSPGCL & CSPTCL, based on the Final True up till FY 2012-13, the revenue surplus along with holding cost has been considered in the ARR of CSPDCL for the FY 2014-15 which is Rs. 27.47 Crore & Rs. 401.06 Crore respectively. Similarly, for CSPDCL, based on the Final True up till FY 2012-13, the revenue gap along with carrying cost has been considered in the ARR of CSPDCL for the FY 2014-15 which is Rs. 664.73 Crore.
- 10.** For CSPGCL, the ARR of FY 2014-15 for various plants has already been approved in MYT Order dated 12.07.2013. For SLDC, ARR of FY 2014-15 is same as approved in last Order dated 09.07.2013. CSPTCL has filed ARR for FY 2014-15 of Rs. 766.35 Crore. However, the Commission in line with the provisions of MYT Regulations, 2012 has not revised the ARR but retained the approved ARR of Rs. 765.64 Crore as specified in the MYT Order dated 12.07.2013. Based on the same, the Transmission charge for FY 2014-15 has been calculated and same is specified in tariff schedule chapter of this order. Transmission losses at the rate of 4.30% for the energy scheduled for transmission at the point or points of injection shall be recoverable from open access customers.

- 11.** CSPDCL had projected the Sales for FY 2014-15 at 16903 MUs considering actual sales for FY 2012-13 for each consumer category as the base. Further, CSPDCL has projected its Gross Energy Requirement based upon its sales projection for FY 2014-15 and loss reduction trajectory approved during the MYT control period. CSPDCL has projected the Power purchase quantum of 23,806 MUs at an average rate of Rs. 2.89 per unit resulting into the total power purchase cost of Rs. 6889.69 Crore. The Commission has applied the CAGR on the approved the sales for FY 2012-13 and approved the projection of sales for FY 2014-15 at 16903MUs. Based on the same, the Commission has approved the Power purchase quantum of 23808 MU and the Power purchase cost of Rs. 6377.19 Crore resulting into the average power purchase rate of Rs. 2.24 per unit. The Commission has not approved any changes in the ARR for FY 2014-15 other than power purchase cost and retained the same as approved in MYT Order dated 12.07.2013.
- 12.** It is noted that the State Government on its part has issued a subsidy of Rs. 465 Crore to bridge a part of revenue gap for the year 2014-15.
- 13.** CSPDCL in its petition has filed standalone deficit of Rs. 1807 Crore for FY 2014-15. However, the cumulative deficit works out to Rs.3128 Crore for FY 2014-15 after including the revenue deficit and carrying cost based on final true up for FY 2011-12 & FY 2012-13 along with the standalone deficit for FY 2014-15.
- 14.** The Commission after prudence check and scrutiny has arrived at a cumulative revenue gap of Rs. 807 Crore for FY 2014-15 after adjusting the cumulative surplus of CSPGCL and CSPTCL and the subsidy from the State Government. Based on the above, the Commission has approved revised tariff schedule which shall be applicable for a period of nine (9) months during the FY 2014-15. The estimated revenue recovery at existing tariff for 3 months and at revised tariff for 9 months would be sufficient to meet the revenue requirements for CSPDCL for the FY 2014-15. The Commission has also complied with the direction of the Hon'ble Appellate Tribunal given in Order 173 of 2012 dated 18.12.2013 where it was directed to calculate revenue based on no. of months for which it is applicable and also not to create any regulatory asset in normal condition.

15. As regards to tariff categories, the Commission made following additions/ changes in the tariff categories in this order in respect to the tariff categories in the previous tariff order:
- i. For LV- domestic category, the existing slab of 1-100 units & 101-200 units is now merged and replaced by revised slab of 0 to 200 units for which same tariff shall be applicable.
 - ii. For LV-non domestic category, the fixed charges are presently linked to energy consumption i.e. in Rs./kWh. This structure has basic lacuna that consumer having good load factor have to pay higher charges. To overcome this problem and to make recovery of fixed charges more appropriate, fixed charges based on connected load has been introduced.
 - iii. Peak hour Charges: All LV-2 (Non-Domestic) and LV-5 (LT Industrial) consumers having a connected load / contracted load of 50 HP or 37 kW shall be required to pay 130% of normal rate of energy charges for the energy consumed during peak hours i.e. 6 P.M. to 11 P.M.
 - iv. Load Management Charges: All the LT consumers except BPL and LV-3 (Agriculture) will be required to pay Rs. 10 per month per connection.
 - v. To encourage energy consumption, one more optional tariff is proposed for HV 1- Steel Industries which consumes minimum of 70% load factor annually. Lower energy charges are applicable in the optional tariff and consumer has to opt for the tariff for minimum of 1 year to avail benefit of the same.
16. For ready reference the tariff schedule to be applicable in reference to this order is appended herewith as **Schedule**.
17. The True-up for FY 12,FY13 and determination of revised ARR for FY15 under this order are provisional and subject to finalization as per outcome of appeal No 308 of 2013 pending for adjudication before the Hon'ble Appellate Tribunal for Electricity at present.
18. The order will applicable from 1st July, 2014 and will remain in force till 31.03.2015 or till the issue of next tariff order, whichever is later.

19. The Commission directs the Companies to take appropriate steps to implement the tariff Order. A public notice of minimum 7 days be given in accordance with the Chhattisgarh State Electricity Regulatory Commission (Details to be Furnished by the Licensees or Generating Company for Determination of Tariff and Manner of Making Application) Regulations, 2004 and the MYT Regulations, 2012 before implementation of this Tariff Order.
20. The detailed Order in reference to this combined order shall be issued shortly.


(Vinod Shrivastava)
MEMBER


(Narayan Singh)
CHAIRMAN

**CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION
RAIPUR**



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Present: Narayan Singh, Chairman
Vinod Shrivastava, Member

In the matter of –

1. Chhattisgarh State Power Generation Company Ltd. (CSPGCL) for final true up for FY 2011-12 & FY 2012-13 for thermal plants and final true up for FY 2010-11 to FY 2012-13 for Hasdeo Bango and Small Hydro Plant (SHPs).
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CORRIGENDUM ORDER

(Dated 16.06.2014)

The Commission has passed order in the above petitions 12/06/2014. In the order, some typographical error has been found on the face of record. Hence, commission hereby makes following corrections in above order.

1. In point no. 15(iii) the word "and above" is inserted as "having a connected load/contracted demand of 50HP or 37 KW and above shall be required to pay 130%".
2. In the terms and conditions of EHV and HV tariff clause no. 15 and 16 are read as follows:-

15 Open Access Charges

a) Transmission Charges

The long-term and medium-term open access customers including CSPDCL shall be required to pay the annual transmission charges approved by the Commission. Bills shall be raised for transmission charge on monthly basis by the STU (CSPTCL), and payments shall be made by the beneficiaries and long-term and medium-term open access customers directly to the CSPTCL. These monthly charges shall be shared by the long-term open access customers and medium-term open access customers as per allotted capacity proportionately. The monthly transmission charge is Rs. 63.80 Crore.

For short-term open access customer: Rs. 278/MWh (or Rs. 0.278 per kWh) for the energy computed as per the provisions made in regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% load factor for transmission. The same charges shall be applicable for both collective and bilateral transaction at the point or points of injection.

b) Energy losses for transmission

Transmission losses at the rate of 4.30% for the energy scheduled for transmission at the point or points of injection shall be recoverable from open access customers.

c) Wheeling Charges

For long-term, medium-term and short-term open access customer: Rs. 235/MWh (or Rs. 0.235 per kWh) for the energy computed as per the provisions made in regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% load factor for wheeling. The same charges shall be applicable for both collective and bilateral transaction at the point of injection.

d) Energy losses for distribution

Distribution losses at the rate of 6 % for the energy scheduled for distribution at the point or points of injection at 33 kV side of 33/11 kV sub-station.

e) Operating Charges

The short-term open access customer shall pay the operation charges to SLDC at the rates specified by Central Commission from time to time which is presently Rs. 2000 per day.

f) Reactive Energy Charges

Reactive energy charges shall be levied at the rate of 27 paise/kVARh

g) Cross Subsidy Surcharge

- i. For EHT consumers Rs. 1.278 per kWh (which is 90% of the computed value of Rs. 1.420 per kWh).
- ii. For HT consumers Rs. 0.909 per kWh (which is 90% of the computed value of Rs. 1.010 per kWh).

h) Stand by charges

The standby charges for consumers availing open access (using transmission and/or distribution system of licensee) and who draws power from the grid up to the contracted capacity of open access during the outage of generating plant/CPP shall be 1.5 times of the per kWh weighted average tariff of HT and EHT consumers which is Rs 8.31 per kWh (1.5 times of the average billing rate of Rs.5.54 per kWh). For drawl of power in excess of the contracted capacity of open access, the tariff for availing stand by support from the grid shall be two times of the per unit weighted average

tariff of HT and EHT consumers which is Rs 11.08 Per kWh (2 times of the average billing rate of Rs. 5.54 per kWh). Further, in case of outage of CPP supplying power to captive/non captive consumer who has reduced its contract demand to zero and also availed open access draws power of CSPDCL the billing of such power drawn shall be done as per the standby charges mentioned above.

Note: The settlement of energy at drawl point in respect of consumers availing open access and when the generator is on outage shall be governed by (intra-State ABT, UI charge and related matters) Regulations to be notified by the Commission and as amended from time to time. Till that time provisions of this order in the matter shall prevail

16 Provisions for renewable energy based power generating plant located in the State and supplying power to consumers (located in the State) through open access.

The charges related to transmission and wheeling shall be 6 % of the energy input into the system for the consumer using State grid for procuring power from renewable energy based power generating stations located in the State. Other than these charges, they shall not be required to pay any transmission charges or wheeling charges either in cash or kind.

For open access consumers procuring power from renewable energy based power generating plant, the cross subsidy surcharge payable shall be 50% of the cross subsidy surcharge determined for that year.

- i. For EHT consumers Rs 0.710 per kWh (which is 50% of the computed value of Rs 1.420 per kWh).
- ii. For HT consumers Rs. 0.505 per kWh (which is 50% of the computed value of Rs 0.909 per kWh).

In case of open access consumer drawing power from biomass based power generating plants, if it is established that the biomass based power generating plants supplying power to such open access consumer has used biomass in the lesser ratio than as mentioned in the guidelines of the Ministry of New and Renewable Energy during any financial year then the relaxations at (i) and (ii) above given to the open

access consumer shall be treated as withdrawn for that financial year and the biomass generator shall be liable to pay to CSPDCL full open access charges.

All the concerned be informed accordingly.


(Vinod Shrivastava)
MEMBER


(Narayan Singh)
CHAIRMAN

**CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION
RAIPUR**



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Present: Narayan Singh, Chairman

Vinod Shrivastava, Member

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CORRIGENDUM ORDER-2

(Dated 16.06.2014)

The Commission has passed order in the above petitions 12/06/2014. In the order, some typographical error has been found on the face of record. Hence, commission hereby makes following corrections in above order.

1. **In point no. 9** "...ARR of CSPDCL for the FY 2014-15 which is Rs. 664.73 Crore. ..." **read as** "...ARR of CSPDCL for the FY 2014-15 which is Rs. 758.74 Crore...."
2. **In point no. 14** "...a cumulative revenue gap of Rs. 807 Crore..." **read as** "... a cumulative revenue gap of Rs. 899.55 Crore...."
3. **Point no. 15(iv) is removed.**

All the concerned be informed accordingly.


(Vinod Shrivastava)
MEMBER


(Narayan Singh)
CHAIRMAN

LIST OF ABBREVIATIONS

| Abbreviation | Description |
|----------------|---|
| A&G | Administrative and General |
| ATE | Appellate Tribunal for Electricity |
| ARR | Aggregate/ Annual Revenue Requirement |
| CERC | Central Electricity Regulatory Commission |
| CGS | Central Generating Stations |
| COD | Date of Commercial Operation |
| CSEB | Chhattisgarh State Electricity Board |
| CSERC | Chhattisgarh State Electricity Regulatory Commission |
| CSPDCL | Chhattisgarh State Power Distribution Company Limited |
| CSPGCL | Chhattisgarh State Power Generation Company |
| CSPHCL | Chhattisgarh State Power Holding Company Limited |
| CSPTCL | Chhattisgarh State Power Transmission Company Limited |
| CSPTCL | Chhattisgarh State Power Trading Company Limited |
| CWIP | Capital Work in Progress |
| DPS | Delayed Payment Surcharge |
| EMS | Energy Management System |
| FY | Financial Year |
| GCV | Gross Calorific Value |
| GFA | Gross Fixed Assets |
| GoCG | Government of Chhattisgarh |
| GoI | Government of India |
| HT | High Tension |
| kCal | Kilocalorie |
| kg | Kilogram |
| kV | Kilovolt |
| kVA | Kilovolt-ampere |
| kVAh | Kilovolt-ampere-hour |
| kW | Kilowatt |

| Abbreviation | Description |
|---------------------|--|
| kWh | Kilowatt-hour |
| MAT | Minimum Alternative Tax |
| MI | Millilitre |
| MMC | Monthly Minimum Charges |
| MT | Million Tonnes |
| MU | Million Units |
| MYT | Multi Year Tariff |
| NCE | Non-Conventional Sources of Energy |
| NTI | Non-Tariff Income |
| O&M | Operations and Maintenance |
| PF | Power Factor |
| PLF | Plant Load Factor |
| PLR | Prime Lending Rate |
| PPA | Power Purchase Agreement |
| R&M | Repair and Maintenance |
| RoE | Return on Equity |
| Rs | Rupees |
| SBI | State Bank of India |
| SCADA | Supervisory Control and data Acquisition |
| SERC | State Electricity Regulatory Commission |
| SHP | Small Hydro Plant |
| SLDC | State Load Dispatch Centre |
| SLM | Straight Line Method |
| T&D Loss | Transmission and Distribution Loss |
| UI | Unscheduled Interchange |

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1. BACKGROUND AND SALIENT FEATURES OF THE ORDER

1.1 Background

The process of restructuring of the erstwhile Chhattisgarh State Electricity Board (CSEB) was initiated by the State Government in pursuance of the provisions of part XIII of the Electricity Act, 2003 (herein after referred as the EA, 2003). The Government of Chhattisgarh (GoCG) vide notification No. 1-8/2008/13/1 dated 19th December 2008 issued the CSEB Transfer Scheme Rules, 2008 with effect from 1st January 2009. As per the rules, the erstwhile CSEB was unbundled into five independent companies i.e. Chhattisgarh State Power Generation Company Limited (CSPGCL), Chhattisgarh State Power Transmission Company Limited (CSPTCL), Chhattisgarh State Power Distribution Company Limited (CSPDCL), Chhattisgarh State Power Trading Company Limited (CSPTTrCL) and Chhattisgarh State Power Holding Company Limited (CSPHCL). The assets and liabilities of erstwhile CSEB have been allocated to the successor Companies w.e.f. 1st January 2009 according to the provisions of the CSEB Transfer Scheme Rules, 2010.

The CSPGCL filed truing up of thermal plants for FY 2011-12 and FY 2012-13 along with truing up for hydro plants and Small Hydro Plants (SHPs) for the control period for FY 2010-11 to FY 2012-13. The CSPTCL has filed Petition for final truing up for FY 2011-12 and FY 2012-13 and approval of revision of ARR for FY 2014-15. The CSPDCL has filed final truing up for FY 2011-12 and provisional truing up for FY 2012-13. The CSPDCL has also filed the revised ARR for FY 2014-15 along with the tariff proposal. They have also pleaded to consider appropriate changes to effect the judgement dated 18.12.2013 of Hon'ble APTEL in the appeal filed by the CSPDCL against the order dated 28th April 2012. The CSPDCL requested to consider and determine the amounts for recovery in FY 2014-15 through an appropriate tariff for the year in the aforesaid circumstances, and the same shall be subject to the outcome of the Appeal No. 308 of 2013 pending before the Hon'ble APTEL. The SLDC has submitted the truing up from FY 2010-11 to FY 2012-13, Annual Performance Report for FY 2013-14 and ARR for FY 2014-15. Under the provisions of Section 33 (4) of the EA, 2003, the mandate of determination of tariffs is vested in the Chhattisgarh State Electricity Regulatory Commission (hereinafter referred to as the Commission).

1.2 The Electricity Act, 2003, Tariff Policy and Regulations

Section 61 of the EA, 2003 stipulates the guiding principles for determination of the tariff by the Commission and mandates that the tariff should 'progressively reflect cost of supply of electricity, reduce cross subsidy, safeguard consumers' interest and

recover the cost of electricity in a reasonable manner. This Section also stipulates that the Commission while determining the tariff shall be guided by the principles and methodologies specified by the Central Electricity Regulatory Commission for determination of the tariff applicable to generating companies and transmission licensees.

Section 62 and section 33 (4) of the EA, 2003 stipulates the Commission shall determine the tariff for:

- Supply of electricity by a generating company to a distribution licensee;
- Transmission of electricity;
- Wheeling of electricity and
- Retail sale of electricity.

The Tariff Policy notified by the Government of India in January 2006, provides the framework to balance the conflicting objectives of attracting investments to ensure availability of quality power and protecting the interest of consumers by ensuring that the electricity tariffs are affordable.

The Commission has set up the necessary regulatory framework within which of tariff may be done in an open and transparent manner. The Commission has notified the necessary Regulations, which have impact on tariff setting principles and norms.

1.3 Brief Note on Tariff Filing and Hearing

The Commission notified Chhattisgarh State Electricity Regulatory Commission (Terms and Conditions of Determination of Tariff according to Multi-Year Tariff Principles) Regulations, 2010 (hereinafter referred to as MYT Regulations, 2010), in January, 2010. The Companies filed their first MYT petitions in 2010. The Commission also notified Chhattisgarh State Electricity Regulatory Commission (Fees and charges of State Load Despatch Centre and other related matters) Regulations, 2010 (hereinafter referred to as SLDC Regulations, 2010) and Chhattisgarh State Electricity Regulatory Commission (Terms and conditions for determination of generation tariff and related matters for electricity generated by plants based on non-conventional sources of energy) Regulations, 2008 (hereinafter referred to as NCE Regulations, 2008).

The three power companies i.e. CSPGCL, CSPTCL and CSPDCL and the SLDC submitted to the Commission separate petitions for determination of ARR for the MYT control period from FY 2010-11 to FY 2012-13, and for determination of tariff for Generation, Transmission and SLDC for the same Control Period and Retail Tariff

for FY 2010-11. The Commission subsequently issued the Order on MYT Petitions of CSPGCL, CSPTCL, SLDC and CSPDCL for FY 2010-11 to FY 2012-13 and Retail Tariff Order for FY 2011-12 (the MYT Order) on 31st March 2011.

The Commission earlier issued the Order on APR and Tariff Petitions for FY 2012-13 on 28th April 2012. In that tariff order, the Commission carried-out the provisional truing up for FY 2010-11, Annual Performance Review for FY 2011-12, revision of Annual Revenue Requirement and determination of tariff for FY 2012-13 for CSPDCL, CSPTCL and CSPGCL.

In accordance with the Chhattisgarh State Electricity Regulatory Commission (Terms and conditions of determination of tariff according to Multi-Year tariff Principles) Regulations, 2012 (hereinafter referred to as MYT Regulations, 2012) and SLDC Regulations, 2010, the three power companies CSPGCL, CSPTCL and CSPDCL, and the SLDC have now filed before the Commission the petitions for truing up and determination of tariff for FY 2014-15 in December 2013. The CSPGCL filed truing up of thermal plants for FY 2011-12 and FY 2012-13 along with truing up for hydro plants and SHPs for the control period for FY 2010-11 to FY 2012-13. The CSPTCL has filed before the Commission its Petition on final truing up for FY 2011-12 and FY 2012-13. The CSPDCL has filed final truing up for FY 2011-12 and provisional truing up for FY 2012-13. The CSPDCL has also filed the revised ARR for FY 2014-15 along with the tariff proposal. The SLDC has submitted the truing up from FY 2010-11 to FY 2012-13 Annual Performance Review for FY 2013-14 and ARR for FY 2014-15. After preliminary scrutiny, the Commission registered the petitions submitted by the three companies as Petition No. 05 of 2014 for CSPGCL, 06 of 2014 for CSPTCL, 07 of 2014 for CSPDCL and 08 of 2014 for SLDC.

The Commission directed the companies to publish the abridged version of the petition in Hindi and English newspapers for inviting comments / objections / suggestions from the stakeholders. The petitions were made available on the website of the Commission as well as of the petitioners along with summary in Hindi version also. As required under clause 21 of the CSERC (Details to be furnished by licensee etc.) Regulations, 2004, public notices inviting suggestions /comments/objections from the stakeholders on the above proposals were published in the leading newspapers of the state on 05th March 2014 by CSPGCL, CSPTCL and SLDC and on 26th April 2014 by CSPDCL. A period of twenty one (21) days was given by the Commission for submission of written objections and suggestions by the public. The Commission also directed the companies to submit written replies to the Commission with copies endorsed to the objectors. The objections raised by the stakeholder have been dealt separately in Section 2 of this order. The Commission also sent the copy of

the abridged Hindi and English version of the tariff petition to all the members of the State Advisory Committee of the Commission on 29th February 2014 for their comments.

The Commission received objections and suggestions from stakeholders on a variety of issues, which are detailed in the chapter 2 of this order.

Notices for hearings under section 94(2) of EA 2003 were published in the following leading newspapers of the State.

Table 1: List of News Papers in which notice of hearing was published

| News Paper Name | Date of notice Published |
|---|--------------------------|
| Nav Bharat (Raipur and Bilaspur Edition) , Patrika (Raipur Edition), Dandkaranya (Jagdalpur Edition), Haribhoomi (Raipur and Bilaspur Edition), Hitvada (Raipur Edition) | 06/05/2014 |
| Central Chronicle (Raipur Edition), Dainik Bhaskar (Raipur and Bilaspur Edition), Nai Duniya (Raipur Edition), Desh Bandhu (Raipur Edition), AmbikaVani (Ambikapur Edition) | 13/05/2014 |

The Commission held hearings with a view to give adequate opportunity of personal hearing to the objectors. Hearing was held not only on the representations / comments received but an opportunity was also given for open hearing to all the participants, irrespective of whether they have submitted written objections / comments on the tariff application or not, at the following places in the State:

Table 2: Details of Hearing

| Date | Venue for hearing | Time and consumer category |
|------------|--|--|
| 21/05/2014 | Chhattisgarh State Power Holding Company, “Krida Bhavan”, Daganiya, Raipur | All consumers |
| 22/05/2014 | CSERC, Raipur | Cement Manufacturers, Mini Steel Plants Association, Chhattisgarh Udyog Mahasangh, South East Central Railway. |

For the purpose of the Petitions filed by the three State Power Companies (CSPGCL, CSPTCL and CSPDCL), the Commission has considered MYT Regulations, 2010 for truing up for the period FY 2010-11 to FY 2012-13; and in accordance with MYT Regulations, 2012 for determination of tariff for FY 2014-15. Final truing up of SLDC for FY 2010-11 to 2012-13 is carried out as per the SLDC Regulations, 2010.

In issuing the instant order, the Commission has also been guided by the National Electricity Policy (NEP), 2005 and the Tariff Policy (TP), 2006, as mandated under the provisions of the EA, 2003. The methodology adopted in tariff order for FY 2010-11 to FY 2012-13, has been adopted for truing up of for FY 2010-11 to FY 2012-13. The Commission has taken care to ensure that as far as possible, the revenue requirement of CSPGCL, CSPTCL, SLDC and CSPDCL is based on reasonable and prudent expenditure, required to enhance operational efficiency of the overall power system and improve the quality of service to the consumers, in the state of Chhattisgarh.

1.4 State Advisory Committee Meeting

A meeting of the State Advisory Committee (SAC), constituted under section 87 of the EA 2003, was convened on 19/05/2014 to discuss the tariff petitions and to seek advice of the SAC. The SAC members were also appraised regarding the appeal filed by CSPDCL before the Hon'ble APTEL against the order dated 12.07.2013 (appeal 308/2013). The companies have given power point presentation in the meeting on the salient features of the tariff petitions.

During the meeting various issues have been pointed out by members of SAC like load shedding particularly during the peak hours for industries, load shedding in Atal Jyoti feeders, wages to contract labourers of State Power Companies, recruitment of helpers for improving services at ground level, security deposit and interest on security deposit, establishing Consumer Grievance Redressal Forum at Durg.

1.5 Layout of the Order

This order is organised into following chapters

- i. Chapter 1 – Background and salient features of the order;
- ii. Chapter 2 – Hearing process, including the comments made by various stakeholders, the Petitioner's response and views of the Commission;

- iii. Chapter 3 – Analysis and the truing up of thermal plants for FY 2011-12 and FY 2012-13 along with truing up for hydro plants and Small Hydro Plants for the control period for FY 2010-11 to FY 2012-13;
- iv. Chapter 4 – Analysis and the truing up for FY 2011-12 and FY 2012-13, for CSPTCL;
- v. Chapter 5 – Analysis and the truing up from FY 2010-11 to FY 2012-13, for SLDC;
- vi. Chapter 6 – Analysis and the truing up for FY 2011-12 to FY 2012-13 along with approval of revised ARR for FY 2014-15, for CSPDCL ;
- vii. Chapter 7 –Tariff principles and tariff design;
- viii. Chapter 8 – Tariff Schedule approved by the Commission for FY 2014-15; and
- ix. Chapter 9 –Directives of the Commission.

The order contains the following Annexure, which are an integral part of the tariff order.

- i. Annexure 1 – List of persons who filed written submissions;
- ii. Annexure 2 – List of persons who presented their views during the hearing on 21st May 2014 and 22nd May, 2014;

2. HEARING PROCESS, INCLUDING THE COMMENTS MADE BY VARIOUS STAKEHOLDERS, THE PETITIONER'S RESPONSE AND VIEWS OF THE COMMISSION

2.1 Background

The three power companies CSPGCL, CSPTCL and CSPDCL and the SLDC have filed before the Commission the petitions for true up and determination of tariff for FY 2014-15. CSPGCL filed true up of thermal plants for FY 2011-12 and FY 2012-13 along with true up for hydro plants and SHPs for the control period for FY 2010-11 to FY 2012-13. CSPTCL have filed before the Commission their petition on final true-up for FY 2011-12 and FY 2012-13 and approval of revision of ARR for FY 2014-15. CSPDCL has filed final true-up for FY 2011-12 and provisional true-up for FY 2012-13. CSPDCL has also filed the revised ARR for FY 2014-15 along with the tariff proposal. SLDC has submitted the true up from FY 2010-11 to FY 2012-13, Annual Performance Report for FY 2013-14 and ARR for FY 2014-15. However, the petitions filed by all three companies were processed together and the common hearing was held on the Petitions.

All written objections/ suggestions received by the Commission were forwarded to the companies as and when they were received, while some of the objections were received directly by the companies. The companies were asked to submit their replies and views in respect of the objections. In addition, during the hearings some of the objectors, who had submitted their objections in writing earlier, presented their objections and suggestions personally before the Commission. Some of the participants, who have not submitted written objections earlier, were also given an opportunity to present their views on the tariff proposals. The list of objectors who filed written comments is annexed in Annexure 1 of this Order while the list of participants who presented their views during the hearing is annexed in Annexure 2 of this order.

The views and suggestions of the objectors on the petitions, the replies given by the companies and views of the Commission are discussed below.

2.2 Common Issues (related to tariff petitions)

2.2.1 Operation and Maintenance of Distribution system

The objectors raised the issues related to poor Operation and Maintenance of Distribution system.

Reply:

Noted.

Commission's View:

Though the matter does not pertain to the instant tariff petition, however such type of issues related to O&M should be brought to the knowledge of nearby office of the Distribution Company.

2.2.2 Pension and Gratuity Fund

Objectors highlighted the issue relating to Pension and Gratuity Fund and also objected the request of CSPGCL to consider various outages as uncontrollable. Objectors highlighted the provision of the Electricity Act, 2003 and Tariff Policy that past and future year expenses should not be loaded to present consumer. Amount approved by the Commission towards Pension and Gratuity Fund is contrary to the provisions of the Act and Policy and requested to adjust Rs. 3000 crore from Pension and Gratuity Fund in the ARR of future years. Regarding request of CSPGCL for considering various outages of Dr. Shyama Prasad Mukherjee (DSPM) plant under force majeure, objectors stated that these outages are due to carelessness of CSPGCL, hence it should not be considered as force-majeure outages.

In addition to above, objectors has also requested the Commission not to approve incentives on saving of O&M expenses by CSPTCL because the Commission has earlier approved higher cost under the O&M head.

Reply:

CSPDCL, CSPGCL and CSPTCL have submitted that the pension benefits of the employees are the statutory liability of the company governed under various Rules and Regulations framed under the Electricity Laws and as per MYT Regulations, 2012. All the statutory liabilities of employees are pass-through expenses of the company. In case, the P&G fund was not created then all the liabilities, which is being met through the fund, would have to be catered through tariff only. The consideration behind such a trust was that once it becomes self-sufficient then no more contribution will be required and the burden of pension liabilities of employees shall be shared by P&G fund only, which couldn't be funded fully so far. Now, the annual outgo is more than the contribution so the corpus is depleting. The investments from these trust funds cannot be subjected to any risk and so the Govt. of India has prescribed the guidelines for investments from such trusts fund, which are followed by this trust strictly.

Commission's View

The Commission appreciates the concerns/views raised by the public regarding need for Pension and Gratuity Fund. However as per Accounting Standards-15 on employee benefits, it is mandatory for the utility to maintain a fund to make payments to the employees on account of pension and gratuity. The utilities are required to make annual contribution to the fund as allowed by the Commission from time to time. Keeping in view the actuarial valuation reports, the Commission has allowed the reasonable contribution to be made to the fund. Rest of the issues has been dealt in accordance with the Regulations and EA, 2003.

2.2.3 Venue of Hearing

The hearing should be held at different locations in the State, the petitions should be available in Hindi and since it has not been provided in Hindi language, the date of hearing should be postponed.

CSPDCL Reply:

CSPDCL has submitted that it is up to the Commission to decide on this issue.

Commission's View:

CSPDCL has published synopsis of petition in Hindi on their website and also published in Hindi and English newspapers. The hearing was conducted in Hindi and all the stakeholders were given the liberty to offer their views in the language they prefer and sufficient time was given to them for offering their comments. None of the stakeholders was denied the opportunity of being heard.

2.2.4 Load shedding

Objectors have raised the issue of load shedding for 6 hours in the evening without the approval of the Commission.

CSPDCL Reply:

The Atal Jyoti scheme has been implemented with the approval of Business Plan by the Commission. The huge investment on the scheme will be fruitful only when the wide gap between demand and supply during the evening peak hours is minimized to the least.

Commission's View:

The Commission agrees with the view of CSPDCL.

2.2.5 Bundling of State power companies

State Power Companies' Reply:

No comment.

Commission's View:

The above referred issues do not pertain to the instant tariff petition and the Commission is functioning and discharging its duties according to the mandate and provisions of the EA, 2003.

2.2.6 Flat rate tariff for agriculture consumers (without meters)

CSPDCL Reply:

CSPDCL has not submitted the proposal for increase in tariff.

Commission's View:

The Commission determines tariff and categorises according to the provisions of the EA, 2003, Regulations and Tariff Policy.

2.2.7 Arrears

Objector highlighted issue relating to the huge amount of arrears by the LT, HT, State Govt., Railway and public sector undertakings consumers and highest distribution loss in the State as compared to other States.

CSPDCL Reply:

Noted.

Commission's View:

CSPDCL should review the arrear position for HT and LT consumers and also reduce the distribution losses as directed by the Commission in this order.

2.2.8 Language of Petitions

Objectors have raised issues related to availability of petitions in Hindi, free of cost.

Commission's View:

The summary of tariff petition has been made available in Hindi and also on the websites of power companies/Commission. Detailed proposal of tariff petition is also available on the website of power companies and Commission which can be downloaded.

2.2.9 Working of CSEB

Objectors raised issues related to Consumers' grievances such as erratic electricity bill, delay in release of new connections, lack of common facilities in Distribution Centres and outsourcing of staff.

Commission's View:

The above referred issues do not pertain to the instant tariff petition and the Commission is functioning and discharging its duties according to the mandate and provisions of the EA, 2003.

2.2.10 Constitution of Commission and appointment of the officers of the Commission

Objector submitted that though the Commission is an autonomous body however as the officers of the Board hold posts in the Commission, it is doubtful that they may have unbiased approach. The objector requested to include unbiased persons in the Commission.

Commission's View:

The matter related to the appointment of the Commission staff is not related to the instant Petition. However, in the interest of transparency and strengthening the public trust on the regulatory process, the Commission would like to inform that the Commission has been constituted as per provision of the Electricity Act, 2003 and as per procedure laid down in the 'Act', appointment of Chairman / Member is done by the State Government on recommendation of a selection committee headed by a Judge of the High-Court. The Commission performs its duties in accordance with the provisions specified in the Act, Guidelines and Regulations. The Commission normally recruits subordinate officers and employees through open advertisement.

The Commission conduct the proceeding for determination of tariff in a quasi-judicial manner and all its orders are appealable. The Commission strongly denies that there is any biasing in the working of the Commission.

As regards compliance to the court orders, the Commission makes amply clear that it has always complied with the orders of the judicial authorities. However, it is a settled judicial practice that pendency of a case before a competent court cannot be construed as a bar on all proceedings unless a stay has been granted by a competent court regarding the same.

2.3 Issues related to CSPDCL

2.3.1 Issues related to Cost of Supply

The objector suggested that the slab system should be abolished and none of the consumer should be supplied less than ACOS, free electricity for BPL consumers should be increased to 200 kWh, domestic tariff should be less than non-domestic tariff and billing demand of HT consumer should be amended in place of 75% of contract demand.

CSPDCL Reply:

It's the Jurisdiction of the Commission.

Commission's View:

The Commission determines tariff and categorises according to the provisions of the EA, 2003, Regulations and Tariff Policy.

2.3.2 Tariff category for Rice mills

The objectors suggested that rice mills being a food processing industries should be billed as per LV-4 (agriculture allied activities) for LT connection instead of LV-5 and HV-9 (agriculture allied activities) instead of HV-3 for HT connection.

CSPDCL Reply:

It's the Jurisdiction of the Commission.

Commission's View:

The Commission determines tariff and categorises according to the provisions of the EA, 2003, Regulations and Tariff Policy.

2.3.3 Agriculture tariff and Agriculture allied tariff

The objector suggested that the agriculture tariff and agriculture allied tariff to be merged and equipment used in farms should be charged as per agriculture tariff.

CSPDCL Reply:

It's the Jurisdiction of the Commission.

Commission's View:

The Commission determines tariff and categorises according to the provisions of the EA, 2003, Regulations and Tariff Policy.

2.3.4 Tariff for domestic consumers

Objector suggested to increase the tariff by 4 to 5 times than the applicable tariff for domestic consumers' consuming excessive electricity and also suggested to introduce demand based tariff for such consumers.

CSPDCL Reply:

CSPDCL says that cheaper electricity is available for the consumers who consumes less and costlier electricity available for those who consumes more. Some of the categories are having demand based tariff, consumer may opt accordingly.

Commission's View:

The Commission determines tariff according to the provisions of the EA, 2003, Regulations and Tariff Policy.

2.3.5 Wrong assessment of contracted load during checking

Objector has raised the issues related to connected load and its assessment during checking.

CSPDCL Reply:

Such type of cases may be redressed by the Consumer Grievances Redressal Forum.

Commission's View:

The Commission agrees with the CSPDCL's reply.

2.3.6 No compulsion for capacitor to be installed in the consumer premises

CSPDCL Reply:

Installation of capacitor is to improve power factor 0.85 or more.

Commission's View:

It is a requirement for stability of system.

2.3.7 Demand Charge

The objector submitted that the demand charge payable under HV-1 category should be Rs. 200/KVA/Month;

CSPDCL's Reply:

As far as fixation of particular tariff for a particular category is considered it is the prerogative of Hon'ble Commission only. CSPDCL as a distribution licensee only worries about the recovery of the approved Annual Revenue Requirement and not from whom it should be recovered.

Considering such request of the Association, this Hon'ble Commission carved out an optional tariff during FY 2013-14 for the Mini Steel Plant consumers with Rs. 250/KVA/Month demand charge as against the normal demand charges of Rs. 360/KVA/Month but none of the Association members ever availed this option during the entire year.

Commission's View:

The Commission has reviewed the optional tariff of HV-1 category and because none of the consumer has availed this option during FY 2013-14. The issue has been appropriately addressed in the chapter of Tariff principles and tariff design for FY 2014-15.

2.3.8 Electricity Tariff

According to objector the net effective electricity tariff for HV-1 category should not be more than Rs. 3.50/unit

CSPDCL's Reply:

As far as fixation of particular tariff for a particular category is considered it is the prerogative of Hon'ble Commission only. CSPDCL as a distribution licensee only worries about the recovery of the approved Annual Revenue Requirement and not from whom it should be recovered.

The HT and EHT Industrial and Commercial consumers are the main source of cross-subsidy under the electricity tariffs. The present approved cost of supply is Rs. 4.0/unit and the proposed average cost of supply is Rs. 4.85/unit for FY 2014-15. If the demanded net effective tariff of Rs. 3.5/unit is considered for Mini Steel Plant consumers then more than 20% of average cost of supply shall be required to be cross subsidized by other consumers. The feasibility of such demand does not appear to be workable as the same will result in steep increase of level of cross subsidies.

Commission's View:

The issue has been appropriately addressed in the chapter of Tariff principles and tariff design for FY 2014-15.

2.3.9 Time Of Day Tariff

It was suggested that the off-peak of TOD tariff should be 30% less than normal tariff.

CSPDCL's Reply:

As far as fixation of particular tariff for a particular category is considered it is the prerogative of Hon'ble Commission only. CSPDCL as a distribution licensee only worries about the recovery of the approved Annual Revenue Requirement and not from whom it should be recovered.

30% reduction in off-peak tariff as against normal tariff will certainly lead to shortfall in overall revenue of CSPDCL. It will further increase the retail tariff to meet the revenue requirement of CSPDCL.

Commission's View

The load curve was analysed as provided by SLDC and after examination, it does not appear appropriate to review this issue at this stage.

2.3.10 Revival Package

According to the objector a revival package should be extended to the Mini Steel plants.

CSPDCL's Reply:

CSPDCL has no such source of funds out of which any financial package/relief can be extended to any class of consumers as demanded under point 4 above. Therefore any desired relief can only be extended by the Govt. of Chhattisgarh.

Commission's View:

The Commission is bound by the provisions of the EA, 2003, Regulations and Tariff Policy and decides the tariff accordingly.

Issues raised by South East Central Railway (SECR)

2.3.11 Traction & Non Traction Tariff for Indian Railways

SECR submitted a memorandum opposing the tariff hike proposed by CSPDCL. SECR also made a detailed presentation during the hearing and filed rejoinder to the reply submitted by CSPDCL. The issues raised by SECR ranged from spiralling effect on economy, impact on coal transportation cost, need for reasonable traction tariff, contribution of the SECR to revenues of DISCOM, ARR filing by DISCOM without

indicating projected cost of traction tariff, abnormal hike in ACoS, etc. In its submission, presentation and the rejoinder, SECR quoted various provisions and guiding principles in favour of their contentions opposing the increase in tariff of both traction and non-traction load of railways. SECR made following prayers:-

- i. Railway is a deemed licensee under the Electricity Act, 2003, hence cross subsidy or surcharges should not be applicable to Railways
- ii. Cost of supply should be given Voltage wise and consumer category wise
- iii. Income through VCA
- iv. Article 287 of constitution of India
- v. Role of Electric Traction on Energy Security
- vi. Traction tariff should be increased based on Wholesale Price Index
- vii. Govt. of India's cabinet secretariat's letter No. 26/M/90(I) dated 12-06-1990
- viii. Concessional Tariff
- ix. Rebate
- x. Annual Plan Allocation to SEBs by Central Govt.
- xi. Abnormal hike in ACOS would result in increased Traction Tariff
- xii. Adoption of simultaneous maximum demand for billing
- xiii. Energy conservation and carbon credit initiation benefit through Electric Traction
- xiv. Co-generation of Electrical Energy by three phases Electric Locomotives and EMU's
- xv. National Tariff Policy mandates
- xvi. Revenue gap vis-à-vis efficiency improvement
- xvii. Some land mark decision for the consideration of Hon'ble Commission
- xviii. Tariff for other than traction load

CSPDCL Reply:

There is no doubt that railway is a deemed distribution licensee under the 2003 Act but that status is for the purpose of distribution and supply of electricity and not for the consumption of electricity. The CSPDCL is supplying electricity to Railways under a supply and distribution agreement as consumer. CSPDCL has already conducted voltage wise cost of supply study and submitted the report to the Hon'ble Commission for appropriate action. The increase in variable cost after issuance of

Tariff Order is taken care by the Variable Cost Adjustment which is nothing but a partial reimbursement of power purchase cost over and above the approved one. The expenditure and income on account of VCA has already been included in its true up petition. The Constitution provides a relief from tax and not tariff. Electricity duty is the tax from which the Traction supply is exempted. Tariff is determined predominantly on the basis of Power Purchase Cost which is not based on Wholesale Price Index. Further, the Tariff also includes a component of cross-subsidy which cannot be related to WPI. The Govt. of India enacted the Electricity Act 2003 to deal with the Electricity Tariff and accordingly, the tariff determination by Hon'ble Commission can only be as per provisions of 2003 Act and Rules and Regulations made there under. The 1990's letter in this scenario cannot dictate the determination of Tariff at present. Railway is a bulk consumer of CSPDCL and drawing power continuously that is why it is kept-out of the purview of TOD Tariff which prescribes higher tariffs during evening peak. It is certainly a concession. Timely payment is the responsibility of consumers and Railway in that way is our esteemed consumer. However, rebate may be considered if the payment well before due date is considered by the railways. There is no such allocation received by CSPDCL from GOI for off-setting the expenditure for extending supply lines to consumers. CSPDCL is treating its all the consumers in a non-discriminatory manner and uniformly as per provisions of applicable law. In case the railways opt to avail the total demand at one single point in the state, CSPDCL has no hitch to arrange supply for that and from that supply point; the Railway may carry forward the electricity to its different points of consumption in the state. But it is not possible for CSPDCL to supply at different distinct points and metering at one point. The SECR has already taken up this issue with the Hon'ble Commission under petition no 60 of 2009(M) and the same has already been decided by the Hon'ble Commission. A distribution licensee is supposed to function as per mandate of Electricity Act 2003 alone which does not stipulate any promotional role to play for its consumers. Any injection of power in the supply system by re-generation through electric locomotives benefits the Railways directly by reducing the overall requirement of electricity through the supply system of licensee equivalent to power re-generated. Therefore, this does not deserve any more benefit to be extended by anyone else. It is a fact which cannot be disputed and everybody has to follow the mandate as far as possible. Efficiency improvement is a gradual process to achieve and has its own limitation in an ongoing organization of the size of CSPDCL. The uncontrollable cost cannot be fully compensated by efficiency improvement as it constitutes 75% to 80% of total expenses. Hon'ble Commission always exercises prudent check on each field of performance and expenditure. It is the prerogative of Hon'ble Commission to consider and decide the

category wise tariff for consumers. CSPDCL only expects the recovery of full approved ARR through tariff and has no reservation on who will pay that.

Commission's Views:

The provision of law is very clear and at present railway is a consumer of CSPDCL. The VCA mechanism has been introduced as per the directions of the Hon'ble APTEL. It is to be noted that the VCA mechanism approved by this Commission takes care of only the fuel price variation of the State generating companies and the power purchase cost variation of the Central generating stations. The variation on the GCV of the fuel, etc. is not covered in the VCA mechanism. So the variable cost variation is partially recovered by the CSPDCL. While fixing the tariff the Commission is bound by the provisions of the EA, 2003, Regulations and Tariff Policy and decides the tariff accordingly. Regarding Annual Plan Allocation to SEBs by Central Govt. and Co-generation of electrical energy by three phases electric locomotives and EMU's, the Commission agrees with the views of CSPDCL. Regarding adoption of simultaneous maximum demand for billing, the issue is already resolved by the Commission.

2.4 Issues related to CSPGCL

2.4.1 Profit of CSPGCL

Objectors has stated that annual generation of CSPGCL is increasing every day and CSPGCL is earning profit from these increased generation, hence revenue loss of Transmission and Distribution Companies should be met by CSPGCL profit.

CSPGCL Reply:

CSPGCL has stated that they have submitted the loss of about Rs. 22 Crore at the end of FY 2012-13.

Commission's View:

The Commission determines tariff according to the provisions of the EA, 2003, Regulations and Tariff Policy.

3. FINAL TRUE-UP FOR FY 2011-12 AND FY 2012-13 FOR CSPGCL

3.1 Background

As detailed in the Chapter I - 'Background and salient features of the order', CSPGCL filed its petition for final truing up for FY 2011-12 and FY 2012-13 of thermal plants, final truing up for control period from FY 2010-11 to FY 2012-13 of Hasdeo Bango hydro power plant and SHPs namely SHP Gangrel, SHP Sikasar & SHP Korba on 31st December, 2013. The clarification has been sought vide letter dated 21st January 2014 and reply on the same was received on 30th January 2014. After detailed examination of the submission, the same has been registered by the Commission on 12th February 2014 as Petition No. 5 of 2014 (T).

Technical Validation Session (TVS) was conducted on 28th April 2014 to deliberate various issues/queries for disposal of the petition. Thereafter during prudent check of the petition, additional information was sought vide letter dated 2nd May 2014 & 26th May 2014. The replies were submitted by CSPGCL vide its letter dated 07th May 2014, 16th May 2014 & 30th May 2014.

The truing up for the period from FY 2010-11 to FY 2012-13 has been undertaken in light of the provisions of the MYT Regulations, 2010 for thermal plants & Hasdeo Bango Hydro Power Plant and provisions of NCE Tariff Regulations 2008 for small hydro power plants in line with the methodology followed in previous orders. For a generating Company, the ARR has following components:-

- Fuel and related Cost or Generation Cost
- Operation and Maintenance Cost
- Contribution to Pension Fund and Gratuity
- Depreciation
- Interest and Finance Charges
- Return on Equity
- Interest on Working Capital
- Less : Non-Tariff Income

Component wise analysis is as under:-

3.2 Final True-up for Thermal Power Plants, Hasdeo Bango Hydro Power Station & Small Hydro Plants

CSPGCL, in its true up petition, requested for truing up of Annual Revenue Requirement and revenue for the three thermal power plants of CSPGCL namely KTPS Korba East, HTPS Korba West and DSPM, Korba for FY 2011-12 and FY

2012-13. The proposal also includes the truing up for the Control period FY 2010-11 to FY 2012-13, in respect of Hasdeo Bango Hydro Power Station and the three SHPs namely SHP Gangrel, SHP Sikasar & SHP Korba.

Commission’s View:

As per MYT Regulations, 2010, the final true-up for thermal generating stations for FY 2011-12 & FY 2012-13 is undertaken.

As per position taken in the previous tariff order dated 12th July 2013, there is wide variation in the operational performance of the station which is due to natural conditions in which hydro plants operate. Hence, in case of hydro power station, true up for the whole control period from FY 2010-11 to FY 2012-13 is undertaken together. In such a case, Commission finds it fit to assess the performance of the hydro plants only at end of the 3 year MYT Control Period, to take care of year to year variations inherent in such plants. In case of co-gen plant, the Commission accepted the petitioner’s view and allowed generic tariff as per its Order dated 28th December 2011 (read with subsequent Orders as may be issued by the Commission from time to time for such plants). As no true-up is undertaken for any plant covered under generic tariff determination process, the Commission has not undertaken true-up for the co-gen station of CSPGCL.

The MYT Regulations, 2010 defines the concept of truing up separately for controllable & uncontrollable parameters; wherein ‘*efficiency linked controllable parameters*’ for generating company refer to O&M costs & norms for operation such as normative plant availability/load factor, auxiliary consumption, station heat rate, secondary fuel consumption & transit losses & ‘*un-controllable parameters*’ for generating company refer to fuel costs & costs on account of inflation, statutory taxes & cess or any other such charges.

3.2.1 True-up Philosophy

The MYT Regulations, 2010, stipulates the concept of ‘True Up’. The regulation 13 which deals with the true up for the MYT control period is reproduced as under:

“13. TRUE UP:

Truing up of the ARR and revenue earned from tariff and charges shall be done in the ensuing year along with the annual performance review of the current year.

The truing up done on the basis of un-audited / provisional account shall be subject to further final truing up, as soon as the audited account is available.

The net financial impact of true-ups shall be accounted for as per the provisions of regulation 5.9 and regulation 5.10, considering the factors like inflation, natural calamity etc. by the Commission.”

It is evident from the regulation 13.3 that financial impact of truing up is to be accounted as per provisions of regulation 5.9 and 5.10. For harmonious reading regulation 5.6 to 5.10 are reproduced as under:

“5.6 Profit-Sharing: The applicant shall present a statement of gain and loss against each efficiency linked controllable item of the Aggregate Revenue Requirement separately.

5.7 For the purpose of sharing gains and losses with the consumers, only the aggregate net gains or losses will be considered.

5.8 There shall be no cap on the profits earned from operational performance, higher than the targets specified by the Commission.

5.9 The mechanism for sharing of aggregate net gain on account of better achievement in reference to the target set shall be as under:

(a) The one-third of the aggregate net gain on account of better achievement in reference with the target set in the tariff order for efficiency linked controllable items shall be passed on to the beneficiary / consumer(s) in the form of rebate in tariff.

(b) The one-third amount of gain on account of better achievement in reference with the target set in tariff order for efficiency linked controllable items shall be credited to the tariff stabilization fund.

(c) The one-third amount of gain on account of better achievement in reference with the target set in tariff order for efficiency linked controllable items shall be retained by the generating company or the licensee as the case may be and reasonable portion of this amount should be used for funding the incentive scheme(s) for the employees for the purpose of improving performance of the respective company. Prior approval for use of above gain will be taken by the respective company from the Commission before making any expenditure from such gain so earned.

(d) The aggregate net gains on account of uncontrollable items (as per tariff order) over such period shall be passed on to beneficiaries / consumers through the next ARR and /or credited to the tariff stabilization fund, as decided by the commission.

5.10 The mechanism of sharing of aggregate net loss, if any, shall be as following:

a) The aggregate net losses on account of under achievement in reference with the target set in tariff order for efficiency linked controllable items over such period, shall be borne by the generating company or the licensee, as the case may be.

b) The aggregate net losses on account of uncontrollable items (as per tariff order) over such period shall be passed on to the beneficiaries / consumers through the next ARR and /or debited to the tariff stabilization fund, as decided by the commission.”

Thus in essence, for any year within the control period, the net financial impact of trueing up is to be decided only on the basis of gains and losses. Clearly, at the time of true up controllable parameters are not to be re-determined, only actual and normative costs are to be compared. The MYT Regulations, 2010 allows resetting of ARR due to uncontrollable factors on actual basis (gain or loss both being 100% pass through) and the net gain or loss due to controllable factors is subjected to sharing. Thus, once the impact due to uncontrollable parameters is identified and embedded, then impact of controllable parameters in respect of each component of the ARR has to be worked out separately.

In actual practice, a generating plant may perform better than the norms in respect of any efficiency linked parameters and at the same time under-perform vis-à-vis the norms in respect of some other parameters.

To work out the component wise gains or losses, first the uncontrollable and controllable parameters affecting per unit cost for that component is identified. Then the impact of uncontrollable factors is allowed on actual and per unit normative cost as well as per unit actual cost is worked out. Both are compared, if the per unit actual cost is higher than the normative cost then the difference is treated as per unit loss and if the actual cost is lower than the normative cost, then the difference is treated as gain. The per-unit gain or loss is then multiplied with the actual sent out units to arrive at the total gain or loss in relation to the specific cost component.

The gains and losses in respect of different cost components are to be netted off on aggregate basis for all the generating stations and in case there is net loss, utility will have to bear the full loss, but if there is net gain then utility shall be allowed to retain one third of such gain. In other words, if the utility performs better than the norms and there is overall net gain on account of controllable factors, then the gross ARR may go up (as the utility is allowed to retain one third share of gains) but the average per unit cost will come down, however if the performance is lower than the norms, then the end consumer is not burdened due to such inefficiency as the average tariff to beneficiary remains same as it would have been if the normative performance would have been achieved.

Review of all cost components has been done with the normative parameters applicable and gains/losses due to efficiency linked controllable factors have been computed in the following sections. The impact of uncontrollable factors has been treated as a pass through.

3.3 Final True-up of for FY 2011-12 & FY 2012-13 for Thermal Generating Stations Operational Parameters of the Thermal Generating Stations

CSPGCL submitted that it has been raising the concern regarding need for re-fixation of the norms of performance parameter for KTPS in many of its previous petitions. However, the relief has been granted only after the completion of the CPRI Report and that too from FY 2013-14 onwards. At the time of true up for FY 2010-11 and APR of FY 2011-12, CSPGCL submitted detailed reasoning regarding infeasibility of some of the yardsticks/operational norms (particularly PLF, Auxiliary Consumption, and SHR) on various grounds.

CSPGCL had engaged CPRI to conduct the study regarding the operational norms after getting the scope approved from the Commission. Study report was submitted to the Commission in March 2013. With due deliberation and prudence check, the Commission has taken cognizance of the report and in the Order dated 12th July 2013, considered benchmark parameters as per CPRI report for the second control period.

CSPGCL in its instant petition prayed that for true up of FY 2011-12 and FY 2012-13, the norms set for operational parameters (namely PLF, Auxiliary Consumption and SHR) for KTPS may be revised in line with the achievable parameters determined by the Commission on the basis of the CPRI study.

It is gathered that the Central Electricity Authority (CEA) vide their letter no 183 dated 06.05.2014 addressed to the Secretary (Energy), GoCG and a copy of which is endorsed to the Chairman CSPGCL has suggested to retire 50 MW units of KTPS by

the end of 12th five years plan and the action plan to be communicated to CEA by end of May-2014. Taking into the consideration, the suggestions of the CEA and acknowledging the fact that a sufficient quantum of power shall be available in the State in ensuing years, the Commission is of the view that the capital investment and additional capital investment approved by the Commission for KTPS plants i.e. 50 MW and 120 MW shall be withheld with immediate effect. In case of any exigencies, prior approval of any investment should be sought from the Commission.

The methodology adopted in tariff order for FY 2010-11 to FY 2012-13 has been adopted for true up for FY 2010-11 to FY 2012-13. The Commission's view on the performance parameters for the thermal generating stations during FY 2011-12 as approved in MYT Order dated 31st March 2011, as proposed by CSPGCL in its petition and as approved by Commission during final true up, are summarised in the following paragraphs:

A) Plant Load Factor (PLF)

CSPGCL requested to the Commission to consider the actual operational parameters of KTPS and HTPS and submitted that the actual PLF has been more than target approved by the Commission. In case of DSPM plant, CSPGCL has prayed for the relaxation of the PLF norms based on various force majeure conditions.

In case of DSPM, CSPGCL has submitted that during FY 2011-12, generator transformer of Unit no. 2 caught fire. The fire caused extensive damage to the generator transformer. For assessing the damage, reparability of the transformer and the reasons of accident, joint inspection were made by experts of CSPGCL and BHEL on 25th June 2011. The inference drawn by the committee is reproduced below:

“There is no evidence of failure of HV bushings. Also no sign of arcing or any other fault inside the transformer observed. The fault is external to transformer which resulted into fire and consequent damage to transformer. Looking to the extent of damage, it is clear that the transformer is not repairable at site.”

“The unit no 1 was taken out on routine overhauling w.e.f. 7th June 2012, where one of the LP turbine blades was detected with minor cracks. Immediately the same were taken for thorough inspection by BHEL (OEM) experts and subsequently few more blades were detected to be suffering from the same problem. It necessitated replacement of the complete set of old blades by new ones. CSPGCL submitted that even with the best efforts to procure blades, the non-availability of blades at BHEL as well as at other

power stations having similar units, resulted in the forced outage of the unit for 48 days. This incident took place while box up of the turbine module was in progress and contract for overhaul was with BHEL only. This negates any possibility of cracks due to sudden jerk because of mal-operation. CSPGCL further submitted that before the overhaul there was no abnormal vibration in the unit. This also proves that crack was not due to any mal-operation and deserves to be treated as 'force majeure' condition."

For FY 2012-13,

On dated 10.02.2013, unit no.1 was running at rated parameters. At about 23.05 hrs, the set encountered a severe and sudden accident. The "balancing leak off line which takes the high pressure steam to the other side of the balancing disc and thus balances the thrust acting along the axis of the rotor, got busted. It resulted in severe damage to the High Pressure Module and Intermediate Pressure Module of the Turbine. The devastating damage to the prime-mover (turbine) resulted in total outage of unit."

CGPGCL submitted that all possible efforts have been made to mitigate the losses to maximum possible extent and the remaining outage has been totally uncontrollable, unavoidable and reasons may not be attributed to CSPGCL.

Based on the above CSPGCL requested the Commission to approve the actual PLF of DSPM for trueing up purposes.

Commission's View

The Commission reiterates that the PLF norms approved for CSPGCL's generating stations in the MYT Regulations 2010 were based on the detailed deliberation and after taking cognizance of the past performance of the plants, design, vintage, age and other such factors affecting the PLF of each generating station. Thus, there is no merit in reviewing the norms in the middle of the MYT control period.

In the petition, Petitioner has claimed forced outage of unit no. 1 of DSPM for 48 days for a period of 7th June 2013 to 25th July 2013. During TVS, CSPGCL has verbally confirmed the period as 07th June 2012 to 25th July 2012. However, in written submission dated 16th May 2014, CSPGCL has confirmed the outage of DSPM from date 7th June 2011 to 25th July 2011. The Commission has noted that this is a serious negligence on part of CSPGCL and feels that CSPGCL's lack-lustre attitude towards dealing with such serious issues. The Commission has considered the outage for a period from 7th June 2011 to 25th July 2011 as per their letter dated 16th May 2014.

In case of DSPM, the Commission has examined the reasons/ justifications submitted by the petitioner on outages. Force Majeure condition is not defined in MYT Regulations, 2010, however, the position submitted by CSPGCL doesn't come under the force majeure conditions as per the provisions of Chhattisgarh State Grid Code.

Also Standard Bidding Documents (SBD) issued by Ministry of Power for medium/ long term power procurement under Case-I doesn't allow such outages as force majeure conditions. In this regard, clause 8.3 and 8.4 of the SBD is very clear, which are reproduced below:

“8.3 Force Majeure

8.3.1 A 'Force Majeure' means any event or circumstance or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:

i. Natural Force Majeure Events

act of God, including, but not limited to lightning, drought, fire and explosion (to the extent originating from a source external to the site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred (100) years,

ii. Non-Natural Force Majeure Events

1. Direct Non-Natural Force Majeure Events

a) Nationalization or compulsory acquisition by any Indian Governmental Instrumentality of any material assets or rights of the Seller; or

b) the unlawful, unreasonable or discriminatory revocation of, or refusal to renew, any consent required by the Seller or any of the Seller's contractors to perform their obligations under the RFP Documents or any unlawful, unreasonable or discriminatory refusal to grant any other consent required for the development/ operation of the power station. Provided that an appropriate court of law declares the revocation or refusal to be unlawful, unreasonable and discriminatory and strikes the same down.

c) any other unlawful, unreasonable or discriminatory action on the part of an Indian Government Instrumentality which is directed against the supply of power by the Seller to the Procurer. Provided that an appropriate court of law declares the action to be unlawful, unreasonable and discriminatory and strikes the same down.

2. Indirect Non-Natural Force Majeure Events

a) any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo; revolution, riot, insurrection, terrorist or military action; or

b) Radioactive contamination or ionising radiation originating from a source in India or resulting from another Indirect Non Natural Force Majeure Event excluding circumstances where the source or cause of contamination or radiation is brought or has been brought into or near the site by the Affected Party or those employed or engaged by the Affected Party.

c) Industry wide strikes and labor disturbances having a nationwide impact in India.

8.4 Force Majeure Exclusions

8.4.1 Force Majeure shall not include (i) any event or circumstance which is within the reasonable control of the Parties and (ii) the following conditions, except to the extent that they are consequences of an event of Force Majeure:

a. Unavailability, late delivery, or changes in cost of the plant, machinery, equipment, materials, spare parts, Fuel or consumables for the power station;

b. Delay in the performance of any contractor, sub-contractors or their agents excluding the conditions as mentioned in Article 8.2;

c. Non-performance resulting from normal wear and tear typically experienced in power generation materials and equipment;

d. Strikes or labour disturbance at the facilities of the Affected Party;

e. Insufficiency of finances or funds or the agreement becoming onerous to perform; and

f. Non-performance caused by, or connected with, the Affected Party's:

i. Negligent or intentional acts, errors or omissions;

ii. Failure to comply with an Indian Law; or

iii. Breach of, or default under this Agreement or any other RFP Documents.

...”

It has to be taken into the consideration that various stakeholders have raised serious objections on the frequent failures/ outages of the plant and abnormal delay in their restoration.

In view of the above, the Commission opines that it is inappropriate to pass the impact of such outages to the end consumers. Accordingly, the Commission in this tariff order disallows plea of CSPGCL.

The Commission has however considered deemed generation occurred during the backing down period of CSPGCL power stations as it had been done as per direction of SLDC for grid stability/security, while calculating the gain/ (loss).

B) Auxiliary Consumption

The CSPGCL submitted that except for auxiliary consumption, HTPS has performed better than the norms specified by the Commission. CSPGCL in the last Petition for provisional true-up of FY 2011-12 had submitted specific technical reasons for approval of auxiliary consumption at 9.7% instead of 9%.

Commission's View

The issue has already been deliberated by the Commission in its previous tariff order dated 12th July 2013. The Commission reiterates that the auxiliary consumption norms approved for CSPGCL's generating stations in the MYT Regulations, 2010 were based on the detailed deliberation and after taking cognizance of the past performance of the plants, design, vintage, age and other such factors affecting the auxiliary consumption of each generating station. Accordingly, the Commission retains the specified norms.

C) Station Heat Rate (SHR)

CSPGCL submitted that in case of HTPS and DSPM it has been performing within the norms specified by the Commission and thus it has proposed to apply the same norms for SHR for FY 2011-12 & FY 2012-13. However in case of KTPS, CSPGCL reiterated many of its old rhetoric such as SHR being high due to inherent specifications of plant related to its design, vintage, age, etc. and not because of any inefficiency on part of CSPGCL, unrealistic benchmark, need for environment scan, etc.

Commission's View

As mentioned earlier, the Commission has already deliberated the issues in the previous tariff order. There is nothing new in the submission and hence no review is required.

D) Specific Oil Consumption (SOC)

CSPGCL submitted that it has been able to achieve and perform exceptionally well in case of SOC and thus has not sought for any revision in the norms for SOC as approved by the Commission in the MYT order dated 12th July 2014.

Commission's View

The Commission for trueing up purposes has considered the actual SOC and the difference of actual and normative has qualified for the sharing of gains and losses.

E) Transit & Stacking Loss of Coal

CSPGCL submitted the actual transit loss has been lower than that approved by the Commission. Hence, CSPGCL has not sought for revision in the norms specified by the Commission in this regards.

Commission's View

The Commission observes that transit losses are controllable parameters and as such the utility should make every effort to reduce such losses.

F) Calorific value of Fuel

CSPGCL submitted the details of gross calorific value (GCV) for Coal for FY 2011-12 & FY 2012-13. Further the GCV for secondary fuel has been considered as 10000 kCal/ litre for FY 2011-12 & FY 2012-13.

Commission's View

The Commission accepts the actual GCV for coal fired for FY 2011-12 & FY 2012-13 as submitted by the petitioner.

G) Generation from Thermal Stations

The following table summarises the approved & actual station-wise gross & net generation for FY 2011-12 & FY 2012-13.

Table 3: Station wise gross & net generation for FY 2011-12

| Sr. No | Plant | MU | | | |
|--------|-------|-----------------------|--------|-----------------------|--------|
| | | Gross Generation | | Net Generation | |
| | | Approved in MYT Order | Actual | Approved in MYT Order | Actual |
| 1 | HGPS | 6050 | 6433 | 5506 | 5816 |
| 2 | KTPS | 3024 | 3059 | 2711 | 2729 |
| 3 | DSPM | 3733 | 3145 | 3397 | 2895 |

Table 4: Station wise gross & net generation for FY 2012-13

| Sr. No | Plant | MU | | | |
|--------|-------|-----------------------|--------|-----------------------|--------|
| | | Gross Generation | | Net Generation | |
| | | Approved in MYT Order | Actual | Approved in MYT Order | Actual |
| 1 | HGPS | 6034 | 6339 | 5491 | 5750 |
| 2 | KTPS | 3026 | 2328 | 2714 | 2035 |
| 3 | DSPM | 3723 | 3433 | 3388 | 3163 |

H) Primary Fuel & Secondary Fuel cost

CSPGCL submitted that variation in landed price of primary fuel (coal) including transportation costs and secondary fuel (mix of HFO/HSD) consumed in thermal stations are uncontrollable parameters and same should be allowed as per actual.

Commission's View

As deliberated earlier, the Commission agrees with CSPGCL that variation in fuel prices is uncontrollable in nature and subject to prudence check should be allowed as per actual.

Table 5: Cost of Coal and Oil for FY 2011-12

| Sr. No | Particulars | Rs. Crore | | | | | |
|--------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | KTPS | | HGPS | | DSPM | |
| | | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Cost of Coal | 267.86 | 267.86 | 439.84 | 439.85 | 227.46 | 227.46 |
| 2 | Cost of Oil | 20.86 | 20.86 | 19.62 | 19.62 | 4.99 | 4.99 |
| 3 | Total | 288.72 | 288.72 | 459.46 | 459.47 | 232.45 | 232.45 |

Table 6: Cost of Coal and Oil for FY 2012-13

| | | Rs. Crore | | | | | |
|--------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Sr. No | Particulars | KTPS | | HTPS | | DSPM | |
| | | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Cost of Coal | 227.62 | 227.62 | 457.38 | 457.38 | 273.71 | 273.71 |
| 2 | Cost of Oil | 33.33 | 33.33 | 21.24 | 21.24 | 5.34 | 5.34 |
| 3 | Total | 260.95 | 260.95 | 478.62 | 478.62 | 279.05 | 279.05 |

The Commission has approved the actual cost for coal and oil as shown in the above table. However, it is to clarify that the sharing of station-wise gains/losses for coal and oil consumption has been considered on approved performance parameters and actual rates for procurement of oil and coal. The sharing of gains/losses on account of actual coal and oil price and normative parameters has been detailed in subsequent paragraphs of this order.

3.3.1 O&M Expenses

The CSPGCL submitted that for the purpose of this petition, CSPGCL has adopted annual escalation factor based on WPI and CPI variations published on RBI website. The same have been applied on the normative O&M expenses value for FY 2010-11, to compute the normative value for FY 2011-12 & FY 2012-13.

CSPGCL adopted the methodology considered in earlier petitions/orders and reduced the cost incurred on coal transport from the O&M expenses head and added to the fuel cost head. Further, CSPGCL has considered productivity incentive as a part of gains/losses. O&M expenses under head office, CAU and others are allocated among the four major existing power plants (i.e., HTPS, KTPS, DSPM and Hasdeo Bango) in proportion to their installed capacities.

The CGPGCL, as per the methodology adopted by the Commission in its orders, has deducted the donations from the actual amount of A&G expenses for the years under consideration.

Table 7: Total actual O&M expenses

| Sr. No | Particulars | Rs. Crore | | | | | |
|--------|-----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | KTPS | | HTPS | | DSPM | |
| | | FY 2011-12 | FY 2012-13 | FY 2011-12 | FY 2012-13 | FY 2011-12 | FY 2012-13 |
| 1 | Employee expenses | 124.40 | 134.08 | 144.69 | 162.19 | 42.29 | 52.07 |
| 2 | A&G expenses | 6.95 | 12.41 | 11.32 | 15.31 | 5.39 | 9.85 |
| 3 | R&M expenses | 55.84 | 63.19 | 76.08 | 84.87 | 68.05 | 54.76 |
| 4 | Less: O&M Cost on KWMM Plant | - | - | 0.34 | 0.35 | - | - |
| 5 | Less: O&M Cost on External CHP/CT | - | - | 31.86 | 39.73 | - | - |
| 6 | Less: O&M Cost on Coal Transport | 22.92 | 19.48 | - | - | - | - |
| 7 | Total O&M expenses | 164.27 | 190.20 | 199.89 | 222.29 | 115.73 | 116.68 |

Commission's View

Employee Expenses

The Commission analysed the actual employee expenses for FY 2011-12 and FY 2012-13 under various sub-heads like basic salary, dearness allowance, house rent allowance, conveyance allowance, other allowance, medical reimbursement, earned leave encashment, etc., and considered the same based on actual expenses. In accordance with the methodology adopted by the Commission in the Tariff Order dated 12th July 2013 for the final truing up for FY 2010-11 and provisional truing up for FY 2011-12, Commission has not considered productivity incentive and contribution to pension and gratuity fund as a part of employee expenses. The Commission opines that payment of productivity incentive is an internal matter of the utility. A utility may decide to give productivity incentive to its employees either to enhance its profitability or to reduce its probable losses. Either ways it is intended for either maximising the profits or minimising the losses. At the same time, Commission wants to make it amply clear that Commission, per-se, is not against any productivity linked incentive scheme, rather it appreciates such schemes. The Regulations themselves are a testimony to the same. It is only the presentation of the cost which differs. The utility has considered it as a fixed employee cost, while Commission views it as a sharing mechanism which either increases the gains or minimises the losses. As by way of sharing of gains/ loss mechanism, Regulations allow a share of gains/ losses to the utility, passing off the cost of incentive as an expense may lead to double accounting. Hence, the Commission decides not to consider the same. This aspect and the associated cost have to be dealt by the utility in its internal management and cannot be treated as a direct pass through to the consumer.

The expenses for contribution to pension and gratuity fund has been dealt separately in the order in subsequent paragraphs. Further, as discussed earlier, the Commission has considered the cost incurred in coal transport division/external CHP as part of the variable cost and accordingly reduced from the employee expenses head and added to the fuel cost head.

Administration and General expenses:

As regards the A&G expenses, the Commission analysed the actual expenses for the FY 2011-12 and FY 2012-13 under various sub-heads like rent, rates & taxes, other taxes, postal & communication expenses, legal fees, audit charges, consultancy charges, technical fees, conveyance & travelling, vehicle expenditure, fees & subscription, printing & stationery, advertisement expenses, electricity charges, miscellaneous expenses, contribution/donation, etc. Further, the Commission has already settled in its previous orders that any contribution/donation made for the welfare of society should be funded through reserves and surplus of company and should not be passed on to the consumers and accordingly, the same has not been approved.

Repairs and Maintenance Expenditure

As regards the R&M expenses, the Commission analysed the actual expenses for the FY 2011-12 and FY 2012-13 under various sub-heads like plant and machinery, building, lubricants, consumables, stores and spares, water charges, etc. As clarified by the Commission in the para 3.3.3 below, the Commission has approved certain portion of additional capitalisation which was of R&M nature in R&M expenses and disallowed the same in additional capitalisation.

The total normative and actual O&M expenditure allowed by the Commission for FY 2011-12 and FY 2012-13 is as given in the following table:

Table 8: Normative (Revised norm as per CSPGCL) O&M expenses

| Rs. Crore | | | | |
|------------------|--|-------------|-------------|-------------|
| Sr. No. | Particulars | KTPS | HTPS | DSPM |
| 1 | Normative O&M Cost for FY 2010-11 as per Order dt. 12.07.2013 (Rs Crore) | 146.14 | 208.23 | 101.75 |
| 2 | Inflation factor for FY 2011-12 | 8.80% | 8.80% | 5.72% |
| 3 | Normative O&M Cost for FY 2011-12 (Rs Crore) | 159.00 | 226.55 | 107.57 |
| 4 | Inflation factor for FY 2012-13 | 8.00% | 8.00% | 5.72% |
| 5 | Normative O&M Cost for FY 12-13 (Rs Crore) | 171.72 | 244.68 | 113.72 |

Table 9: O&M expenses as approved by the Commission

| | | Rs. Crore | | | | | |
|--------|-----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Sr. No | Particulars | KTPS | | HTPS | | DSPM | |
| | | FY 2011-12 | FY 2012-13 | FY 2011-12 | FY 2012-13 | FY 2011-12 | FY 2012-13 |
| 1 | Employee expenses | 124.40 | 134.08 | 144.69 | 162.19 | 42.29 | 52.07 |
| 2 | A&G expenses | 6.95 | 12.41 | 11.32 | 15.31 | 5.39 | 9.85 |
| 3 | R&M expenses | 55.84 | 63.19 | 76.08 | 84.87 | 68.05 | 54.76 |
| 4 | Add: Disallowed as Capitalisation | 0.27 | 0.14 | 12.94 | 4.53 | 0.16 | 0.14 |
| 5 | Less: O&M Cost on KWMM Plant | - | - | 0.34 | 0.35 | - | - |
| 6 | Less: O&M Cost on External CHP/CT | - | - | 31.86 | 39.73 | - | - |
| 7 | Less: O&M Cost on Coal Transport | 22.92 | 19.48 | - | - | - | - |
| 8 | Total O&M expenses | 164.54 | 190.33 | 212.83 | 226.81 | 115.89 | 116.83 |

3.3.2 Contribution to Pension and Gratuity Fund:

For FY 2011-12, CSPGCL has submitted Rs. 14.10 Crore & Rs. 7.39 Crore towards share of contribution to pension and gratuity fund for HTPS & KTPS respectively. For FY 2012-13, CSPGCL has submitted Rs. 24.19 Crore & Rs. 12.67 Crore towards share of contribution to pension and gratuity fund for HTPS & KTPS respectively.

Commission's View

The Commission has approved the pension and gratuity as per the submission of petitioner. The approved amount of contribution to pension and gratuity fund for FY 2011-12 and FY 2012-13 is as given in the following table:

Table 10: Contribution to pension and gratuity fund as approved by Commission

| | | Rs. Crore | | | |
|--------|--------|------------|------------------------------|------------|------------------------------|
| Sr. No | Plants | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved after Final True-up | Petition | Approved after Final True-up |
| 1 | HTPS | 14.10 | 14.10 | 24.19 | 24.19 |
| 2 | KTPS | 7.39 | 7.39 | 12.67 | 12.67 |
| 3 | DSPM | - | - | - | - |

3.3.3 Capital Expenditure and Capitalisation

CSPGCL submitted that it has considered the opening capital cost (GFA & CWIP) and capital structure (Equity & Debt) as on 01st April 2011 which has been approved by the Commission in its order dated 12th July 2013 i.e. closing of FY 2010-11. CSPGCL has generally executed the capital works in line with the approvals granted by the Commission. Prior to 01st April 2010, as per the then prevailing Regulations and practice, the Commission had approved capital expenses limit instead of schemes. CSPGCL took up the capital O&M and civil works within such limit only. Some of

the capital works initiated in reference to such approved capital limit also got completed/ capitalized during the period under consideration and thus have become due for capitalization.

Commission's View

For FY 2011-12, the Commission approves the additional capitalisation of Rs. 13.14 Crore, Rs. 75.39 Crore for KTPS and HTPS respectively. For FY 2012-13, the Commission approves the additional capitalisation of Rs. 84.06 Crore, Rs. 31.70 Crore and Rs. 21.63 Crore for KTPS, HTPS and DSPM respectively. The Commission vide letter No. P 05/ 2014 (T) / 642 dt. 02/05/2014 had sought information on actual capitalisation as against that approved by the Commission along with the detailed reasons for deviation. The Commission has examined in detail the information submitted by CSPGCL in its response vide letter dated 07.05.2014. The Commission also sought further clarifications from CSPGCL on the matter. Based on the due analysis undertaken by the Commission, it has been observed that some expenditure which was of R&M nature has also been booked under capital works. The Commission has not considered such expenses for capitalisation as claimed by CSPGCL however the same has been approved under the R&M expenses as the expenses were of R&M nature. The Commission has expressed its displeasure in this matter and directs CSPGCL not to repeat such instances in future by adopting proper accounting procedures.

3.3.4 Depreciation

CSPGCL has submitted that the opening GFA and capitalisation during FY 2011-12 & FY 2012-13 has been considered based on audited annual accounts. Further, for computing the accumulated depreciation till previous year, accumulated depreciation till 1st January, 2009 has been considered and then for future period appropriate rates as per MYT Regulations, 2010 have been applied to reach the opening accumulated depreciation for FY 2011-12.

For HTPS, CSPGCL has requested to allow depreciation expenses of the balance depreciable value of asset over useful life of the assets as on 31st March 2010. CGPGCL has submitted that the MYT Regulations, 2010 has prescribed the useful life of the coal based thermal power plant as 25 years only. Since no renovation and modernization has been undertaken by the petitioner, hence, there shall be no revision in the useful life of the assets. Based on the Regulations, since the useful life of the assets would be completed in FY 2011-12, the balance depreciable value of assets may be allowed in the remaining useful life of the assets, i.e., two years i.e., in FY

2010-11 and FY 2011-12. The petitioner has submitted that the Commission has considered the actual life of the assets rather than the useful life of the plant. In view of the same, the Petitioner has requested the Commission to revisit the decision taken in the MYT order dated 12 July 2013 and allow the same to be recovered in two years i.e., during FY 2010-11 and FY 2011-12.

The petitioner has further submitted that even if one consider such works part of the renovation and modernization package (though currently no such work has been carried out and the Commission has also dis-allowed the same), then also life extension of 15 years can only be considered and the depreciable value of additional capitalization during the extended life works out to 6%. In view of the above, even with consideration of 15 years life (which is not the case hereof), 5.11% rate (for which no computation is provided in the order) in the MYT order dated 12 July 2013 appears to be an arithmetical error (probably due to consideration of fully depreciated assets in old GFA, which is not the case for additional capitalization) and the computation needs rectification. Accordingly, without prejudice to the submission regarding allowing depreciation of additional capitalization over the useful life of the plant, the petitioner in the instant petition has revised the computation to 6%.

Commission's View:

The Commission has noted the provisions in the MYT Regulations, 2010. Regulation 24 of the MYT Regulations, 2010 stipulates as under:

“24.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

24.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

24.3 Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

*24.4 Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these regulations for the assets of the generating station and transmission system:*

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

24.5 In case of the existing projects, the balance depreciable value as on 1.4.2010 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2010 from the gross depreciable value of the assets.

24.6 Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.”

The opening value of GFA for FY 2011-12 is considered same as closing value as approved by the Commission for final truing up for FY 2010-11 in the Tariff Order dated 12th July 2013. In addition, as discussed in earlier paragraphs, the additional capitalisation as submitted by CSPGCL is analysed and certain portion disallowed as the expense was of R&M nature.

For HTPS, Commission has recognised the inadvertent calculation error for the opening GFA as on 01.04.2010. By rectifying the same, remaining amount of depreciation is spread over useful life of 5 years i.e. till FY 2015-16.

Depreciation on additional capitalisation of HTPS during the period has been considered based on the average depreciation rate of 5.11%, same as considered in tariff order dated 12.07.2013 as against claim of 6% by CSPGCL.

The plant-wise depreciation claimed by CSPGCL and approved by the Commission is as given in the following table:

Table 11: Depreciation computation for HTPS

Rs. Crore

| Sr. No | Particulars | FY 2011-12 | | FY 2012-13 | |
|--------|---|--------------|------------------------------|--------------|------------------------------|
| | | Petition | Approved after Final True-up | Petition | Approved after Final True-up |
| 1 | Opening GFA | 759.58 | 759.58 | 759.58 | 759.58 |
| 2 | Less: Value of Land Under Freehold | 1.09 | 1.09 | 1.09 | 1.09 |
| 3 | Accumulated Depreciation | 565.74 | 565.74 | 589.12 | 565.74 |
| 4 | 90% of Gross Block Excluding Land | 682.65 | 682.64 | 682.65 | 682.64 |
| 5 | Amount Remaining to be Depreciated | 116.91 | 116.90 | 93.52 | 116.90 |
| 6 | Depreciation (Equally spread in 5 years i.e. till end of FY 15-16) | 23.38 | 23.38 | 23.38 | 23.38 |
| 7 | Additional Capitalisation during the year | 88.34 | 75.39 | 36.23 | 31.70 |
| 8 | Cumulative Gross Block on Additional Capitalisation from FY 2010-11 | 261.23 | 248.28 | 297.46 | 279.98 |
| 9 | Average Depreciation Rate | 6.00% | 5.11% | 6.00% | 5.11% |
| 10 | Depreciation on Additional Capitalisation | 13.02 | 10.76 | 16.76 | 13.50 |
| 11 | Total Depreciation | 36.40 | 34.14 | 40.14 | 36.88 |

Table 12: Depreciation computation for KTPS and DSPM

Rs. Crore

| Sr. No | Particulars | KTPS | | | | DSPM | | | |
|--------|--|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|
| | | FY 2011-12 | | FY 2012-13 | | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Opening GFA | 550.47 | 550.47 | 563.87 | 563.61 | 2,227.45 | 2,227.45 | 2,227.61 | 2,227.45 |
| 2 | Closing GFA | 563.87 | 563.61 | 648.08 | 647.67 | 2,227.61 | 2,227.45 | 2,249.38 | 2,249.08 |
| 3 | Depreciation | 31.28 | 31.27 | 33.80 | 33.78 | 123.12 | 123.11 | 123.60 | 123.59 |
| 4 | Fully Depreciated Assets | 118.13 | 118.13 | 118.13 | 118.13 | - | - | - | - |
| 5 | Average Depreciation Rate | 5.61% | 5.61% | 5.58% | 5.58% | 5.53% | 5.53% | 5.52% | 5.52% |
| 6 | Less: Depreciation on Fully Depreciated Assets | 6.63 | 6.63 | 6.59 | 6.59 | - | - | - | - |
| 7 | Net Depreciation Approved | 24.65 | 24.64 | 27.21 | 27.19 | 123.12 | 123.11 | 123.60 | 123.59 |

3.3.5 Interest and finance charges

The CSPGCL submitted that to compute the opening loan balance, opening actual outstanding loan as on 1st January, 2009 and debt: equity ratio of 70:30 is considered for additional capitalisation for subsequent years. Further, CSPGCL submitted that it has claimed interest and financing charges for loans used for creating usable assets as per the MYT Regulations, 2010. Accordingly, CSPGCL considered the opening loan balance and addition to existing loans based on additional capitalisation. CSPGCL

submitted that it has considered the actual weighted average interest rate for computing interest and financing charges.

CSPGCL submitted that all the loans which were not project specific loan could have been utilized only towards the additional capital expenditure on the existing generating stations (i.e., KTPS and HTPS) only. Hence the same shall be considered only for KTPS and HTPS. CSPGCL further submitted that due to such revision of allocation of loan, there would be only interchanging of normative loan and the borrowed loan. Thus, there would be no impact on total regulatory loan and permissible equity of KTPS, HTPS and Hasdeo Bango power stations.

Commission's View:

The Commission has considered opening net loan for FY 2011-12 same as the closing loan for FY 2010-11 approved during the true up for FY 2010-11 in the tariff order dated 12th July 2013. The Commission has considered repayment during the year equivalent to the approved depreciation for the year under consideration. Further, additional capitalisation of loan has been considered by considering the actual loan borrowed during the year as per CSPGCL's submission. The interest and finance charges have been computed on the average loan balance during the years by applying the weighted average interest rate considered by CSPGCL in its computations. The plant-wise interest and finance charges approved by the Commission are as given in the following table:

Table 13: Interest and finance charges as approved by the Commission

| Sr. No | Particulars | Rs. Crore | | | | | |
|--------|--|--------------|--------------|---------------|--------------|--------------|---------------|
| | | FY 2011-12 | | | FY 2012-13 | | |
| | | HTPS | KTPS | DSPM | HTPS | KTPS | DSPM |
| 1 | Total Opening Net Loan | 155.13 | 156.59 | 1,307.75 | 173.76 | 141.14 | 1,184.64 |
| 2 | Repayment during the period | 34.14 | 24.64 | 123.11 | 36.88 | 27.19 | 123.59 |
| 3 | Additional Capitalisation of Borrowed Loan during the year | 52.77 | 9.20 | - | 22.19 | 58.84 | 15.14 |
| 4 | Total Closing Net Loan | 173.76 | 141.14 | 1,184.64 | 159.07 | 172.80 | 1,076.19 |
| 5 | Average Loan during the year | 164.45 | 148.87 | 1,246.19 | 166.42 | 156.97 | 1,130.41 |
| 6 | Weighted Average Interest Rate | 10.57% | 10.43% | 11.45% | 10.73% | 10.44% | 11.47% |
| | Interest expenses for the Period | 17.38 | 15.53 | 142.69 | 17.86 | 16.39 | 129.66 |

3.3.6 Interest on working capital

CSPGCL submitted that it has computed the interest on working capital as per the provisions of MYT Regulations, 2010. CSPGCL submitted that it has considered SBI-PLR as on 1st April 2010 of 11.75% for computing the interest on working capital for FY 2011-12 & FY 2012-13 respectively.

CSPGCL also submitted that the cost of coal is based on the landed cost incurred by taking into account normative transit and handling losses and gross calorific value of the fuel as per latest available actual data.

Commission's View:

The Commission has computed interest on working capital as per MYT Regulations, 2010. The Commission has considered cost of coal for 1½ months for all the power stations of CSPGCL considering them as pit head power stations. CSPGCL contention that for the purpose of working capital calculation DSPM is a non-pit head power station has not been accepted by the Commission for the purpose of approval of the cost. In the Commission's considered opinion it is incomprehensible that just due to use of Indian railway network for about 20 Km distance, the coal storage requirement goes up from 1.5 month to 2 months. Cost of secondary fuel oil for two months, O&M expenses for one month, maintenance spares as 20% of the O&M expenses and receivables equivalent to two months have been considered for computing the working capital requirement. The Commission has considered the interest rate of 11.75%, which is the then existing SBI PLR on 1st April 2010, for computing the interest on working capital for FY 2011-12 and FY 2012-13. The plant wise interest on working capital claimed by CSPGCL and approved by the Commission is as given in the following table:

Table 14: Interest on Working Capital as approved by the Commission

Rs. Crore

| Sr. No | Particulars | FY 2011-12 | | FY 2012-13 | |
|-------------|--|---------------|------------------------------|---------------|------------------------------|
| | | Petition | Approved after Final True-up | Petition | Approved after Final True-up |
| HTPS | | | | | |
| 1 | Cost of Coal (1.5 months) | 52.87 | 53.21 | 57.22 | 57.22 |
| 2 | Cost of Oil (2 months) | 4.74 | 4.60 | 4.93 | 5.05 |
| 3 | O&M expensess (1 months) | 16.66 | 17.74 | 18.52 | 18.90 |
| 4 | Maintenance spares(20% of annual O&M) | 39.98 | 42.57 | 44.46 | 45.36 |
| 5 | Receivables (two months) | 143.89 | 134.55 | 148.34 | 140.51 |
| 6 | Total Working Capital Requirement | 258.13 | 252.67 | 273.48 | 267.04 |
| 7 | Rate of interest(SBI PLR as on 1st April 10) | 11.75% | 11.75% | 11.75% | 11.75% |
| 8 | Interest on Working Capital | 30.33 | 29.69 | 32.13 | 31.38 |
| KTPS | | | | | |
| 1 | Cost of Coal (1.5 months) | 31.81 | 31.61 | 32.14 | 32.14 |
| 2 | Cost of Oil (2 months) | 4.96 | 4.93 | 4.94 | 4.95 |
| 3 | O&M expensess (1 months) | 13.69 | 13.71 | 15.85 | 15.86 |
| 4 | Maintenance spares(20% of annual O&M) | 32.85 | 32.91 | 38.04 | 38.07 |
| 5 | Receivables (two months) | 88.05 | 90.70 | 90.91 | 91.11 |
| 6 | Total Working Capital Requirement | 171.37 | 173.86 | 181.88 | 182.13 |
| 7 | Rate of interest(SBI PLR as on 1st April 10) | 11.75% | 11.75% | 11.75% | 11.75% |
| 8 | Interest on Working Capital | 20.14 | 20.43 | 21.37 | 21.40 |
| DSPM | | | | | |
| 1 | Cost of Coal (1.5 months) | 44.33 | 33.82 | 48.01 | 36.01 |
| 2 | Cost of Oil (1.5 months / 2 months) | 2.76 | 2.77 | 3.10 | 3.05 |
| 3 | O&M expensess (1 months) | 9.64 | 9.66 | 9.72 | 9.74 |
| 4 | Maintenance spares(20% of annual O&M) | 23.15 | 23.18 | 23.34 | 23.37 |
| 5 | Receivables (two months) | 130.91 | 122.32 | 130.60 | 126.97 |
| 6 | Total Working Capital Requirement | 210.79 | 191.75 | 214.78 | 199.13 |
| 7 | Rate of interest(SBI PLR as on 1st April 10) | 11.75% | 11.75% | 11.75% | 11.75% |
| 8 | Interest on Working Capital | 24.77 | 22.53 | 25.24 | 23.40 |

3.3.7 Return on Equity

The CSPGCL submitted that it has computed Return on Equity employed in asset created based on the provisions of the MYT Regulations, 2010. The CSPGCL also submitted that at present, no income tax liability for FY 2011-12 and FY 2012-13 has been computed and no income tax has been paid (except for the advance income tax paid for which refund has been claimed before the competent authority). As such in the instant petition no grossing up of tax rate has been accounted, however, leave is craved that if in future income tax authorities impose any tax for the period under consideration, the same may be allowed either on actual or RoE allowed for the said period may be grossed up by applicable tax rate.

Commission's View:

The Commission has considered permissible Equity in opening/closing GFA for computation of Return on Equity as per tariff order dated 12th July 2013. Further, the Commission has considered 15.5% return as per Regulations for FY 2011-12 and FY 2012-13 on the average permissible equity base during the year as per MYT Regulations, 2010. In reply to a specific query, CSPGCL submitted the details of income tax and it was observed that no income tax was payable during FY 2011-12 and FY 2012-13, accordingly, the Commission has not grossed-up the return with the tax rate (or MAT) for trueing up purposes. The Return on Equity claimed by CSPGCL and approved by the Commission is as given in the following table:

Table 15: Return on Equity as approved by the Commission

| Sr. No | Particulars | Legend | FY 2011-12 | | | FY 2012-13 | | |
|--------|---|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | | HTPS | KTPS | DSPM | HTPS | KTPS | DSPM |
| 1 | Permissible Equity in Opening GFA | A | 308.16 | 171.73 | 663.01 | 330.78 | 175.67 | 663.01 |
| 2 | Permissible Equity in Closing GFA | B | 330.78 | 175.67 | 663.01 | 340.29 | 200.89 | 669.50 |
| 3 | Average Gross Permissible Equity | C=Avg. (A,B) | 319.47 | 173.70 | 663.01 | 335.53 | 188.28 | 666.25 |
| 4 | Rate of Return on Equity | D | 15.50% | 15.50% | 15.50% | 15.50% | 15.50% | 15.50% |
| 5 | Return on Equity | E=C*D | 49.52 | 26.92 | 102.77 | 52.01 | 29.18 | 103.27 |

3.3.8 Net prior period (credits)/charges

CSPGCL has considered the prior period (credits)/charges as per the audited annual accounts for FY 2011-12 and FY 2012-13 and as per the philosophy adopted by the Commission in its Order dated 12 July 2013. The same has been included in the ARR of various plants. The CSPGCL has not considered interest and finance charges as part of prior period (credits)/charges as the same has been allowed on normative basis. Further, the (credits)/ charges under other income, has not been considered as it pertains to fuel cost for the prior periods and the same has also been approved on normative basis. For prior period employee expense, CSPGCL has submitted that in the provisional true up, the employee expenses have been allowed on actual basis and not on the normative basis. Hence, the prior period adjustments need to be considered in the present petition for approval.

Commission's View:

The Commission observed that CSPGCL has claimed Net prior period (credits) /charges for FY 2011-12 and FY 2012-13. The Commission has accordingly approved Net prior period (credits) /charges as per the audited annual accounts for FY 2011-12

and FY 2012-13. The Net prior period (credits) /charges as per accounts for FY 2011-12 and FY 2012-13 is as given in the following table:

Table 16: Net prior period (credits)/ charges as approved by Commission

| Rs. Crore | | | | | |
|-----------|-------------|------------|------------------------------|------------|------------------------------|
| Sr. No | Particulars | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved after Final True-up | Petition | Approved after Final True-up |
| 1 | HTPS | (0.04) | (0.04) | (0.08) | (0.08) |
| 2 | KTPS | (0.18) | (0.18) | (0.08) | (0.08) |
| 3 | DSPM | (0.02) | (0.02) | (0.11) | (0.11) |

3.3.9 Non-tariff income

The CSPGCL submitted that Non-tariff income comprise interest income, income from rent and hire charges, sale of tender items, profit on sale of scrap, revenue from grant & subsidies and other receipts. The CSPGCL has claimed the plant-wise Non-tariff Income as per the audited annual accounts for the year under consideration. The CSPGCL also submitted that there has been an income in FY 2011-12 on account of refund from income tax department amounting to Rs. 2.50 Crore. It is submitted that such refund of income tax pertains to the advance tax paid (FY 2008-09 onwards) based on the initial assessment. However, after the final assessment of income tax liability when it was ascertained that there is no tax liability; claim for refund of such advance tax paid was lodged. It may be noted that though CSPGCL in past has paid advance income tax, however, in the truing up; it has not claimed the same as part of ARR. Moreover, the Commission has also not considered the advance tax paid. Hence, for all practical purposes, CSPGCL submits that such income towards refund of income tax does not qualify for truing up purposes and hence the same has not been considered in the instant Petition.

Commission's View

The Commission has verified the plant-wise non-tariff Income submitted by CSPGCL from the audited annual accounts submitted along with the Petition and found to them in order. The Commission observed CSPGCL has not claimed delayed payment surcharge as part of non-tariff income. In accordance with the approach adopted by the Commission in the previous tariff orders for excluding the delayed payment surcharge from the non-tariff income, the Commission has accepted the approach adopted by the petitioner in this regard. The non-tariff Income claimed by CSPGCL and approved by the Commission is as given the following table:

Table 17: Non-Tariff Income as approved by the Commission

Rs. Crore

| Sr. No | Particulars | FY 2011-12 | | FY 2012-13 | |
|--------|-------------|------------|------------------------------|------------|------------------------------|
| | | Petition | Approved after Final True-up | Petition | Approved after Final True-up |
| 1 | HTPS | 9.85 | 9.85 | 24.78 | 24.78 |
| 2 | KTPS | 4.17 | 4.17 | 11.51 | 11.51 |
| 3 | DSPM | 5.56 | 5.56 | 14.10 | 14.10 |

3.3.10 ARR and Revenue (Gap)/Surplus

Based on various components of expense and income discussed above, the plant-wise summary of ARR and Revenue (gap)/Surplus of CSPGCL for FY 2011-12 and FY 2012-13 is as given in the following tables:

Table 18: ARR for HTPS as approved by the Commission

Rs. Crore

| Sr. No | Particulars | FY 2011-12 | | | FY 2012-13 | | |
|--------|---|---------------------|---------------|---------------|-------------------------|---------------|---------------|
| | | Provisional True-up | Petition | Final True-up | Tariff Order FY 2012-13 | Petition | Final True-up |
| 1 | O&M expenses | 212.85 | 199.89 | 212.83 | 232.64 | 222.29 | 226.81 |
| 2 | Depreciation | 30.16 | 36.40 | 34.14 | 39.00 | 40.13 | 36.88 |
| 3 | Interest & Finance Charges | 15.12 | 17.75 | 17.38 | 26.00 | 18.56 | 17.86 |
| 4 | Interest on Working Capital | 30.84 | 30.33 | 29.69 | 32.23 | 32.13 | 31.38 |
| 5 | Return on Equity | 48.51 | 49.82 | 49.52 | 71.00 | 52.71 | 52.01 |
| 6 | Contribution to Pension and Gratuity Fund | 14.10 | 14.10 | 14.10 | 23.57 | 24.19 | 24.19 |
| 7 | Less: Net Prior Period Credits/(Charges) | - | (0.04) | (0.04) | - | (0.08) | (0.08) |
| 8 | Less: Non Tariff Income | 11.76 | 9.85 | 9.85 | 5.20 | 24.78 | 24.78 |
| 9 | Total Annual Fixed Cost | 339.82 | 338.48 | 347.86 | 419.24 | 365.31 | 364.42 |
| 10 | Cost of Coal | 439.91 | 439.84 | 439.85 | 444.00 | 457.38 | 457.38 |
| 11 | Cost of Oil | 19.62 | 19.62 | 19.62 | 27.08 | 21.24 | 21.24 |
| 12 | Total Cost | 799.35 | 797.95 | 807.32 | 890.32 | 843.92 | 843.04 |

Table 19: ARR for KTPS as approved by the Commission

Rs. Crore

| Sr. No | Particulars | FY 2011-12 | | | FY 2012-13 | | |
|--------|---|---------------------------|---------------|------------------------------|-------------------------|---------------|------------------------------|
| | | Provisional True-up Order | Petition | Approved after Final True-up | Tariff Order FY 2012-13 | Petition | Approved after Final True-up |
| 1 | O&M expenses | 149.20 | 164.27 | 164.54 | 164.75 | 190.19 | 190.33 |
| 2 | Depreciation | 22.79 | 24.65 | 24.64 | 34.00 | 27.21 | 27.19 |
| 3 | Interest & Finance Charges | 14.49 | 15.53 | 15.53 | 12.00 | 16.42 | 16.39 |
| 4 | Interest on Working Capital | 19.73 | 20.14 | 20.43 | 20.45 | 21.37 | 21.40 |
| 5 | Return on Equity | 26.80 | 26.93 | 26.92 | 41.00 | 29.20 | 29.18 |
| 6 | Contribution to Pension and Gratuity Fund | 7.39 | 7.39 | 7.39 | 12.35 | 12.67 | 12.67 |
| 7 | Less: Net Prior Period Credits/(Charges) | - | (0.18) | (0.18) | - | (0.08) | (0.08) |
| 8 | Less: Non Tariff Income | 5.29 | 4.17 | 4.17 | 5.20 | 11.51 | 11.51 |
| 9 | Total Annual Fixed Cost | 235.11 | 254.92 | 255.46 | 279.35 | 285.63 | 285.73 |
| 10 | Cost of Coal | 267.89 | 267.86 | 267.86 | 247.00 | 227.62 | 227.62 |
| 11 | Cost of Oil | 20.86 | 20.86 | 20.86 | 26.26 | 33.33 | 33.33 |
| 12 | Total Cost | 523.86 | 543.64 | 544.18 | 552.61 | 546.58 | 546.68 |

Table 20: ARR for DSPM as approved by the Commission

Rs. Crore

| Sr. No | Particulars | FY 2011-12 | | | FY 2012-13 | | |
|--------|---|---------------------------|---------------|------------------------------|-------------------------|---------------|------------------------------|
| | | Provisional True-up Order | Petition | Approved after Final True-up | Tariff Order FY 2012-13 | Petition | Approved after Final True-up |
| 1 | O&M expenses | 104.41 | 115.73 | 115.89 | 115.90 | 116.69 | 116.83 |
| 2 | Depreciation | 117.27 | 123.12 | 123.11 | 114.00 | 123.60 | 123.59 |
| 3 | Interest & Finance Charges | 147.15 | 142.65 | 142.69 | 124.00 | 129.35 | 129.66 |
| 4 | Interest on Working Capital | 23.41 | 24.77 | 22.53 | 24.46 | 25.24 | 23.40 |
| 5 | Return on Equity | 102.96 | 102.97 | 102.77 | 115.00 | 103.89 | 103.27 |
| 6 | Contribution to Pension and Gratuity Fund | - | - | - | - | - | - |
| 7 | Less: Net Prior Period Credits/(Charges) | - | (0.02) | (0.02) | - | (0.11) | (0.11) |
| 8 | Less: Non Tariff Income | 5.64 | 5.56 | 5.56 | 3.20 | 14.10 | 14.10 |
| 9 | Total Annual Fixed Cost | 489.55 | 503.70 | 501.45 | 490.16 | 484.78 | 482.75 |
| 10 | Cost of Coal | 227.47 | 227.46 | 227.46 | 276.00 | 273.71 | 273.71 |
| 11 | Cost of Oil | 4.99 | 4.99 | 4.99 | 16.34 | 5.34 | 5.34 |
| 12 | Total Cost | 722.01 | 736.15 | 733.91 | 782.50 | 763.82 | 761.80 |

3.3.11 Computation of Sharing of Gains/Losses

CSPGCL submitted that once the capital cost and capital structure is frozen, the components of tariff i.e. ROE, depreciation and interest on capital loan depend upon tax rate, applicable depreciation rate and interest rate respectively. As these rates are

uncontrollable nature, the actual and allowable value of ROE, depreciation and interest remain same. The non-tariff income considered uncontrollable and hence actual and allowable non-tariff income remains same. At the same time, the component O&M expenses (excluding the contribution to P&G trust) is generally considered controllable expense (except for inflationary adjustment). The secondary fuel cost and coal cost depend on various operation parameters such as PLF, auxiliary consumption, SHR, etc. and as such are generally considered controllable costs (with the exception of rate of oil/ coal and CV of Coal and Oil). Accordingly in the instant petition, O&M Cost, secondary fuel cost and coal cost have been computed on actual basis as well as normative basis both. As per regulation, the interest on working capital is computed on the normative values only. Further, in accordance to the regulations and in adoption of methodology followed by the Commission, the composite sharing of gains and losses have been worked out on the basis of per unit gains and losses taking into account the actual vis-à-vis the normative expenses.

Commission's Views:

The Commission has computed sharing of gains/ losses as per Regulation 5.9 and 5.10 of the MYT Regulations, 2010. The Commission has computed gains/losses on fixed cost components (excluding O&M and Secondary Fuel), O&M expense, coal cost and the secondary fuel oil cost on the actual cost incurred vis-à-vis normative amount. The plant-wise total gain/ loss on each of the component are then added together to arrive at the total gain/ loss for the Company as a whole.

As per Regulation in case of gains on account of better performance than the bench mark parameters owing to controllable factors, the utility is entitled to retain 1/3rd share from such gains, however, in case of loss due to underperformance the total loss has to be borne by the utility itself.

For a generating station there are five different parameters on which the cost implications can be ascertained. Each of the factors makes an impact on the cost in a different way e.g. with the increase in PLF, the per unit cost stands to come down thus there is a gain to the beneficiary, however, at the same time if the auxiliary consumption goes up then it has a negative impact. Similarly, with the PLF and the auxiliary consumption at bench mark level, the SHR have an impact on the cost of generation. Even the landed cost of coal is subject to vary with the variation in transit loss which gets reflected in the normative fuel cost vis-à-vis actual fuel cost. Therefore, to have a fair assessment of overall gains / losses, different performance parameters have been compared on normative vis-à-vis actual basis and the costs have been assigned to per unit (sent out) value. In all gains and losses have been calculated

in four sub component. The first component takes into account the impact of variation in net generation (taking into account combined effect of variation in PLF as well as auxiliary consumption). On the various fixed cost component excluding O&M and secondary fuel cost (both being controllable cost) the second component relates to the impact of variation in the per-unit O&M cost. A utility is allowed O&M cost either on normative basis or on the basis of historical trend. At the same time, it is expected to achieve a definite level of performance (net generation). Thus, in ideal condition the O&M charges per-unit net generation is pre-defined. With the higher level of generation or lower level of expenses there is a gain. Even if the O&M cost goes up but at the same time the sent out units rises more than the increase in cost the beneficiary get cheaper power in terms of per-unit cost. The second component addresses the cost economic dynamics in this respect.

The third component is related to the secondary fuel cost which has a linear relation with the generation. The fourth component is related to the primary fuel which basically reflects the impact of SHR and transit loss on the total cost. Thus it can be seen that all the cost components have been considered only once and the submission of four components gives overall picture of the gains / losses achieved / incurred by a power station on account of its over / under performance with respect to the pre-defined bench mark level. To work out the net impact for the utility as a whole the gains / losses for the three power stations have been clubbed and the resultant net gains / losses have been given appropriate treatment in accordance with the provisions of the regulations. On the net basis the total gains for FY 2011-12 was Rs. 15.23 Crore and accordingly CSPGCL is allowed to retain one third share of Rs. 5.08 Crore. For FY 2011-12 on the net basis the utility incurred a loss of Rs. (52.52) Crore and as per regulation the whole of the loss is assigned to CSPGCL. The detailed computation on sharing of gains/ (losses) is as given in the following table:

Table 21: Computation of Gains/ (Losses) for Thermal Plants

| Particulars | Units | Legend | FY 2011-12 | | | FY 2012-13 | | |
|--|--------------|-------------------------------|---------------|---------------|----------------|----------------|---------------|----------------|
| | | | KTPS | HTPS | DSPM | KTPS | HTPS | DSPM |
| <i>Fixed Charges @ NPLF</i> | | | | | | | | |
| <i>Installed capacity</i> | MW | | 440 | 840 | 500 | 440 | 840 | 500 |
| NPLF as per MYT Regulations | % | | 78.25% | 82.00% | 85.00% | 78.50% | 82.00% | 85.00% |
| Actual PLF achieved | % | | 79.14% | 87.18% | 71.61% | 60.40% | 86.15% | 78.39% |
| Gross generation at NPLF | MU | | 3,024.33 | 6,050.42 | 3,733.20 | 3,025.70 | 6,033.89 | 3,723.00 |
| Gross generation at actual PLF | MU | | 3,058.64 | 6,432.81 | 3,145.20 | 2,328.24 | 6,339.58 | 3,433.49 |
| Normative aux. consumption | % | | 10.35% | 9.00% | 9.00% | 11.50% | 9.00% | 9.00% |
| Actual aux cons | % | | 10.77% | 9.59% | 7.94% | 12.57% | 9.30% | 7.88% |
| Normative aux. consumption | MU | | 313.02 | 544.54 | 335.99 | 347.96 | 543.05 | 335.07 |
| Actual aux cons | MU | | 329.31 | 616.59 | 249.84 | 292.63 | 589.40 | 270.53 |
| Normative Net Generation | MU | a | 2,711.31 | 5,505.88 | 3,397.21 | 2,677.75 | 5,490.84 | 3,387.93 |
| Actual net generation | MU | b | 2,729.33 | 5,816.23 | 2,895.36 | 2,035.61 | 5,750.18 | 3,162.96 |
| Generation Loss due to backing down | MU | c | 9.57 | 25.65 | 16.06 | 3.99 | 56.11 | 145.70 |
| Generation Loss due to system problem | MU | d | | | | | | |
| Generation Loss due to forced majeure outages | MU | e | | | | | | |
| Total Net Generation Including Generation Loss due to backing down | MU | f=b+c+d+e | 2,738.91 | 5,841.88 | 2,911.42 | 2,039.60 | 5,806.29 | 3,308.66 |
| Total Net Generation to be considered for sharing of gains and losses | MU | g=If(APLF<NPLF, Min(f,a),b+c) | 2,738.91 | 5,841.88 | 2,911.42 | 2,039.60 | 5,806.29 | 3,308.66 |
| <i>Fixed Cost (norm-wise)</i> | | | | | | | | |
| Depreciation | Rs Cr | A | 24.64 | 34.14 | 123.11 | 27.19 | 36.88 | 123.59 |
| Interest on Loan and Finance charges | Rs Cr | B | 15.53 | 17.38 | 142.69 | 16.39 | 17.86 | 129.66 |
| Return on Equity | Rs Cr | C | 26.92 | 49.52 | 102.77 | 29.18 | 52.01 | 103.27 |
| Interest on Working Capital | Rs Cr | D | 20.43 | 29.69 | 22.53 | 21.40 | 31.38 | 23.40 |
| Contribution to Pension Fund | Rs Cr | E | 7.39 | 14.10 | - | 12.67 | 24.19 | - |
| Less - Non Tariff Income | Rs Cr | F | 4.17 | 9.85 | 5.56 | 11.51 | 24.78 | 14.10 |
| Fixed Cost excluding O&M and Sec fuel | Rs Cr | G=Sum(AtoE)-F | 90.74 | 134.98 | 385.54 | 95.32 | 137.53 | 365.82 |
| Normative per unit Fixed Cost (Rs/kWh) excluding O&M and Secondary fuel cost | Rs/kWh | H=G/a*10 | 0.33 | 0.25 | 1.13 | 0.36 | 0.25 | 1.08 |
| Actual Sent out Unit | MU | I=g | 2,738.91 | 5,841.88 | 2,911.42 | 2,039.60 | 5,806.29 | 3,308.66 |
| Fixed cost recovery from generation considered from sharing of gains and losses | Rs Cr | J=H*I/10 | 91.66 | 143.22 | 330.41 | 72.60 | 145.43 | 357.26 |
| Fixed cost gain from normative cost | Rs Cr | K=J-G | 0.92 | 8.24 | (55.13) | (22.72) | 7.90 | (8.56) |
| Total gain and loss | Rs Cr | L=Sum(K) | | | (45.97) | | | (23.37) |
| <i>O & M expensess</i> | | | | | | | | |
| Normative O&M Cost allowed | Rs Cr | M | 159.00 | 226.55 | 107.57 | 171.72 | 244.68 | 113.72 |
| Normative O&M Cost derived from NPLF | Rs/kwh | N | 0.59 | 0.41 | 0.32 | 0.64 | 0.45 | 0.34 |
| Actual O&M cost recovery due to net generation considered from sharing of gains and losses | Rs Cr | O=N*g/10 | 160.62 | 240.38 | 92.19 | 130.80 | 258.74 | 111.06 |
| Actual O & M cost expenditure | Rs Cr | P | 164.54 | 212.83 | 115.89 | 190.33 | 226.81 | 116.83 |
| Difference of recovery and expenditure | Rs Cr | Q=O-P | (3.92) | 27.55 | - | (59.54) | 31.92 | - |
| Total Difference | | R=Sum(Q) | | | 23.62 | | | (27.62) |
| <i>Secondary Fuel Cost</i> | | | | | | | | |
| Normative SFC | Rs Cr | S | 29.68 | 30.29 | 18.29 | 29.68 | 30.29 | 18.29 |
| Normative SF Cost derived from NPLF | Rs/kwh | T | 0.11 | 0.05 | 0.05 | 0.11 | 0.06 | 0.05 |
| Secondary fuel cost recovery from actual generation | Rs Cr | U=T*b/10 | 29.79 | 29.18 | 14.18 | 22.56 | 31.72 | 17.07 |
| Actual SFC incurred | Rs Cr | V | 20.86 | 19.62 | 4.99 | 33.33 | 21.24 | 5.34 |
| Savings due to performance improvement | Rs Cr | W=U-V | 8.94 | 9.56 | 9.19 | (10.77) | 10.48 | 11.73 |
| Total Impact Savings/Excess Expenditure due to SFC | Rs Cr | X=Sum(W) | | | 27.68 | | | 11.44 |
| <i>Coal Cost (primary fuel)</i> | | | | | | | | |
| Normative fuel cost on actual sent out | Rs Cr | Y | 263.01 | 449.69 | 230.61 | 195.47 | 479.41 | 268.94 |
| Actual fuel cost | Rs Cr | Z | 267.86 | 439.85 | 227.46 | 227.62 | 457.38 | 273.71 |
| Coal Cost Surplus/(deficit) | Rs Cr | AA=Y-Z | (4.85) | 9.85 | 3.15 | (32.14) | 22.03 | (4.77) |
| Total Impact Savings/Excess Expenditure due to coal cost | Rs Cr | AB=Sum(AA) | | | 8.14 | | | (14.89) |
| Total Impact Savings/Excess Expenditure | Rs Cr | AC=Sum(L,R,X,AB) | | | 13.47 | | | (54.43) |
| Gain/(Loss) to Utility | Rs Cr | AD=IF(AC>0,AC/3,AC) | | | 4.49 | | | (54.43) |

3.4 Final True-up for FY 2010-11, FY 2011-12 and FY 2012-13 for Hasdeo Bango HPS

3.4.1 Capital Structure

Approved capital structure for Hasdeo Bango HPS based on the philosophy adopted by the Commission, in its Order dated 12 July 2013 (table 74) and the actual numbers as per accounts are tabulated as under:

Table 22: Approved Capital Structure of Hasdeo Bango HPP

| Rs. Crore | | | | | | | |
|-----------|--|------------|----------|------------|----------|------------|----------|
| Sr. No. | Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Opening GFA (Including Share of Holding Company GFA) | 108.54 | 108.54 | 108.54 | 108.54 | 109.60 | 109.60 |
| 2 | Opening Capex | 109.72 | 109.72 | 109.72 | 109.72 | 109.60 | 109.60 |
| 3 | Capitalization during the Year | - | - | 1.06 | 1.06 | - | - |
| 4 | Closing GFA | 108.54 | 108.54 | 109.60 | 109.60 | 109.60 | 109.60 |
| 5 | Permissible Equity in Opening GFA | 37.31 | 37.31 | 37.31 | 37.31 | 37.63 | 37.63 |
| 6 | Permissible Equity in Closing GFA | 37.31 | 37.31 | 37.63 | 37.63 | 37.63 | 37.63 |
| 7 | Average Gross Permissible Equity during the year | 37.31 | 37.31 | 37.47 | 37.47 | 37.63 | 37.63 |

3.4.2 Return on Equity

CSPGCL has claimed ROE in accordance to methodology adopted by the Commission in the Order dated 12 July 2013

Commission's View:

The Return on Equity computation for the control period as sought by CSPGCL and as approved by the Commission from FY 2010-11 to FY 2012-13 for Hasdeo Bango is shown in the table below:

Table 23: Approved Return on Equity for Hasdeo Bango HPP

| Rs. Crore | | | | | | | |
|-----------|--|------------|----------|------------|----------|------------|----------|
| Sr. No. | Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Average Permissible Equity during the year | 37.31 | 37.31 | 37.47 | 37.47 | 37.63 | 37.63 |
| 2 | Rate of Return on Equity | 15.50% | 15.50% | 15.50% | 15.50% | 15.50% | 15.50% |
| 3 | Return on Equity | 5.78 | 5.78 | 5.81 | 5.81 | 5.83 | 5.83 |

3.4.3 Depreciation

CSPGCL has submitted that the Commission in its MYT Order dated 12th July 2013 had deducted the cumulative depreciation as on 31st March 2013 from the depreciable value of asset for Hasdeo Bango HPS and depreciation was estimated on the remaining depreciable value of the asset over the remaining life of the Plant of 20 years. On similar lines, CSPGCL has identified the depreciable value of assets as on 31st March 2010 for Hasdeo Bango HPS by deducting the same with the cumulative depreciation and estimating the depreciation on the remaining depreciable value of the assets over the remaining life of the plant of 20 years (at the beginning of FY 2010-11). For such computation, CSPGCL has considered the opening GFA of Rs. 108.54 Crore for FY 2010-11 as approved by the Commission in its MYT Order dated 12th July 2013.

Commission's View:

CSPGCL has submitted depreciation working based on capital structure approved for Hasdeo Bango during last tariff order dated 12.07.2013. During TVS, it has come to knowledge of Commission that CSPGCL have considered higher accumulated depreciation as compared to that approved by Commission in its last tariff order dated 12.07.2013. The Commission has rectified the error and considered accumulated depreciation of Rs. 46.02 Crore as against Rs. 50.72 Crore in petition till 31.03.2010. The depreciation computation for the control period from FY 2010-11 to FY 2012-13 for Hasdeo Bango is given in the table below:

Table 24: Approved Depreciation for Hasdeo Bango HPP

| Sr. No. | Particulars | Rs. Crore | | | | | |
|---------|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Opening GFA | 108.54 | 108.54 | 108.54 | 108.54 | 109.60 | 109.60 |
| 2 | Capitalisation | - | - | 1.06 | 1.06 | - | - |
| 3 | Accumulated Depreciation | 50.72 | 46.02 | 53.07 | 48.60 | 55.47 | 51.21 |
| 4 | Excl Land (90% of GB) | 97.69 | 97.69 | 98.64 | 98.16 | 98.64 | 98.64 |
| 5 | Amount Left to be Depreciated | 46.97 | 51.67 | 45.57 | 49.56 | 43.17 | 47.43 |
| 6 | Remaining Life | 20.00 | 20.00 | 19.00 | 19.00 | 18.00 | 18.00 |
| 7 | Depreciation | 2.35 | 2.58 | 2.40 | 2.61 | 2.40 | 2.63 |

3.4.4 Interest and finance charges

CSPGCL has computed the interest and finance charges based on the principles outlined by the Commission in its Order dated 12 July 2013. In the said Order the

Commission has determined the closing net loan for Hasdeo Bango for FY 2009-10 as Rs. 25.19 Crore. The same has been considered as opening net loan for FY 2010-11.

Commission’s View:

Commission has noticed that CSPGCL has considered loan even when there is no capitalization during FY 2010-11. The Commission has worked out additional loan based on debt: equity ratio of 70:30 based on actual capitalization during the control period. The interest computation for the Control Period from FY 2010-11 to FY 2012-13 for Hasdeo Bango is given in the table below:

Table 25: Approved Interest and Finance Charges for Hasdeo Bango HPP

| Rs. Crore | | | | | | | |
|-----------|----------------------------------|------------|----------|------------|----------|------------|----------|
| Sr. No. | Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Total Opening Net Loan | 25.19 | 25.19 | 22.73 | 22.61 | 21.08 | 20.74 |
| 2 | Repayment during the period | 2.46 | 2.58 | 2.4 | 2.61 | 2.4 | 2.63 |
| 3 | Additional Loan during the year | 0.11 | - | - | 0.74 | - | - |
| 4 | Total Closing Net Loan | 22.73 | 22.61 | 21.08 | 20.74 | 18.68 | 18.11 |
| 5 | Average Loan during the year | 23.96 | 23.90 | 21.9 | 21.67 | 19.88 | 19.42 |
| 6 | Weighted Average Interest Rate | 10.68% | 10.68% | 11.19% | 11.19% | 11.23% | 11.23% |
| 7 | Interest expenses for the Period | 2.56 | 2.55 | 2.45 | 2.43 | 2.23 | 2.18 |

3.4.5 Operation and maintenance expenses

The Commission in its order dated 31st March 2011 approved the normative O&M expenses by escalating the base year O&M expenses arrived at as per Regulations by 5.72%. For the purpose of this petition, CSPGCL has adopted the principles laid down by the Commission. The annual escalation factor based on WPI and CPI variations published on RBI website, have been applied on the normative O&M expense value for FY 2010-11, to compute the normative value for FY 2011-12 & FY 2012-13.

Commission’s View:

Based on the audited accounts, the Commission approves the actual O&M cost for FY 2010-11 to FY 2012-13 for Hasdeo Bango is given in the table below:

Table 26: Approved O&M expenses for Hasdeo Bango HPP

| Rs. Crore | | | | |
|-----------|--------------------|----------|----------|----------|
| | Particulars | FY 10-11 | FY 11-12 | FY 12-13 |
| 1 | Employee expenses | 5.74 | 5.96 | 6.58 |
| 2 | A&G expenses | 1.44 | 1.16 | 1.49 |
| 3 | R&M expenses | 2.24 | 1.80 | 1.17 |
| 4 | Total O&M expenses | 9.43 | 8.92 | 9.25 |

3.4.6 Interest on Working Capital

CSPGCL submitted that the interest on working capital is computed on the normative basis.

Commission's View:

The Commission has observed that CSPGCL has considered lower O&M expenses for FY 2010-11 due to arithmetic error which is not expected at this level. The interest on working capital computation based on normative principles specified in the Regulations for the control period from FY 2010-11 to FY 2012-13 for Hasdeo Bango is given in the table below:

Table 27: Approved Interest on Working Capital for Hasdeo Bango HPP

| Rs. Crore | | | | | | | |
|-----------|--|-------------|-------------|-------------|-------------|-------------|-------------|
| Sr. No. | Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | O&M expensess (1 months) | 0.69 | 0.79 | 0.75 | 0.74 | 0.81 | 0.77 |
| 2 | Maintenance spares (15% of annual O&M) | 1.25 | 1.41 | 1.36 | 1.34 | 1.46 | 1.39 |
| 3 | Receivables (two months) | 4.10 | 4.14 | 3.73 | 3.76 | 4.07 | 4.10 |
| 4 | Total Working Capital Requirement | 6.04 | 6.34 | 5.84 | 5.85 | 6.34 | 6.26 |
| 5 | Rate of interest(SBI PLR as on 1st April 10) | 11.75% | 11.75% | 11.75% | 11.75% | 11.75% | 11.75% |
| 6 | Interest on Working Capital | 0.71 | 0.75 | 0.69 | 0.69 | 0.74 | 0.74 |

3.4.7 Contribution to Pension and Gratuity Fund

The contribution to pension and gratuity fund to be appropriated to HTPS for FY 2011-12 and FY 2012-13

Commission's Views:

The Commission approves contribution to pension and gratuity fund of Rs. 4.90 Crore, Rs. 2.01 Crore & Rs. 3.46 Crore for FY 2010-11, FY 2011-12 & FY 2012-13 respectively based on the audited accounts.

3.4.8 Annual Revenue Requirement for Hasdeo Bango HPS

Based on various components of expense discussed above, the summary of approved ARR for Hasdeo Bango for the control period from FY 2010-11 to FY 2012-13 is given in the table below:

Table 28: ARR for Hasdeo Bango HPP

| | | Rs. Crore | | | | | |
|---------|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Sr. No. | Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | O&M expenses | 9.43 | 9.43 | 8.92 | 8.92 | 9.25 | 9.25 |
| 2 | Contribution to Gratuity/Pension Fund | 4.90 | 4.90 | 2.01 | 2.01 | 3.46 | 3.46 |
| 3 | Depreciation | 2.35 | 2.58 | 2.40 | 2.61 | 2.40 | 2.63 |
| 4 | Interest & Finance Charges | 2.56 | 2.55 | 2.45 | 2.43 | 2.23 | 2.18 |
| 5 | Interest on Working Capital | 0.71 | 0.75 | 0.69 | 0.69 | 0.74 | 0.74 |
| 6 | Total Expenditure | 19.94 | 20.20 | 16.47 | 16.66 | 18.08 | 18.26 |
| 7 | Return on Equity | 5.78 | 5.78 | 5.81 | 5.81 | 5.83 | 5.83 |
| 8 | Aggregate Revenue Requirement | 25.72 | 25.99 | 22.28 | 22.46 | 23.91 | 24.09 |
| 9 | Normative O&M expenses | 8.31 | 8.31 | 9.04 | 9.04 | 9.76 | 9.76 |
| 10 | Normative Aggregate Revenue Requirement | 24.60 | 24.87 | 22.40 | 22.58 | 24.42 | 24.60 |

3.5 Final True-up for FY 2010-11, FY 2011-12 and FY 2012-13 for SHPS

3.5.1 True-up for SHPs

Regulation 34 B of the MYT Regulation, 2010 stipulates that the norms of operation for small hydel plants shall be same as applicable to small hydel plants as per the relevant orders and regulations of the Commission. Accordingly, the Commission in its MYT Order dated 31st March 2011 had considered the principles specified in the NCE Regulations, 2008 for small hydro plants and biomass order on generic tariff for Kawardha cogeneration plant.

CSPGCL submitted that RoE for small hydro stations has been estimated @ 16% for small hydro stations. The Commission in its MYT Order dated 31 Mach, 2011 had not considered grossing-up of RoE by applicable tax rate for SHPs in accordance with the principle of NCE Regulations, 2008. The same has also not been considered by CSPGCL for working out the RoE for SHPs.

CSPGCL submitted that Depreciation has been considered on the basis of principle as specified in the NCE Regulations 2008, wherein depreciation is to be charged on SLM basis on 90% of the value of assets and as per rates specified by the latest CERC Regulations for determination of Renewable Energy (RE) tariff. CERC has specified that for the first 10 years assets would be depreciated at 7% p.a. on SLM basis and the balance depreciation would be spread out in remaining useful life of plant. As all the small hydro plants of CSPGCL are less than 10 years old, rate of depreciation 7% p.a. has been considered.

CSPGCL has submitted that in case of small hydro generating stations, the Commission in its MYT Order dated 31st March 2011 had approved the interest rate of 11.75% for small hydro plants. Considering the fact that there has been no actual loan for the small hydro plant, accordingly, CSPGCL has adopted the interest rate of 11.75% as approved in the MYT Order dated 31 Mach, 2011.

In case of small hydro generating stations, Commission vide its MYT Order dated 31st March 2011, has considered the normative O&M expenses as 2.5% of admitted capital cost of the project with annual escalation of 5% based on the norms for small hydro projects as per its NCE Regulations 2008. For Sikasar and Gangrel SHPs, CSPGCL has considered the actual O&M expenses based on the Audited Accounts. However, for Korba West SHP, CSPGCL submits that for all practical purposes its establishment is integrated with the HTPS main Thermal Plant. As such working out the judicious segregation of all the establishment expenses seems to be infeasible. Therefore normative O&M cost has been considered for the truing up purposes and the same value has been reduced from the O&M expenses of HTPS. Thus, the total value remains same.

In case of small hydro generating stations, Commission in its MYT Order dated 31st March 2011 the Commission approved the interest on working capital in accordance to NCE Regulations 2008 for small hydro stations. CSPGCL has considered the methodology adopted by the Commission.

Commission's View

Opening values for capital structuring for SHPs submitted by CSPGCL is as per MYT Order dated 12th July 2013. Addition to the GFA, loan and equity is as per audited accounts. The Commission approves capital structure same as proposed by CSPGCL. The summary of capital structure as approved by the Commission for control period is as shown below:

Table 29: Capital structure for SHPs for Control period

Rs. Crore

| FY 2010-11 | | | | | | | | | |
|------------|------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sr. No. | Particulars | Sikasar | | Gangrel | | KWMM | | Total | |
| | | Petition | Approved | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Opening GFA | 26.18 | 26.18 | 48.24 | 48.24 | 12.14 | 12.14 | 86.55 | 86.55 |
| 2 | Opening Equity | 7.85 | 7.85 | 14.47 | 14.47 | 3.64 | 3.64 | 25.97 | 25.97 |
| 3 | Opening Net Loan | 13.12 | 13.12 | 29.69 | 29.69 | 7.11 | 7.11 | 49.91 | 49.91 |
| 4 | Opening Grant | 3.00 | 3.00 | - | - | - | - | 3.00 | 3.00 |
| 5 | Closing GFA | 26.18 | 26.18 | 48.24 | 48.24 | 12.14 | 12.14 | 86.55 | 86.55 |
| 6 | Closing Equity | 7.85 | 7.85 | 14.47 | 14.47 | 3.64 | 3.64 | 25.97 | 25.97 |
| 7 | Closing Net Loan | 11.29 | 11.29 | 26.31 | 26.31 | 6.26 | 6.26 | 43.86 | 43.86 |
| 8 | Closing Grant | 3.00 | 3.00 | - | - | - | - | 3.00 | 3.00 |
| FY 2011-12 | | | | | | | | | |
| Sr. No. | Particulars | Sikasar | | Gangrel | | KWMM | | Total | |
| | | Petition | Approved | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Opening GFA | 26.18 | 26.18 | 48.24 | 48.24 | 12.14 | 12.14 | 86.55 | 86.55 |
| 2 | Equity | 7.85 | 7.85 | 14.47 | 14.47 | 3.64 | 3.64 | 25.97 | 25.97 |
| 3 | Opening Net Loan | 11.29 | 11.29 | 26.31 | 26.31 | 6.26 | 6.26 | 43.86 | 43.86 |
| 4 | Grant | 3.00 | 3.00 | - | - | - | - | 3.00 | 3.00 |
| 5 | Closing GFA | 26.18 | 26.18 | 48.24 | 48.24 | 12.14 | 12.14 | 86.55 | 86.55 |
| 6 | Equity | 7.85 | 7.85 | 14.47 | 14.47 | 3.64 | 3.64 | 25.97 | 25.97 |
| 7 | Closing Net Loan | 9.46 | 9.46 | 22.93 | 22.93 | 5.41 | 5.41 | 37.80 | 37.80 |
| 8 | Grant | 3.00 | 3.00 | - | - | - | - | 3.00 | 3.00 |
| FY 2012-13 | | | | | | | | | |
| Sr. No. | Particulars | Sikasar | | Gangrel | | KWMM | | Total | |
| | | Petition | Approved | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Opening GFA | 26.18 | 26.18 | 48.24 | 48.24 | 12.14 | 12.14 | 86.55 | 86.55 |
| 2 | Equity | 7.85 | 7.85 | 14.47 | 14.47 | 3.64 | 3.64 | 25.97 | 25.97 |
| 3 | Opening Net Loan | 9.46 | 9.46 | 22.93 | 22.93 | 5.41 | 5.41 | 37.80 | 37.80 |
| 4 | Grant | 3.00 | 3.00 | - | - | - | - | 3.00 | 3.00 |
| 5 | Closing GFA | 26.18 | 26.18 | 48.24 | 48.24 | 12.14 | 12.14 | 86.55 | 86.55 |
| 6 | Equity | 7.85 | 7.85 | 14.47 | 14.47 | 3.64 | 3.64 | 25.97 | 25.97 |
| 7 | Closing Net Loan | 7.63 | 7.63 | 19.56 | 19.56 | 4.56 | 4.56 | 31.74 | 31.74 |
| 8 | Grant | 3.00 | 3.00 | - | - | - | - | 3.00 | 3.00 |

For working out various cost components of ARR, NCE Regulations, 2008 is applicable for SHPs. CSPGCL has followed the NCE Regulations, 2008 and sought no deviation in the same. By adopting NCE Regulations, 2008, the Commission has calculated cost components of ARR for SHPs. The summary of approved ARR for SHP for control period is as shown below:

Table 30: Approved ARR for SHP for Control period

Rs. Crore

| FY 2010-11 | | | | | | | | | |
|------------|----------------------------------|-------------|-------------|--------------|--------------|-------------|-------------|--------------|--------------|
| Sr. No. | Particulars | Sikasar | | Gangrel | | KWMM | | Total | |
| | | Petition | Approved | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Return on Equity | 1.26 | 1.26 | 2.32 | 2.32 | 0.58 | 0.58 | 4.15 | 4.15 |
| 2 | Depreciation | 1.82 | 1.83 | 3.38 | 3.38 | 0.85 | 0.85 | 6.05 | 6.06 |
| 3 | Interest on Loan | 1.43 | 1.43 | 3.29 | 3.29 | 0.79 | 0.79 | 5.51 | 5.51 |
| 4 | Actual O&M expenses | 0.24 | 0.24 | 0.80 | 0.80 | 0.32 | 0.32 | 1.36 | 1.36 |
| 5 | Normative O&M expenses | 0.77 | 0.77 | 1.50 | 1.50 | 0.32 | 0.32 | 2.59 | 2.59 |
| 6 | Interest on Working Capital | 0.14 | 0.14 | 0.27 | 0.27 | 0.07 | 0.07 | 0.48 | 0.48 |
| 7 | Actual ARR (1+2+3+4+6) | 4.89 | 4.90 | 10.05 | 10.05 | 2.61 | 2.61 | 17.55 | 17.56 |
| 8 | Normative ARR (1+2+3+5+6) | 5.42 | 5.43 | 10.75 | 10.75 | 2.61 | 2.61 | 18.78 | 18.79 |
| FY 2011-12 | | | | | | | | | |
| Sr. No. | Particulars | Sikasar | | Gangrel | | KWMM | | Total | |
| | | Petition | Approved | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Return on Equity | 1.26 | 1.26 | 2.32 | 2.32 | 0.58 | 0.58 | 4.15 | 4.15 |
| 2 | Depreciation | 1.83 | 1.83 | 3.38 | 3.38 | 0.85 | 0.85 | 6.06 | 6.06 |
| 3 | Interest on Loan | 1.22 | 1.22 | 2.89 | 2.89 | 0.69 | 0.69 | 4.80 | 4.80 |
| 4 | Actual O&M expenses | 0.32 | 0.32 | 0.41 | 0.41 | 0.34 | 0.34 | 1.07 | 1.07 |
| 5 | Normative O&M expenses | 0.81 | 0.81 | 1.57 | 1.57 | 0.34 | 0.34 | 2.72 | 2.72 |
| 6 | Interest on Working Capital | 0.14 | 0.14 | 0.27 | 0.27 | 0.07 | 0.07 | 0.48 | 0.48 |
| 7 | Actual ARR (1+2+3+4+6) | 4.77 | 4.77 | 9.27 | 9.27 | 2.52 | 2.52 | 16.56 | 16.56 |
| 8 | Normative ARR (1+2+3+5+6) | 5.25 | 5.25 | 10.43 | 10.43 | 2.52 | 2.52 | 18.21 | 18.21 |
| FY 2012-13 | | | | | | | | | |
| Sr. No. | Particulars | Sikasar | | Gangrel | | KWMM | | Total | |
| | | Petition | Approved | Petition | Approved | Petition | Approved | Petition | Approved |
| 1 | Return on Equity | 1.26 | 1.26 | 2.32 | 2.32 | 0.58 | 0.58 | 4.15 | 4.15 |
| 2 | Depreciation | 1.83 | 1.83 | 3.38 | 3.38 | 0.85 | 0.85 | 6.06 | 6.06 |
| 3 | Interest on Loan | 1.00 | 1.00 | 2.50 | 2.50 | 0.59 | 0.59 | 4.09 | 4.09 |
| 4 | Actual O&M expenses | 0.42 | 0.42 | 0.68 | 0.68 | 0.35 | 0.35 | 1.45 | 1.45 |
| 5 | Normative O&M expenses | 0.85 | 0.85 | 1.65 | 1.65 | 0.35 | 0.35 | 2.85 | 2.85 |
| 6 | Interest on Working Capital | 0.14 | 0.14 | 0.27 | 0.27 | 0.07 | 0.07 | 0.48 | 0.48 |
| 7 | Actual ARR (1+2+3+4+6) | 4.65 | 4.65 | 9.14 | 9.14 | 2.44 | 2.44 | 16.23 | 16.23 |
| 8 | Normative ARR (1+2+3+5+6) | 5.08 | 5.08 | 10.11 | 10.11 | 2.44 | 2.44 | 17.63 | 17.63 |

3.5.2 True-up for Kawardha Cogeneration Station

For Kawardha cogeneration station, generic tariff as applicable for other cogeneration power plants has been adopted. The Commission has already settled that for plants covered under generic tariff, no true-up is applicable; hence no true-up is done for the Kawardha cogeneration plant.

3.6 Gain/ (Loss) for Hydro Plants

For Hydro stations, O&M is the only parameter, which is controllable, and hence comparison of normative O&M and actual O&M made to work out gain/ (loss). Gain/ (loss) for Hydro plants is as shown below:

Table 31: Computation of Gains/ (Losses) for Hydro Plants

| Rs. Crore | | | | | |
|-------------------|------------------------------|----------------|----------------|-------------|--------------|
| Sr. No. | Particulars | Sikasar | Gangrel | KWMM | Bango |
| FY 2010-11 | | | | | |
| 1 | Normative O&M | 0.77 | 1.50 | 0.32 | 8.31 |
| 2 | Actual O&M | 0.24 | 0.80 | 0.32 | 9.43 |
| 3 | Gain/ (Loss) (1-2) | 0.53 | 0.70 | - | (1.12) |
| 4 | Gain/ (Loss) Total Hydro | | | | 0.11 |
| 5 | Gain/ (Loss) to be Passed on | | | | 0.04 |
| FY 2011-12 | | | | | |
| 1 | Normative O&M | 0.81 | 1.57 | 0.34 | 9.04 |
| 2 | Actual O&M | 0.32 | 0.41 | 0.34 | 8.92 |
| 3 | Gain/ (Loss) (1-2) | 0.49 | 1.16 | - | 0.12 |
| 4 | Gain/ (Loss) Total Hydro | | | | 1.77 |
| 5 | Gain/ (Loss) to be Passed on | | | | 0.59 |
| FY 2012-13 | | | | | |
| 1 | Normative O&M | 0.85 | 1.65 | 0.35 | 9.76 |
| 2 | Actual O&M | 0.42 | 0.68 | 0.35 | 9.25 |
| 3 | Gain/ (Loss) (1-2) | 0.43 | 0.97 | - | 0.51 |
| 4 | Gain/ (Loss) Total Hydro | | | | 1.91 |
| 5 | Gain/ (Loss) to be Passed on | | | | 0.64 |

3.7 Net Revenue Surplus/ (Deficit) for CSPGCL

3.7.1 Revenue Surplus/ (Deficit) for FY 2010-11

For FY 2010-11, the utility share of surplus/ (deficit) gain for HBPS and SHPs is approved at Rs. 0.04 Crore. The surplus/ (deficit) for FY 2011-12 and FY 2012-13 is treated in the subsequent paragraphs.

CSPGCL has submitted that during Final True up for FY 2010-11 in last tariff order dated 12.07.2013 in the computation of gain / loss, from the notations; it appears that Secondary fuel cost recovery from actual generation computed on the basis per unit normative cost multiplied by the actual generation. In relation to HTPS and KTPS the computation given in the table confirms this corollary however in case of DSPM the value indicated in the table for FY 2010-11 for DSPM is Rs. 13.61 Crore, which is same as normative SFC. Taking into account the actual net generation, this ought to be Rs. 15.71 Crore. CSPGCL has stated that as the logic adopted in the computations are not very explicit, it is prayed that the either the calculations may kindly be revisited and rectified at that end or the logistics relied in the computation may please be provided so that CSPGCL is able to analyse and comprehend the same in true spirit. On its part, CSPGCL has confirmed that for FY 2011-12 proposed corrections being already accounted for in the instant petition.

In lieu of above submission, the Commission approves the correction in gain/ (loss) of DSPM. The Surplus/ (Deficit) for FY 2010-11 for HBPS/SHPs is as shown in the table below:

Table 32: Surplus/ (Deficit) for FY 2010-11 of CSPGCL

| Sr. No | Particulars | Rs. Crore | |
|----------|---|-------------|------------------------------|
| | | FY 2010-11 | |
| | | Petition | Approved after Final True-up |
| 1 | ARR for Hasdeo Bango & SHPs Approved | 45.98 | 45.98 |
| 2 | Actual ARR for Hasdeo Bango & SHPs | 43.27 | 43.55 |
| 3 | Sharing of Gain/ Loss of HBPS & SHPs | 0.04 | 0.04 |
| 4 | DSPM Specific Oil Gain/ (Loss) Correction | | 2.10 |
| 5 | Surplus/ (Deficit) (1-2+3-4) | 2.74 | 0.37 |

CSPGCL has claimed revenue from sale of power as Rs. 2,108.28 Crore and Rs. 2,218.60 Crore for FY 2011-12 and FY 2012-13 respectively.

The revenue from sale of power in the annual accounts includes revenue receipts against sale of power from Kawardha Co-generation plant as well. However, as the co-generation plant is covered under generic tariff and the Commission has already settled that no true-up applies for the same; neither the expenses nor the revenue from the co-generation plant has been considered for the purpose of this instant true-up. Revenue from sale of power has been considered accordingly. As regards FY 2011-12 & FY 2012-13, the Commission has considered revenue from sale of power based on the audited accounts and accordingly considered revenue as proposed by CSPGCL for trueing up purposes.

3.7.2 Statutory Charges for FY 2011-12 & FY 2012-13

CSPGCL submitted that it incurs a number of statutory charges during its operations. At present these charges are Electricity Duty (ED) and cess on auxiliary power consumption, additional ED on sale (sent out energy) and water charges for hydro & thermal plants. It is a standard practice that the above statutory taxes, duties, levies, cess or any other kind of imposition(s), not included in the O&M expenses, are pass-through to the beneficiary over and above the tariff approved by the Commission.

Commission's View

The Commission accepts the contentions made by CSPGCL in this regard, as these are statutory charges, which needs to pass through in the ARR, and accordingly has

considered the expenses under these heads on actual as submitted by the petitioner for FY 2011-12 and FY 2012-13.

Table 33: Statutory Charges for FY 2011-12 & FY 2012-13

| Rs. Crore | | | | | |
|-----------|----------------------------|----------------|------------------------------|---------------|------------------------------|
| Sr. No | Particulars | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved after Final True-up | Petition | Approved after Final True-up |
| | Revenue | | | | |
| 1 | Water Charges | 20.56 | 20.56 | 49.35 | 49.35 |
| 2 | ED & Cess | 40.25 | 40.25 | 66.55 | 66.55 |
| 3 | SLDC Charges | 5.58 | 5.58 | 7.28 | 7.28 |
| 4 | Total Revenue | 66.39 | 66.39 | 123.18 | 123.18 |
| | | | | | |
| | Expenditure | | | | |
| 5 | Water Charges | 52.05 | 52.05 | 49.55 | 49.55 |
| 6 | ED & Cess | 41.57 | 41.57 | 66.55 | 66.55 |
| 7 | SLDC Charges | 5.58 | 5.58 | 7.73 | 7.73 |
| 8 | Total Expenditure | 99.20 | 99.20 | 123.83 | 123.83 |
| 9 | Surplus / (Deficit) | (32.81) | (32.81) | (0.65) | (0.65) |

3.7.3 Revenue Surplus/ (Deficit) for FY 2011-12 & FY 2012-13

Net ARR for FY 2011-12 & FY 2012-13

Based on the above approved cost components, net ARR of CSPGCL excluding statutory charges for FY 2011-12 and FY 2012-13 are as under.

Table 34: Net ARR of CSPGCL excluding statutory charges

| Rs. Crore | | | | | |
|-----------|---|-----------------|------------------------------|-----------------|------------------------------|
| Sr. No | Particulars | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved after Final True-up | Petition | Approved after Final True-up |
| 1 | ARR for Thermal, Hydro and SHPs | 2,116.58 | 2,126.08 | 2,194.46 | 2,191.84 |
| 2 | Thermal Plant's share in net Gain/ (Loss) | 93.69 | 13.47 | (29.52) | (54.43) |
| 3 | Hydro Plant's share in net Gain/ (Loss) | 1.77 | 1.77 | 1.91 | 1.91 |
| 4 | 1/3 of Gain/ (Loss) of Thermal & Hydro Plants | 31.82 | 5.08 | (27.61) | (52.52) |
| 5 | Recoverable Statutory Charges | 32.81 | 32.81 | 0.65 | 0.65 |
| 6 | Net ARR for CSPGCL (1 + 4 + 5) | 2,181.21 | 2,163.97 | 2,167.50 | 2,139.97 |

The standalone revenue surplus/ (deficit) of CSPGCL for FY 2011-12 and FY 2012-13 is as given in the table below:

Table 35: Standalone Surplus/ Deficit for CSPGCL

| | | Rs. Crore | | | |
|--------|---------------------------------------|----------------|------------------------------|--------------|------------------------------|
| Sr. No | Particulars | FY 2011-12 | | FY 2012-13 | |
| | | Petition | Approved after Final True-up | Petition | Approved after Final True-up |
| 1 | Net ARR for CSPGCL | 2,181.21 | 2,163.97 | 2,167.50 | 2,139.97 |
| 2 | Revenue from Sale of Power | 2,108.28 | 2,108.28 | 2,218.60 | 2,218.60 |
| 3 | Standalone Surplus / (Deficit) | (72.93) | (55.69) | 51.10 | 78.63 |

For FY 2010-11, in last tariff order dated 12th July 2013, surplus/ deficit is calculated and passed on based on audited accounts for thermal plants. In this Order, surplus / deficit of hydro plants are worked out so Rs. 0.37 Crore will be standalone surplus/ deficit.

For FY 2011-12, in last tariff order dated 12th July 2013, surplus/ deficit is calculated and passed on based on provisional accounts for thermal plants. In this Order, surplus / deficit of thermal plants and hydro plants based on audited accounts is worked out so Rs. (55.69) Crore. As surplus/ deficit of Rs. (5.43) Crore is already passed on in last tariff order dated 12th July 2013, remaining Rs. (50.26) Crore will be standalone surplus/ deficit.

For FY 2012-13, no surplus/ deficit exercise done in last tariff order dated 12th July 2013 and hence Rs. 78.63 Crore will be standalone surplus/ deficit.

The revenue surplus/ deficit along with the carrying cost is as given in the table below:

Table 36: Revenue Surplus/ Deficit of CSPGCL

| | | Rs. Crore | | | |
|--------|---|-------------|----------------|--------------|--------------|
| Sr. No | Particulars | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 |
| 1 | Opening Surplus/(Deficit) | - | 0.39 | (52.78) | 24.27 |
| 2 | Standalone Surplus/(Deficit) | 0.37 | (50.26) | 78.63 | - |
| 3 | Closing Surplus/(Deficit) | 0.37 | (49.87) | 25.85 | 24.27 |
| 4 | Interest Rate (%) | 11.75% | 11.75% | 11.75% | 13.20% |
| 5 | Holding/Carrying Interest/Cost for the year | 0.02 | (2.91) | (1.58) | 3.20 |
| 6 | Total Closing Surplus/(Deficit) | 0.39 | (52.78) | 24.27 | 27.47 |

As the sole beneficiary of CSPGCL is CSPDCL and the entire power is purchased by CSPDCL at the rate decided by the Commission, the Commission has decided to adjust the entire revenue surplus of CSPGCL in favour of CSPDCL.

The Commission directs CSPDCL to adjust the surplus amount as approved above from the outstanding amount including delayed payment surcharge to CSPGCL as on 31st March 2014. Similarly, in case of balance surplus i.e. outstanding as on 31st March 2014 is less than the recoverable amount, the balance may be adjusted from bills of CSPGCL in nine equal monthly instalments (starting from July, 2014).

4. FINAL TRUE-UP FOR FY 2011-12 AND FY 2012-13 FOR CSPTCL

4.1 Introduction

As detailed in the Chapter I - 'Background and salient features of the order', the CSPTCL filed Petition for final truing up for FY 2011-12 and FY 2012-13.

CSPTCL submitted the petition on 30th December 2013. After detailed examination of the submissions, the Commission on 12th February 2014 has registered as Petition No. 6 of 2014. Technical Validation Session (TVS) conducted on 30th April 2014 to understand various issues/queries that arose during scrutiny of the Petition. The Commission analysed the petition and sought additional data submission and raised queries through letter dated 01st March 2013 and 18th March 2013. The response to the queries was submitted by CSPTCL vide its letter No. CE/C&P/MYT/13-16/525 dated 07th March 2013 and letter No. CE/C&P/MYT/13-16/643 dated 25th March 2013.

4.2 Final True-up for FY 2011-12 and FY 2012-13

The final truing up for the period has been undertaken in light of the provisions of the MYT Tariff Regulations, 2010 and in general the methodology followed in previous orders and in view of interest of consumers as per the provisions of 61(d) of the EA 2003.

As per the provisions of the MYT Tariff Regulations, 2010, for a transmission licensee, the ARR has following components:-

- Operation and Maintenance (O&M) expenses
- Contribution to pension and gratuity
- Depreciation
- Interest and finance charges
- Return on Equity
- Interest on working capital
- Net prior period credits / Other debits
- Less : Non-tariff income

The component wise analysis and details of the ARR approved by the Commission is outlined in the subsequent paragraphs.

4.2.1 O&M expenses

The CSPTCL has claimed O&M expenses of Rs. 150.65 Crore and Rs. 152.92 Crore for FY 2011-12 and FY 2012-13 respectively as per the audited annual accounts for FY 2011-12 and FY 2012-13.

Commission's View:

The Commission has considered the employee expenses as per the audited annual accounts submitted by the CSPTCL for the years under consideration. The Commission analysed the employee expenses for FY 2011-12 and FY 2012-13 under various sub-heads like salary and wages, earned leave encashment, contribution to provident fund and other funds and employee welfare expenses. In accordance with MYT Regulations, 2010, the Commission has not considered the contribution to pension and gratuity fund as part of the employee expenses. Such expenses have been dealt separately in the order in subsequent paragraphs.

The Commission has considered the A&G expenses as per the audited annual accounts submitted by the CSPTCL for the years under consideration. The Commission analysed the actual audited A&G expenses for FY 2011-12 and FY 2012-13 under various sub-heads like rent, rates & taxes, other taxes, postal & communication expenses, legal fees, audit charges, consultancy charges, technical fees, conveyance & travelling, vehicle expenditure, fees & subscription, printing & stationery, advertisement expenses, electricity charges, miscellaneous expenses, contribution/donation, etc. The Commission has identified that Rs. 0.08 Crore & Rs. 2.78 Crore for FY 2011-12 & FY 2012-13 respectively are under the head social responsibility expenses. The Commission has already settled this matter in its previous orders wherein the Commission had ruled that that any contribution/donation made by the utility for the welfare of society should be funded through its own reserves and surplus and should not be passed on to the consumers and accordingly, the same has not been approved.

The Commission analysed the actual R&M expenses for FY 2011-12 under various sub-heads and has considered the same on actuals.

The net O&M expenses as claimed by the CSPTCL and allowed by the Commission for FY 2010-11 and FY 2011-12 is as given in the following table:

Table 37: O&M expenses as approved by the Commission**Rs Crore**

| Particulars | FY 2011-12 | | FY 2012-13 | |
|-----------------------------------|---------------|------------------------------|---------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Gross Employee expensess | 113.25 | 113.56 | 127.42 | 127.82 |
| Gross A&G expensess | 49.64 | 23.39 | 41.87 | 18.93 |
| Gross R&M expensess | | 26.31 | | 20.51 |
| O&M expensess | 162.89 | 163.26 | 169.29 | 167.26 |
| Less: capitalisation | | | | |
| Employee cost capitalised | (11.23) | (11.23) | (15.28) | (15.28) |
| R&M and A&G expensess capitalised | (1.02) | (1.02) | (1.09) | (1.09) |
| Net O&M expensess | 150.65 | 151.02 | 152.92 | 150.89 |

As far as sharing of gains on achievement of lower O&M expenses is concerned, the Commission has computed normative O&M expenses as Rs. 302.62 Crore for FY 2011-12 and Rs. 327.30 Crore for FY 2012-13 as per MYT Regulations, 2010. The gain and losses were included in MYT Regulations 2010 on the basis of normative O&M and actual O&M expenses. However, the gains of O&M expenses have not been considered in the interest of consumers as per the provisions in section 61(d) of EA 2003. Also in the same spirit, the provisions in the MYT Regulations, 2012 related to gains and losses, have been modified based on normative O&M expenses. Various stakeholders have been objecting on the normative O&M expenses considered in the MYT Regulations 2010 and the orders passed based on these Regulations.

4.2.2 Contribution to pension and gratuity

As regards the contribution to pension and gratuity fund, the CSPTCL has claimed the amount of Rs. 19.06 Crore for FY 2011-12 and Rs. 21.23 Crore as per their audited annual accounts.

Commission's Views:

The Commission has accepted the submission and approved the amounts as claimed by the Petitioner. The approved amount of contribution to pension and gratuity fund is as given in the following table:

Table 38: Contribution to pension and gratuity Fund as approved by the Commission

| Particulars | FY 2011-12 | | FY 2012-13 | |
|--------------------------------------|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Contribution to pension and gratuity | 19.06 | 19.06 | 21.23 | 21.23 |

4.2.3 Capital expenditure and addition in GFA

The CSPTCL has considered addition in GFA of Rs. 171.52 Crore and Rs. 604.89 Crore for FY 2011-12 and FY 2012-13 respectively in its petition.

Commission's View:

The Commission observed that the scheme wise addition of GFA considered by the Petitioner is inclusive of the additions to GFA for SLDC. Accordingly, the amount pertaining to SLDC has been deducted by the Commission and the addition in GFA is approved thereafter on the basis of audited annual accounts. The details of addition in GFA and its sources of funding as proposed by the CSPTCL and as approved by the Commission are shown below:

Table 39: Capitalisation approved by the Commission for FY 2011-12 and FY 2012-13

| Particulars | FY 2011-12 | | FY 2012-13 | |
|-----------------------|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Addition in GFA | 172.52 | 171.52 | 605.39 | 604.89 |
| Sources of Funding: | | | | |
| Consumer Contribution | 1.04 | 1.04 | - | - |
| Equity | 34.50 | 34.50 | 121.08 | 121.08 |
| Debt | 136.97 | 135.98 | 484.31 | 483.81 |

4.2.4 Depreciation

The CSPTCL submitted that it has computed depreciation for FY 2011-12 and FY 2012-13 as per the provisions of clause 24 of the MYT Regulations, 2010. The CSPTCL has proposed the depreciation of the amount of Rs. 75.21 Crore and Rs. 95.67 Crore for FY 2011-12 and FY 2012-13 respectively. The Petitioner has also submitted that it has computed the weighted average depreciation rate to be 5.23% & 5.25% for FY 2011-12 & FY 2012-13 respectively based on the actual opening and closing GFA and the depreciation rates as provided in Appendix – II of MYT Regulations, 2010.

Commission's View:

The Commission has considered the values for opening GFA for FY 2011-12 same as the closing value for FY 2010-11 as approved during the truing up in the order dated 12th July 2013 as per provisions of clause 24 of the MYT Regulations, 2010.

The Commission approves the depreciation at the weighted average rate of 5.24% & 5.25% for FY 2011-12 & FY 2012-13 respectively based on the depreciation rates as provided in Appendix – II of MYT Regulations 2010. The Commission has continued with the prevalent method of computation to determine depreciation based on the rates as specified in the MYT Regulations, 2010.

The depreciation as claimed by the CSPTCL and approved by the Commission is as given in the following table:

Table 40: Depreciation as approved by the Commission

| Particulars | FY 2011-12 | | FY 2012-13 | |
|--|--------------|------------------------------|---------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Opening GFA | 1,626.41 | 1,627.74 | 1,798.93 | 1,799.26 |
| Additional Capitalisation during the Year | 172.52 | 171.52 | 605.39 | 604.89 |
| Closing GFA | 1,798.93 | 1,799.26 | 2,404.32 | 2,404.15 |
| Average GFA for the year | 1,712.67 | 1,713.50 | 2,101.63 | 2,101.71 |
| Depreciation @ rates as per applicable Regulation | 89.83 | 89.79 | 110.31 | 110.23 |
| Opening consumer contribution | 51.46 | 51.46 | 52.50 | 52.50 |
| Addition: consumer contribution during the year | 1.04 | 1.04 | - | - |
| Closing consumer contribution | 52.50 | 52.50 | 52.50 | 52.50 |
| Average consumer contribution | 51.98 | 51.98 | 52.50 | 52.50 |
| Less: Depreciation on consumer contribution on live assets | 2.73 | 2.72 | 2.76 | 2.75 |
| Less: Depreciation on Fully Depreciated Assets | 11.89 | 12.32 | 11.89 | 12.63 |
| Net Depreciation | 75.21 | 74.74 | 95.67 | 94.85 |

4.2.5 Interest and finance charges

The CSPTCL has claimed interest and finance charges of Rs. 88.22 Crore and Rs. 119.08 Crore respectively for FY 2011-12 and FY 2012-13. CSPTCL has considered the opening weighted average interest rate based on actual loan portfolio of 11.5% and 12% respectively for FY 2010-11 and FY 2011-12.

Commission's View:

The Commission has determined opening net loan for computation of interest and finance charges as per the methodology discussed earlier. In accordance with MYT Regulations, 2010, the Commission has considered repayment during the year equivalent to the approved depreciation for the year under consideration. The Interest and finance charges have been computed on the average loan balance during the year by applying the opening weighted average interest rate computed on the basis of actual loan and interest details submitted by the CSPTCL in its submission in May 2014. The interest and finance charges as claimed by the CSPTCL and as approved by the Commission is as given in the following table:

Table 41: Interest and finance charges as approved by the Commission

| Particulars | Rs Crore | | | |
|--|------------|------------------------------|------------|------------------------------|
| | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Total Opening Net Loan | 736.23 | 736.23 | 797.99 | 797.47 |
| Repayment during the period | 75.21 | 74.74 | 95.67 | 94.85 |
| Additional Capitalization of Borrowed Loan during the year | 136.97 | 135.98 | 484.31 | 483.81 |
| Addition/(Reduction) in Normative Loan during the year | - | | - | |
| Total Closing Net Loan | 797.99 | 797.47 | 1,186.63 | 1,186.43 |
| Average Loan during the year | 767.11 | 766.85 | 992.31 | 991.95 |
| Wt. Avg. Interest Rate | 11.50% | 11.50% | 12.00% | 12.00% |
| Interest expenses | 88.22 | 88.19 | 119.08 | 119.03 |

4.2.6 Interest on working capital

The CSPTCL has claimed Interest on working capital of Rs. 20.53 Crore and Rs. 18.85 Crore for FY 2011-12 and FY 2012-13 respectively based on the methodology specified in the MYT Regulations, 2010. CSPTCL has considered prevailing SBI-PLR on 1st April of respective years for which truing up is to be done as the interest rate for working capital.

Commission's View:

In accordance to the Regulation, the Commission has considered one month of the approved O&M expenses, maintenance spares at 15% of the approved O&M expenses and receivables equivalent to 60 days of average billing to consumers for computing the working capital requirement. For computing the interest on working capital, the

Commission has considered the interest rate of 11.75%, for the entire control period, which is the applicable SBI-PLR as on 1st April 2010 in line with MYT Order dated 12th July 2012. Based on the above, the interest on working capital claimed by the CSPTCL and approved by the Commission is as given in the following table:

Table 42: Interest on working capital as approved by the Commission

| Particulars | Rs Crore | | | |
|--|------------|------------------------------|------------|------------------------------|
| | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Operation and Maintenance expenses for one Month | 12.55 | 12.58 | 12.74 | 12.57 |
| Maintenance spares at 15% of O&M expenses | 22.60 | 22.65 | 22.94 | 22.63 |
| Receivable equivalent to 60 days average billing | 122.80 | 120.79 | 94.35 | 93.05 |
| Total working capital requirement | 157.95 | 156.03 | 130.03 | 128.26 |
| Applicable Interest Rate (%) | 13.00% | 11.75% | 14.50% | 11.75% |
| Interest on working capital | 20.53 | 18.33 | 18.85 | 15.07 |

4.2.7 Return on Equity

The CSPTCL has claimed RoE of Rs. 99.48 Crore and Rs. 114.65 Crore for FY 2011-12 and FY 2012-13 respectively.

Commission's View:

In the tariff order dated 12.07.2013, the Commission had determined the capital structure and permissible equity in opening/closing GFA for computation of RoE. The Commission has considered the opening permissible equity for FY 2011-12 same as the closing equity approved for FY 2010-11. The clause 22.3 of the MYT Regulations, 2010 provides for RoE on base rate of 15.5% (maximum) to be grossed up with the Minimum Alternate Tax (MAT) of 19.9305% and 20.01% for FY 2011-12 and FY 2012-13. The RoE claimed by the CSPTCL and approved by the Commission is as given in the following table:

Table 43: Return on Equity as approved by the Commission**Rs Crore**

| Particulars | FY 2011-12 | | FY 2012-13 | |
|--|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Permissible Equity in Opening GFA | 496.65 | 496.65 | 531.16 | 531.15 |
| Permissible Equity in Closing GFA | 531.16 | 531.15 | 652.24 | 652.23 |
| Average Gross Permissible Equity during the Year | 513.91 | 513.90 | 591.70 | 591.69 |
| Rate of Return on Equity | 19.358% | 19.358% | 19.377% | 19.377% |
| Return on Equity | 99.48 | 99.48 | 114.65 | 114.65 |

4.2.8 Net prior period (credits)/ charges

The net prior period (credits) /charges claimed by the CSPTCL and approved by the Commission for FY 2011-12 and FY 2012-13 on the basis of audited annual accounts is as given in the following table:

Table 44: Net prior period (credits) /charges**Rs Crore**

| Particulars | FY 2011-12 | | FY 2012-13 | |
|------------------------------------|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Net prior period (credits)/charges | 2.9 | 2.9 | 1.12 | 0.34 |

4.2.9 Non-tariff income

The CSPTCL has submitted non-tariff income of Rs. 39.17 Crore and Rs. 53.50 Crore for FY 2011-12 and FY 2012-13 respectively as per the audited annual accounts.

Commission's View

The Commission has approved non-tariff Income as per the audited annual accounts of FY 2011-12 & FY 2012-13. The non-tariff income claimed by CSPTCL and approved by the Commission is as given in the following table:

Table 45: Non-tariff income as approved by the Commission**Rs Crore**

| Particulars | FY 2011-12 | | FY 2012-13 | |
|-------------------|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Non-tariff income | 39.17 | 39.33 | 53.50 | 53.51 |

4.2.10 Revenue from transmission charges

The CSPTCL has submitted revenue from transmission charges as per the audited annual accounts for the years under consideration after deducting the revenue for SLDC.

The Commission has verified the same and has approved the revenue based on audited annual accounts. The approved amount of revenue from transmission charges is as given in the following table:

Table 46: Revenue from transmission charges as approved by the Commission**Rs Crore**

| Particulars | FY 2011-12 | | FY 2012-13 | |
|-----------------------------------|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Revenue from transmission charges | 736.81 | 736.81 | 566.08 | 566.08 |

4.2.11 Transmission losses

The Petitioner submitted that the actual transmission losses were 4.12% and 3.86% respectively as against the targeted losses level of 4.57% and 4.50% for FY 2011-12 and FY 2012-13 based on the actual reading of the energy meters installed at the various points of the State periphery.

Commission's view:

It is observed that energy accounting for inter-state exchange of power appears inappropriate and bus-losses have not been incorporated in the calculations submitted by the Petitioner. In absence of this, the Commission is constrained to consider provisional transmission loss as 4.12% and 3.86% for year FY 2011-12 and FY 2012-13 respectively. In absence of proper energy accounting data, sharing of gains and losses will not be permitted. The transmission loss as claimed by CSPTCL and approved by the Commission is as given in the following Table:

Table 47: Transmission loss as approved by the Commission

| Particulars | FY 2011-12 | | FY 2012-13 | |
|---|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Total Energy injected into the Transmission system (MU) | 18,305.24 | 18,305.24 | 18,755.53 | 18,755.53 |
| Energy output from the Transmission system | | | | |
| Sales at EHV levels by consumers on 132 kV and above (MU) | 1,662.72 | 1,662.72 | 1,661.42 | 1,661.42 |
| Energy delivered to Discom on 33kV side of Power Transformer (MU) | 15,888.61 | 15,888.61 | 16,369.21 | 16,369.21 |
| Net Energy delivered (MU) | 17,551.33 | 17,551.33 | 18,030.63 | 18,030.63 |
| Energy Loss (MU) | 753.91 | 753.91 | 724.90 | 724.90 |
| Transmission Loss (%) | 4.12% | 4.12% | 3.86% | 3.86% |

4.2.12 Annual Revenue Requirement

Based on various components of expenses and income discussed above, the summary of ARR of the CSPTCL for FY 2011-12 and FY 2012-13 is as given in the following table:

Table 48: Annual Revenue Requirement as approved by the Commission

| Particulars | FY 2011-12 | | FY 2012-13 | |
|--|---------------|------------------------------|---------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Gross O & M expensess | 162.89 | 163.26 | 169.29 | 167.26 |
| O&M expensess capitalised | (12.24) | (12.24) | (16.37) | (16.37) |
| Contribution to Pension and Gratuity | 19.06 | 19.06 | 21.23 | 21.23 |
| Depreciation | 75.21 | 74.74 | 95.67 | 94.85 |
| Interest on Loan and Finance Charges | 88.22 | 88.19 | 119.08 | 119.03 |
| Interest on Working Capital | 20.53 | 18.33 | 18.85 | 15.07 |
| Net Prior Period Credit/Other Debits | 2.90 | 2.90 | 1.12 | 0.34 |
| Total expensess | 356.58 | 354.24 | 408.87 | 401.41 |
| Return on Equity | 99.48 | 99.48 | 114.65 | 114.65 |
| Less - Non Tariff Income | 39.17 | 39.33 | 53.50 | 53.51 |
| Add: Gains for savings in O&M expensess | 45.79 | - | 52.29 | - |
| Add: Incentives for reduction in transmission losses | 6.18 | - | 8.93 | - |
| Annual Revenue Requirement | 468.86 | 414.39 | 531.25 | 462.56 |
| Revenue | 736.81 | 736.81 | 566.08 | 566.08 |
| Standalone Surplus/(Deficit) | 267.95 | 322.42 | 34.83 | 103.52 |

4.3 Revenue (Surplus)/ (Deficit) of CSPTCL

The Revenue surplus/ (deficit) for FY 2011-12 and FY 2012-13 as approved by the Commission is shown in the table below:

Table 49: Computation of Surplus/ Deficit

| Particulars | FY 2011-12 | FY 2012-13 | FY 2013-14 |
|--|------------------------------|------------------------------|---------------|
| | Approved after final true up | Approved after final true up | |
| Opening Surplus/(Deficit) | - | 55.05 | 354.29 |
| Standalone Surplus/(Deficit) | 52.00 | 276.52 | - |
| Closing Surplus/(Deficit) | 52.00 | 331.58 | 354.29 |
| Interest Rate (%) | 11.75% | 11.75% | 13.20% |
| Holding/Carrying Cost for the year | 3.05 | 22.71 | 46.77 |
| Total Closing Surplus/(Deficit) | 55.05 | 354.29 | 401.06 |

The Commission notes that CSPDCL has to pay significant outstanding amount to CSPTCL towards transmission charge of previous years. The Commission directs CSPDCL to adjust the surplus amount as approved above from the outstanding amount including delayed payment surcharge to CSPTCL as on 31st March 2014. Similarly in case of balance surplus i.e. outstanding as on 31st March 2014 less than the recoverable amount, the balance may be adjusted from bills of CSPTCL in nine equal monthly instalments (starting from July 2014).

5. FINAL TRUE-UP FOR FY 2010-11 TO FY 2012-13 FOR SLDC

5.1 Introduction

As detailed in the Chapter I - 'Background and salient features of the order', the SLDC has filed Petition for final truing up for FY 2010-11, FY 2011-12 and FY 2012-13, Annual Performance Report for FY 2013-14 and ARR for FY 2014-15.

SLDC submitted the petition on 31st December 2014. The Commission analysed the Petition, asked for additional data submission, and raised queries through letter dated 22nd January 2014. The replies were submitted by the SLDC vide its letter No. 2445 dated 21st February 2014. After detailed examination of the submission, the Commission on 25th February 2014 the same has been registered as Petition No. 8 of 2014. Technical Validation Session (TVS) was conducted on 26th April 2014 to understand various issues/queries that arose after scrutinizing the Petition.

5.2 Final True-up for FY 2010-11, FY 2011-12 and FY 2012-13

The final truing up for FY 2010-11, FY 2011-12 and FY 2012-13 has been undertaken in light of the provisions of the SLDC Regulations, 2010 which provide that the ARR for the SLDC will include the following components:

- Return on Equity
- Interest on Loan Capital
- Depreciation
- Operation and Maintenance expenses excluding Human Resource expenses
- Human Resource Expenses
- Interest on Working Capital
- Miscellaneous charges (Other charges, if any)

The following paragraphs outline the ARR components approved by the Commission.

5.2.1 Operation and Maintenance expenses excluding Human Resource expenses

The O&M expenses excluding Human Resource expenses comprise of Repair & Maintenance expenses, Administrative and General expenses.

SLDC has claimed O&M expenses of Rs. 1.645 Crore, Rs. 2.023 Crore and Rs. 1.361 Crore as per the audited annual accounts for FY 2010-11, FY 2011-12 and FY 2012-13 respectively based on the actual expenses incurred by it during the relevant years.

Commissions' View:

For FY 2010-11, the Commission has determined the O&M expenses by reducing the O&M expenses as approved by the Commission for CSPTCL in the MYT Order dated 12th July 2012 from the legitimate O&M expenses in the audited annual accounts for CSPTCL which also includes expenses for SLDC. For FY 2011-12 and FY 2012-13, The Commission has approved the O&M Expenses as proposed by the SLDC in its petition after validation of various components of the same. It is observed that R&M expenses for FY 2012-13 has been reduced drastically from past period due to reduction in expenses in Long Term Service Agreement (SCADA & EMS), miscellaneous expenses and rent of lease lines.

The net O&M expense as claimed by the SLDC and approved by the Commission for FY 2010-11, FY 2011-12 and FY 2012-13 is as given in the following table:

Table 50: O&M expenses excluding Human Resource expenses as approved by the Commission

| Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
|--------------------------------|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up | Petition | Approved after final true up |
| A&G expensess | 0.423 | 1.150 | 0.741 | 0.741 | 0.900 | 0.900 |
| R&M expensess | 1.222 | 0.390 | 1.283 | 1.283 | 0.461 | 0.461 |
| Total O&M expensess | 1.645 | 1.540 | 2.023 | 2.023 | 1.361 | 1.361 |

5.2.2 Human Resource expenses

The SLDC has claimed the Human Resource expenses of Rs. 4.314 Crore, Rs. 4.311 Crore and Rs. 4.491 Crore as per the audited annual accounts for FY 2010-11, FY 2011-12 and FY 2012-13 respectively based on the actual expenses incurred by it during the relevant years.

Commission's View:

For FY 2010-11, the Commission has determined the Human Resource expenses by reducing the Employee expenses as approved by the Commission for CSPTCL in the MYT Order dated 12th July 2012 from the legitimate Human Resource expenses in the audited annual accounts for CSPTCL which also includes expenses for SLDC. For FY 2011-12 and FY 2012-13, The Commission has approved the O&M expenses as proposed by the SLDC in its petition after validation of various components of the same.

The net Human Resource expenses as claimed by the SLDC and approved by the Commission for FY 2010-11, FY 2011-12 and FY 2012-13 is as given in the following table:

Table 51: Human Resource expenses as approved by the Commission

| Particulars | Rs Crore | | | | | |
|-------------------------|------------|------------------------------|------------|------------------------------|------------|------------------------------|
| | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up | Petition | Approved after final true up |
| Human Resource expenses | 4.314 | 3.250 | 4.311 | 4.311 | 4.491 | 4.491 |

5.2.3 Capital expenditure and addition in GFA

In its petition, the SLDC has submitted addition in GFA of Rs. 0.999 Crore during FY 2010-11, Rs. 0.997 Crore during FY 2011-12 and Rs. 0.502 Crore during FY 2012-13. The SLDC has considered normative debt: equity ratio of 70:30 for funding capital investment plan.

Commission's View:

The Commission has approved the addition in GFA for the SLDC after scrutinising the proposed scheme wise capitalisation as submitted by the SLDC in its petition. The addition in GFA as claimed by the SLDC and approved by the Commission for FY 2010-11, FY 2011-12 and FY 2012-13 is as given in the following table:

Table 52: Addition in GFA approved by the Commission

| Particulars | Rs Crore | | | | | |
|---------------------|------------|------------------------------|------------|------------------------------|------------|------------------------------|
| | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up | Petition | Approved after final true up |
| Addition in GFA | 0.999 | 0.999 | 0.997 | 0.997 | 0.502 | 0.502 |
| Sources of funding: | | | | | | |
| Equity | 0.300 | 0.300 | 0.299 | 0.299 | 0.151 | 0.151 |
| Debt | 0.699 | 0.699 | 0.698 | 0.698 | 0.351 | 0.351 |

5.2.4 Depreciation

The SLDC submitted that it has computed depreciation for FY 2010-11, FY 2011-12 and FY 2012-13 as per clause 24 of the provisions of the SLDC Regulations, 2010. The SLDC has considered an average rate of 5.28% for depreciating the assets. In its

petition, the SLDC has submitted depreciation of Rs. 0.765 Crore during FY 2010-11, Rs. 0.818 Crore during FY 2011-12 and Rs. 0.857 Crore during FY 2012-13.

Commission’s View:

The Commission has done a detailed exercise to determine the capital structure of all successor companies of CSEB i.e. CSPGCL, CSPTCL & CSPDCL in Tariff Order for MYT Control Period (FY 2013-14 to FY 2015-16) dated 12th July 2013. In that capital structure, the Commission has determined the debt, equity and grant for various companies. In the same order, the Commission has determined GFA of the SLDC on the basis of difference of GFA approved in the final truing up of CSPTCL for the year 2010-11 and the same has been considered as opening GFA for FY 2010-11. The rate of depreciation is same as that considered by the Commission for truing up of CSPTCL. The depreciation as claimed by the SLDC and approved by the Commission is as given in the following table:

Table 53: Depreciation as approved by the Commission

Rs Crore

| Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
|---|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up | Petition | Approved after final true up |
| Opening GFA | 10.910 | 14.080 | 10.910 | 15.079 | 10.910 | 16.076 |
| Additional capitalisation during the year | 0.999 | 0.999 | 0.997 | 0.997 | 0.502 | 0.502 |
| Closing GFA | 11.909 | 15.079 | 11.907 | 16.076 | 11.412 | 16.578 |
| Average GFA for the year | 11.410 | 14.580 | 11.409 | 15.578 | 11.161 | 16.327 |
| Rate of depreciation | 5.28% | 5.25% | 5.28% | 5.25% | 5.28% | 5.25% |
| Total depreciation for the year | 0.602 | 0.765 | 0.602 | 0.818 | 0.589 | 0.857 |

5.2.5 Interest and Finance Charges

The SLDC has submitted Rs. 0.227 Crore, Rs. 0.283 Crore and Rs. 0.330 Crore as the Interest and finance charges for FY 2010-11, FY 2011-12 and FY 2012-13 respectively.

Commission’s View:

The Commission has considered the outstanding loan which was reduced from opening GFA for FY 2010-11 of CSPTCL for future calculation of interest and finance charges. The Commission has considered repayment during the year equivalent to the approved depreciation for the year under consideration. Further, additional capitalisation of loan has been considered as already approved by the

Commission. For determining of weighted average interest rate for SLDC, the Commission has considered the actual loan portfolio of CSPTCL as the annual accounts have not been segregated. The interest and finance charges have been computed on the opening loan balance during the year by applying the weighted average interest rate computed on the basis of actual loan appearing in the annual accounts of CSPTCL. Interest and finance charges claimed by the SLDC and approved by the Commission are given in the following table:

Table 54: Interest and finance charges as approved by the Commission

| Particulars | Rs Crore | | | | | |
|--|------------|------------------------------|------------|------------------------------|------------|------------------------------|
| | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up | Petition | Approved after final true up |
| Total opening net loan | 3.140 | 7.640 | 4.140 | 7.706 | 5.140 | 7.83 |
| Capital Expenditure during the year | 0.999 | 0.999 | 0.997 | 0.997 | 0.502 | 0.50 |
| Additional capitalization of borrowed loan during the year | 0.699 | 0.699 | 0.698 | 0.698 | 0.351 | 0.35 |
| Repayment of normative loan | 0.602 | 0.765 | 0.602 | 0.818 | 0.589 | 0.86 |
| Total closing net loan | 0.902 | 7.706 | 0.901 | 7.826 | 0.740 | 8.33 |
| Average loan during the year | 2.021 | 7.673 | 2.521 | 7.766 | 2.940 | 8.08 |
| Wt. avg. interest rate | 11.23% | 11.22% | 11.23% | 11.50% | 11.23% | 12.00% |
| Interest expensess | 0.227 | 0.861 | 0.283 | 0.893 | 0.330 | 0.969 |

5.2.6 Interest on Working Capital

The SLDC has claimed Interest on working capital of Rs 0.110 Crore, Rs 0.121 Crore and Rs 0.094 Crore for FY 2010-11, FY 2011-12 and FY 2012-13 respectively.

Commission's View:

In accordance to the Regulation, the Commission has considered one month of the approved O&M expenses excluding Human Resources expenses, Human Resource expenses for one month and receivables equivalent to 2 months of approved System Operation Charges and Market Operation Charges. The Commission has considered the interest rate of 11.75%, which is the SBI-PLR on 1st April 2010, for computing interest on working capital. Interest on working capital claimed by the SLDC and approved by the Commission is as given in the following table:

Table 55: Interest on Working Capital as approved by the Commission

Rs Crore

| Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
|--|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up | Petition | Approved after final true up |
| Operation and Maintenance expenses for one Month | 0.137 | 0.128 | 0.169 | 0.169 | 0.113 | 0.113 |
| Human Resource expenses (1 month) | 0.359 | 0.271 | 0.359 | 0.359 | 0.374 | 0.374 |
| Receivables (1/6th of Income) | 0.441 | 1.250 | 0.503 | 1.545 | 0.310 | 1.489 |
| Total working capital requirement | 0.937 | 1.649 | 1.031 | 2.073 | 0.798 | 1.977 |
| Applicable Interest Rate (%) | 11.75% | 11.75% | 11.75% | 11.75% | 11.75% | 11.75% |
| Interest on working capital | 0.110 | 0.194 | 0.121 | 0.244 | 0.094 | 0.232 |

5.2.7 Return on Equity

The SLDC has claimed Return on Equity (RoE) of Rs. 0.960 Crore, Rs. 0.960 Crore and Rs. 0.902 Crore for FY 2010-11, FY 2011-12 and FY 2012-13 respectively.

Commission's View:

The Commission has considered opening GFA for FY 2010-11 in the para 1.2.4 above. The Commission has considered equity at 30% of opening GFA of FY 2010-11 for calculation of RoE. The base rate of RoE is considered as 15.5% grossed up with the applicable MAT of 16.995%, 19.931% and 20.010% for FY 2010-11, FY 2011-12 and FY 2012-13. The RoE is approved at 18.674%, 19.358% and 19.377% respectively. The RoE claimed by the SLDC and approved by the Commission is as given in the following table:

Table 56: Return on Equity as approved by the Commission

Rs Crore

| Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
|--|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up | Petition | Approved after final true up |
| Permissible equity in opening GFA | | 4.620 | | 4.920 | | 5.219 |
| Additions to equity due to increase of GFA | | 0.300 | | 0.299 | | 0.151 |
| Permissible equity in closing GFA | | 4.920 | | 5.219 | | 5.369 |
| Average permissible equity for the year | 4.960 | 4.770 | 4.960 | 5.069 | 4.660 | 5.294 |
| Rate of return on equity | 15.50% | 15.50% | 15.50% | 15.50% | 15.50% | 15.50% |
| MAT | 19.931% | 16.995% | 19.931% | 19.931% | 19.931% | 20.010% |
| Grossed-up rate of return on equity | 19.358% | 18.674% | 19.358% | 19.358% | 19.358% | 19.377% |
| Return on equity | 0.960 | 0.891 | 0.960 | 0.981 | 0.902 | 1.026 |

5.2.8 Annual Revenue Requirement

Based on various components of expense and income discussed above, the summary of ARR of the SLDC approved by the Commission for FY 2010-11, FY 2011-12 and FY 2012-13 is as given in the following table:

Table 57: Annual Revenue Requirement as approved by the Commission

| Particulars | Rs Crore | | | | | |
|--|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|
| | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up | Petition | Approved after final true up |
| Human resources expensess | 4.314 | 3.250 | 4.311 | 4.311 | 4.491 | 4.491 |
| O&M expensess excluding Human Resource expensess | 1.645 | 1.540 | 2.023 | 2.023 | 1.361 | 1.361 |
| Interest on normative loan (loan capital) | 0.227 | 0.861 | 0.283 | 0.893 | 0.330 | 0.969 |
| Interest (normative) on working capital | 0.110 | 0.194 | 0.121 | 0.244 | 0.094 | 0.232 |
| Depreciation | 0.602 | 0.765 | 0.602 | 0.818 | 0.589 | 0.857 |
| Return on Equity | 0.960 | 0.891 | 0.960 | 0.981 | 0.902 | 1.026 |
| Total ARR | 7.858 | 7.501 | 8.301 | 9.270 | 7.767 | 8.936 |

5.2.9 SLDC Development Fund

As per the SLDC Regulations, 2010, the SLDC shall be entitled to utilise, except the revenue expenditure, the money deposited in the SLDC development fund for loan repayment, servicing the capital raised in the form of interest and dividend paid, meeting stipulated equity portion in asset creation and margin money for raising loan from the financial institutions and funding of R&D projects of SLDC. The Commission has approved the proposed charges for the SLDC development fund which can be utilised by the SLDC for capital expenditure which were not envisaged at the time of filing of capital investment plan and also necessary for smooth functioning of SLDC as shown in the table below.

Table 58: SLDC development fund as approved by the Commission

Rs Crore

| Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
|----------------------|------------|------------------------------|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up | Petition | Approved after final true up |
| Registration charges | - | - | 2.760 | 2.760 | 0.990 | 0.990 |
| EIR charges | | | - | - | 0.269 | 0.269 |
| STOA charges | | | 1.173 | 1.173 | 1.257 | 1.257 |
| Total | - | - | 3.933 | 3.933 | 2.516 | 2.516 |

5.2.10 Revenue Surplus/ (Deficit)

The Revenue surplus/ (deficit) for FY 2010-11, FY 2011-12 and FY 2012-13 as approved by the Commission is shown in the table below:

Table 59: Computation of Surplus/ (Deficit)

Rs Crore

| Particulars | FY 2010-11 | | FY 2011-12 | | FY 2012-13 | |
|---|------------|------------------------------|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up | Petition | Approved after final true up |
| Annual Revenue Requirement | 7.858 | 7.501 | 8.301 | 9.270 | 7.767 | 8.936 |
| Revenue | 7.850 | 7.850 | 11.238 | 11.238 | 13.330 | 13.330 |
| Revenue Surplus / (Deficit) during the year | (0.008) | 0.349 | 2.937 | 1.968 | 5.563 | 4.394 |

5.3 ARR for FY 2014-15

The SLDC has requested to revise the ARR of Rs. 16.290 Crore for FY 2014-15 in its petition. In accordance with the clause 5.7 of the SLDC Regulations, 2012, the Commission has tried up for previous years and has not revised the ARR for FY 2014-15. Hence, the ARR for FY 2014-15 for SLDC will be Rs. 14.150 Crore as approved in order dated 09th July 2013.

SLDC has also requested for additional R&M expenses for contribution towards subscription portion of SLDC for PGCIL and other R&M activities at SLDC in compliance with the Commission's order in petition No. 53/2012(M). The SLDC submitted that in this order the Commission has directed that certain items shall not be considered as CAPEX and shall be considered in O&M.

The additional R&M expenses as sought by the SLDC in this petition are not of routine nature. In accordance with clause 9 of the SLDC Regulations, 2010, the SLDC

development fund for servicing the dividend payment, meeting stipulated equity portion in asset creation, margin money for raising loan from the financial institutions etc. after due approval of the Commission. The fund shall not be utilised for any other revenue expenditure.

However as per the clause 9 of the SLDC Regulations, 2012, outstanding SLDC development fund, as may be available on 31st March 2013, shall now be part of capital reserves of SLDC and till a separate company is notified by the State Govt., the same shall be part of capital reserve of STU, which may be utilized for meeting stipulated equity portion in asset creation after due approval of the Commission.

Taking into consideration the fact that there may not be any SLDC development fund in prospective years, it may be proper that the amount accumulated in the fund be utilised for such additional exceptional expenses. The Commission hence directs the SLDC to meet out the additional R&M expenditure from the SLDC development fund.

6. FINAL TRUE-UP FOR FY 2011-12 AND FY 2012-13 FOR CSPDCL AND REVISED ARR FOR FY 2014-15 ALONG WITH THE TARIFF PROPOSAL.

6.1 Introduction

As detailed in the Chapter I - 'Introduction and Background', CSPDCL filed Petition for final True-up for FY 2011-12 and provisional True-up of FY 2012-13 and revision of ARR for FY 2014-15 along with a Tariff Proposal on 31st December 2013. The clarification has been sought vide letter dated 21st January 2014 and reply on the same was received on 12th February 2014. After detailed examination of the submission, the same has been registered by the Commission on 14th February 2014 as Petition No. 7 of 2014 (T).

Technical Validation Session (TVS) was conducted on 29th April 2014 to deliberate various issues/queries for disposal of the petition. Thereafter during prudence check of the petition, additional information was sought vide letter dated 2nd May 2014 & 24th May 2014 and 31st May 2014. The replies were submitted by CSPDCL vide its letter dated 15th May 2014, 27th May 2014 and 2nd June 2014. As final audited accounts for FY 2012-13 was submitted by the petitioner, it was decided to carry out final True-up of FY 2012-13 along with final True-up of FY 2011-12.

6.2 Directions of Hon'ble APTEL

- True up the interest on working capital in the truing up of the accounts for FY 2011-12 & FY 2012-13, taking into account the Prime Lending Rate of SBI in the respective financial years.
- True up the interest on consumer security deposit at the truing up of accounts for FY 2012-13.
- Determine the additional revenue generated at the revised tariff taking into account the period from the date of implementation of the revised tariff till the end of financial year.
- Allow financing cost on un-recovered revenue gap created in the ARR for FY 2012-13 in the next tariff order to be recovered through the retail supply tariff and allow for part recovery of the revenue gap in accordance with the findings given in the impugned order in the next tariff order.

The above directions of Hon'ble APTEL have been complied in this order.

6.3 Final True-up for FY 2011-12 and FY 2012-13

The truing up for the period has been undertaken in light of the provisions of the MYT Regulations 2010 and in general the methodology followed in previous orders. Exceptions have been resorted to, with the reasons recorded in the relevant section, only in such cases where there was practical constraint or where it was essential to comply to pith and substance of the Act / Regulation.

For a distribution company, The ARR has following components:-

- Power purchase cost
- Operation and Maintenance cost
- Contribution to Pension Fund and Gratuity
- Depreciation
- Interest and finance charges
- Return on Equity
- Interest on working capital
- Net prior period credits / Other debits
- Less: Non-tariff income

The component wise analysis of the ARR is as under:-

6.3.1 Sales

CSPDCL submitted that it served more than 38 lakhs consumers at LV level and more than 2000 consumers at HV and EHV level. CSPDCL also submitted that it aims at managing the energy procurement and sales in the most efficient manner so that conflicting objectives of availability and cost are balanced to the benefit of consumers.

As regards FY 2011-12, CSPDCL submitted the actual category-wise sales. The total sales submitted by CSPDCL amounts to 13173 MU which comprise of 6,544 MU of LT sales and 6629 MU of HV and EHV Sales. For FY 2012-13, actual sales as submitted by CSPGCL amounts to 14200 MU which comprise of 7483 MU of LT sales and 6717 MU of HV and EHV sales.

Commission's View:

As regards the sales for FY 2011-12 and FY 2012-13, the Commission had asked CSPDCL to submit the details in the form R15 for scrutinising the actual sales.

The actual sales for the FY 2011-12 have been recorded at 13173 MUs which is same as considered in the order for provisional truing up for FY 2011-12. Further, the Commission has considered the sales of 15226 MUs for FY 2012-13 in the tariff order dated 28.04.2012 whereas the actual sales recorded by CSPDCL is 14200 MUs, which is 1026 MUs less.

The sales data submitted by CSPDCL has been analysed and accordingly, sales as reported in the R-15 have been considered by the Commission for the purpose of truing up in this order. The category-wise sales as considered by the Commission are given in the following table:

Table 60: Category-wise sales for FY 2011-12 and FY 2012-13

| Sr. No | Category | FY 2011-12 | | FY 2012-13 | |
|----------|--|---------------|------------------------------|---------------|------------------------------|
| | | Petition | Approved after final true up | Petition | Approved after final true up |
| A | LV | 6,544 | 6,544 | 7,483 | 7,483 |
| 1 | BPL | 604 | 604 | 878 | 878 |
| 2 | Domestic Excluding BPL | 2,442 | 2,442 | 2,639 | 2,639 |
| 3 | Non Domestic (Normal Tariff) | 582 | 582 | 656 | 656 |
| 4 | Non Domestic (Demand Based Tariff) | 4 | 4 | 8 | 8 |
| 5 | Agriculture - Metered | 2,084 | 2,084 | 2,255 | 2,255 |
| 6 | Agriculture - Allied Activities | 12 | 12 | 15 | 15 |
| 7 | LT Industry | 475 | 475 | 477 | 477 |
| 8 | Public Utilities | 190 | 190 | 240 | 240 |
| 9 | Temporary | 149 | 149 | 315 | 315 |
| | | | | | |
| B | EHV | 1,865 | 1,865 | 2,080 | 2,080 |
| 1 | Railway Traction | 789 | 789 | 900 | 900 |
| 2 | Heavy Industries | 764 | 764 | 860 | 860 |
| 3 | Steel Industries | 141 | 141 | 181 | 181 |
| 4 | Other EHV Consumers | 171 | 171 | 141 | 141 |
| | | | | | |
| C | HV | 4,764 | 4,764 | 4,637 | 4,637 |
| 1 | Steel Industries | 3,033 | 3,033 | 2,834 | 2,834 |
| 2 | Mines and Cement Industries | 319 | 319 | 350 | 350 |
| 3 | Other HT Industries | 554 | 554 | 596 | 596 |
| 4 | Low Load Factor Industries | 84 | 84 | 84 | 84 |
| 5 | Residential Purpose | 242 | 242 | 212 | 212 |
| 6 | General Purpose Non Industrial | 345 | 345 | 429 | 429 |
| 7 | PWW and Irrigation | 50 | 50 | 55 | 55 |
| 8 | Start up power Tariff | 124 | 124 | 61 | 61 |
| 9 | Agriculture Allied Services | 14 | 14 | 17 | 17 |
| 10 | Industries related to renewable power tariff | - | - | - | - |
| | | | | | |
| D | Total | 13,173 | 13,173 | 14,200 | 14,200 |

6.3.2 Power Purchase Cost

CSPDCL in its petition submitted that it had purchased power from CSPGCL generating stations, Central generating stations and other sources such as captive generating plants, bio-mass based power plants, IPPs, solar and other RE sources, CSPTTrCL and other short term sources to meet the energy requirement of the State. The CSPDCL also submitted that net expenses of Rs 29.69 Crore on account of UI charges in FY 2012-13 has been reduced from income from inter-state sales in the balance sheet, thereby reducing the income receipt. CSPDCL has submitted power

purchase cost of Rs. 5046.49 Crore for FY 2011-12 and Rs. 5138.96 Crore for FY 2012-13 respectively. CSPDCL further requested the Commission to approve the power purchase expenses including transmission charges on actuals.

Commission's View:

The details submitted by CSPDCL regarding power purchase were analysed; source wise power purchase quantum and cost was verified from form R-4.

From the R-4 submitted by CSPDCL it is observed that the utility has incurred Rs. 89.83 Crore for FY 2011-12 and Rs. 264.65 Crore for FY 2012-13 towards short-term power purchase from M/s Jindal Steel and Power Limited (JSPL). CSPDCL had purchased 359.32 MU at the average rate of Rs. 2.50 per unit in FY 2011-12 and 980.19 MUs at the average rate of Rs. 2.66 per unit in FY 2012-13.

The load curve prepared by the SLDC shows that the injection pattern of the power supplied by JSPL to CSPDCL has wide variation. Supply from JSPL is changing frequently and it is unstable / non-firm power. To check sanctity of the fact, the Commission has done detailed analysis of the power supplied by JSPL.

In the judgment passed by Hon'ble APTEL in the Appeal No.89 of 2012 dated 07th March 2014, JSPL itself has submitted that surplus power at different times of the day was dependent on the actual consumption of steel plant which varied frequently. JSPL has shown inability to supply power from its captive plant to licensee area in which one of the reason in fluctuation of quantum of surplus power available from its Captive Power Plant due to fluctuating load of its steel plant. The relevant clauses of the order are reproduced below:

“...

17. According to Jindal Steel, the surplus of annual aggregate generation of energy does not correctly reflect the surplus power on continuous and sustainable basis each day. The surplus power at different times of the day was dependent on the actual consumption of Steel Plant which varied frequently. Jindal Steel also submitted sample graphs of export from its Captive Power Plant for the months of July, 2010 and July, 2011 to substantiate its point. It is further submitted that their supply to CSPDCL formed a small part of total capacity handled by the network of CSPDCL, hence their network was able to absorb the fluctuations in power supply. CSPDCL also refused to grant increase in contract demand from 1 MW to 80 MW for its Steel Plant on 22.12.2008 against the request made by Jindal Steel on 6.9.2008 to enhance the contract demand to meet the increased demand of their Steel Plant.

18. Thus, Jindal Steel has given the following reasons for non-supply of power from its captive power plant to its licensed area:

(a) Increase in demand of electricity in its Steel Plant due to expansion of its steel plant.

(b) Refusal of CSPDCL to increase contract demand for supply of power to its steel plant consequent to its increase in the power demand of its Steel Plant.

(c) Fluctuation in quantum of surplus power available from its Captive Power Plant due to fluctuating load of its Steel Plant whereas Jindal Industrial Park required supply on continuous and sustainable basis. Therefore, the surplus power from its captive Power Plant could not be utilised in Jindal Industrial Park.

...“

It is amply clear that power supplied by JSPL to CSPDCL is fluctuating in nature. In such a case, it is very difficult for CSPDCL to manage its load-generation balance and some time it may have to over draw/ under draw from grid for which heavy penalty is required to be paid. The CSPDCL has signed power purchase agreement with JSPL for RTC power supply and not for non-firm power. It is also seen that CSPDCL has not taken any corrective steps to overcome this situation and continued purchasing such power of poor quality. The Commission takes serious note on the same and directs CSPDCL for not to purchase unstable / non-firm power which creates disturbance in demand supply balance.

As power purchased from JSPL by CSPDCL is of non-firm nature. The purchase price of non-firm (unstable) power cannot be same as that of firm power. The Commission in Suo-motu Petition No. 05 of 2010 has decided the base rate for power supply based on load factor for stable power. The CSPDCL plans its power purchase on the basis of load factor and executes agreements accordingly so that CSPDCL may supply quality and reliable power to its consumers. The load factor base tariff has been determined to take care outages of generating plants. The injection pattern of such generators causes commercial implications to the State distribution utility if the State does not resort to drawal limitations for drawl of power from the regional grid.

It has been noticed that CSPDCL has ignored the quality of power (unstable) supplied by JSPL and entered in power purchase agreement for such power. The Commission is of the strong view that burden of negligence of the CSPDCL should not be passed

on to the consumers and hence approves minimum base rate of Rs. 1.50 per kWh as part of power purchase cost.

The CSPDCL has paid DPS to CSPGCL and claimed the same as part of power purchase cost which has not been considered by the Commission as per the provisions of the MYT Regulations. In view of the same, DPS paid by CSPDCL should not be part of power purchase cost and it has to be borne by CSPDCL. The Commission continuing with its stand taken in the last tariff order dated 12.07.2013, disallows Rs. 25.04 Crore and Rs. 66.75 Crore for FY 2011-12 & FY 2012-13 respectively.

It has been observed that the directives given in the orders for submitting quarterly report on short term power purchase by CSPDCL is not being complied.

Table 61: Power purchase expenses for FY 2011-12 as approved by the Commission

| Sr. No | Description | Petition | | Approved after final true up | |
|----------|--|------------------|--------------------|------------------------------|--------------------|
| | | Quantum (in MU) | Amount (Rs. Crore) | Quantum (in MU) | Amount (Rs. Crore) |
| A | Purchase from Central Generating Stations | | | | |
| 1 | N.T.P.C. | 4,877.39 | 1,151.57 | 4,877.39 | 1,151.57 |
| 2 | N.T.P.C. - SAIL | 367.75 | 150.57 | 367.75 | 150.57 |
| 3 | N.P.C. Limited | 283.84 | 89.59 | 283.84 | 89.59 |
| 4 | Others | 16.53 | 1.25 | 16.53 | 1.25 |
| | Sub Total A | 5,545.51 | 1,392.98 | 5,545.51 | 1,392.98 |
| B | Purchase from State Generating Stations | | | | |
| 5 | CSPGCL | 11,783.99 | 2,193.11 | 11,783.99 | 2,193.11 |
| 6 | Traders/CSPTrdCL/Others | 485.37 | 139.20 | 485.37 | 139.20 |
| 7 | CPPs/PPs | 1,831.03 | 479.64 | 1,831.03 | 443.71 |
| 8 | Biomass | 423.92 | 177.16 | 423.92 | 177.16 |
| 9 | Solar | 2.47 | | 2.47 | |
| 10 | Other RE(Hydel) (Private) | 0.81 | | 0.81 | |
| | Sub Total B | 14,527.59 | 2,989.11 | 14,527.59 | 2,953.18 |
| C | Transmission & Other Charges | | | | |
| 11 | Interstate Transmission Charges | | 134.11 | - | 134.11 |
| 12 | Intrastate Transmission Charges | | 577.42 | - | 577.42 |
| 13 | Other Charges | | 103.20 | - | 103.20 |
| 14 | UI | 36.81 | 101.64 | 36.81 | 101.64 |
| 13 | SLDC | | 5.10 | - | 5.10 |
| | Sub Total C | 36.81 | 921.47 | 36.81 | 921.47 |
| 14 | Less: Rebate on Power Purchase | | 29.47 | - | 29.47 |
| | Gross Power Purchase Cost | 20,109.91 | 5,274.09 | 20,109.91 | 5,238.16 |
| 16 | Less: DPS towards payment to CSPGCL | | - | - | 25.04 |
| | Net Power Purchase Cost | 20,109.91 | 5,274.09 | 20,109.91 | 5,213.12 |

Table 62: Power purchase expense approved by the Commission for FY 2012-13

| Description | Petition | | Approved after final true up | |
|--|------------------|--------------------|------------------------------|--------------------|
| | Quantum (in MU) | Amount (Rs. Crore) | Quantum (in MU) | Amount (Rs. Crore) |
| Purchase from Central Generating Stations | | | | |
| N.T.P.C. | 6,290.72 | 1,599.16 | 6,290.72 | 1,599.16 |
| N.T.P.C. - SAIL | 349.64 | 152.21 | 349.64 | 152.21 |
| N.P.C. Limited | 330.42 | 96.16 | 330.42 | 96.16 |
| Others | 16.36 | 2.03 | 16.36 | 2.03 |
| Sub Total A | 6,987.14 | 1,849.56 | 6,987.14 | 1,849.56 |
| Purchase from State Generating Stations | | | | |
| CSPGCL | 11,309.54 | 2,413.42 | 11,309.54 | 2,413.42 |
| Traders/CSPTdCL/Others | 237.05 | 44.80 | 237.05 | 44.80 |
| CPPs/IPPs | 2,575.11 | 711.94 | 2,575.11 | 594.32 |
| Biomass | 564.46 | | 564.46 | |
| Solar | 5.74 | 283.94 | 5.74 | 283.94 |
| Other RE(Hydel) (Private) | 1.96 | | 1.96 | |
| Sub Total B | 14,693.86 | 3,454.10 | 14,693.86 | 3,336.48 |
| Transmission & Other Charges | | | | - |
| Interstate Transmission Charges | | 194.50 | - | 194.50 |
| Intrastate Transmission Charges | | 489.57 | - | 489.57 |
| Other Charges | | 72.84 | - | 72.84 |
| UI | 25.24 | 29.69 | 25.24 | 29.69 |
| SLDC | | 5.85 | - | 5.85 |
| Sub Total C | 25.24 | 792.45 | 25.24 | 792.45 |
| Less: Rebate on Power Purchase | | 27.11 | - | 27.11 |
| Gross Power Purchase Cost | 21,706.24 | 6,069.00 | 21,706.24 | 5,951.38 |
| Less: DPS towards payment to CSPGCL | | - | - | 66.75 |
| Net Power Purchase Cost | 21,706.24 | 6,069.00 | 21,706.24 | 5,884.62 |

6.3.3 Distribution Loss

The CSPDCL submitted that it has over-achieved the loss levels as compared to that approved by the Commission, therefore in accordance with the Regulation 5.9 of the MYT Regulations, 2010 the distribution licensee is eligible to share a part of the financial gain derived from achieving higher loss reduction vis-à-vis target fixed by the Commission. Accordingly, CSPDCL claimed the overachievement at 1/3rd of the total gains from overachievement of the distribution losses. The distribution loss and computation of incentive for FY 2011-12 and FY 2012-13 as submitted by CSPDCL is as shown in table below:

Table 63: Distribution Loss and Computation of Incentive for FY 2011-12 & FY 2012-13 as submitted by the petitioner

| Particulars | Formulae | FY 2011-12 | FY 2012-13 |
|---|------------|------------|------------|
| Energy recorded at 33kV Outgoing feeder of all EHV S/s | A | 16156 | 16754 |
| Add: Net Energy injected by generators connected at 33/11 kV S/S | B | 304 | 290 |
| Energy Input at Distribution Periphery below EHV level MU | C=A+B | 16460 | 17044 |
| Add: EHV Sales | D | 1865 | 2080 |
| Energy Input considered for Distribution Business | E=C+D | 18325 | 19124 |
| Energy Sales to LV | F | 6544 | 7483 |
| Energy Sales to HV | G | 4764 | 4637 |
| Energy Sales to EHV | H | 1865 | 2080 |
| Total Sales (MU) | I=F+G+H | 13173 | 14200 |
| Distribution Losses (MU) | J=I-E | 5152 | 4924 |
| Distribution Losses (%) | K=J/E*100 | 28.11% | 25.75% |
| Targeted | L | 32.00% | 30.00% |
| Overachievement | M=L-K | 3.89% | 4.25% |
| Total Power Purchase Cost (in Rs Crore) | O | 5046.49 | 5138.96 |
| Average Power Purchase Cost at Distribution Periphery (Including EHV) | P=O/E*10 | 2.75 | 2.69 |
| Overachievement amount (in Rs Crore) | Q=P*M*E/10 | 196.06 | 218.56 |
| Overachievement to be retained by CSPDCL (in Rs Crore) | R=1/3 of Q | 65.35 | 72.85 |

Commission's View:

CSPDCL has claimed for efficiency gain based on the performance of distribution losses. For sharing of gains and losses, the methodology proposed by CSPDCL in calculation of distribution loss (which is inclusive of EHV sales) for the year FY 2011-12 and FY 2012-13 is unacceptable. For the sake of argument if the submission of CSPDCL is considered then the distribution loss target will also needs to be modified accordingly. It has been observed that the methodology adopted by CSPDCL is not the same as in the original main petition for determination of tariff. The Commission has finalised the distribution losses in accordance with the methodology adopted in previous main orders.

The distribution losses worked out by CSPDCL raises question when CSPDCL itself has reported that about 6% LV consumer meters are defective. As mandated in the Supply Code, 2011, the defective meters should not be more that 2.5%. Similarly a large number of 11 kV and 33 kV feeder meters are also lying defective which are meant for energy accounting. In absence of proper energy accounting data, sharing of gains and losses is not permitted. Various stake holders have also expressed their concern on distribution losses.

In such scenario, allowing incentive to CSPDCL is not justified and directs CSPDCL to make extra efforts to minimise defective meters within the permissible limit as per the provision of Supply Code, 2011. Under such circumstances, the Commission at

this stage after prudence check of the information considers the distribution losses as 31.30% for FY 2011-12 and 28.89% for FY 2012-13.

The summary of the distribution loss is shown in the table below:

Table 64: Distribution loss as approved by the Commission

| Sr. No | Particulars | Formula | Unit | Approved after final true up | |
|--------|--|--------------|----------|------------------------------|---------------|
| | | | | FY 2011-12 | FY 2012-13 |
| 1 | Energy Sales at LV | A | MU | 6,544 | 7,483 |
| 2 | Energy Sales at HV | B | MU | 4,764 | 4,637 |
| 3 | Energy Sale below EHV level | C=A+B | MU | 11,308 | 12,120 |
| 4 | Energy Delivered at 33 kV outgoing feeder of all EHV S/s | D | MU | 16,156 | 16,754 |
| 5 | Energy injected by CPP/IPP at 33/11 kV S/s | E | MU | 304 | 290 |
| 6 | Total Energy available at 33 kV | F=D+E | MU | 16,460 | 17,044 |
| 7 | Energy Loss below 33 kV | G=F-C | MU | 5,152 | 4,924 |
| 8 | Energy Loss below 33 kV in % | H=G/F | % | 31.30% | 28.89% |
| 9 | Approved in MYT order | | % | 32.00% | 30.00% |
| 10 | EHV Sales | I | MU | 1,865 | 2,080 |
| 11 | Total Sales (LT, HV & EHV) | J=C+I | MU | 13,173 | 14,200 |
| 12 | Energy available for sale (incl. EHV sales) | K=F+I | MU | 18,325 | 19,124 |
| 13 | Energy Loss including EHV sales | L=K-J | MU | 5,152 | 4,924 |
| 14 | Percentage Energy Loss including EHV sales | M=L/K | % | 28.11% | 25.75% |

6.3.4 O&M expenses:

6.3.4.1 Employee expense

The CSPDCL submitted that the actual employee expense for FY 2011-12 were considered as per the audited annual accounts. The CSPDCL claimed the net employee expenses of Rs. 498.90 Crore for FY 2011-12 and Rs. 542.09 Crore for FY 2012-13 based on provisional accounts. The CSPDCL also submitted that employee salaries were based on the actual cash outgo based on the pay scales and associated costs as approved under the applicable governing legal framework to which the petitioner is bowed to abide by.

Commission's View:

The Commission has considered the employee expenses for FY 2011-12 and FY 2012-13 as per the audited annual accounts. The actual employee expenses for FY 2011-12 and FY 2012-13 under various sub-heads has been analysed and considered the same based on actuals as per the audited accounts. The Commission has not considered the contribution to pension and gratuity fund as part of the employee expenses. Such expenses have been dealt separately in subsequent paragraphs of this

order. For the purpose of final true-up for FY 2011-12 and FY 2012-13, the Commission approves the actual Employee expense (excluding contribution to Pension and Gratuity fund) for CSPDCL given in the following table:

Table 65: Employee expenses as approved by the Commission

| Particulars | Rs Crore | | | |
|---------------------------------------|------------|------------------------------|------------|------------------------------|
| | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Gross Employee Expense | 531.02 | 530.77 | 570.67 | 570.42 |
| Less: Employee Expense Capitalisation | 32.12 | 32.12 | 28.58 | 31.45 |
| Net Employee Expense | 498.90 | 498.66 | 542.09 | 538.97 |

6.3.4.2 Administrative and General Expenses

CSPDCL in its Petition submitted that the actual A&G expense for FY 2011-12 is considered as per the audited annual accounts. CSPDCL also submitted that the Commission had not approved Rs 10.90 Crore during provisional true up for FY 2011-12 in the Tariff Order dated 12.07.2013, considering it as grants/donations/contributions. However, CSPDCL submitted that it was actually the A&G expenses of CSPHCL wrongly mentioned as contribution in the formats submitted to the Commission earlier. CSPDCL claimed the net A&G expense of Rs. 91.96 Crore for FY 2011-12 and Rs. 104.95 Crore for FY 2012-13 for provisional true up.

Commission's View:

The actual expenses for the FY 2011-12 and FY 2012-13 are classified under various sub-heads like rent, rates & taxes, other taxes, postal & communication expenses, legal fees, audit charges, consultancy charges, technical fees, conveyance & travelling expenses, vehicle expenditure, fees & subscription, printing & stationery expenses, advertisement expenses, electricity charges, miscellaneous expenses, contribution/donation, etc. On information sought from CSPDCL for detailed reasons for variation in O&M expenses from that approved in MYT order, CSPDCL submitted that the variation in O&M expenses for FY 2011-12 was primarily on account of A&G expenses. The A&G expenses of CSPHCL was inadvertently captured under the major head "contribution/ grants" in its trial balance, increase of Rs. 9.62 Crore under the head "Electricity Charges" and Rs. 2.79 Crore under the head "Other Administrative Expenses" was inadvertently missed out during the preparation of provisional accounts.

The A&G expense as claimed by CSPDCL and allowed by the Commission is as given in the following table:

Table 66: A&G expense as approved by the Commission

| Particulars | Rs Crore | | | |
|----------------------------------|------------|------------------------------|------------|------------------------------|
| | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Gross A&G Expense | 93.82 | 93.82 | 107.99 | 108.00 |
| Less: A&G Expense Capitalisation | 1.86 | 1.86 | 3.04 | 3.04 |
| Net A&G Expense | 91.96 | 91.96 | 104.95 | 104.96 |

6.3.4.3 Repair and Maintenance expenses

CSPDCL in its Petition submitted the Repair and Maintenance expense (R&M expense) as per the audited annual accounts for FY2011-12. CSPDCL has claimed net R&M expense of Rs. 86.05 Crore in its Petition for FY 2011-12. CSPDCL has submitted the R&M expense of 95.94 for FY 2012-13 on provisional basis.

Commission's View:

The R&M expenses has been analysed from the audited annual accounts for FY 2011-12 and FY 2012-13. R&M expenses as claimed by CSPDCL and allowed by the Commission is as given in the following table:

Table 67: R&M expenses as approved by the Commission

| Particulars | Rs Crore | | | |
|----------------------------------|------------|------------------------------|------------|------------------------------|
| | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Gross R&M Expense | 87.00 | 87.00 | 96.22 | 96.23 |
| Less: R&M Expense Capitalisation | 0.95 | 0.95 | 0.28 | 0.40 |
| Net R&M Expense | 86.05 | 86.05 | 95.94 | 95.83 |

6.3.4.4 Total O&M Expenditure:

The total O&M Expenditure as claimed by CSPDCL and allowed by the Commission for FY 2011-12 and FY 2012-13 is as given in the following table:

Table 68: O&M Expenses as approved by the Commission

Rs Crore

| Particulars | FY 2011-12 | | FY 2012-13 | |
|-----------------------------------|---------------|------------------------------|---------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Gross Employee Expense | 531.02 | 530.77 | 570.67 | 570.42 |
| Gross R&M Expense | 87.00 | 87.00 | 96.22 | 96.23 |
| Gross A&G Expense | 93.82 | 93.82 | 107.99 | 108.00 |
| O&M Expense | 711.84 | 711.59 | 774.88 | 774.65 |
| Less: Capitalisation | | | | |
| Employee Cost capitalised | 32.12 | 32.12 | 28.58 | 31.45 |
| R&M Expenses capitalised | 0.95 | 0.95 | 0.28 | 0.40 |
| A&G Expenses capitalised | 1.86 | 1.86 | 3.04 | 3.04 |
| Pension and Gratuity Contribution | 115.36 | 115.36 | 124.00 | 124.00 |
| Net O&M Expenses | 676.91 | 676.67 | 742.98 | 739.76 |

6.3.4.5 Gains/ (Losses)

The Commission in the MYT Order dated 12th July 2013 had approved the gains on O&M expenses for FY 2010-11 and FY 2011-12 of Rs. 9.9 Crore and Rs 2.94 Crore respectively. The Normative O&M expenses considered by the Commission for FY 2010-11 in the MYT Order were Rs. 613.09 Crore. The Commission has considered the normative O&M expenses for FY 2011-12 and FY 2012-13 by applying the inflation rate of 8.82% and 8% (WPI:CPI=80:20) respectively. The Commission adopted the values published by RBI to calculate the inflation factor. Annual variation in WPI and CPI as published by RBI on its website is used for calculating the inflation factor. Further, the actual applicable escalation factor for each year of the control period is computed as under:

Table 69: Gains/ (Losses)

Rs Crore

| Particulars | Normative O&M | Actual O&M | Efficiency Gain/(Loss) | Entitlement of Gain/(Loss) | | |
|-------------------|---------------|------------|------------------------|----------------------------|---------------------------|-----------|
| | | | | CSPDCL | Tariff Stabilisation Fund | Consumers |
| FY 2011-12 | | | | | | |
| O&M Expenses | 667.16 | 676.67 | (9.50) | | | |
| Total | | | (9.50) | (9.50) | - | - |
| FY 2012-13 | | | | | | |
| O&M Expenses | 720.54 | 739.76 | (19.22) | | | |
| Total | | | (19.22) | (19.22) | - | - |

6.3.5 Contribution to pension and gratuity

As regards contribution to pension and gratuity fund for FY 2011-12, CSPDCL submitted that while the balance sheets of FY 2010-11 & FY 2011-12 mention the pension contribution as Rs 124 Crore in each year, the actual contribution in FY 2010-11 was 132.64 Crore (excess contribution of Rs 8.64 Crore). The amount of Rs 132.64 Crore is already approved in final true-up of FY 2010-11. Consequently, there was a reduced contribution of Rs 115.36 Crore only in FY 2011-12 (Rs 8.64 Crore less) so as to match the overall contribution of Rs 124 Crore in both these years. Further, the actual contribution made by CSPDCL in FY 2012-13 is Rs 124 Crore and the variation of Rs 2.25 Crore is on account of contribution made by CSPDCL on behalf of CSPHCL in accordance with the clarification issued by Hon'ble Commission vide letter no. 897 dated 23/09/2011.

The amount of contribution to pension and gratuity fund as claimed by CSPDCL is Rs. 115.36 Crore for FY 2011-12 and Rs. 124.00 Crore for FY 2012-13.

Commission's View:

Contribution to pension and gratuity as claimed by the petitioner and as approved by the Commission is shown in the table below:

Table 70: Contribution to Pension and Gratuity Fund approved by the Commission

| Particulars | FY 2011-12 | | FY 2012-13 | |
|--------------------------------------|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Contribution to Pension and Gratuity | 115.36 | 115.36 | 124.00 | 124.00 |

6.3.6 Capital Expenditure and Capitalisation

The CSPDCL has submitted capitalisation of Rs. 408.44 Crore for FY 2011-12 and Rs. 430.38 Crore for working out capex related expenses. The Commission has considered the actual value of consumer contribution as per the annual accounts. The actual consumer contribution is subtracted from the addition in GFA and the remaining amount is divided in Debt and Equity in the ratio of 70:30. The Commission has verified the same from the audited annual accounts and the details provided for the years under consideration and found the same to be in order and accordingly these having approved as shown in the table below.

Table 71: Capital Expenditure and Capitalisation as approved by the Commission**Rs Crore**

| Particulars | FY 2011-12 | | FY 2012-13 | |
|-----------------------|------------|------------------------------|------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Addition in GFA | 408.44 | 407.97 | 430.38 | 430.38 |
| Sources of Funding: | | | | |
| Consumer Contribution | 113.35 | 142.58 | 174.96 | 179.08 |
| Equity | 88.39 | 79.61 | 76.63 | 75.39 |
| Debt | 206.23 | 185.77 | 178.81 | 175.91 |

6.3.7 Depreciation

CSPDCL submitted that the depreciation recorded in the audited annual accounts has been computed on straight line basis for FY 2011-12 to the extent of 90% of the cost of the asset at the rates notified in the MYT Regulations, 2010. Further, CSPDCL submitted that depreciation was computed after excluding the depreciation on assets created from consumer contribution and grants. While calculating the assets created out of consumer contribution the CSPDCL considered the amount of consumer contribution received in the ratio of capitalization of assets to the opening CWIP and addition to CWIP.

Commission's View:

Head-wise asset addition during the year has been considered as submitted by CSPDCL in form F-2. Further depreciation corresponding to fully depreciated assets and the consumer contribution in live assets has been reduced in accordance with approach adopted in true up in previous years order. CSPDCL has submitted assets getting fully depreciated in FY 2011-12 & FY 2012-13 which was added to fully depreciated assets identified in last tariff order dated 12.07.2013 and depreciation rate of respective year has been applied to work out depreciation on fully depreciated assets. The Commission has also computed depreciation according to the provisions of the MYT Regulations, 2010 and approves as given in the following table:

Table 72: Depreciation as approved by the Commission

Rs Crore

| Particulars | FY 2011-12 | | FY 2012-13 | |
|--|---------------|------------------------------|---------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Opening GFA | 2,220.30 | 2,222.89 | 2,629.20 | 2,630.86 |
| Additional Capitalisation during the Year | 408.90 | 407.97 | 430.38 | 430.38 |
| Closing GFA | 2,629.20 | 2,630.86 | 3,059.58 | 3,061.24 |
| Average GFA for the year | 2,424.75 | 2,426.87 | 2,844.39 | 2,846.05 |
| Depreciation @ rates as per applicable Regulation | 128.26 | 130.97 | 149.29 | 154.16 |
| Less: Depreciation on consumer contribution on live assets | 6.42 | 46.18 | 13.94 | 55.06 |
| Less: Depreciation on Fully Depreciated Assets | - | 16.96 | - | 17.44 |
| Net Depreciation | 121.84 | 67.84 | 135.35 | 81.65 |

6.3.8 Interest and Finance Charges

As regards interest and financing Charges for FY 2011-12, CSPDCL computed interest on loan as per the MYT Regulations, 2010. Further, CSPDCL submitted that for the purpose of calculating opening normative loan on 1st April 2011, it has followed the approach followed by the Commission in its MYT Order dated 31st March 2011. Accordingly, CSPDCL arrived at opening balance of normative equity for FY 2011-12 by considering 30% of the actual opening GFA as on 1st April 2010 and additional equity has been considered for funding of the additions GFA during FY 2010-11 to the extent of 30%. Further, CSPDCL considered the opening cumulative repayment of normative loan equivalent to the accumulated depreciation.

The CSPDCL considered the rate of interest on normative loan equal to the weighted average interest rate calculated on the basis of actual rate of interest on each loan and the actual loan portfolio. CSPDCL claimed Rs. 70.35 Crore as interest on capital loans and Rs. 41.32 Crore as the interest on consumer security deposits for FY 2011-12. The CSPDCL claimed Rs. 66.32 Crore as interest on capital loans and Rs. 60.27 Crore as the interest on consumer security deposits for FY 2012-13.

Commission's View:

Opening net loan for computation of interest and finance charges is done as per the methodology discussed in the capital structure section of last tariff order dated 12.07.2013. In accordance with MYT Regulations, 2010, the Commission has

considered repayment during the year equivalent to the approved depreciation for the year under consideration. Further, additional capitalisation of loan has been considered on the actual loan borrowed during the year as per CSPDCL's submission. The interest charges have been computed on the average loan balance during the year by applying the weighted average interest rate computed on the basis of loan details.

The interest and finance charges claimed by the CSPDCL and approved by the Commission are as given in the following table:

Table 73: Interest and finance charges as approved by the Commission

| Particulars | Rs Crore | | | |
|--|--------------|------------------------------|--------------|------------------------------|
| | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Total Opening Net Loan | 689.06 | 459.93 | 773.45 | 577.86 |
| Repayment during the period | 121.84 | 67.84 | 135.35 | 81.65 |
| Additional Capitalization of Borrowed Loan during the year | 206.23 | 185.77 | 178.81 | 175.91 |
| Total Closing Net Loan | 773.45 | 577.86 | 816.91 | 672.12 |
| Average Loan during the year | 731.26 | 518.90 | 795.18 | 624.99 |
| Wt. Avg. Interest Rate | 9.62% | 9.62% | 8.34% | 8.34% |
| Interest Expense | 70.35 | 49.92 | 66.32 | 52.12 |

6.3.9 Interest on Working Capital

CSPDCL submitted that it has considered normative interest rate of 13% and 14.75% for FY 2011-12 and FY 2012-13 for the purpose of computing interest on working capital and accordingly claimed Rs. 90.64 Crore for the FY 2011-12 and Rs. 107.65 Crore for interest on working capital for FY 2012-13.

Commission's View:

The interest on working capital is computed as per MYT Regulations, 2010. The Commission has considered one month of the approved O&M Expenses, maintenance spares at 15% of the approved O&M expenses and receivables equivalent to 60 days of average billing to consumers for computing the working capital requirement. The Commission has taken a view that receivables will be allowed for 60 days as against one month sought by CSPDCL. In the Appeal No. 173 of 2012, Hon'ble APTEL had considered the appeal of CSPDCL and Commission to consider the prevailing PLR of SBI for the respective year for which true up has to be done. Thus in accordance with the directions of the Hon'ble APTEL, interest on working capital is computed at the

normative interest rate of 13% and 14.75% which was the prevailing SBI-Short Term Prime Lending Rate as on 1st April 2011 and as on 1st April 2012 respectively. Interest on working capital claimed by CSPDCL and approved by the Commission is given in the table below:

Table 74: Interest on Working Capital as approved by the Commission

| Particulars | Rs Crore | | | |
|--|--------------|------------------------------|---------------|------------------------------|
| | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Operation and Maintenance expenses for one Month | 66.02 | 56.39 | 72.25 | 61.65 |
| Maintenance spares at 15% of O&M Expense | 118.84 | 101.50 | 130.05 | 110.96 |
| Receivable equivalent to 60 days average billing | 512.36 | 720.73 | 527.54 | 858.35 |
| Total working capital requirement | 697.22 | 878.62 | 729.84 | 1,030.96 |
| Applicable Interest Rate (%) | 13.00% | 13.00% | 14.75% | 14.75% |
| Interest on working capital | 90.64 | 114.22 | 107.65 | 152.07 |

6.3.10 Interest on Consumer Security Deposit

CSPDCL considered the interest on consumer security deposit on actual basis as per audited balance sheet of FY 2011-12 and FY 2012-13 as per the provisions of the MYT Regulations, 2010.

Commission's View:

The Commission has approved the interest on consumer security deposit as shown in the table below:

Table 75: Interest on consumer security deposit

| Particulars | Rs Crore | | | |
|------------------------------|------------|------------------------------|------------|------------------------------|
| | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Interest on Security Deposit | 41.32 | 41.33 | 60.27 | 60.26 |

6.3.11 Return on Equity

As regards RoE for FY 2011-12, CSPDCL submitted that it computed the same based on MYT Regulations, 2010 considering opening equity base as 30% of the opening GFA and that consumer contribution/grants and capital subsidies towards GFA have

been excluded while computing return on equity. CSPDCL has claimed Rs. 107.12 Crore towards return on equity for FY 2011-12 and Rs. 119.91 Crore for the provisional true-up for FY 2012-13.

Commission’s View:

The Commission has determined permissible equity in opening/ closing GFA for computation of return on equity as per the methodology considered in the capital structure section of tariff Order dated 12.07.2013. The Regulation 22.3 of the MYT Regulations, 2010 provides for Return on Equity (RoE) at the rate of 15.5% (maximum) grossed up with the applicable tax rate of that year. CSPDCL has not paid any tax for the period under consideration so Return on Equity (RoE) has considered at the rate of 15.5% only. The return on equity claimed by CSPDCL and approved by the Commission is as given in the table below:

Table 76: Return on Equity as approved by the Commission

| Particulars | Rs Crore | | | |
|--|------------|------------------------------|------------|------------------------------|
| | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Permissible Equity in Opening GFA | 646.93 | 693.92 | 735.31 | 773.53 |
| Permissible Equity in Closing GFA | 735.31 | 773.53 | 811.94 | 848.93 |
| Average Gross Permissible Equity during the Year | 691.12 | 733.73 | 773.63 | 811.23 |
| Rate of Return on Equity | 15.50% | 15.50% | 15.50% | 15.50% |
| Return on Equity | 107.12 | 113.73 | 119.91 | 125.74 |

6.3.12 Net Prior Period (Credits) /Charges

CSPDCL proposed the prior period (credits)/charges based on the audited annual accounts for FY 2011-12 and FY 2012-13.

Commission’s View:

The Commission has approved net prior period (credits) /charges as per the audited annual accounts for FY 2011-12 and FY 2012-13. The Commission has not considered the expense under the head “Other Administrative Expenditure”, interest expense, employee and depreciation expense as the permissible amount of administrative expenditure, interest expense and employee expense has already been approved for previous years. Hence the same has not been re-considered for

calculation of expenses. The net prior period (credits) /charges claimed by CSPDCL and approved by the Commission is as given in the following table:

Table 77: Prior period (credits)/ charges approved by the Commission

| Particulars | Rs Crore | | | |
|---|---------------|------------------------------|--------------|------------------------------|
| | FY 2011-12 | | FY 2012-13 | |
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Income | 16.96 | 16.96 | 0.18 | 0.18 |
| Expense | 7.80 | 1.02 | 13.61 | 12.01 |
| Net Prior Period (credits)/charges | (9.17) | (15.94) | 13.43 | 11.82 |

6.3.13 Non-Tariff Income

The CSPDCL submitted that Non-Tariff Income is in the form of interest on fixed deposits apportioned to CSPDCL, activities like meter rent, miscellaneous charges, open access charges, parallel operation charges, etc. Further, CSPDCL submitted that it has not considered the delayed payment surcharge and amortisation of consumer contribution as a part of the non-tariff Income. CSPDCL has submitted Non-Tariff Income of Rs. 178.06 Crore for FY 2011-12 and Rs. 259.00 Crore for FY 2012-13.

Commission's View

Non-tariff income for FY 2011-12 and FY 2012-13 is based on the audited annual accounts. Further, the Commission has excluded the delayed payment surcharge and amortisation of deferred consumer contribution from the non-tariff income. Further, the Commission has added income under the heads meter rent/service line rental and other receipts from consumers to the non-tariff income based on the audited accounts.

Further, the Commission has estimated notional income on consumer security deposit available with CSPDCL at the rate considered for estimating the interest on working capital and accordingly considered it as a part of the non-tariff income in accordance with reasons elaborated in the order dated 12th July 2013.

The non-tariff income submitted by CSPDCL and approved by the Commission is given the table below:

Table 78: Non-Tariff Income approved by the Commission

Rs. Crore

| Particulars | FY 2011-12 | | FY 2012-13 | |
|---|---------------|------------------------------|---------------|------------------------------|
| | Petition | Approved after Final True-up | Petition | Approved after Final True-up |
| Income from Investment, Fixed and Call Deposits | - | - | | |
| Interest income from investments other than contingency reserve | - | - | | |
| Interest on Fixed Deposits | 8.28 | 8.28 | 16.18 | 16.18 |
| Interest from banks other than fixed deposits | - | - | - | - |
| Income from STOA | - | - | - | - |
| Notional income on Consumer Security Deposits | - | 111.95 | - | 163.70 |
| Sub-Total | 8.28 | 120.23 | 16.18 | 179.88 |
| Other Non-Tariff Income | | | | |
| Interest on loans and Advances to staff | 0.90 | 0.90 | 0.60 | 0.60 |
| Interest on Other Loans and Advances | 0.04 | 0.04 | - | 8.29 |
| Interest on Advances to Suppliers / Contractors, etc. | 6.02 | 6.02 | 2.89 | 2.89 |
| Income from Trading (other than Electricity) | - | - | - | - |
| Gain on Sale of Fixed Assets | 3.41 | 3.41 | 5.67 | 5.67 |
| Income/Fee/Collection against staff welfare activities | - | - | - | - |
| Wheeling charges from Open access Consumers | 14.47 | 14.47 | 3.12 | 3.12 |
| Other Receipts from consumers | 98.35 | 113.81 | 65.60 | 102.98 |
| Parallel operation connected with distribution system | - | - | 51.32 | 51.32 |
| RKVAH Charges | - | - | 21.51 | 21.51 |
| Standby feeder maintenance charges | 0.46 | - | 0.45 | - |
| Surcharge | - | - | - | - |
| Incentive due to Securitisation of CPSU Dues | - | - | - | - |
| Any other subsidies / grants other than those u/s 65 | - | - | - | - |
| Amortization of Capital grants | - | - | - | - |
| Income from Misc. charges from Consumer (As detailed in R9) | 30.48 | 15.07 | 55.87 | 17.31 |
| Miscellaneous receipts | 15.65 | 16.06 | 35.79 | 37.43 |
| Sub-Total | 169.78 | 169.78 | 242.82 | 250.51 |
| Total | 178.06 | 290.01 | 259.00 | 430.39 |

6.3.14 Revenue from Sale of Power

CSPDCL submitted revenue from sale of power of Rs. 4,396.46 Crore for FY 2011-12 and Rs. 5,221.65 Crore for FY 2012-13 respectively as per the annual accounts. CSPDCL has reduced revenue from inter-state sale of Rs. 227.59 Crore and Rs. 930 Crore for FY 2011-12 & FY 2012-13 respectively from power purchase cost.

Commission's View:

Revenue from sale of power as submitted by CSPDCL is as per the audited annual accounts. Meter rent/service line rental, other receipts from consumers and other income, which is part of non-tariff income and hence not considered as part of revenue from sale of power. Revenue from Inter State sale considered as part of

revenue in place of reducing from power purchase cost. The revenue from sale of power and Inter State sale approved by the Commission is given in the table below:

Table 79: Revenue from Sale of Power as approved by the Commission

Rs Crore

| Particulars | FY 2011-12 | | FY 2012-13 | |
|------------------------------|-----------------|------------------------------|-----------------|------------------------------|
| | Petition | Approved after final true up | Petition | Approved after final true up |
| Revenue from sale of power | 4,396.46 | 4,396.46 | 5,221.65 | 5,221.65 |
| Revenue from InterState Sale | 227.59 | 227.59 | 930.04 | 930.04 |
| Total Revenue | 4,624.05 | 4,624.05 | 6,151.69 | 6,151.69 |

6.3.15 Annual Revenue Requirement and Revenue (Gap)/Surplus for FY 2011-12 and FY 2012-13

Based on various components of expense and income discussed above, the summary of ARR and revenue (gap)/surplus of CSPDCL for FY 2011-12 and FY 2012-13 are given in the table below:

Table 80: Annual Revenue Requirement as approved by the Commission

Rs Crore

| Sr. No. | Particulars | FY 2011-12 | | FY 2012-13 | |
|-----------|---|-------------------|------------------------------|-------------------|------------------------------|
| | | Petition | Approved after final true up | Petition | Approved after final true up |
| 1 | Power Purchase Cost | 4,454.26 | 4,393.29 | 5,306.24 | 5,121.86 |
| 2 | Interstate Transmission Charges | 134.11 | 134.11 | 194.50 | 194.50 |
| 3 | Intra state Transmission Charges | 685.72 | 685.72 | 568.26 | 568.26 |
| 4 | O&M Expenses | 711.84 | 711.59 | 774.88 | 774.65 |
| 5 | O&M Expenses Capitalised | (34.93) | (34.93) | (31.90) | (34.89) |
| 6 | Contribution to Pension and Gratuity | 115.36 | 115.36 | 124.00 | 124.00 |
| 7 | Interest and Finance Charges | 70.35 | 49.92 | 66.32 | 52.12 |
| 8 | Interest on Working Capital | 90.64 | 114.22 | 107.65 | 152.07 |
| 9 | Interest on Security Deposit | 41.32 | 41.33 | 60.27 | 60.26 |
| 10 | Depreciation | 121.84 | 67.84 | 135.35 | 81.65 |
| 11 | Income Tax | - | - | (8.29) | (8.29) |
| 12 | Provision for Bad Debts/ Other Debits | - | - | 15.96 | 15.96 |
| 13 | Net Prior Period Credits/ (Charges) | (9.17) | (15.94) | 13.43 | 11.82 |
| 14 | Total Expenses (1 to 13) | 6,381.33 | 6,262.51 | 7,326.67 | 7,113.99 |
| 15 | Reasonable Return (ROE) | 107.12 | 113.73 | 119.91 | 125.74 |
| 16 | Share in Gain/(Loss) | 65.35 | (9.50) | 72.85 | (19.22) |
| 17 | Non tariff Income | 178.06 | 290.01 | 259.00 | 430.39 |
| 18 | Annual Revenue Requirement (14+15+16-17) | 6,375.75 | 6,076.73 | 7,260.43 | 6,790.11 |
| 19 | Revenue receipt from Sale | 4,396.46 | 4,396.46 | 5,221.65 | 5,221.65 |
| 20 | Revenue from InterState Sale | 227.59 | 227.59 | 930.04 | 930.04 |
| 21 | Total Revenue (19+20) | 4,624.05 | 4,624.05 | 6,151.69 | 6,151.69 |
| 22 | Standalone Surplus/ (Deficit) (21-18) | (1,751.70) | (1,452.68) | (1,108.74) | (638.42) |

6.3.16 Cumulative Surplus/ (Deficit) for CSPDCL

The Commission has allowed revenue surplus/ (deficit) of Rs. (488.64) Crore in MYT Order dated 12th July 2013 considering holding/ carrying cost. For computation of holding/ carrying cost, the same rate at which the working capital interest is allowed for respective years. In light of the APTEL decision for change of rate of interest for working capital, there is a need for revised working of revenue surplus/ (deficit) from FY 2011-12 onwards.

In addition to above, revenue gap worked out for FY 2011-12 & FY 2012-13, advance tax refund of Rs. 26.34 Crore and subsidy from Government of Rs. 465 Crore for FY 2012-13 is considered in line with MYT Order dated 12th July 2013.

The cumulative surplus/ (deficit) for CSPDCL is shown in table below:

Table 81: Cumulative Surplus/ (Deficit) for CSPDCL

| Particular | Rs. Crore | | |
|---|-----------------|-------------------|-----------------|
| | FY 2011-12 | FY 2012-13 | FY 2013-14 |
| Opening Surplus/ (Deficit) | 597.16 | (872.31) | (670.26) |
| Standalone Surplus/ (Deficit) | (1,452.68) | (638.42) | - |
| Advance Tax Refund & Govt. Subsidy | | 491.34 | |
| Closing Surplus/ (Deficit) | (855.52) | (1,019.39) | (670.26) |
| Interest Rate | 13.00% | 14.75% | 13.20% |
| Holding/ (Carrying) Cost | (16.79) | (139.51) | (88.47) |
| Total Closing Surpl/ (Deficit) | (872.31) | (1,158.90) | (758.74) |
| Deficit adjusted in Tariff Order FY 2013-14 | | 488.64 | |
| Adjusted Surplus/ (Deficit) | (872.31) | (670.26) | (758.74) |

6.4 Revised Annual Revenue Requirement for FY 2014-15

6.4.1 Introduction

As per Clause no .5.7 of MYT Regulations, 2012, CSPDCL has to provide below given details in their petition:

1. Truing up for preceding year(s). (**True up for FY 2011-12 & FY 2012-13**)
2. Revised power purchase quantum/cost (if any), with details thereof, for the ensuing year. (**CSPDCL can only propose change in power purchase quantum/ cost for FY 2014-15**)
3. Revenue from existing tariffs and charges and projected revenue for the ensuing year. (**Based on revised power purchase quantum, revenue from existing tariff and revenue from proposed tariff**)
4. Application for re-determination of ARR for the ensuing year along-with retail tariff proposal. (**Re-determination of ARR based on change in power purchase quantum/cost only and Retail Tariff Proposal**)

6.4.2 Energy Sales

CSPDCL submitted that there are various factors which can have an impact on the actual consumption of electricity and are often beyond the control of the licensee, such as Government Policy, economic climate, weather conditions, force-majeure events like natural disasters, change in consumption mix, etc. Hence, various factors affecting electricity consumption have been considered and interrelationships have been estimated among them to arrive at a forecast of energy sales for the purpose of

estimating future costs/revenues. CSPDCL submitted that the Commission in its MYT Regulations, 2012 has specified sales mix and quantum of sales as uncontrollable which are beyond the control of the licensee, and could not be mitigated by the licensee.

CSPDCL for projecting the category-wise energy sales for FY 2014-15 has considered the past growth trends in each consumer category as explained below.

1. CSPDCL has adopted a trend analysis method for projecting the sales/connected load/ number of consumers of domestic, non-domestic, industrial, agriculture, public lighting and other categories. This method assumes that the underlying factors which drive the demand for electricity are expected to follow the same trend as observed in the past. CSPDCL has however, discounted for any outlier (relative to the trend) observed in the growth rates over the period of past 5 years for LT and Past 3 years for HT and excluded them while projecting energy sales for FY2014-15;
2. The strength of this method, when used with reasoned judgment, lies in its ability to reflect recent changes and therefore makes it well suited as a basis for short-term projections in the context of ARR determination;
3. As per this method, Compounded Annual Growth Rates (CAGRs) were calculated on the basis of past five years and three years for LT and HT respectively, along with the year on year growth. Pertinently, the CAGR is computed for each category of LT consumers for the past 5-year period FY 2007-08 to FY 2012-13, the 4-year period FY 2008-09 to FY 2012-13, the 3-year period FY 2009-10 to FY 2012-13 along with the year-on-year growth rate of FY 2012-13 over FY 2011-12. Similarly to capture the recent development in the HT and EHT categories data for past three years have been considered and CAGR for 2-3 years and one year growth rate of FY 2012-13 over FY 2011-12 has been considered.
4. Subject to the specific characteristics of each consumer category, either a particular CAGR or the year-on-year growth rates is chosen as the basis of sales projection for that category. For example, if an abnormal growth rate (high or low), relative to the current trend, is observed at the beginning of the four year period, then a shorter period is considered for the trend analysis and projections, i.e. appropriately a 3-year CAGR or a 2-year CAGR has been considered. In case where the past data does shows a declining trend a nil growth has been considered or a trend which is not consistent is substituted with assumptions of growth;

5. For making projections of sales and connected load/ number of consumers, the provisional sales for FY 2012-13 for each consumer category, is taken as the base, i.e. the CAGR is applied over the actual sales for FY 2012-13 for projections for each category of consumers for FY 2013-14 & FY 2014-15;
6. Further, for projection of number of consumers, sale and connected load of subcategories/ slabs of any consumer category, CSPDCL has used the ratio of provisional sales in the subcategory to total sales of the category observed in FY 2012-13.

6.4.3 Category-wise Sales Forecast – LV Sales

6.4.3.1 LV-1: Domestic Consumers including BPL consumers

CSPDCL submitted that as per the provisional accounts data states that at the end of FY 2012-13, there were 31.72 Lakh domestic consumers including BPL consumers. The growth rate selected for the sales has been accordingly considered at the 3 year CAGR as the complete metering of the BPL category was done during FY 2009-10 only.

Based on the above assumptions CSPDCL had projected domestic sales at 4596 MU for the FY 2014-15.

Commission's View

As per MYT Order dated 31st March 2011, from FY 2011-12 onwards, the Commission has decided to discontinue the separate category for BPL consumers. All BPL card holders shall be provided a domestic connection. Since there shall now be only one tariff category for all domestic consumers, the Commission has decided to give a combined sales forecast for the MYT Control Period for these two categories of domestic consumers.

The sales to domestic consumers have increased at CAGR of approximately 13% over the last five years, 11% over the last four years, 14.33% over the last three years and 15% in year on year.

The Commission has considered a growth rate of 14.33% for projection of sales to the domestic category based on the 3 year CAGR over actual sales of FY 2012-13. The sales to the domestic category (including BPL) have thus been approved at 4596 MU for FY 2014-15.

6.4.3.2 LV-2: Non Domestic Consumers

CSPDCL submitted that for the Non-domestic category has recorded a 4-year CAGR of 14.60% and the same has been projected by it for the FY 2014-15. With a CAGR of 14.60% based on the above assumptions and method discussed earlier, the sales projected for Non-Domestic Consumers is 877 MU for FY 2014-15.

Commission's Views

The Non-Domestic category has recorded a 4-year CAGR of 14.60%. The Commission believes that with the increased commercial activity in the State, the sales to this category are likely to increase at a higher rate. It has thus projected sales for this category considering the 4 year CAGR of 14.60% over the actual sales for FY 2012-13 to this category and has accordingly projected sales for non-domestic category as 877 MU for FY 2014-15.

6.4.3.3 LV-3: Agriculture Consumers

CSPDCL submitted that the Agriculture category has shown a considerable increase in the sales for the past few years. The increase may be attributed to the metering of the agriculture consumer and the weather condition. There is a target of addition of 25000 consumers in each year of control period. Accordingly, for projection of sales for FY 2014-15, 4 years CAGR has been considered.

CSPDCL accordingly projected sales for agriculture consumers at 2,532 MU for the FY 2014-15.

Commission's Views

It is observed that there has been significant increase in the actual sales for FY 2011-12 for agriculture consumers as compared to FY 2010-11. The said sudden increase as submitted by the Petitioner may be on account of metering of agricultural consumers.

Addition in agriculture consumers and corresponding energy consumption is dependent on number of applications received by CSPDCL and its annual target of release of connections.

In view of the above, the sales to agriculture category have thus been approved at 2,532 MU for FY 2014-15 same as proposed by CSPDCL.

6.4.3.4 LV-4: Agriculture Allied Services

CSPDCL submitted that 4-year CAGR has been considered for this category. CSPDCL has considered a growth rate of 20.74% in line with the 4 Year CAGR.

CSPDCL projected the sales for agriculture allied services as 22 MU for FY 2014-15.

Commission's Views

Growth rate of 20.74% is considered for projection of sales for LV-4 category. The sales to agriculture allied services category have thus been approved at 22 MU for FY 2014-15.

6.4.3.5 LV-5: LT Industry

CSPDCL submitted that the growth rate in LT industrial category has been estimated for each subcategory and has been assumed equivalent to the 4 year CAGR as a smooth trend is observed over the past four years.

CSPDCL has projected the sales for LV-5 LT Industry as 556 MU for FY 2014-15.

Commission's View

Growth rate based on 4 year CAGR as proposed by CSPDCL is considered and accordingly projected sales for this category at 556 MU for FY 2014-15.

6.4.3.6 LV-6: Public Utilities

CSPDCL submitted that the Public Utilities category comprising of street lights and public water works have shown a smooth trend in the past data analysis. Therefore a 5 year CAGR has been considered appropriate for considering the growth.

CSPDCL projected the sales for LV 6 Public Utilities as 333 MU for FY 2014-15.

Commission's View

Projection made by CSPDCL of 5 years CAGR seems reasonable and accordingly estimates sales for this category at 333 MU for FY 2014-15 has been considered.

6.4.3.7 LV-7: Temporary

CSPDCL in its submission has considered 10% CAGR for projection of the temporary supply. The sales projected to LV Temporary category are 381 MU for FY 2014-15.

Commission's View

Projection made by CSPDCL of 10% CAGR seems reasonable and accordingly estimates sales for this category at 381 MU for FY 2014-15 has been considered.

6.4.4 Category-wise Sales Forecast - EHV Sales

6.4.4.1 EHV-1: Railway Traction

CSPDCL submitted that it has considered 4 year CAGR for projection of sales

Commission's View

Projection made by CSPDCL of 4 year CAGR of 8.30% seems reasonable and accordingly estimates sales for this category at 1055 MU for FY 2014-15 has been considered.

6.4.4.2 EHV-2: Heavy Industries

CSPDCL submitted that despite the reduction in connected load as compared to previous years, CSPDCL has considered a nominal growth of 10% to account for the new connections in this category.

Commission's View

Projection made by CSPDCL of 10% CAGR seems reasonable and accordingly estimates sales for this category at 1040 MU for FY 2014-15 has been considered.

6.4.4.3 EHV-3: Steel Industries

CSPDCL submitted that Steel Industry has shown a sudden growth of sales by 27.75 % in FY 2012-13. Considering the fact that there is the overall negative growth trend otherwise over the years, a nominal 10% growth in sales has been considered to account for new connections in this category.

Commission's View

Projection made by CSPDCL of 10% CAGR seems reasonable and accordingly estimates sales for this category at 218 MU for FY 2014-15 has been considered.

6.4.4.4 EHV-4: Other EHV Consumers

CSPDCL submitted that as there is declining trend in the category, therefore, CSPDCL has not considered any growth rate for sales projection during the MYT control period.

Commission's View

Projection made by CSPDCL of no growth seems reasonable and accordingly estimates sales for this category at 141 MU for FY 2014-15 has been considered.

6.4.5 Category-wise Sales Forecast - HV Sales

6.4.5.1 HV-1: Steel Industries

CSPDCL has considered 4 year CAGR for projection of sales.

Commission's View

Projection made by CSPDCL of 4 year CAGR of 1.44% seems reasonable and accordingly estimates sales for this category at 2916 MU for FY 2014-15 has been considered.

6.4.5.2 HV-2: Mines and Cement Industries

CSPDCL submitted that the sales have been projected with 3 year CAGR considering the fact that year on year growth in FY 2012-13 is not significant.

Commission's View

Projection made by CSPDCL of 3 year CAGR of 12.03% seems reasonable and accordingly estimates sales for this category at 439 MU for FY 2014-15 has been considered.

6.4.5.3 HV-3: Other Industries

CSPDCL submitted that the sales have been projected with 3 year CAGR considering the fact that year on year growth in FY 2012-13 is not significant.

Commission's View

Projection made by CSPDCL of 3 year CAGR of 11.96% seems reasonable and accordingly estimates sales for this category at 747 MU for FY 2014-15 has been considered.

6.4.5.4 HV-4: Low Load Factor Industries

CSPDCL submitted that it has considered 4 year CAGR for projection of sales.

Commission's View

Projection made by CSPDCL of 4 year CAGR of 1.37% seems reasonable and accordingly estimates sales for this category at 86 MU for FY 2014-15 has been considered.

6.4.5.5 HV-5: Residential Purpose

The CSPDCL submitted that considering the negative growth in the past, nominal growth of 3% has been assumed for projecting sales.

Commission's View

Though the CAGR for the residential category shows negative trend, considering the improved market conditions hence projection made by CSPDCL of 3% seems reasonable and accordingly estimates sales for this category at 225 MU for FY 2014-15 has been considered.

6.4.5.6 HV-6: General Purpose Non Industrial

CSPDCL submitted that it has considered 4 year CAGR for projection of sales:

Commission's View

Projection made by CSPDCL of 4 year CAGR of 15.27% seems reasonable and accordingly estimates sales for this category at 570 MU for FY 2014-15 has been considered.

6.4.5.7 HV-7: PWW & Irrigation

CSPDCL submitted that it has considered 4 year CAGR for projection of sales.

Commission's View

Projection made by CSPDCL of 4 year CAGR of 9.83% seems reasonable and accordingly estimates sales for this category at 66 MU for FY 2014-15 has been considered.

6.4.5.8 HV-8: Start-up Power Tariff

CSPDCL submitted that the sales have been projected with nominal growth at 3 year CAGR despite the fact that year on year growth in FY 2012-13 is negative.

Commission's View

Projection made by CSPDCL of 3 year CAGR of 11.80% seems reasonable and accordingly estimates sales for this category at 77 MU for FY 2014-15 has been considered.

6.4.5.9 HV-9: Agriculture Allied Services

CSPDCL submitted that the sales have been projected with a year on year growth rate of FY 2012-13.

Commission's View

Projection made by CSPDCL of year on year CAGR of 24.62% seems reasonable and accordingly estimates sales for this category at 26 MU for FY 2014-15 has been considered.

6.4.6 Overall Sales

The overall sales as submitted by the Petitioner and as estimated by the Commission for FY 2014-15 is shown in the table as under:

Table 82: Energy Sales as estimated by the Commission

| Sr. No | Category | FY 2014-15 | |
|----------|--|---------------|---------------|
| | | Petition | Estimated |
| A | LV | 9,298 | 9,298 |
| 1 | BPL | 1,147 | 1,147 |
| 2 | Domestic Excluding BPL | 3,449 | 3,449 |
| 3 | Non Domestic (Normal Tariff) | 867 | 867 |
| 4 | Non Domestic (Demand Based Tariff) | 10 | 10 |
| 5 | Agriculture - Metered | 2,532 | 2,532 |
| 6 | Agriculture - Allied Activities | 22 | 22 |
| 7 | LT Industry | 556 | 556 |
| 8 | Public Utilities | 333 | 333 |
| 9 | Temporary | 381 | 381 |
| | | | |
| B | EHV | 2,454 | 2,454 |
| 1 | Railway Traction | 1,055 | 1,055 |
| 2 | Heavy Industries | 1,040 | 1,040 |
| 3 | Steel Industries | 218 | 218 |
| 4 | Other EHV Consumers | 141 | 141 |
| | | | |
| C | HV | 5,151 | 5,151 |
| 1 | Steel Industries | 2,916 | 2,916 |
| 2 | Mines and Cement Industries | 439 | 439 |
| 3 | Other HT Industries | 747 | 747 |
| 4 | Low Load Factor Industries | 86 | 86 |
| 5 | Residential Purpose | 225 | 225 |
| 6 | General Purpose Non Industrial | 570 | 570 |
| 7 | PWW and Irrigation | 66 | 66 |
| 8 | Start up power Tariff | 77 | 77 |
| 9 | Agriculture Allied Services | 26 | 26 |
| 10 | Industries related to renewable power tariff | - | - |
| | | | |
| D | Total | 16,903 | 16,903 |

6.4.7 Energy requirement

It is observed that for projecting the energy input requirement for FY 2014-15, the Petitioner has considered the power injection by CPPs/IPPs at 33 kV as 425 MU. It has already been decided in MYT Order dated 12th July 2013 that the power injection by CPPs/IPPs at EHV S/s shall now be considered as the energy input to the transmission system.

The summary of the energy input requirement as submitted by the Petitioner and estimated by the Commission is shown in the table below:

Table 83: Energy requirement estimated by the Commission

| Sr. No. | Particulars | Approved in MYT 12.07.13 | Petition | Estimated in this Order |
|---------|---|--------------------------------|----------|----------------------------|
| 1 | LV Sales | 8,877 | 9,298 | 9,298 |
| 2 | HV Sales | 4,929 | 5,151 | 5,151 |
| 3 | Total below EHV Level | 13,806 | 14,449 | 14449 |
| 4 | Losses for the network 33 kV and below (%) | 28% | 28% | 28% |
| 5 | Losses for the network 33 kV and below (MU) | 5,369 | 5,619 | 5619 |
| 6 | Energy Requirement at Distribution periphery | 19,175 | 20,068 | 20068 |
| 7 | Less: Input to distribution at 33 kV level by CPP/IPPs | 425 | 425 | 425 |
| 8 | Net Energy Input required at Distribution Periphery | 18,750 | 19,643 | 19643 |
| 9 | Sales to EHV consumers | 2,211 | 2,454 | 2,454 |
| 10 | Input energy required inclusive of EHV sales | 20,961 | 22,097 | 22,098 |
| 12 | Transmission Loss | 4.30% | 4.30% | 4.30% |
| 13 | Transmission Loss | 942 | 993 | 993 |
| 14 | Net energy required at transmission periphery | 21,903 | 23,090 | 23,090 |

6.4.8 Power Purchase Cost

CSPDCL submitted that it has broadly categorised the sources of energy into State owned generation i.e., generation from CSPGCL, allocation (firm and non-firm) from Central Generating Stations (CGS), Captive Power Plants (CPPs), Independent Power Producers (IPPs), Biomass, and Solar Power Plants and Short-Term/UI/Bilateral purchases, etc.

CSPDCL also submitted that it mainly relies on the power from State Generating Station to meet its power requirement. Further, CSPDCL also has firm allocation of power from Central Generating Stations like Korba STPS, Vinadhyachal, Sipat, Tarapur, Kahalgaon etc. to meet its energy requirement. Further, the supply will be augmented by new State generating plants that are scheduled to commence generation in the MYT period are shown in the table below along with the expected commissioning date as intimated by CSPGCL.

CSPDCL while estimating the energy availability for FY 2014-15 from the power stations has considered the following assumption:-

- **Allocation of Share:** For Central Generating Stations (CGS), CSPDCL has considered the firm allocation and allocation from the unallocated quota from the above-mentioned stations except Kahalgaon STPS-II as per the latest notification of the Western Region Power Committee. The allocation for Kahalgaon STPS-II

is considered as per the notification of the Eastern Region Power Committee. Further 100% allocation is considered from the state generating plants.

- **Gross Energy Availability:** For CGS, CSPDCL has estimated the gross energy availability from the existing stations based on the allocated capacity and the average Plant Load Factor for the past three years (FY 2010-11 to FY 2012-13). The Net energy sent out has been considered after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 for CGS and targeted auxiliary consumption as approved by the Commission for CSPGCL stations;
- **New Station:** The availability of new generation stations has been considered as per the commissioning date given by CSPGCL. The PLF for the new generation stations has been considered at 85% for new state generating stations.
- **Energy Available:** The effective share from the stations is applied on the energy sent out to arrive at the energy available for the petitioner from respective stations;
- **Renewable Energy:** The RPO obligation specified by the Commission at 0.75%, 3.75% and 2.25% of sales respectively is proposed to be met through Biomass, Solar and other RE power generating plants;

Further, while estimating the power purchase cost for FY 2014-15 from the above stations, CSPDCL has considered the following assumption:

- **Fixed Charges:** The fixed charges for CGS except nuclear station are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The annual fixed charges for each station have been considered as per the latest Tariff orders issued by CERC and Commission for the respective stations and past availability factor has been considered for arriving at the expected fixed cost. However, in the absence of any order for the FY 2014-15 for CGS, the Petitioner has considered a 5% increase per year to project the Annual fixed charge.
- **Variable Charges:** CSPDCL has considered the variable cost from CGS at the actual rate recorded during first 6 months for FY 2013-14 for the entire FY 2013-14. Further, the rates considered for FY 2013-14 have been escalated at 5% to arrive at the variable cost of FY 2014-15 For CSPGCL stations, the rates approved by the Commission in the MYT Order have been considered. The basis for estimation of the tariff for the new stations is as outlined below:

- CSPDCL has considered a provisional rate of Rs 3.00 per unit for Korba West Extension and Marwa stations till such time these rates are approved by the Commission.
- The rate for power procurement from Biomass based generating stations has been considered at Rs 5.38 per unit, which is in line with the recent purchases from such plants. The power purchase rate of solar and other RE has been considered as per the provision of regulation 60 of CSERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012.
- Considering the demand supply gap for each year CSPDCL has projected power to be procured from short-term sources including CPP and IPP at the rate of Rs 3 per unit. Further, Rate of sale of surplus energy has been considered at Rs 3.65 per unit which is in line with the recent trends observed by CSPDCL.

CSPDCL has considered the PoC rates as specified by the Central Electricity Regulatory Commission vide its order No. L-1/44/2010-CERC dated 29/06/2013 for calculation of Interstate Transmission Charges for FY 2013-14. Further, an escalation of 5% has been considered on the said rates for calculating the Interstate Transmission Charges for FY 2014-15.

The petitioner also utilizes the network of CSPTCL for wheeling of power scheduled from different stations. The petitioner has considered the intrastate transmission charges and SLDC charges for FY 2014-15 as approved by the Commission in the MYT Order dated 12th July 2013.

Commission's View:

CSPDCL has proposed changes in quantum of power available from various stations along with fixed and variable cost of power purchase. The Commission has already estimated quantum of power available for various power plants in MYT Order dated 12th July 2013. The Commission in subsequent paragraphs has analysed and re-estimated the purchase of power from various sources.

6.4.8.1 Power Purchase from CSPGCL

The Commission estimates quantum of power available from KTPS, DSPM and HTPS same as MYT Order dated 12th July 2013. A new power plants namely Marwa Unit-1 is commissioned in FY 2013-14 and Marwa Unit-2 is expected to be commissioned in FY 2014-15. CSPDCL has proposed generation based on the CoD given by CSPGCL. Based on revised CoD given by CSPGCL, power availability has been estimated as given below:

Table 84: CoD as submitted by CSPGCL

| Sr. No | Plants | COD | Capacity (MW) | Capacity Allocated to CSPDCL (MW) |
|--------|----------------------|------------|---------------|-----------------------------------|
| 1 | Korba West Extension | FY 2013-14 | 500 | 500 |
| 2 | Marwa Unit-1 | Jun' 14 | 500 | 500 |
| 3 | Marwa Unit-2 | Nov' 14 | 500 | 500 |

For KTPS, DSPM and HTPS, fixed charges based on latest available details is accepted and variable charges considered same as approved in MYT Order dated 12th July 2013 considered. For Korba West Extension and Marwa Unit, CSPDCL has considered a provisional rate of Rs. 3/ kWh. However, the Commission in its MYT order dated 12.07.2013 had provisionally approved at Rs. 2.65/ kWh. Accordingly, the Commission retains the provisionally estimated cost for the new generating stations for the purpose of this order.

The summary of the power purchase expenses as submitted by CSPDCL and estimated by the Commission for FY 2014-15 for thermal generating stations of CSPGCL is shown in the table below:

Table 85: Power Purchase from thermal generating stations of CSPGCL

| Particulars | FY 2014-15 | | | |
|----------------------|---------------|--------------|---------------|--------------|
| | CSPDCL | | Estimated | |
| | MU | Rs. Crore | MU | Rs. Crore |
| KTPS | 2,685 | 633 | 2,685 | 633 |
| DSPM | 3,388 | 828 | 3,388 | 828 |
| HTPS | 5,515 | 972 | 5,816 | 1,000 |
| Korba West Extension | 3,351 | 1,005 | 3,388 | 898 |
| Marwa Unit-1 | 2,791 | 837 | 2,822 | 748 |
| Marwa Unit-2 | 1,946 | 584 | 1,968 | 521 |
| Total | 19,676 | 4,859 | 20,066 | 4,628 |

6.4.8.2 Power Purchase from Central Sector & IPPs

The Commission estimates the quantum of power available from Central sector & IPPs in line with the estimates approved in the MYT Order dated 12th July 2013 except for NTPC Mauda and concessional power from various stations i.e. KMPCL, ACPCL, Spectrum and JPL Raigarh.

During prudence check undertaken by the Commission, it has come to notice that there is no PPA for power purchase from NTPC Mauda approved by the Commission and no such request has been received from CSPDCL so far. In light of the same, the Commission finds no reason to estimate power purchase quantum from supply of

power by NTPC Mauda when CSPDCL already has reasonable surplus power. Hence, the Commission disapproves power purchase from NTPC Mauda and directs CSPDCL to surrender the allocated capacity if committed from NTPC Mauda.

CSPDCL has signed back to back long-term PPA with KMPCL, ACPCL, Spectrum and JPL Raigarh to supply concessional power at provisional rate i.e. Rs. 1.90/ kWh for the cumulative quantum of 106 MW as per the MoU signed between the State Government and IPPs. CSPDCL has not considered any power from these sources while estimating power availability. The Commission has considered power availability at 85% load factor of contracted capacity (106 MW) and estimates that 718 MU will be available at cost of Rs. 136 Crore during FY 2014-15.

The summary of the power purchase expenses as submitted by CSPDCL and estimated by the Commission for FY 2014-15 for Central sector & IPPs is shown in the table below:

Table 86: Power Purchase from Central sector & IPPs

| Particulars | FY 2014-15 | | | |
|--|--------------|--------------|--------------|--------------|
| | CSPDCL | | Estimated | |
| | MU | Rs. Crore | MU | Rs. Crore |
| KSTPS Unit 1 | 141 | 22 | 138 | 22 |
| KSTPS Unit 2 | 141 | 22 | 147 | 23 |
| KSTPS Unit 3 | 141 | 22 | 148 | 23 |
| KSTPS Unit 4 | 352 | 58 | 344 | 58 |
| KSTPS Unit 5 | 352 | 56 | 356 | 56 |
| KSTPS Unit 6 | 352 | 56 | 348 | 55 |
| Sipat STPS Stage II (2*500 MW) | 1,191 | 346 | 1,264 | 359 |
| Korba STPS (Unit VII) | 1,078 | 300 | 1,106 | 303 |
| Vindychal Stage 3 | 837 | 191 | 811 | 188 |
| SIPAT STAGE 1 (3*660 MW) | 2,137 | 723 | 2,179 | 731 |
| Vindychal Stage 4 (2*500 MW) | 209 | 61 | 435 | 108 |
| NTPC+SAIL power corporation limited (Bhillai power plant) | 336 | 144 | 336 | 144 |
| NTPC MAUDA | 212 | 105 | 0 | 0 |
| NUCLEAR | 0 | 0 | 0 | 0 |
| Tarapur (Unit 3 & 4) | 286 | 86 | 276 | 83 |
| Kakrapar Atomic Station | 0 | 0 | 0 | 0 |
| Hirakud | 5 | 0 | 17 | 1 |
| EASTERN REGION | 0 | 0 | 0 | 0 |
| Kahalgaon Stage II (3*500 MW) | 156 | 68 | 176 | 73 |
| Concessional Power (KMPCL, ACPCL, Spectrum & JPL Raigarh) | 0 | 0 | 718 | 136 |
| Total Central Generating Stations | 7,925 | 2,261 | 8,801 | 2,363 |

6.4.8.3 Power Purchase from Renewable Sources

For renewable sources, CSPDCL's projection is realistic considering power available from such sources in recent time. In view of the same, projection of CSPDCL for

power purchase from Other RE, Biomass and Solar is approved by the Commission. For SHP Gangrel, SHP Sikasar, Korba Mini Hydro and Kawardha cogeneration plant, power availability as estimated in the MYT Order dated 12th July 2013 for FY 2014-15 has been retained by the Commission for the purpose of this order.

Only two projects are supplying power under the Rooftop PV and Small Solar Power Generation Program (RPSSGP) scheme for which the utility bears the cost, which is the difference of tariff approved by the Commission in order passed in Suo-Motu petition no. 37 of 2012 and incentive payable by the Government of India. Further, in view of the order passed for the Roof-top projects, the weightage average power purchase cost for solar power is estimated at Rs. 5.00/kWh as against projection of Rs. 10.04 / kWh by CSPDCL.

The summary of the power purchase expenses as submitted by CSPDCL and estimated by the Commission for FY 2014-15 for renewable sources is shown in the table below:

Table 87: Power Purchase from Renewable Sources

| Particulars | FY 2014-15 | | | |
|---------------------------------------|-----------------|---------------|-----------------|---------------|
| | CSPDCL | | Estimated | |
| | MU | Rs. Crore | MU | Rs. Crore |
| Other RE (Hydel, wind etc) | 330.32 | 139.08 | 330.32 | 139.08 |
| Biomass | 659.64 | 372.63 | 659.64 | 372.63 |
| Solar | 132.47 | 133.00 | 132.47 | 66.24 |
| SHP Gangrel | 34.34 | 12.80 | 33.82 | 12.61 |
| SHP Sikasar | 24.04 | 9.10 | 23.68 | 8.96 |
| Korba Mini Hydro | 5.84 | 3.11 | 5.75 | 3.06 |
| Kawardha cogeneration plant (Biomass) | 2.60 | 1.41 | 2.60 | 1.41 |
| Total | 1,189.25 | 671.13 | 1,188.28 | 603.99 |

In accordance with the RPO Regulations, 2013 for meeting RPO, the Commission has considered percentage of total energy input at 33 KV level plus EHV sales. The computation of total energy requirement is shown in the table below:

Table 88: Computation of total consumption for RPO for CSPDCL

| Particulars | FY 2014-15 |
|---|------------|
| Energy Sales LT (MU) | 9,298 |
| Energy Sales HT (MU) | 5,151 |
| Loss Target | 28% |
| Energy input at 33 KV level (MU) | 20,068 |
| Energy Sales EHV (MU) | 2,454 |
| Total Energy Input including EHV sales (MU) | 22,523 |

CSPDCL is obligated to purchase energy from these sources in accordance with the CSERC (Renewable Purchase Obligation and REC framework Implementation) Regulations, 2013. The estimates for renewable power purchase have been made according to CSERC (RPO) Regulations, 2013.

Table 89: Minimum quantum of electricity to be procured by Obligated Entity as percentage of total consumption

| RPO | FY 2014-15 | | |
|----------|------------|--------|--------|
| | Target | Target | CSPDCL |
| | % | MU | MU |
| Solar | 0.75% | 168.92 | 132.47 |
| Biomass | 3.75% | 844.60 | 659.64 |
| Other RE | 2.25% | 506.76 | 330.32 |

It is observed that estimation of CSPDCL for procurement of energy from Renewable Energy sources works out to lower than the RPO targets specified in Regulations for FY 2014-15.

Accordingly, the Commission suggests CSPDCL that it should ensure the compliance to the RPO targets by way of its own generation or long-term procurement of power from RE developer or by way of purchase of Renewable Energy Certificate (REC) or by way of combination of any of the above options.

Considering the fact the estimation of CSPDCL to procure renewable power is lower than the obligation, the Commission has considered the purchase of solar and non-solar RECs to meet the RPO targets. The Commission has considered the recent trade data of Market Clearing Price of solar and non-solar RECs. The summary of the solar and non-solar RECs purchase as estimated by the Commission is shown in the table below:

Table 90: Purchase of RECs estimated for FY 2014-15

| RPO | FY 2014-15 | | | | |
|--------------|-----------------|-----------------|----------------|---------------------------------|----------------------------------|
| | Target (MU) | CSPDCL (MU) | Shortfall (MU) | Purchase Rate of REC (Rs./ kWh) | Purchase cost of REC (Rs. Crore) |
| Solar | 168.92 | 132.47 | 36.45 | 9.30 | 33.90 |
| Non-Solar | 1,351.35 | 989.96 | 361.39 | 1.50 | 54.21 |
| Total | 1,520.27 | 1,122.43 | 397.84 | 10.80 | 88.11 |

6.4.8.4 Power Purchase from short-term sources

CSPDCL has proposed to buy 918 MU from short term sources as against estimate of 39 MU in MYT Order dated 12th July 2013 for FY 2014-15. The power purchase rate proposed by CSPDCL is Rs. 3/ kWh. However, it is found that CSPDCL has already

tied-up capacity to meet its load requirement and hence estimates short-term power purchase to the tune of 39 MU at the weightage average rate of Rs. 2.60/ kWh for FY 2014-15.

The summary of the power purchase expenses as submitted by CSPDCL and as estimated by the Commission for FY 2014-15 for short-term sources is shown in the table below:

Table 91: Power Purchase from Short-term Sources

| Particulars | FY 2014-15 | | | |
|------------------------|------------|------------|-----------|-----------|
| | CSPDCL | | Estimated | |
| | MU | Rs. Crore | MU | Rs. Crore |
| Short-Term Procurement | 918 | 275 | 39 | 10 |
| Total | 918 | 275 | 39 | 10 |

As directed earlier also, the Commission reiterates that CSPDCL has to come for approval of short-term power purchase before start of every month. The Commission may approve short-term power purchase based on demand-supply scenario for such period.

6.4.8.5 Energy Balance & Treatment of Surplus Energy

CSPDCL has considered the surplus energy for sale of 6173 at the rate of Rs. 3.65/ kWh based on energy balance.

Energy balance for FY 2014-15 is based on estimation of quantum of power requirement and power availability estimated by the Commission in above sections is as shown in table below:

Table 92: Energy Balance estimated by the Commission

| Particulars | Unit | FY 2014-15 |
|---|------|------------|
| Energy Sales LT | MU | 9,298 |
| Energy Sales HT | MU | 5,151 |
| Total Energy Sales below EHV Level | MU | 14,449 |
| Losses for the network 33 KV and below (%) | % | 28% |
| Losses for the network 33 KV and below (MU) | MU | 5,619 |
| Energy requirement at Distribution periphery | MU | 20,068 |
| Less: Input to Distribution at 33 KV | MU | 425 |
| Input required at distribution periphery | MU | 19,643 |
| Energy Sales EHT | MU | 2,454 |
| Input at transmission periphery above EHV level | MU | 22,098 |
| Transmission Loss in % | % | 4.30% |
| Transmission Loss in (MU) | MU | 993 |
| Net energy required at transmission periphery | MU | 23,090 |
| Inter-State Transmission Loss | MU | 293 |
| Gross Energy required including 33 KV | MU | 23,383 |
| Gross Energy available including 33 KV | MU | 30,365 |
| Surplus Energy | MU | 6,557 |

Based on energy balance, surplus energy available for short-term sale during FY 2014-15 works out to 6557 MU. The Commission estimates short-term sale of 6557 MU at the rate of 3.65/ kWh for FY 2014-15.

Surplus power should not be sold less than Rs. 3.65/ kWh. If buyer is not available at the rate above Rs. 3.65/ kWh then backing down of plant should be ensured as per merit order dispatch.

6.4.8.6 Transmission Charges & SLDC Charges

Inter & Intra-State Transmission Charges and SLDC Charges proposed by CSPDCL are based on recent trends. CSPDCL has proposed Intra-State Transmission Charges and SLDC charges same as approved in MYT Order dated 12th July 2013. CSPDCL has proposed Inter-State Transmission Charges lower than estimated in MYT Order dated 12th July 2013. The Commission estimates transmission charges and SLDC charges same as proposed by CSPDCL.

The summary of the transmission charges and SLDC charges estimated by the Commission is as shown in the table below:

Table 93: Transmission Charges & SLDC Charges

| Particulars | Rs. Crore | |
|----------------------------------|------------|-----------|
| | FY 2014-15 | |
| | CSPDCL | Estimated |
| Inter-State Transmission Charges | 258.73 | 258.73 |
| Intra-State Transmission Charges | 765.64 | 765.64 |
| SLDC Charges | 14.15 | 14.15 |

6.4.8.7 Summary of Power Purchase Cost

The summary of the power purchase cost as submitted by the Petitioner and as estimated by the Commission is as shown in the table below:

Table 94: Power Purchase Cost for FY 2014-15

| Sr. No. | Particulars | FY 2014-15 | | | | | |
|---------------------------------------|--|---------------------|--------------------|-------------------|---------------------|--------------------|-------------------|
| | | Petition | | | Estimated | | |
| | | Power Purchase (MU) | Amount (Rs. Crore) | Average (Rs./kWh) | Power Purchase (MU) | Amount (Rs. Crore) | Average (Rs./kWh) |
| A. CENTRAL GENERATING STATIONS | | | | | | | |
| | WESTERN REGION | | | | | | |
| | THERMAL | | | | | | |
| 1 | Korba STPS Unit 1 to 6 | | | | | | |
| | KSTPS Unit 1 | 140.66 | 22.25 | 1.58 | 138.18 | 21.99 | 1.59 |
| | KSTPS Unit 2 | 140.66 | 22.25 | 1.58 | 146.94 | 22.90 | 1.56 |
| | KSTPS Unit 3 | 140.66 | 22.25 | 1.58 | 148.29 | 23.04 | 1.55 |
| | KSTPS Unit 4 | 351.64 | 58.40 | 1.66 | 343.84 | 57.59 | 1.67 |
| | KSTPS Unit 5 | 351.64 | 55.63 | 1.58 | 356.00 | 56.08 | 1.58 |
| | KSTPS Unit 6 | 351.64 | 55.63 | 1.58 | 348.37 | 55.29 | 1.59 |
| 2 | Sipat STPS Stage II (2*500 MW) | 1,191.24 | 346.18 | 2.91 | 1264.29 | 359.02 | 2.84 |
| 3 | Korba STPS (Unit VII) | 1,077.99 | 300.11 | 2.78 | 1105.73 | 303.09 | 2.74 |
| 4 | Vindychal Stage 3 | 836.95 | 191.14 | 2.28 | 811.12 | 187.96 | 2.32 |
| 5 | SIPAT STAGE I (3*660 MW) | 2,136.90 | 723.42 | 3.39 | 2179.11 | 730.52 | 3.35 |
| 6 | Vindychal Stage 4 (2*500 MW) | 209.21 | 60.73 | 2.90 | 435.47 | 107.53 | 2.47 |
| 7 | NTPC+SAIL power corporation limited (Bhillai power plant) | 336.22 | 144.47 | 4.30 | 335.96 | 144.41 | 4.30 |
| | NTPC MAUDA | 211.95 | 104.76 | 4.94 | 0.00 | 0.00 | 0.00 |
| | NUCLEAR | | | | | | |
| 8 | Tarapur (Unit 3 & 4) | 286.07 | 85.57 | 2.99 | 276.21 | 82.62 | 2.99 |
| | Kakrapar Atomic Station | | | | | | |
| | HYDRO | | | | | | |
| 9 | Hirakud | 4.87 | 0.39 | 0.80 | 16.64 | 1.33 | 0.80 |
| | EASTERN REGION | | | | | | |
| 10 | Kahalgaon Stage II (3*500 MW) | 156.26 | 68.22 | 4.37 | 176.30 | 73.30 | 4.16 |
| | Sub-Total Central Generating Stations | 7,924.56 | 2,261.40 | 2.85 | 8,082.46 | 2,226.67 | 2.75 |
| 11 | Concessional Power (KMPCL, ACPCL, Spectrum & JPL Raigarh) | | | | 718.24 | 136.47 | 1.90 |
| | Sub-Total Central Generating Stations & IPPs | 7924.56 | 2261.40 | 2.85 | 8800.70 | 2363.14 | 2.69 |
| B. STATE GENERATING STATIONS | | | | | | | |
| | THERMAL | | | | | | |
| 1 | Korba thermal power station | | | | | | |
| | PHASE 2 | 1,220.60 | 287.67 | 2.36 | 1220.60 | 287.67 | 2.36 |
| | PHASE 3 | 1,464.72 | 345.20 | 2.36 | 1464.72 | 345.20 | 2.36 |
| 2 | Dr Shyam Prasad Mukherjee thermal power station | 3,387.93 | 827.88 | 2.44 | 3387.93 | 827.88 | 2.44 |
| 3 | Hasdeo thermal power station | 5,515.05 | 972.12 | 1.76 | 5815.74 | 1000.20 | 1.72 |
| | HYDRO | | | | | | |
| 1 | HPS Bango | 271.26 | 37.14 | 1.37 | 271.26 | 37.14 | 1.37 |
| 2 | SHP Gangrel | 34.34 | 12.80 | 3.73 | 33.82 | 12.61 | 3.73 |
| 3 | SHP Sikasar | 24.04 | 9.10 | 3.79 | 23.68 | 8.96 | 3.79 |
| 4 | Korba Mini Hydro | 5.84 | 3.11 | 5.33 | 5.75 | 3.06 | 5.33 |
| | COGENERATION PLANT | | | | | | |
| 1 | Kawardha cogeneration plant (Biomass) | 2.60 | 1.41 | 5.42 | 2.60 | 1.41 | 5.42 |
| | NEW STATE GENERATING STATIONS | | | | | | |
| 1 | Korba west extension | 3,350.70 | 1,005.21 | 3.00 | 3387.93 | 897.80 | 2.65 |
| 2 | Marwa unit 1 | 2,790.72 | 837.22 | 3.00 | 2821.73 | 747.76 | 2.65 |
| 3 | Marwa unit 2 | 1,946.16 | 583.85 | 3.00 | 1967.78 | 521.46 | 2.65 |
| | Sub-Total State Generating Stations | 20013.96 | 4922.71 | 2.46 | 20403.54 | 4691.16 | 2.30 |
| NON CONVENTIONAL SOURCES | | | | | | | |
| | Other RE (Hydel, wind etc) | 330.32 | 139.08 | 4.21 | 330.32 | 139.08 | 4.21 |
| | Biomass | 659.64 | 372.63 | 5.65 | 659.64 | 372.63 | 5.65 |
| | Solar | 132.47 | 133.00 | 10.04 | 132.47 | 66.24 | 5.00 |
| | Procurement of REC Cost | | | | | 88.11 | |
| | SHORT TERM SOURCES Purchase | 917.89 | 275.37 | 3.00 | 38.56 | 10.02 | 2.60 |
| | Gross power purchase from all sources | 29,978.83 | 8,104.19 | 2.70 | 30,365.22 | 7,730.37 | 2.55 |
| SHORT TERM SOURCES SALE | | | | | | | |
| | IEX/PXIL/UI AND BILATERAL | -6,172.64 | -2,253.01 | 3.65 | -6556.85 | -2393.24 | 3.65 |
| | Net power purchase | 23806.19 | 5851.18 | 2.46 | 23808.37 | 5337.13 | 2.24 |
| | Interstate Transmission Charges | | 258.73 | | | 258.73 | |
| | Intrastate Transmission Charges | | 765.64 | | | 765.64 | |
| | SLDC Charges | | 14.15 | | | 14.15 | |
| | Total | 23806.19 | 6,889.70 | 2.89 | 23808.37 | 6,375.65 | 2.68 |

6.4.9 Annual Revenue Requirement for FY 2014-15

CSPDCL in its petition has requested the Commission to revise all the components in Annual Revenue Requirement for FY 2014-15. The Commission in accordance with the clause 5.7 of MYT Regulations, 2012, has considered only the proposed change in Power Purchase quantum and cost and consequential changes in ARR. The table below shows the proposed changes in ARR as revised by CSPDCL and as approved by the Commission. As shown in the table below, the Commission has revised the value of Power Purchase cost only, whereas the other components are retained as approved by the Commission in the MYT Order dated 12th July 2013.

Table 95: Annual Revenue Requirement for FY 2014-15

| Rs Crore | | | |
|-----------------------------------|-----------------------|-----------------|------------------------|
| Particulars | Approved in MYT Order | Petition | Approved in this Order |
| Power Purchase Cost | 4657.61 | 5,851.16 | 5,337.13 |
| Interstate Transmission Charges | 275.59 | 272.88 | 258.73 |
| Intra state Transmission Charges | 765.64 | 765.64 | 765.64 |
| SLDC Charges | 14.15 | 14.15 | 14.15 |
| O&M Expenses | 852.91 | 827.91 | 852.91 |
| Pension and Gratuity | 186.75 | 186.75 | 186.75 |
| Interest and Finance Charges | 39.15 | 123.68 | 39.15 |
| Interest on Security Deposit | 105.63 | 115.78 | 105.63 |
| Interest on Working Capital | - | - | - |
| Depreciation | 77.71 | 182.60 | 77.71 |
| Bad Debt | 67.72 | 63.98 | 67.72 |
| Return on Equity | 152.66 | 199.28 | 152.66 |
| Total Expenses | 7,195.52 | 8,603.81 | 7,858.18 |
| Total Non Tariff Income | 423.11 | 385.27 | 423.11 |
| Annual Revenue Requirement | 6,772.41 | 8,218.54 | 7,435.07 |

6.5 Revenue from existing tariff

Based on the existing retail tariff and projections of sales for FY 2014-15, CSPDCL projected the revenue of Rs. 6397.67 Crore at existing Tariff.

As regards the revenue from existing tariff and revenue gap, Regulation 5.7 (a) (ii) (3) of the MYT Regulations, 2012 stipulates as under:

- *“Revenue from existing tariffs and charges and projected revenue gap for the first year of the Control Period.*
- *Application for retail tariff proposal for the first year of the control period”*

In accordance with the requirement of the MYT Regulations, 2012, the Commission has estimated the revenue from sale of electricity on the basis of the prevailing tariff applicable for each consumer category and the category-wise sales projected by the Commission, as discussed earlier. The Commission has estimated the revenue from demand charges in case of HT categories, by considering ratio of billing demand to contract demand at 85% as submitted by the Petitioner.

Based on approved sales & existing retail tariff, revenue from sale of power works out to Rs. 6400.72 Crore.

The consumer category wise revenue for FY 2014-15 estimated by the Commission is as given in the following table:

Table 96: Revenue at Existing Tariff estimated by the Commission

| Sr. No | Category | Revenue (Rs. Crore) |
|----------|--|---------------------|
| A | LV | 2,441 |
| 1 | Domestic including BPL | 1,123 |
| 2 | Non Domestic (Normal Tariff) | 443 |
| 3 | Non Domestic (Demand Based Tariff) | 6 |
| 4 | Agriculture – Metered | 363 |
| 5 | Agriculture - Allied Activities | 9 |
| 6 | LT Industry | 271 |
| 7 | Public Utilities | 101 |
| 8 | Temporary | 124 |
| B | EHV | 1,299 |
| 1 | Railway Traction | 512 |
| 2 | Heavy Industries | 595 |
| 3 | Steel Industries | 112 |
| 4 | Other EHV Consumers | 81 |
| C | HV | 2,660 |
| 1 | Steel Industries | 1,393 |
| 2 | Mines and Cement Industries | 235 |
| 3 | Other HT Industries | 395 |
| 4 | Low Load Factor Industries | 58 |
| 5 | Residential Purpose | 95 |
| 6 | General Purpose Non Industrial | 367 |
| 7 | PWW and Irrigation | 28 |
| 8 | Start up power Tariff | 73 |
| 9 | Agriculture Allied Services | 15 |
| 10 | Industries related to renewable power tariff | - |
| D | Total | 6,400.72 |

6.6 Consolidated Surplus/ (Deficit) at existing tariff

In order to reduce the burden on the consumers of the State, the Government of Chhattisgarh has ordered for revenue subsidy to CSPDCL of Rs. 465 Crore for FY 2014-15. It is pertinent to note that Rs. 465 Crore provided by GoCG is over and above the subsidy given to BPL consumers, agriculture consumers and others.

Based on approved ARR for FY 2014-15, surplus/ (deficit) till FY 2012-13 for CSPGCL, surplus/ (deficit) till FY 2012-13 for CSPTCL, surplus/ (deficit) till FY 2012-13 for CSPDCL and Subsidy provided by GoCG, adjusted ARR for FY 2014-15 works out to Rs. 7300.27 Crore.

Based on the adjusted ARR and expected revenue from existing tariff, revenue surplus/ (deficit) worked out to Rs. 899.55 Crore for FY 2014-15.

Table 97: Consolidated Surplus/ (Deficit) at existing tariff for FY 2014-15

| Rs. Crore | |
|---|-----------------|
| Particular | Approved |
| ARR for FY 2014-15 | 7,435.07 |
| Add: Surplus/ (Deficit) of CSPGCL till FY 2012-13 | 27.47 |
| Add: Surplus/ (Deficit) of CSPTCL till FY 2012-13 | 401.06 |
| Add: Surplus/ (Deficit) of CSPDCL till FY 2012-13 | (758.74) |
| Add: Subsidy from Government | 465.00 |
| Total Aggregate Revenue Requirement | 7,300.27 |
| | |
| Expected Revenue from Existing Tariff | 6,400.72 |
| Revenue Surplus/(Deficit) | (899.55) |

7. TARIFF PRINCIPLES AND TARIFF DESIGN

7.1 Tariff Principles

In assessing the revenue requirements of the three companies and in determining the generation tariff, the transmission charges and the retail supply tariff for FY 2014-15, the Commission has been guided by the provisions of the Electricity Act, 2003 (the Act), the National Electricity Policy (NEP) and the Tariff Policy (TP) and MYT Regulations, 2012. Section 61 of the Act lays down the principles which should guide determination of retail supply tariff – the tariff should ‘progressively reflect the cost of supply of electricity’ and also ‘reduce cross-subsidy’. The Act lays special emphasis on safeguarding consumer’s interest and requires that the ‘cost should be recovered in a reasonable manner’. These and other principles enunciated in this provision of the Act have been suitably incorporated in the Tariff Regulations of this Commission. The Tariff Policy notified by the Government of India in January, 2006 provides comprehensive guidelines for determination of tariff as also for working out revenue requirements of power Utilities.

The ARR and tariff in this tariff order has been determined under the MYT framework as stipulated by the Tariff Policy and in accordance with the MYT Regulations, 2012 as notified by this Commission.

In determining the tariff for the year, the Commission has followed the cost plus method and has also continued the process of rationalisation of tariff, a process which was started with the first Tariff Order of the Commission for FY 2005-06 in order to ensure that the tariffs reflect, as far as feasible, the cost of supply. The mandate of Tariff Policy that cross subsidies should be reduced and tariff should be within +/- 20% of the average cost of supply has been the guiding principle of the Commission. The cross subsidies are being reduced over the years and the same philosophy has been followed this year also. For determination of cross-subsidy, the Commission has relied on average cost of supply instead of voltage-wise or consumer category-wise cost of supply due to the absence of relevant data.

7.2 Tariff Design

In the Petition, CSPDCL has submitted the ARR for FY 2014-15. The Petitioner has also estimated a standalone revenue gap for FY 2014-15 at Rs. 1807 Crore and cumulative revenue gap till FY 2014-15 including the carrying cost of Rs. 3128 Crore.

The Commission has carried out the final true up for FY 2011-12 and FY 2012-13. The Commission has approved the ARR and revenue gap for FY 2014-15 after detailed scrutiny of the revenue requirement proposed by the CSPDCL. The Commission has arrived at the revised ARR of Rs. 7436.65 Crore after prudence check and in accordance with the MYT Regulations, 2012 leading to a standalone revenue gap of Rs. (758.74) Crore. The Commission has also accounted for cumulative surplus of Rs. 27.47 Crore for CSPGCL, Rs. 401.06 Crore for CSPTCL and subsidy from GoCG of Rs. 465 Crore. It has been estimated that with the prevailing tariff, CSPDCL would get Rs. 6400.72 Crore during the FY 2014-15 leaving a cumulative revenue gap of Rs. 744.29 Crore.

As regards the Variable Cost adjustment, it is made clear that from the date of implementation of the instant order, for the purpose of computation of FCA / VCA for the succeeding months (in line with prevailing order), the power purchase rate from CGS stations, base rate and CV of coal for CSPGCL stations, on which deviation is derived, shall be considered in accordance to values considered in this Order.

As regards to voltage wise cost of supply is concerned, the Commission is duty bound to comply with the directions of Hon'ble Tribunal. CSPDCL has not submitted the details of Voltage-wise Cost of Supply in the MYT Petition that was published for public comments. It is observed that in case of CSPDCL, if the tariff is designed as per methodology suggested by Hon'ble Tribunal it would lead to a severe tariff shock to certain categories of consumers. In the interest of natural justice, such consumers are required to be given a reasonable opportunity to give their comments and before determining tariffs and cross-subsidy on the basis of voltage-wise cost of supply.

In view of all the above reasons, it would not be appropriate to determine tariffs on the basis of voltage-wise cost of supply at this point of time, and hence, for the purpose of this Order, the Commission has continued to compute the cross-subsidy with respect to the Average Cost of Supply.

Considering the importance of voltage-wise cost of supply and directions issued by Hon'ble Tribunal, the Commission redirects the Petitioner to submit a detailed report on voltage-wise cost of supply and its impact on the tariff design along with next tariff petition.

7.3 LT Categories

7.3.1 LV-1: Domestic

In continuation of the principle adopted by the Commission in its Tariff Order dated 31st March 2011, there shall be no separate category for BPL consumers. All domestic

consumers including BPL card holders shall be provided a domestic connection. Each BPL card holder will be eligible for the subsidy, if any, given by the State Govt. irrespective of their consumption or connected load. The consumers in the BPL category shall be charged for their consumption over and above the subsidised units, if any, at the rate specified by the Commission in this Tariff Order.

The tariff for all categories of LV-1 consumers has been revised.

In domestic (LV 1) category, the Commission has merged 0-100 and 101-200 unit slabs and created new slab of 0-200 units and telescopic slab tariff is as under:

Slab 1: 0-200 units;

Slab 2: 201-600 units; and

Slab 4: more than 600 units.

7.3.2 LV-2: Non-Domestic

The tariff for all categories of LV-2 consumers has been revised.

In non-domestic (LV 2) category, the Commission has maintained the telescopic tariff for energy charges and introduced fixed charges on the basis of connected load/contract demand which is non-telescopic.

Slab for energy charges:

Slab 1: 0-100 units;

Slab 2: 101-500 units; and

Slab 3: more than 500 units.

The option for demand based tariff for non-domestic category will continue.

7.3.3 LV-3: Agriculture

The tariff for agricultural consumers has been revised.

The agricultural consumers should be given the due benefit of the subsidy, if any, made available to them by the Govt. of Chhattisgarh from time to time.

7.3.4 LV-4: Agriculture Allied Activities

The tariff for all categories of agricultural allied consumers has been revised.

The option for demand based tariff for agriculture allied activities category will continue.

7.3.5 LV-5: L.T. Industries

The tariff for all categories of L.T. industries consumers has been revised.

7.3.6 LV-6: Public Utilities

The tariff for all categories of public utilities has been revised.

7.3.7 L.T. Temporary Supply

The tariff for temporary supply is maintained at one and half times the tariff for the respective categories of permanent connection. However, in case of excess drawl of power than contracted, the billing as per provision of excess supply as in case of permanent connection shall also be applicable.

All LT installations which have welding transformers are required to install suitable capacitor(s) so as to ensure power factor of not less than 85%. Consumers not complying with the above shall have to pay surcharge of 75 (seventy-five) paisa per unit on the entire monthly consumption, provided the load of the welding transformer(s) exceeds 25% of the total connected load of connection.

Terms and Conditions of LT

The Commission continues the provision related to rounding of contract demand and the demand in fraction to be rounded off to the next whole number.

All LV-2 (Non-Domestic) and LV-5 (LT Industrial) consumers having a contracted load/Demand of 50 HP or 37 kW and above shall be required to pay 130% of normal rate of energy charges for the energy consumed during peak hours i.e. 6 P.M. to 11P.M. as Peak Hour Charges.

7.4 EHV Category

7.4.1 EHV Categories

The Commission has made the EHV tariff applicable for consumers who avail supply at 400 kV, 220 kV 132 kV.

The Commission redirects the Petitioner to submit a detailed report on the likely impact of the kVAh billing on all other HV consumers along with the next Tariff Petition and based on the submission in this regard the Commission shall finalise its views.

Even though billing for all EHV consumers and consumers in HV-5 and HV-6 categories shall be on the basis of kVAh unit, the Commission directs CSPDCL to

record both kVAh and kWh units consumed by all EHV & HV consumers and include the same in the R-15 prepared by it each month.

The category EHV-4 is merged into EHV-2 (Heavy Industries & Other Consumers).

7.4.2 EHV-1: Railway Traction

The tariff for this category has been increased.

7.4.3 EHV-2: Heavy Industries & Other Consumers

The tariff for this category has been increased.

7.4.4 EHV-3: Steel Industries

The tariff for this category has been increased.

7.5 HV Categories

As per the current tariff structure, all HV consumers (except for HV-5 and HV-6) are billed based on kWh consumption. As already mentioned earlier, the Commission decided to retain kWh billing for all HV consumers excluding HV-5 consumers and HV-6 consumers.

The Commission has introduced new optional tariff on load factor basis for HV-1: steel industries as option 2. The consumer under this tariff (option-2) shall be subject to bear minimum guaranteed payment of electricity bill of demand charges on contracted demand and energy charges at 70% load factor on contracted demand with 0.9 power factor and power-on-hours on annualised basis or over the period upto next tariff order whichever is earlier. However, monthly bills shall be raised on the basis of 70% load factor on contracted demand with 0.9 power factor or actual consumption whichever is higher till last but one month of the period. The power-on-hours defined as total hours in the billing period minus hours of load restriction enforced by CSPDCL/ CSPTCL. All the adjustment shall be made in the twelfth bill or last bill whichever is later.

The category HV-3 and HV-6 is merged into HV-2 category (Mines, Cement, Other Industries and General Purpose Non-Industrial)

HV-4 Low Load Factor Industry is now HV-3 category

HV-5 Residential Purpose is now HV-4 category

The category HV-7 and HV-9 is merged into HV-4 category (Residential, Public Water Works, Irrigation and Agriculture Allied Activities)

7.5.1 HV-1: Steel industries

The tariff for this category has been increased and optional tariff as per tariff schedule shall be applicable.

7.5.2 HV-2: Mines, Cement, Other Industries and General Purpose Non-Industrial

The tariff for this category has been increased.

7.5.3 HV-3: Low load factor industries

The tariff for this category has been increased.

7.5.4 HV-4: Residential, Public Water Works, Irrigation and Agriculture Allied Activities

The tariff for this category has been increased.

7.5.5 HV-5: Start-up Power

Generating plant, captive generating plant with distant located load and captive generating plant with co-located load does not avail start-up power connection from CSPDCL but eventually draws power from Grid for not more than 30 minutes at one occasion shall be billed at the rate of Rs. 10.24 per kWh (as per average billing rate for this tariff which includes demand charges). Drawl beyond 30 minutes shall be billed at Rs. 20.48 per kWh.

Those Generating/ captive generating plant who have not availed start-up power connection from CSPDCL and draw power upto 30 minutes at one occasion during a day shall be billed at the rate of Rs. 10.24 per kWh. Drawl beyond 30 minutes at first occasion and any subsequent occasion of drawl during a day shall be billed at Rs. 20.48 per kWh.

7.5.6 HV-6: Industries related to manufacturing of equipment for power generation from renewable energy sources.

The tariff for this category has been increased.

7.6 Temporary Supply

For temporary supply, the tariff of one and half times of permanent supply of that category of consumer is maintained. However, in case of excess drawl of power than

contracted, the billing as per provision of excess supply as in case of permanent connection shall also be applicable.

7.7 Power Factor Incentive and Penalty

No change in the present principle and methodology of power factor incentive and penalty has been made in this Order.

7.8 Tariff for Stand-by charges

No change in the present principle and methodology of tariff for stand-by charges has been made in this Order.

7.9 Revenue at Approved Tariff

The expected consumer category wise revenue from the approved tariffs given in the tariff schedule for FY 2014-15 is as given in the table below:

Table 98: Revenue at Approved Tariff estimated by the Commission

| Sr. No | Category | Revenue (Rs. Crore) |
|----------|---|---------------------|
| A | LV | 3,188 |
| 1 | Domestic including BPL | 1,373 |
| 2 | Non Domestic (Normal Tariff) | 543 |
| 3 | Non Domestic (Demand Based Tariff) | 7 |
| 4 | Agriculture – Metered | 637 |
| 5 | Agriculture - Allied Activities | 11 |
| 6 | LT Industry | 301 |
| 7 | Public Utilities | 128 |
| 8 | Temporary | 187 |
| B | EHV | 1,428 |
| 1 | Railway Traction | 588 |
| 2 | Heavy Industries & Others | 719 |
| 3 | Steel Industries | 121 |
| C | HV | 2,785 |
| 1 | Steel Industries | 1,423 |
| 2 | Mines, Cement, Other Industries and General Purpose Non-industrial | 1,069 |
| 3 | Low Load Factor Industries | 62 |
| 4 | Residential, Public Water Works, Irrigation and Agriculture Allied Activities | 152 |
| 5 | Start up power Tariff | 79 |
| 6 | Industries related to renewable power tariff | - |
| D | Total | 7,400.43 |

7.10 Consolidated Surplus/ (Deficit) at approved tariff

Existing tariff will be applicable for 3 months and approved tariff will be applicable from 9 months to the consumers of State for FY 2014-15.

Based on the adjusted ARR and expected revenue from approved tariff, revenue surplus/ (deficit) worked out to Rs. 5.50 Crore for FY 2014-15.

Table 99: Consolidated Surplus/ (Deficit) at approved tariff for FY 2014-15

| Particular | Rs. Crore |
|---|-----------------|
| | Approved |
| ARR for FY 2014-15 | 7,435.07 |
| Add: Surplus/ (Deficit) of CSPGCL till FY 2012-13 | 27.47 |
| Add: Surplus/ (Deficit) of CSPTCL till FY 2012-13 | 401.06 |
| Add: Surplus/ (Deficit) of CSPDCL till FY 2012-13 | (758.74) |
| Add: Subsidy from Government | 465.00 |
| Total Aggregate Revenue Requirement | 7,300.27 |
| Expected Revenue from Existing Tariff | 6,400.72 |
| Additional revenue from approved tariff applicable for 9 months | 807.00 |
| Additional revenue on account of TOD tariff & others | 95.00 |
| Revenue from Sale of Power | 7,302.72 |
| Revenue Surplus/(Deficit) | 2.45 |

7.11 Cross Subsidy

An element of cross-subsidy is inherent in the present tariff structure. The tariffs of different consumer categories in relation to the average cost of supply (Rs. 4.40 per kWh) has been such that the tariffs for some categories of consumers, mainly EHV and HV consumers, are higher than the ACOS while the tariffs for others are lower.

Table 100: Cross Subsidy with existing and approved Tariffs (Rs. /kWh)

| Particulars | | Approved in Tariff Order for FY 2013-14 | | Approved in Tariff Order for FY 2014-15 | |
|-------------|---|--|----------|--|----------|
| | | ABR | ABR/ACOS | ABR | ABR/ACOS |
| LV | Domestic | 2.76 | 65.47% | 2.99 | 67.89% |
| | Non-Domestic | 5.23 | 124.07% | 6.27 | 142.51% |
| | Agricultural | 1.46 | 34.56% | 2.54 | 57.68% |
| | LT Industry | 5.04 | 119.61% | 5.42 | 123.27% |
| | Public Utilities | 3.25 | 77.00% | 3.86 | 87.72% |
| EHV | Railway Traction | 5.38 | 127.53% | 5.57 | 126.62% |
| | Heavy Industries & Others | 5.89 | 139.64% | 6.09 | 138.31% |
| | Steel Industries | 5.05 | 119.66% | 5.55 | 126.23% |
| HV | Steel Industries | 4.70 | 111.46% | 4.88 | 110.89% |
| | Mines, Cement, Other Industries and General Purpose Non-industrial | 5.48 | 129.94% | 6.09 | 138.33% |
| | Low Load Factor Industries | 5.54 | 131.27% | 7.20 | 163.68% |
| | Residential, Public Water Works, Irrigation and Agriculture Allied | 4.20 | 99.50% | 4.81 | 109.37% |

7.12 Cross-Subsidy Surcharge

The Commission has determined the cross-subsidy surcharge to be paid by the open access consumers, in accordance with CSERC (Connectivity and Intra-State Open Access) Regulations, 2011.

For open access consumers procuring power from renewable energy based power generating plant, the cross subsidy surcharge payable shall be 50% of the cross subsidy surcharge determined for that year:

Table 101: Cross-Subsidy Surcharge for Open Access Consumers (Rs. /kWh)

| Particulars | EHV | HV |
|--|-------|-------|
| Average rate for subsidising categories | 5.82 | 5.41 |
| Average Cost of Supply | 4.40 | 4.40 |
| Cross Subsidy Surcharge | 1.420 | 1.010 |
| Cross Subsidy Surcharge at 90% of the computed value | 1.278 | 0.909 |

8. TARIFF SCHEDULE APPROVED BY THE COMMISSION FOR FY 2014-15

8.1 Tariff Schedule

The detailed schedules of approved tariff are as given in this part.

8.1.1 Tariff Schedule for Low Tension (LT) Consumers

This tariff schedule is applicable to all LT consumers as follows:

- i. Single-phase, 230 Volts up to a maximum connected load of 3 kW, and
- ii. Three phase, 400 volts, for maximum demand up to 75 kW in case of demand based tariff or for maximum contracted load of 100 hp in case of other tariff, as applicable.

8.1.1.1 LV-1: Domestic

1. Applicability

This tariff is applicable to domestic light and fan and power used for all domestic appliances, in a residential premises, orphanages, homes for old/physically challenged people and homes for destitute; dharamshalas; student hostels; working women's hostels; ashrams; schools and hospitals (including X-rays etc.) run by charitable trusts; Government hospitals/dispensaries, (excluding private clinics and nursing homes); Government Schools; farm houses; mosques; temples; churches, gurudwaras; religious and spiritual institutions; water works and street lights in private colonies and cooperative societies; common facilities such as lighting in stair case, lifts, firefighting in multi storied housing complex, light and fan in khalihan, kothar, byra where agriculture produce is kept, post office at residence of a villager; residential premises of professionals such as advocates, doctors, artists, consultants, weavers, bidi makers, beauticians, stitching and embroidery workers including their chambers; public toilets; fractional HP motors used for Shailchak by Kumhars in their residences.

2. Tariff:

| Category of Consumers | Units Slab | Fixed Charge (In Rupees per kWh) | Energy Charge (Rs. per kWh) | Minimum Fixed Charge |
|-----------------------|--------------|----------------------------------|-----------------------------|----------------------|
| LV-1: Domestic | | | | |
| Domestic including | 0 -200 units | 1.80 | 0.90 | Single |

| Category of Consumers | Units Slab | Fixed Charge (In Rupees per kWh) | Energy Charge (Rs. per kWh) | Minimum Fixed Charge |
|-----------------------|-----------------|----------------------------------|-----------------------------|--------------------------|
| BPL Consumers | | | | Phase Rs. 30/- p.m. |
| | 201 - 600 units | 2.60 | 1.50 | Three phase Rs. 100/- pm |
| | 601 and Above | 3.90 | 2.00 | |

Notes:

- i. Only those domestic consumers who hold BPL card issued by State Govt. will be considered as BPL domestic consumer. BPL card holders shall be entitled for subsidy **for 40 units** as per State Govt. order, and their consumption shall be billed as per tariff LV-1.
- ii. All BPL domestic categories of consumers shall be billed as per meter reading. All the new BPL domestic connections are served with meter only.
- iii. If a portion of the dwelling is used for the conduct of any business other than those specified above, the entire consumption shall be billed under Non-domestic tariff LV-2.

8.1.1.2 LV-2 Non-Domestic

1. Applicability

This tariff is applicable to light and fan and power to shops, show rooms, business houses, offices, educational institutions (except those included in LV-1 and LV-5), public buildings, town halls, clubs, gymnasium and health clubs, meeting halls, places of public entertainment, circus, hotels, cinemas, railway stations, private clinics and nursing homes including X-rays plant, diagnostic centres, pathological labs, carpenters and furniture makers, juice centres, hoardings and advertisement services, public libraries and reading rooms, typing institutes, internet cafes, STD/ISD PCO's, FAX/ photocopy shops, tailoring shops, photographers and colour labs, laundries, cycle shops, compressors for filling air, toy making industry, nickel plating on small scale, restaurants, eating establishments, Government circuit houses/rest houses, guest houses, marriage gardens, farmhouses being used for commercial purposes, book binders, petrol pumps and service stations, HV industrial consumers seeking separate

independent LT connection in the same premises of HV industrial connection and other consumers not covered under any other category of LT consumers.

2. Tariff:

| Category of Consumers | Units Slab | Fixed Charge (Rs per kWh of Contracted load/Demand) | Energy Charge (Rs. per kWh) |
|---|---------------------|--|-----------------------------|
| LV-2.1:Non-Domestic (Normal Tariff) | 0 – 100 units | Rs. 50 per kW per month - up | 4.00 |
| | 101 - 500 units | to 3 kW | 4.50 |
| | 501 and above units | and Rs. 100 per kW per month above 3 kW; | 6.00 |
| LV-2.2: Non-Domestic Demand Based Tariff (for Contract demand of 15 to 75 kW) | | Demand Charges- Rs 180/kW/month on billing demand | 5.00 |

Note:

- i. Fixed charges for LV-2.1 are non-telescopic. For example, if connected load is 5 kW then monthly fixed charges shall be Rs. 500 per month;
- ii. The tariff LV-2.2 will be optional.
- iii. Fixed Charges of LV-2.1 and Demand charge on contract demand of tariff LV-2.2 is a monthly minimum charge whether any energy is consumed during the month or not.

8.1.1.3 LV-3 L.T. Agriculture

1. Applicability

This tariff is applicable to agricultural pumps/tube wells used for irrigation (including drip and sprinkler system) for crops, nursery, horticulture crops (growing vegetables and fruits), floriculture (growing flowers), growing of herbs/medicinal plants and mushroom, jatropha plantation, chaff cutters, thresher, winnowing machines, sugarcane crushers used on agricultural land, lift irrigation pumps/tube wells of State Government or its agencies; water drawn by agriculture pumps used by labour, cattle, and farm houses in the premises of agriculture farms for drinking purposes only and packaging of agriculture produce at farm, khalian etc.

2. Tariff:

| Category of Consumers | Fixed Charge | Energy Charge (Rs. per kWh) |
|-------------------------------|-----------------|--------------------------------|
| LV-3: L.T. Agriculture | Rs. 50/HP/month | 2.25 |

One 40W incandescent bulb/CFL of wattage not exceeding 20W is permitted at or near the motor pump set in the power circuit.

Notes:

- All new connections of above 3 HP shall be served only after installation of capacitor of specified rating to maintain power factor of 0.85 & above.
- All pump connections of above 3 HP load not provided with capacitors of specified rating and who do not maintain power factor of 0.85 and above, shall be required to pay surcharge of 35 paise per unit.
- Fixed charge is monthly minimum charge whether any energy is consumed or not during the month.

8.1.1.4 LV- 4 L.T. Agriculture Allied Activities

1. Applicability

This tariff is applicable to pump/tube well connections, other equipment and light and fan for tree plantation, fisheries, hatcheries, poultry farms, dairy, cattle breeding farms, sericulture, tissue culture and aquaculture laboratories and milk chilling plant.

2. Tariff:

| Category of Consumers | Fixed Charge | Energy Charge (Rs. per kWh) |
|---|---|--------------------------------|
| LV-4.1: Up to 100 HP or 75 kW | Rs. 100 per HP per month or Rs 135 per kW per month | 4.00 |
| LV-4.2: Demand based tariff for contract demand of 15 to 75 kW | Rs. 180 per kW per month on billing demand | 3.80 |

Note:

- i. All connections shall be required to maintain average monthly power factor of 0.85 by providing capacitors of suitable rating, failing which they shall be required to pay surcharge of 35paise per unit.
- ii. For tariff LV-4.1 fixed charge is monthly minimum charge and for tariff LV-4.2 demand charge on contract demand is monthly minimum charge whether any energy is consumed during the month or not.

8.1.1.5 LV-5 L.T. Industry**1. Applicability**

These tariffs are applicable to light and fan and power for industries such as, flour mills, hullers, grinders for grinding masala, power looms, rice mills, dall-mills, oil mills, ice factories, cold storage plants, ice candies; laboratories of engineering colleges, ITIs and polytechnics and industrial institutions; workshops and fabrication shop etc.

2. Tariff:

| Category of Consumers | | Fixed Charge | Energy Charge |
|----------------------------|---|--|---------------|
| | | | (Rs. per kWh) |
| LV-5: L.T. Industry | | | |
| 5.1 | Flour mills Hullers, power looms, grinders for grinding masalas up to 15 HP | Rs 50/HP/month | 2.65 |
| 5.2 | Other Industries | | |
| 5.2.1 | Up to 25 HP | Rs 80/HP/month | 3.40 |
| 5.2.2 | Above 25 HP up to 100 HP | Rs 125/HP/month | 3.80 |
| 5.3 | Demand based Tariff- for contract demand of 15 kW to 75kW | Demand charges- Rs. 180/kW/month on billing demand | 4.00 |

Notes:

- i. Demand based tariff-5.3 is applicable for maximum contracted demand from 15 kW to 75 kW.
- ii. For tariff LV 5.1 and LV 5.2 fixed charge is monthly minimum charge and for tariff 5.3 the Demand charge on contract demand is a monthly minimum charge whether any energy is consumed during the month or not.

8.1.1.6 LV-6 Public Utilities

1. Applicability

This tariff is applicable to public utilities such as water supply schemes, sewage treatment plants and sewage pumping installations, crematorium, traffic signals and lighting of public streets including public parks and archaeological and other monuments when requisition for supply is made by Public Health Engineering Department, local bodies, Gram Panchayats or any organization made responsible by the Government to maintain these services.

2. Tariff:

| Category of Consumers | Fixed Charge | Energy Charge (Rs. per kWh) |
|--|---|--------------------------------|
| LV-6: Public utilities Public street light and water works | Rs. 100/HP/month or Rs. 135/kW/month | 3.50 |

Note:

Fixed charge is monthly minimum charge whether any energy is consumed during the month or not.

8.1.1.7 LT Temporary Supply

1. Applicability

This tariff is for connections temporary in nature. The tariff applicable shall be as given in the respective category of consumer.

Temporary supply cannot be demanded by a prospective consumer as a matter of right but will normally be arranged by the licensee when a requisition is made subject to technical feasibility.

2. Tariff:

Fixed charge and energy charge to be billed at one and half times the normal tariff as applicable to the corresponding consumer categories.

Notes:

- i. An amount equal to estimated bill for 3 months or for the period of temporary connection requisitioned whichever is less is payable before serving the temporary

connection subject to replenishment from time to time and adjustment in the last bill after disconnection.

- ii. No temporary connection shall be served without a meter. Agricultural connections shall also be billed one and half times of metered supply tariff (LV-3).
- iii. Connection and disconnection charge shall be paid as per the schedule of miscellaneous charges.
- iv. No rebates/concessions under any head shall be applicable to temporary connections.
- v. A month for the purpose of billing of temporary supply shall mean 30 days from the date of connection or part thereof.
- vi. In case connected load/maximum demand is found more than contracted load/contract demand, then the billing of excess load/supply shall be done for the amount calculated as per the clause 8 of the terms & conditions of LT tariff.
- vii. Any expenditure made by the licensee for providing temporary supply upto the point of supply, shall be paid for by the consumer as per prescribed procedure.
- viii. Temporary connections shall not be served unless suitable capacitors, wherever applicable, are installed so as to ensure power factor of not less than 0.85 lagging.
- ix. Surcharge at the rate of 2% per month or part thereof on the outstanding amount of the bill shall be payable in addition, from the due date of payment of bill, if the Bill is not paid by the consumer within the period prescribed.

8.1.2 Terms and Conditions of L.T. Tariff

1. Energy will be supplied to the consumer ordinarily at a single point for the entire premises of the consumer.
2. No new L.T. connection above 75 kW of contract demand/100 HP of contracted load shall be served.
3. All existing L.T. connections with contracted load above 100 HP (75KW) which have not availed H.T. supply so far shall be levied 35% additional charge on total amount of monthly bill comprising fixed charge/demand charge and energy charge.
4. Contracted load/connected load or contract demand/maximum demand infraction shall be rounded off to the next whole number.
5. For the purpose of separate independent LT connection to HV industrial consumer in the same premises of HV industrial connection, to meet out its essential load during

emergency on non-availability of supply in HV connection under LV 2 category conditions as mentioned in clause 4.40 of the Chhattisgarh State Electricity Supply Code and its amendment if any shall be applicable.

6. For the purpose of Demand Based Tariff (LV-2.2. LV-4.2 & LV-5.3)

- i. **Determination of Maximum Demand**- The maximum demand of the consumer in each month shall be twice the largest amount of Kilo Watt hours delivered at the point of supply of the consumer, during any consecutive thirty minutes, in that month.
- ii. **Billing Demand**– The billing demand for the month shall be the actual maximum KW demand of the consumer recorded during the month or 75% of the contract demand or 15 kW, whichever is higher. The billing demand shall be rounded off to the next whole number.
- iii. **Minimum Charge** – The demand charge on contract demand (CD) is a monthly minimum charge whether any energy is consumed during the month or not.
- iv. There shall be no restriction on connected load for applicability of demand based tariff.

7. **Peak Hour Charges**

All LV-2 (Non-Domestic) and LV-5 (LT Industrial) consumers having a contracted load/Demand of 50 HP or 37 kW and above shall be required to pay 130% of normal rate of energy charges for the energy consumed during peak hours i.e. 6 P.M. to 11P.M.

8. **Power Factor Incentive and Surcharge**

- a) All LT industrial, agriculture allied, and public water works, sewage treatment plants and sewage pumping installations consumers shall arrange to install suitable low tension capacitors of appropriate capacity at their cost. The consumer also shall ensure that the capacitors installed by him properly match with the actual requirement of the load so as to ensure average monthly power factor of 85% or above. A consumer who fails to do so shall be liable to pay power factor surcharge @ 35paise per unit on the entire consumption of the month.
- b) All the agriculture pump connections of above 3HP shall provide with capacitor of specified rating maintain average monthly power factor of 0.85 or above failing which they are required to pay power factor surcharge @ 35paise per kWh on the entire consumption for the month.

- c) All LT non-domestic consumers with contracted load/connected load of 15 kW or above shall arrange to install low tension suitable capacitors of appropriate capacity at their cost. The consumer shall ensure that the capacitors installed by him properly match with the actual requirement of the load so as to ensure average monthly power factor of 85% or above. A consumer who fails to do so will be liable to pay low power factor surcharge @ 35paise per kWh on the entire consumption of the month.
- d) All LT installations having welding transformer are required to install suitable capacitor(s) so as to ensure power factor of not less than 85%. Consumers not complying with the above shall have to pay surcharge of 75 paisa per kWh on the entire monthly consumption, provided the load of the welding transformer(s) exceeds 25% of the total connected load.

Note - For the purposes of computing the connected load in kW of welding transformers, a power factor of 0.6 shall be applied to the kVA rating of such welding transformers. The kVA rating can also be calculated on the basis of load voltage and maximum load current on secondary side of welding machine.

- e) The average monthly power factor recorded in the meter shall be considered for billing of power factor surcharge or power factor incentive, as the case maybe.
- f) Levy of power factor surcharge as indicated above, shall be without prejudice to the rights of the CSPDCL to disconnect the consumer's installation after issue of 15 days' notice if the average monthly power factor remains 0.7 or below for a period of more than two consecutive months. It shall remain disconnected till the consumer makes suitable arrangements to improve the power factor to the satisfaction of the CSPDCL.
- g) Notwithstanding the above the average monthly power factor of a new consumer is found to be less than 85% at any time during the first six months from the date of connection and if he maintains average monthly power factor continuously in subsequent three months at not less than 85% then the surcharge billed on account of low power factor during the said period shall be withdrawn and credited in next month bill.
- h) All categories of LT consumers except the LT domestic consumers in whose case power factor surcharge is applicable; shall also be eligible for power factor incentive. Such incentive shall be payable @ of 10 paisa per unit on the entire consumption of that month in which he maintains an average monthly power factor equal or above 90% and @ 15 paisa per unit of entire consumption of that month in which he maintains an average monthly power factor 95% or above.

9. Provisions of billing in case of Excess Supply

i. For Normal Tariff consumers

1. In case the connected load of any LT consumer, except the domestic (LV-1) consumers, is found at any time in excess of contracted load, the consumer shall have to pay charges at tariff (fixed and energy charge) corresponding to the excess load at the rate of one and halftimes the normal tariff for the excess load to the extent of 20% of contracted load and at the rate of two times of the normal tariff if the excess load is found beyond 20% of contracted load for actual period of enhancement of load or 6 months whichever is less, including the month in which the existence of excess load is detected and shall be continued to be billed till excess load is removed or contract load is enhanced.
2. Where the recording facility of demand is available the billing on account of excess supply should be restricted to the recorded month only.

ii. For Demand Based tariff consumers

Consumers availing supply at demand based tariff (LV-5.3/LV-4.2/LV- 2.2.) should at all-time restrict their maximum demand to the contract demand. In case the maximum demand in any month exceeds the contract demand, the said demand based tariff (LV-5.3/LV-4.2/LV- 2.2) shall apply only to the extent of the contract demand and corresponding units of energy. The demand in excess of contract demand and corresponding units of energy shall be treated as excess supply. The excess supply so availed, in any month, shall be charged at the rate of one and half times of the normal tariff applicable to the consumer (fixed and energy charges) for the excess demand to the extent of 20% of contract demand and at the rate of two times of normal tariff if the excess demand is found beyond 20% of contract demand. For the purpose of billing of excess supply, the billing demand and the units of energy shall be determined as under:

- a) Billing Demand: The demand in excess of the contract demand in any month shall be the billing demand.
- b) Units of Energy: the units of energy corresponding to KW portion of the demand in excess of the contract demand shall be:-

$$EU = TU (1 - CD/MD)$$

Where

EU – denotes excess units;

TU – denotes total units supplied during the month;

CD – denotes contract demand, and

MD – denotes actual maximum demand.

- I. The excess supply availed in any month shall be charged along with the monthly bill and shall be payable accordingly.
- II. The above billing of excess supply at one and half times/ two times of the normal tariff shall be applicable to consumers without prejudice to the CSPDCL's right to discontinue supply in accordance with the provisions contained in the Chhattisgarh State Electricity Supply Code, 2011.

10. Delayed Payment Surcharge

If the bill is not paid by the consumer within the period (due date) prescribed for payment of the bill, a surcharge @ 1.5% per month or part thereof, on the total outstanding amount of the bill (including arrears, if any, but excluding amount of surcharge), subject to minimum of Rs. 5 shall be payable in addition, from the due date of payment as mentioned in the bill.

11. 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.

12. Advance Payment Rebate

A rebate @ 0.5% per month will be payable on net amount of advance at the end of the billing cycle of that particular month, subject to the condition that the net amount of advance is not less than Rs. 500, and shall be adjustable in next month's bill.

13. Rounding off

The bill shall be rounded off to the in nearest multiple of Rs.10. Difference, if any, between the bill amount before and after rounding off, shall be adjusted in next month's bill.

For example: - If the total amount of bill is Rs. 235.00, then the bill shall be rounded off to Rs. 240 and Rs. 5.00 will be credited in next month's bill Whereas if the total amount of bill is Rs. 234.95, then the bill will be rounded off to Rs. 230 and Rs. 4.95 will be debited in next month's bill. In view of the above provision no surcharge will be liveable on outstanding amount which is less than Rs. 10.

14. Applicability of tariff

In case of any dispute about applicability of tariff to a particular LT category, the decision of the Commission shall be final and binding.

15. Tax or Duty

The tariff does not include any tax or duty, etc. on electrical energy that may be payable at any time in accordance with any law in force. Such charges, if any, shall be payable by the consumer in addition to tariff charges.

16. Meter Hire

Meter hire shall be charged as per the schedule of miscellaneous charges to all categories of LT consumers except the consumers of domestic light and fan category. Domestic light and fan category consumer shall not be required to pay such charges.

17. Variable Cost Adjustment Charge

Variable Cost Adjustment charge as per the formula and conditions decided by the Commission, in order dated 30th June 2012 in Suo-motu Petition No. 26 of 2012, its subsequent amendment/modification, if any, shall be levied in addition to energy charge on all the LV categories including temporary supply. However, from the date of applicability of this Order the base values for computation of VCA for succeeding period shall be revised in accordance to this Order.

18. Conditions to have over-riding effect

All the above conditions of tariff shall be applicable to the consumer notwithstanding the provisions, if any, in the agreement entered into by the consumer with the licensee.

8.1.3 Tariff Schedule for Extra High Tension (EHT) Consumers

This tariff schedule is for consumers who avail supply at EHV i.e. at 400/220/132 kV.

8.1.3.1 EHV-1: Railway Traction.

1. Applicability

This tariff is applicable to the Railways, for traction loads only, availing two-phase supply.

2. Tariff:

| Category of Consumers | Demand Charge (Rs./kVA/month) | Energy Charge (Rs. per kVAh) |
|-----------------------|----------------------------------|---------------------------------|
| EHV-1 | 345 | 4.00 |

3. Determination of Demand

The maximum demand of the supply in each month shall be four times the largest number of kilo Volt Ampere hours (kVAh) delivered at the point of supply during any consecutive 15 minutes in the month as per the sliding window principle of measurement of demand. Provided that if as a result of an emergency in the consumer's installation or in the transmission lines supplying energy to the said traction sub-station, extra load is availed by the consumer with prior intimation to the licensee, the period of such emergency shall not be taken into account for the purpose of working out the maximum demand.

Provided further that as a result of emergency in the traction sub-station (TSS) or in the transmission line supplying power, if the entire load of the TSS or part thereof is transferred to adjacent TSS, the maximum demand (MD) of the TSS, for the month shall not be taken as less than the average MD recorded for the previous three months during which no emergency had occurred.

4. The conditions of power factor incentive/penalty shall not be applicable as the energy charges are billed on kVAh.

8.1.3.2 EHV-2: Heavy Industries and other Consumers

1. Applicability

1. This tariff is applicable to all types of industries including steel, mines, coal mines, cement industries etc. with a contract demand of above 20 MVA for power, lights, fans, cooling ventilation etc. which shall mean and include all energy consumption in factory; and consumption for residential and general use therein including offices, stores, canteen compound lighting etc.

2. This tariff is also applicable to all other EHV consumers upto contract demand of 20 MVA which are not covered under any other EHV-1 & EHV-3 tariff category including coal mines, mines, cement industries etc. for power, lights, fans, cooling ventilation, etc. which shall mean and include all energy consumption in factory; and consumption for residential and general use therein including offices, stores, canteen compound lighting, etc.

2. Tariff:

| Category of Consumers | Demand Charge (Rs./kVA/month) | Energy Charge (Rs. per kVAh) |
|-----------------------|----------------------------------|---------------------------------|
| EHV-2 | 345 | 4.00 |

3. Determination of Demand

The maximum demand in each month shall be four times the largest number of Kilo Volt

Ampere hours delivered at the point of supply during any consecutive 15 minutes during the month as per sliding window principle of measurement of demand.

4. The conditions of power factor incentive/penalty shall not be applicable as the energy charges are billed on kVAh.

8.1.3.3 EHV-3: Steel Industries

1. Applicability

This tariff is applicable to steel industries having contract demand upto 20 MVA, i.e. for mini steel plants, rolling mills, sponge iron plants, ferro alloy units, steel casting units, and combination thereof including wire drawing units with or without galvanizing unit; for power, lights, fans, cooling ventilation etc. which shall mean and include all energy consumption in factory and consumption for residential and general use therein including offices, stores, canteen compound lighting etc.

2. Tariff:

| Category of Consumers | Demand Charge (Rs./kVA/month) | Energy Charge (Rs. per kVAh) |
|-----------------------|----------------------------------|---------------------------------|
| EHV- 3 | 345 | 3.50 |

3. Determination of Demand

The maximum demand of the supply in each month shall be four times the largest number of Kilo Volt Ampere hours delivered at the point of supply during any consecutive 15 minutes in the month as per sliding window principle of measurement of demand.

4. The conditions of power factor incentive/penalty shall not be applicable as the energy charges are billed on kVAh.

8.1.4 Tariff Schedule for High Tension (HT) Consumers

This tariff schedule is for consumers who avail supply at 33 or 11 kV.

8.1.4.1 HV-1 Steel Industries

1. Applicability

This tariff is applicable to steel industries i.e. for mini steel plants, rolling mills, sponge iron plants, Ferro alloy units, steel casting units, and combination thereof including wire drawing units with or without galvanizing unit; for power, lights, fans, cooling ventilation etc. which shall mean and include all energy consumption in factory and consumption for residential and general use therein including offices, stores, canteen, compound lighting etc.

2. Tariff:

| Category of Consumers | Demand Charge (Rs./kVA/month) | Energy Charge (Rs. per kWh) |
|-----------------------|----------------------------------|--------------------------------|
| HV-1.1: 33 kV | 360 | 3.60 |
| HV-1.2: at 11 kV | 370 | 3.70 |

Optional Tariff

Option - 1

| Category of Consumers | Demand Charge (Rs./kVA/month) | Energy Charge (Rs. per kWh) |
|-----------------------|----------------------------------|--------------------------------|
| HV-1.3 33 kV | 200 | 3.80 |

Option - 2

| Category of Consumers | Demand Charge (Rs./kVA/month) | Energy Charge (Rs. per kWh) |
|-----------------------|----------------------------------|--------------------------------|
| HV-1.4: 33 kV | 360 | 3.30 |

Note:

- I. The following option 1 and option 2 may be opted by steel industry of this category for one year or revision of next tariff whichever is earlier.
- II. Consumer under this tariff (option II) shall be subjected to bear minimum guaranteed payment of electricity bills for demand charges on contract demand and energy charges at 70% load factor on contracted demand with 0.9 PF and Power-on-hours on annualized basis or over the period upto next tariff order whichever is earlier. However , monthly bills shall be raised on the basis of 70% load factor on contracted demand with 0.9 PF or actual consumption basis whichever is more till last but one month of the period and adjusted for minimum guarantee in the last month of period
- III. Power-on- hours is defined as total hours in the billing period minus hours of load restriction enforced by CSPDCL/ CSPTCL.

3. Determination of Demand

The maximum demand of the supply in each month shall be four times the largest number of Kilo Volt Ampere hours delivered at the point of supply during any consecutive 15 minutes in the month as per sliding window principle of measurement of demand.

8.1.4.2 HV-2: Mines, Cement, other Industries and General Purpose Non Industries:**1. Applicability**

1. This tariff is applicable to the mines, coal mines, cement industries, and other industries not covered under categories HV-1, and HV-4 for power, lights, fans, cooling ventilation etc. which shall mean and include all energy consumption in factory and consumption for residential and general use therein including offices, stores, canteen yard lighting etc.
2. This tariff is also applicable for supply to establishment such as Railways (other than traction), hospitals, offices, hotels, shopping malls, power supplied to outside of State (border villages), educational institutions, mixture and/or stone crushers for road/building construction and other institutions etc. having mixed load or non-industrial and/or non-residential load. This tariff is also applicable to all other HT consumers not covered specifically in any other HV tariff category.

2. Tariff:

| Category of Consumers | Demand Charge (Rs./kVA/month) | Energy Charge (Rs. per kWh) |
|-----------------------|----------------------------------|--------------------------------|
| HV-2.1 33 kV | 360 | 4.20 |
| HV-2.2: 11 kV | 370 | 4.30 |

3. Determination of Demand

The maximum demand in each month shall be four times the largest number of Kilo Volt Ampere hours delivered at the point of supply during any consecutive 15 minutes during the month as per sliding window principle of measurement of demand.

8.1.4.3 HV-3: Low Load Factor Industries

1. Applicability

This tariff is applicable to all such HT industries to whom tariff category HV-1 and HV-2 may apply but working in day time only i.e., between 6:00 A.M. and 6:00 P.M., as an optional tariff; for power, lights, fans, etc. which shall mean and include all energy consumption in factory and consumption for residential and general use therein. This tariff will be applicable to a consumer who opts for it.

2. Tariff:

| Category of Consumers | Demand Charge (Rs./kVA/month) | Energy Charge (Rs. per kWh) |
|-----------------------|----------------------------------|--------------------------------|
| HV 3.1: 33 kV | 205 | 4.20 |
| HV 3.2 : 11 kV | 210 | 4.30 |

3. Determination of Demand

The maximum demand of supply in each month shall be four times the largest number of Kilo Volt Ampere hours delivered at the point of supply during any consecutive 15 minutes in the month as per sliding window principle of measurement of demand.

4. Conditions for low load factor industries

- i. This tariff is applicable to HT industries, which use power during daytime between 6:00 A.M. and 6:00 P.M. In case, they draw power beyond the time specified, the energy consumed shall be charged at one hundred and thirty percent (1.3 times) of the normal rate of energy charge applicable to the consumer.
- ii. The supply availed beyond specified period in any month shall be charged along with the monthly bill and shall be payable by the consumer.

8.1.4.4 HV-4: Residential, Public water works, Irrigation & Agriculture Allied Activities

1. Applicability

1. This tariff shall be applicable for bulk supply at one point to colonies, multi-storied residential buildings, townships, including townships of industries provided that connected load of non-domestic nature for common basic amenities and other general purpose load put together for the residents shall not be more than 10% of total connected load other than drinking water supply, sewage pumping and street light, public utility water supply schemes, sewerage treatment plants and sewage pumping installations run by P.H.E. Department, local bodies, Gram Panchayat or any organization made responsible by the Government to supply/maintain public water works/sewerage installation including energy used for lighting pump house and agriculture pump connections, irrigation pumps of lift irrigation schemes of State Government or its agencies/co-operative societies, including energy used for lighting pump house.

2. This tariff is also applicable to the consumer availing supply at HV for the purpose of pump/tube well connections, other equipment for tree plantation fisheries, hatcheries, poultry farms, dairy, cattle breeding farms, sericulture, tissue culture and aquaculture laboratories and milk chilling plant and for power, lights, fans, coolers, etc. which shall mean and include all energy consumed in factory, offices, stores, canteen, compound lighting, etc. and residential use therein.

2. Tariff:

| Category of Consumers | Demand charge (Rs./kVA/month) | Energy charge (Rs. per kWh) |
|-----------------------|----------------------------------|--------------------------------|
| HV 4.1: 33 kV | 360 | 3.40 |
| HV 4.2 : 11 kV | 370 | 3.50 |

3. Determination of Demand

The maximum demand of supply in each month shall be two times the largest number of Kilo Volt Ampere hours delivered at the point of supply during any consecutive 30 minutes in the month as per sliding window principle of measurement of demand.

8.1.4.5 HV-5: Start-Up Power Tariff

1. Applicability

The tariff shall be applicable to those consumers who avail supply for start-up power for their power plant (generating station and captive generating plant) at 400/220/132/33/11 kV.

2. Tariff:

| Category of Consumers | Demand charge (Rs./kVA/month) | Energy charge (Rs. per kVAh) |
|-----------------------|----------------------------------|---------------------------------|
| HV-5 | 185 | 5.90 |

3. Determination of Demand

The maximum demand of supply in each month shall be four times the largest number of Kilo Volt Ampere hours delivered at the point of supply during any consecutive 15 minutes during the month as per sliding window principle of measurement of demand.

4. The conditions of power factor incentive/penalty shall not be applicable as the energy charges are billed on kVAh.

5. Conditions for start-up power consumers

- i. Contract demand shall not exceed 10% of the highest capacity of generating unit of the generating station/captive generating plant
- ii. Captive generating plants which do not have any co-located industrial load and who use the grid for transmission and wheeling of electricity can avail start up-power tariff.
- iii. Captive generating plant who have co-located industrial load are also entitled for start-up power tariff

- iv. Drawl of power shall be restricted to within 10% of load factor based on the contract demand in each month. In case the load factor in a month is recorded beyond 10%, the demand charge shall be charged at double the normal rate. Supply can also be disconnected if the monthly load factor exceeds 10% in any two consecutive months. Load factor shall be computed from contract demand.
- v. Start-up power shall also be made available to the generator/captive generating plant connected to CTU grid with proper accounting.
- vi. This tariff shall also be applicable to generators before their commercial operation.
- vii. In case of generators who have not availed start-up connection but eventually draws power from the grid not more than 30 minutes at one occasion shall be billed @ Rs 10.24 per kWh it as per the average billing rate for this tariff, which includes demand charge also. Drawl beyond 30 minutes shall be bill at @ Rs 20.48 per kWh.
- viii. In case of captive generating plant, which do not have any co-located industrial load and who use the grid for transmission and wheeling of electricity, such CGP's, if they have not availed start-up connection but eventually draws power from the grid not more than 30 minutes at one occasion shall be billed @ Rs. 10.24 per kWh as per the average billing rate for this tariff, which includes demand charge also. Drawl beyond 30 minutes shall be bill at @ Rs 20.48 per kWh.
- ix. In case of captive generating plant which have co-located industrial load and who have not availed start-up connection but eventually draws power from the grid not more than 30 minutes at one occasion shall be billed @ Rs. 10.24 per kWh it as per the average billing rate for this tariff, which includes demand charge also. Drawl beyond 30 minutes shall be bill at @ Rs 20.48 per kWh.
- x. The existing biomass-based generators are exempted from payment of demand charge for the first five years from the date of availing start-up connection i.e. they are required to pay energy charge only during first five years of availing start-up power and full start-up tariff from sixth year onwards. The new biomass-based generators who would come under operation during the MYT Control Period are exempted from payment of demand charge for the first five years from the date of commercial operation of their power plant i.e., they will be required to pay energy charge only during first five years from COD and full start-up tariff from sixth year onwards. However, in case during first five years from the date of its connection, if it's actual demand exceeds the contract demand, the billing for that

month shall be as per other start-up power consumer exceeding contract demand. In case if the load factor is within 10% but actual demand exceeds the contract demand then also the billing for that month shall be as per other start-up power consumer exceeding contract demand. In case, it is established that the biomass based generator has used biomass in the lesser ratio than as mentioned in the guidelines of the Ministry of New and Renewable Energy during any financial year in first five years from the date of availing start up power tariff then demand charge as per this tariff category (HV-5) shall also become payable for the whole such financial year and such payable amount will be billed in three equal instalments after such happening comes in the notice of the CSPDCL.

8.1.4.6 HV-6: Industries related to manufacturing of equipment for power generation from renewable energy sources

1. Applicability

This tariff is applicable to consumers availing supply at 220/132/33/11 kV for manufacturing of plant, machinery and equipment used for generation of power from renewable sources of energy including for the manufacturing of hydel turbine, generator and related auxiliaries needed for small hydel plants up to 25 MW but excluding manufacturing of boilers, turbines, generators, and the related auxiliaries which otherwise can be used for generation of power from conventional source of energy. This tariff shall also not be applicable for manufacturing of such common machines/equipment/and other items such as electrical motors, structural items, nuts bolts, etc. which can be used for other purposes also.

2. Tariff:

| Category of Consumers | Demand charge (Rs./kVA/month) | Energy charge (Rs. per kVAh) |
|------------------------------|--|---|
| HV-6 | 345 | 4.10 |

3. Determination of Demand

The maximum demand of supply in each month shall be four times the largest number of Kilo Volt Ampere hours delivered at the point of supply during any consecutive 15 minutes during the month as per sliding window principle of measurement of demand.

4. The conditions of power factor incentive/penalty shall not be applicable as the energy charges are billed on kVAh.

8.1.4.7 Temporary Connection at EHV and HV

1. Applicability

This tariff is applicable to all EHV and HV connections (other than the consumers availing Start up power Tariff (HV-5)), of temporary nature at 220/132/33/11 kV.

Temporary supply cannot be demanded by a prospective consumer as a matter of right but will normally be arranged by the licensee when a requisition is made subject to technical feasibility.

2. Tariff:

One and half times of the normal Tariff applicable for the corresponding category of consumer for demand and energy charge.

Notes

- i. An amount equal to estimated bill for 3 months or for the period requisitioned, whichever is less; is payable in advance before the temporary connection is served subject to replenishment from time to time and adjustment in the last bill after disconnection.
- ii. If maximum demand is found more than the contract demand in any billing month, the billing shall be done at one and half times / two times of the energy charges and Demand charges as applicable, in case of exceeding contract demand in permanent connection, and shall be calculated as per clause 10 of terms & conditions of EHV and HV tariff.
- iii. Any expenditure made by the CSPDCL up to the point of supply for giving temporary connection shall be payable by the consumer as per prescribed procedure.
- iv. Connection and disconnection charges shall be paid separately.
- v. No rebates/concessions under any head shall be applicable to temporary connections.
- vi. Month for the purpose of billing of temporary supply shall mean 30 days from the date of connection or for part thereof.

- vii. Other terms and conditions of the relevant category of tariff shall also be applicable.
- viii. Surcharge at 2% per month or part thereof on the outstanding amount of the bill shall be payable in addition from the due date of payment of bill, if the bill is not paid by the consumer within the period prescribed.
- ix. Temporary connection shall not be served unless suitable capacitors are installed by the consumer so as to ensure power factor of not less than 0.90, in case of HT connections.

8.1.5 Time of Day Tariff

This tariff is applicable to EHV and HV categories. Under the Time of Day (TOD) Tariff, electricity consumption in respect of EHV and HV industries for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a TOD meter. Consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer:

| Period of Use | Normal rate of Demand Charge Plus |
|--|--------------------------------------|
| (i) Normal period (5:00 a.m. to 6:00 p.m.) | Normal rate of Energy Charges |
| (ii) Evening peak load period (6:00 p.m. to 11:00 p.m.) | 130% of normal rate of Energy Charge |
| (iii) Off-peak load period (11:00 p.m. to 5:00 am of next day) | 85 % of normal rate of Energy Charge |

Applicability and Terms and Conditions of TOD tariff:

- i. TOD tariff is applicable to all EHV and HV categories covered in EHV-2, EHV-3, HV-1 including optional tariff, HV-2 and HV-6 categories.
- ii. The terms and conditions of the applicable tariff (such as monthly tariff minimum charge, etc.) shall continue to apply to a consumer to whom TOD tariff is applicable.
- iii. In case, the consumer exceeds the contract demand, the demand in excess and the corresponding energy shall be billed at one and half/two times of the normal tariff applicable for the day time (i.e., 5.00 a.m. to 6.00 p.m.) irrespective of the time of use.

Terms and Conditions of EHV and HV Tariff

1. The maximum and minimum contract demand for different supply voltage is governed as per provision in supply code. Presently, the minimum and maximum permissible load at respective supply voltage are as below:

| Supply Voltage | Minimum | Maximum |
|-----------------------|----------------|----------------|
| 11 kV | 60 kVA | 500 kVA |
| 33 kV | 60 kVA | 15 MVA |
| 132 kV | 4 MVA | 40 MVA |
| 220 kV | 15 MVA | 150 MVA |

Deviation in contract demand, if any, in respect of the above provisions on account of technical reasons may be permitted with the approval of the Commission and billing shall be done accordingly. The EHV/HV consumers having contract demand exceeding the maximum limit mentioned above for respective voltage of supply shall be liable to pay additional charges at the rate of 5% or energy charges of respective consumer category as specified in clause 10 of terms and conditions of EHV and HV tariff.

1. Point of Supply

Power will be supplied to consumers ordinarily at a single point for the entire premises. In certain categories like coal mines, power may be supplied at more than one point on the request of consumer subject to technical feasibility. HV industrial consumers can avail separate LT supply as per clause 4.40 of the Chhattisgarh State Electricity Supply Code, 2011 in the same premises.

Billing demand

The billing demand for the month shall be the maximum demand (in kVA) of the consumer recorded during the billing month or 75% of the contract demand or 60 kVA whichever is higher except for the consumers who have reduced their contract demand to zero. The billing demand shall be rounded off to the next whole number.

2. Minimum Charge

The demand charge on contract demand (CD) is a monthly minimum charge whether any energy is consumed during the month or not.

3. Power Factor Incentive / Surcharge for all HV category consumers shall be billed on the following terms and condition except of HV-5 and HV-6 category.

- a) If the average monthly power factor of the consumer increases above 95%, he shall be paid an incentive at the following rate:

| | |
|--|--|
| For each one percent increase by which his - average monthly power factor is above 95%, upto unity power factor. | One percent (1%) of the total amount of the bill under the head 'energy charge'. |
|--|--|

- b) If the average monthly power factor of the consumer falls below 90%, he shall pay a surcharge in addition to his normal tariff, at the following rate:

| | |
|---|---|
| For each one percent by which his - average monthly power factor falls below 90% upto 85% | One percent (1%) of the total amount of the bill under the head 'energy charge' |
|---|---|

- c) If average monthly power factor of the consumer falls below 85%, he shall pay a surcharge in addition to his normal tariff at the following rate:

| | |
|--|---|
| For each one percent by which his - average monthly power factor falls below 85% | Two percent (2%) of the total amount of the bill under the head 'energy charge' |
|--|---|

- d) If the average monthly power factor of the consumer falls below 70%, then the CSPDCL shall have the right to disconnect supply to consumer's installation after serving a notice of 15 days. Supply may be restored only after steps are taken to improve the power factor to the satisfaction of the CSPDCL. This is, however, without prejudice to the levy of surcharge for low power factor in the event of supply not being disconnected.
- e) For this purpose, the "average monthly power factor" is defined as the ratio of total 'Kilo Watt hours' to the total 'Kilo Volt Ampere hours' recorded during the month. This ratio will be rounded off to two figures after decimal, 5 or above in the third place after decimal being rounded off to the next higher figure in the second place after decimal.

f) Notwithstanding the above, if the average monthly power factor of a new consumer is found to be less than 90% at any time during the first 6 (six) months from the date of connection, and if he maintains the average monthly power factor continuously in subsequent three months at not less than 90%, then the surcharge billed on account of low power factor during the said period, shall be withdrawn and credited in next month's bill.

4. Rounding off

The amount of EHV and HV energy bill shall be rounded off to the nearest multiple of Rs.10.

For example - the amount of Rs. 12345 will be rounded off to Rs. 12350 & Rs. 12344.95 shall be rounded off to Rs. 12340.

In view of the above provision no surcharge will be leviable on outstanding amount which is less than Rs. 10.

5. Delayed Payment Surcharge

If the bill is not paid by the consumer within the period prescribed (due date) for payment of the bill, a surcharge @ 1.5% per month or part thereof, on the total outstanding amount of the bill (including arrears, if any but excluding amount of surcharge), shall be payable in addition, from the due date of payment as mentioned in the bill.

6. Additional charges for local bodies

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.

7. Advance Payment Rebate

A rebate @ 0.5% per month will be payable on net amount of advance at the end of the billing cycle of that particular month, subject to the net amount of advance is not less than Rs.20,000, and shall be adjustable in next month's bill.

8. Additional Charge for Exceeding Contract Demand

The consumers should restrict their maximum demand to the extent of contract demand. In case the maximum demand during any month exceeds the contract demand, the foregoing tariffs shall apply only to the extent of the contract demand

and corresponding units of energy. The demand in excess of contract demand and corresponding units of energy shall be treated as excess supply. The excess supply so availed, if any, in any month shall be charged at one and half times of the normal tariff applicable to the consumer (demand and energy charges) for the excess demand to the extent of 20% of contract demand and at the rate of two times of normal tariff if the excess demand is found beyond 20% of contract demand.

For the purpose of billing of excess supply, the billing demand and the units of energy shall be determined as under:-

i. **Billing Demand / Contract Demand:**

The demand in excess of the contract demand in any month shall be the billing demand/ contract demand of the excess supply.

ii. **Units Energy:**

The units of energy corresponding to kVAs of the portion of the demand in excess of the contract demand shall be:

$$EU = TU (1 - CD/MD)$$

Where

EU - denotes units corresponding to excess supply;

TU - denotes total units supplied during the month;

CD - denotes contract demand; and

MD - denotes maximum demand.

The excess supply availed in any month shall be charged along with the monthly bill and shall be payable by the consumer.

The billing of excess supply at one and half times/two times of the normal tariff applicable to consumer is without prejudice to the CSPDCL's right to discontinue the supply in accordance with the provisions contained in the Chhattisgarh State Electricity Supply Code.

iii. No rebates/incentive is payable on such excess supply.

9. Additional Charge

The EHV/HV consumers having contract demand exceeding the maximum limit as prescribed in clause 1 of terms and conditions of EHV & HV tariff with the approval of competent authority shall be levied additional charges at the rate of 5% on energy charges of the respective consumer category.

10. Meter Hire

Meter hire shall be charged as per the schedule of miscellaneous charges to all categories of EHV and HV consumers.

11. Tax or Duty

The tariff does not include any tax or duty, etc. on electrical energy that may be payable at any time in accordance with any law/State Government Rules in force. Such charges, if any, shall be payable by the consumer in addition to tariff charges.

12. Variable Cost Adjustment charge

Variable Cost Adjustment charge as per the formula and conditions decided by the Commission in order dated 30th June 2012 in Suo-motu Petition No. 26 of 2012 and its subsequent amendment/modification from time to time shall be levied in addition to energy charge on all the EHV and HV categories.

13. Dispute on applicability of tariff

In case of any dispute on applicability of tariff on a particular category of HV/EHV industry/ consumer, the decision of the Commission shall be final and binding.

Notwithstanding the provisions, if any, contrary to the agreement entered into by the consumer with the CSPDCL, all conditions prescribed herein shall be applicable to the consumer.

14. Parallel Operation Charges (POC)

Parallel operation charges shall be payable by CPP to CSPDCL for its captive and non-captive load at the rate Rs.21/per kVA/Month.

15. Open Access Charges

i) Transmission Charges

The long-term and medium-term open access customers including CSPDCL shall be required to pay the annual transmission charges approved by the Commission. Bills shall be raised for transmission charge on monthly basis by the STU (CSPTCL), and payments shall be made by the beneficiaries and long-term and medium-term open

access customers directly to the CSPTCL .These monthly charges shall be shared by the long-term open access customers and medium-term open access customers as per allotted capacity proportionately. The monthly transmission charge is Rs. 63.80 Crore.

For short-term open access customer: Rs. 278/MWh (or Rs. 0.278 per kWh) for the energy computed as per the provisions made in regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% load factor for transmission. The same charges shall be applicable for both collective and bilateral transaction at the point or points of injection.

j) Energy losses for transmission

Transmission losses at the rate of 4.30% for the energy scheduled for transmission at the point or points of injection shall be recoverable from open access customers.

k) Wheeling Charges

For long-term, medium-term and short-term open access customer: Rs. 235/MWh (or Rs. 0.235 per kWh) for the energy computed as per the provisions made in regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% load factor for wheeling. The same charges shall be applicable for both collective and bilateral transaction at the point of injection.

l) Energy losses for distribution

Distribution losses at the rate of 6 % for the energy scheduled for distribution at the point or points of injection at 33 kV side of 33/11 kV sub-station.

m) Operating Charges

The short-term open access customer shall pay the operation charges to SLDC at the rates specified by Central Commission from time to time which is presently Rs. 2000 per day.

n) Reactive Energy Charges

Reactive energy charges shall be levied at the rate of 27 paisa/kVARh

o) Cross Subsidy Surcharge

- iii. For EHT consumers Rs. 1.278 per kWh (which is 90% of the computed value of Rs. 1.420 per kWh).

- iv. For HT consumers Rs. 0.909 per kWh (which is 90% of the computed value of Rs. 1.010 per kWh).

p) Stand by charges

The standby charges for consumers availing open access (using transmission and/or distribution system of licensee) and who draws power from the grid up to the contracted capacity of open access during the outage of generating plant/CPP shall be 1.5 times of the per kWh weighted average tariff of HT and EHT consumers which is Rs 8.31 per kWh (1.5 times of the average billing rate of Rs.5.54 per kWh). For drawl of power in excess of the contracted capacity of open access, the tariff for availing stand by support from the grid shall be two times of the per unit weighted average tariff of HT and EHT consumers which is Rs 11.08 Per kWh (2 times of the average billing rate of Rs. 5.54 per kWh). Further, in case of outage of CPP supplying power to captive/non captive consumer who has reduced its contract demand to zero and also availed open access draws power of CSPDCL the billing of such power drawn shall be done as per the standby charges mentioned above.

Note: The settlement of energy at drawl point in respect of consumers availing open access and when the generator is on outage shall be governed by (intra-State ABT, UI charge and related matters) Regulations to be notified by the Commission and as amended from time to time. Till that time provisions of this order in the matter shall prevail

16. Provisions for renewable energy based power generating plant located in the State and supplying power to consumers (located in the State) through open access.

The charges related to transmission and wheeling shall be 6 % of the energy input into the system for the consumer using State grid for procuring power from renewable energy based power generating stations located in the State. Other than these charges, they shall not be required to pay any transmission charges or wheeling charges either in cash or kind.

For open access consumers procuring power from renewable energy based power generating plant, the cross subsidy surcharge payable shall be 50% of the cross subsidy surcharge determined for that year.

- iii. For EHT consumers Rs 0.710 per kWh (which is 50% of the computed value of Rs 1.420 per kWh).
- iv. For HT consumers Rs. 0.505 per kWh (which is 50% of the computed value of Rs 0.909 per kWh).

In case of open access consumer drawing power from biomass based power generating plants, if it is established that the biomass based power generating plants supplying power to such open access consumer has used biomass in the lesser ratio than as mentioned in the guidelines of the Ministry of New and Renewable Energy during any financial year then the relaxations at (i) and (ii) above given to the open access consumer shall be treated as withdrawn for that financial year and the biomass generator shall be liable to pay to CSPDCL full open access charges.

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9. DIRECTIVES OF THE COMMISSION

9.1 Common Directives

| Directives as per Tariff Order of FY 2013-14 | Status Submitted by the Petitioner | Views of Commission |
|---|--|---|
| <p>Terminal Benefits for employees appointed after 01.04.2004</p> <p>All the three successor companies (CSPGCL, CSPTCL & CSPDCL) are directed to submit comprehensive report on the matter related to terminal benefits of employees and officers appointed after 01.04.2004, who are not covered by P&G trust, within three months.</p> | <p>The report on terminal benefits of employees and officers appointed after 1st April 2004 has already been submitted to Hon'ble Commission.</p> | <p>The CSPHCL will review the issue on regular basis, take appropriate action and will ensure that the directive of the Commission is complied.</p> |

9.2 Directives of the Commission to Generation Company (CSPGCL)

Status of Compliance to Directives issued in previous Tariff Order

| Directives as per Tariff Order of FY 2013-14 | Status Submitted by the Petitioner | Views of Commission |
|---|--|---|
| <p>Energy audit of the generating plants</p> <p>The Commission has directed CSPGCL to take up energy audit as a regular exercise. Any proposal for Capital Investment which proclaim to save energy shall be entertained only if it is supported by energy audit report.</p> | <p>CSPGCL submitted that appropriate steps are being undertaken religiously to comply with the directive related to energy audit of power plants. It is also confirmed that in future Energy audit shall be undertaken in accordance to provisions of Energy Conservation Act 2001 and the guidelines issued by BEE from time to time.</p> | <p>It seems that no sincere efforts are made by CSPGCL for compliance of directions. CSPGCL should submit the plan for compliance of direction within two months otherwise action according to the provisions of EA, 2003 will be initiated against them.</p> |
| <p>Mock Billing</p> <p>The Commission had directed CSPGCL to start mock billing at the earliest. Methodology for mock billing was also suggested. Further it was directed to take needful action</p> | <p>CSPGCL submitted that mock billing could not be implemented so far for want of state energy account from</p> | <p>CSPGCL and SLDC are jointly required to submit the plan for compliance of directive on mock billing within two months otherwise</p> |

| Directives as per Tariff Order of FY 2013-14 | Status Submitted by the Petitioner | Views of Commission |
|--|--|--|
| for providing data to SLDC in the desired format. CSPGCL /CSPTCL should coordinate at the highest level, to ensure proper data flow. Directions on the issue have been issued from time to time (last on May 14, 2013). The directions shall continue till further instructions. | SLDC. CSPGCL is pursuing the matter with the SLDC. As soon as the matter gets settled, the mock billing shall be started at the earliest possible. | action according to the provisions of EA, 2003 will be initiated against both the companies. |

9.3 Directives to Transmission Company (CSPTCL)

Status of Compliance to Directives issued in previous Tariff Order

| Directives as per Tariff Order of FY 2013-14 | Status Submitted by the Petitioner | Views of Commission |
|---|--|--|
| <p>Joint Meter reading at EHV sub stations</p> <p>The Commission had directed CSPDCL and CSPTCL to continue joint meter readings (JMR) of the meters on the outgoing feeder to the distribution system of EHV substations every month. The Commission further directed CSPTCL to submit over all bus losses at 400 kV, 220 kV, 132 kV and 33 kV level in Petition.</p> | The Petitioner submits that the Joint Meter reading of meters installed at EHV substations connected to outgoing feeders meant for CSPDCL is continued on a regular basis and the computation of bus losses is under process as per the directive of the Hon'ble Commission. | In the tariff petition of CSPDCL and CSPTCL, the bus-losses of grid sub-station have not been taken into consideration. It indicates that the reply is not genuine. The commission directs that such baseless progress on the directive should not be submitted to the Commission. CSPDCL and CSPTCL are required to submit the details for compliance of direction within two months otherwise action according to the provisions of EA, 2003 will be initiated against both the companies. |
| <p>State Energy Accounts</p> <p>The Commission has directed SLDC to prepare and submit State Energy Account. CSPTCL has to exercise its checks in preparation of State Energy Accounts and it should be submitted by 15th of the succeeding month duly signed by CSPTCL and SLDC.</p> | CSPTCL submits that the quarterly state energy account is being submitted to Hon'ble Commission at the regular intervals as per the directive of the Hon'ble Commission. | The copy of State Energy Accounts (SEA) should also be made available to CSPDCL for reconciliation of power purchase bills according to SEA and the reconciled report should be submitted to the Commission on quarterly basis for its perusal. |
| <p>Asset not in use</p> <p>The Commission directed CSPTCL to submit factual position</p> | The Petitioner submits that this line is being used for exchange of power | CSPTCL should submit month wise details of double circuit line used for |

| Directives as per Tariff Order of FY 2013-14 | Status Submitted by the Petitioner | Views of Commission |
|--|--|--|
| in the matter of Double Circuit line for M/s Jindal Power Limited. | from M/s JPL as per requirement of CSPDCL. | exchange of power for the FY 2013-14 and it should also be clarified that whether this line will also be used for exchange of power for similar transactions in FY 2014-15 and onwards. CSPTCL / CSPDCL are also advised that the concessional power purchased from M/s JPL should be routed through this line only. |

9.4 Directives to Distribution Company (CSPDCL)

Status of Compliance to Directives issued in previous Tariff Order

| Directives as per Tariff Order of FY 2013-14 | Status Submitted by the Petitioner | Views of Commission |
|---|--|---|
| <p>Study Regarding Voltage-wise Cost of Supply:</p> <p>The Commission directed CSPDCL to submit a detailed study report on voltage-wise cost of supply and its impact on the tariff design within twelve months from the date of this Order.</p> | <p>CSPDCL submitted that it has already conducted the voltage wise cost of supply study in its system and submitted study report to the Hon'ble Commission vide letter No. 02-01/REV-II/EA/8706 dated 17.03.2011. The CSPDCL further submitted that new study will take at least one and half years' time.</p> | <p>CSPDCL is further directed to prioritize the study.</p> |
| <p>Wheeling loss</p> <p>The Commission directed CSPDCL to conduct a study on the wheeling loss computation through a reputed experienced agency. The report should be submitted with the next Tariff Petition.</p> | <p>CSPDCL submitted that practically there is no wheeling consumer available at present in the network of CSPDCL. Therefore it is practically not possible to conduct an actual study in the network of CSPDCL for wheeling consumers. Accordingly the existing system losses in the CSPDCL's system may be continued and considered as normative losses for the wheeling consumers as well.</p> | <p>Estimation of wheeling losses is irrespective of the availability of wheeling consumers. Wheeling loss computation is a part of Voltage wise losses and cost of supply study. Therefore the Commission redirects CSPDCL to prioritize the study.</p> |

| Directives as per Tariff Order of FY 2013-14 | Status Submitted by the Petitioner | Views of Commission |
|---|---|--|
| <p>Reactive Energy Charges</p> <p>CSPDCL is directed to submit a detailed proposal for re-determination of reactive energy charge along with a study report with the Tariff Petition.</p> | <p>CSPDCL submitted that the scope of study has been finalised by the Hon'ble Commission vide letter no. 04/03-Tariff/09/2009/1126 dated 07-09-2013 only. Therefore after that the tender document has been prepared and submitted for competent approval and the tender shall be shortly floated to invite the bidders for conducting the study. It will take some reasonable time to make available the study report.</p> | <p>CSPDCL will ensure timely completion of the study. Quarterly progress on the study should be presented to the Commission invariably.</p> |
| <p>Allocation matrix for the cost of supply</p> <p>Distribution licensee has two distinct businesses i.e. Retail power sales and wire business. The Commission directs CSPDCL to allocate expenditure in these two different activities by arriving through a suitable matrix. This allocation matrix should be submitted in its next tariff Petition.</p> | <p>CSPDCL submitted that there is no wheeling consumer available in the network of CSPDCL. Therefore the allocation of expenditure amongst the wheeling and retail supply business shall not be practically possible at present for CSPDCL. However, considering retail supply business alone as the existing business, CSPDCL is preparing an allocation matrix of expenses amongst the wire and supply activities in the retail supply business only which will be submitted separately in due course for kind consideration of Hon'ble Commission.</p> | <p>CSPDCL is directed to expedite the submission of the report.</p> |
| <p>Average cost of extension in rural areas</p> <p>In the past Tariff Order directive was given to CSPDCL by the Commission to evaluate average cost of extension of lines for LT industrial power and non-domestic light and fan consumer having load up to 25 HP in rural areas. In</p> | <p>The average cost of extension against load enhancement & new connections served during FY 2012-13 has been worked out for rural and urban consumers and already submitted to Commission. Accordingly the Commission has</p> | <p>The Commission is disappointed to note that even after a lapse of two and half years' period CSPDCL could not evaluate average cost of extension of lines for releasing connections to LT industrial power and non-domestic light and fan</p> |

| Directives as per Tariff Order of FY 2013-14 | Status Submitted by the Petitioner | Views of Commission |
|--|--|---|
| <p>response CSPDCL has submitted overall average cost as Rs. 3869 per HP. As the directive has not been complied fully, the Commission again directs to calculate this average cost for rural and urban areas consumers separately.</p> | <p>amended the Supply Code, 2011 in this regard on 1st January 2014.</p> | <p>consumers having load up to 25 HP in rural areas. The Commission strongly issues directions to CSPDCL that they will submit the desired information invariably within two months. Non-fulfilment of the same will be considered as breach of order and action according to the provisions of EA, 2003 will be initiated against them.</p> |
| <p>Quality of Power Supply The Commission directs CSPDCL to display month-wise SAIFI, SAIDI & MAIFI information on its website on quarterly basis. It is to be published in the prescribed format. This information should be made available for the feeders feeding power to district head quarter, rural areas and urban areas.</p> | <p>Circle wise Reliability indices (SAIFI, SAIDI, MAIFI) of 11kV feeders for quarter ending January 2014 to March 2014 is enclosed as Annexure – A. The break-up of consolidated information in District HQ, Rural and Urban are prepared and enclosed as Annexure A(1), A(2) & A(3). The same RI has already been displayed in Company’s website.</p> | <p>In spite of repeated reminders, complete information of the State is not being submitted regularly by CSPDCL which is essential. Therefore the Commission redirects that information for the FY 2013-14 should invariably be submitted by end of July and other balance information should be submitted to Commission by September, otherwise action according to the provisions of EA, 2003 will be initiated against them.</p> |
| <p>Power Cut & Poor quality of insulators in Atal Jyoti Yojana With reference to the para 2.3.14 of this Order, CSPDCL is directed to take appropriate action in the matter of Power Cut & Poor quality of insulators and submit a compliance report in three months. The Commission has taken a note of this. CSPDCL is directed to furnish a report on the two matters in three months.</p> | <p>Compliance report already submitted in previous quarter end September 2014.</p> | <p>CSPDCL should ensure that there is no breakdown because of the poor quality construction material.</p> |
| <p>kVAh Billing for all HV Consumers The Commission further directs the Petitioner to submit a detailed report on the likely impact of the</p> | | <p>The Commission advised CSPDCL to conduct the study on priority basis</p> |

| Directives as per Tariff Order of FY 2013-14 | Status Submitted by the Petitioner | Views of Commission |
|---|------------------------------------|---------------------|
| kVAh billing on all other HV consumers along with the next Tariff Petition. | | |

9.5 New directives

9.5.1 New directives for CSPGCL

1. The Commission directs that capital investment and additional capital investment approved by the Commission for KTPS plants i.e. 50 MW and 120 MW shall be withheld with immediate effect. In case of any exigencies, prior approval of any investment should be sought from the Commission.
2. The Commission directs that frequent interruptions of the power plants and abnormal delay in restoration of the plants be minimised. Proper maintenance should be carried out during the annual maintenance. CSPGCL also give estimated time for restoration of such failure to CSPDCL. If the reduction in plant outages as compared to previous years is not observed then the Commission will be constrained to disallow expenses made on annual maintenance of that plant.

9.5.2 New directives for CSPTCL

1. **Non-firm Power:** The Commission has noted that poor quality and non-firm power is being injected by some generators for sale to CSPDCL. SLDC is directed to discourage such poor quality and non-firm power injection, and same should be communicated to CSPDCL. SLDC should also monitor injection of such power from the open access customers apart from the entities supplying power to CSPDCL. CSPDCL should avoid purchase of power from such suppliers and may direct SLDC to take appropriate action under the intimation to the Commission.
2. **State Energy Account:** SLDC has been submitting State Energy Account to the Commission on quarterly basis. SLDC should send copy of the same to the CSPDCL.
3. **Bus losses of EHV substations:** In spite of earlier directive, CSPTCL has not reported the bus losses of EHV substations. The Commission directs CSPTCL to submit the details of bus loss within two months otherwise action according to the provisions under EA, 2003 will be initiated against him.

9.5.3 New directives for CSPDCL

- 1. State Energy Account:** CSPDCL should reconcile the power purchase bills according to SEA and reconciliation report should be submitted to the Commission on quarterly basis.
- 2. True up of ARR for CGS:** CSPDCL should take up the matter of true up of ARR of Central Generating Stations at appropriate forum to safeguard the interest of consumers of the State.
- 3. Bus losses of EHV substations:** In spite of earlier directive, CSPDCL have not reported the bus losses of EHV substations. The commission directs CSPDCL to submit the details of bus loss within two months otherwise action under the provisions of the EA, 2003 will be initiated against him.
- 4. Distribution losses:** The Commission has noted abnormally high distribution losses in some of the O&M circles. CSPDCL is directed to reduce the circle wise losses as shown in table below up to 31st March 2015. In this regard the action taken report should be submitted to the Commission on quarterly basis along with the responsibility should also be fixed on the officers/employee for non-compliance of directives. Nodal Officer for monitoring the reduction of losses be nominated by CSPDCL in one month and represent to the Commission.

| Sr. No. | Name of Circle | Distribution losses as reported in FY 2013-14 | Target distribution losses reduction up to 31 st March 2015 |
|---------|----------------|---|--|
| 1. | Mahasamund | 37.66% | 5% |
| 2. | Janjgir-Champa | 49.26% | 10% |
| 3. | Raigarh | 40.92% | 10% |
| 4. | Bilaspur O&M | 40.44% | 10% |
| 5. | Korba O&M | 35.88% | 5% |
| 6. | Ambikapur | 40.79% | 10% |

- 5. Benefits of BPL consumers:** State Government while releasing the tariff subsidy of Rs. 465 Crore has directed that BPL consumers who are consuming more than 100 units in a month shall not be allowed to avail the benefits of BPL consumer thereafter. He shall be converted into normal Domestic connection.

6. **Arrears:** CSPDCL is directed to reduce 50% arrear pending as on 31st March 2014 against LT and HT consumers by 31st March 2015 and quarterly progress on action taken be presented before the Commission.
7. **Concessional power:** CSPTCL / CSPDCL are advised that the concessional power purchased from M/s JPL should be routed through Raigarh-Tamnar 220 KV Double Circuit Line only. If not then inter-state transmission charges will not be allowed. CSPDCL should monitor the concessional power on monthly basis and if lesser power than agreed is supplied by the generator, appropriate action should be taken by the CSPDCL against M/s JPL.
8. **Reactive energy charges:** Quarterly progress of the Reactive energy charges study should be presented to the Commission.
9. **Surplus power:** Surplus power should not be sold less than Rs. 3.65/ kWh. If buyer is not available at the above rate Rs. 3.65/ kWh then backing down of plant should be ensured as per merit order dispatch.
10. **kVAh billing:** The Commission directs the petitioner to submit a detailed report on the likely impact of introduction of kVAh billing on all other HV consumers with the next tariff petition to enable the Commission to take its views.
11. **Supplementary demands:** It is observed that the in many cases a supplementary demand is not supported by the details as stipulated in the Supply Code. It is further observed that the supplementary demand is not added to the regular electricity bills as per the provisions of the Supply Code leading to pending recovery against the connected consumers of the CSPDCL. All such cases should be identified and pending recovery should be ensured or the connection should be disconnected. In this regard the action taken report should be submitted to the Commission on quarterly basis. Responsibility may also be fixed against the officers/employee for non-compliance of directives.

10. ANNEXURE – 1: LIST OF PERSONS WHO FILED WRITTEN SUBMISSIONS

| Sl. No. | Name and Address of objectors |
|----------------|--|
| 1. | Shri Tejram Vidrohi, Akhil Bhartiya Krantikari Kisan Sabha, Rajim, Dist. Gariyaband |
| 2. | Shri Sant Kumar Jain, 'A' Class contractor, Jagdalpur |
| 3. | Shri Ashok Surana, Shri Sanjay Agrawal, Chhattisgarh Mini Steel Plant Association |
| 4. | Shri Dhanendra Sahu, Vidhayak, Abhanpur, Dist. Raipur |
| 5. | Shri Rajkumar Gupt, Chhattisgarh Pragatisheel Kisan Sangthan, Dhamdha, Dist. Durg |
| 6. | Dy. Chief Electrical Engineer(HQ), South East Central Railway, Bilaspur |
| 7. | Shri Amar Dhavana, Executive President, Chhattisgarh Chamber of Commerce and Industries, Raipur |
| 8. | Shri Suraj Upadhyay, Dist. convener Aam Adami Party |
| 9. | Shri Hitesh Varu, President, Chhattisgarh Yuva Pragatishil Kisan Sangh, Kapsada, Tehsil Dhamdha, Dist. Durg |
| 10. | Shri Rajkumar Gupt (Advt.), Chhattisgarh Swabhiman Manch |
| 11. | Shri Virendra Pandey, "Tatpar" Jansarokar Ke Liye Karya Karne Wale Sangathano Ki Samnvayak Sanstha, New Shanti Nagar, Raipur |
| 12. | Smt. Dhaneshwari Chandrakar, Village Bhadaha |
| 13. | Shri Tikam Sahu, Village Bhalera |
| 14. | Smt. Hema Sahu, Village Goindra |
| 15. | Shri Kamta Ghritlahare, Village Akoli Khurd |
| 16. | Shri Dhru Kumar Chandrakar, Village Nara |
| 17. | Shri Dharmraj Mahapatra, Secretary, CPIM |
| 18. | Shri Udhoram Verma, President Block Congress Committee, Dharsiva |
| 19. | Shri Pawan Kumar Agrawal, Prime Ispat Ltd. |
| 20. | Shri Jageshwar Prasad, Chhattisgarhi Samaj Party, Handipara, Raipur |
| 21. | Shri Sharda Prasad Vajpeyee, Samajvadi Party, Raipur |

| Sl. No. | Name and Address of objectors |
|----------------|---|
| 22. | Shiv Sena, Chhattisgarh, Raipur |
| 23. | Shri Kailash Kumar Dewangan, Arjunda, Dist. Balod |
| 24. | M/s Swastik Bekars, Raigarh Road, Pathalgaon, Jaspur |
| 25. | Shri Arun Kumar & Shri Jagjeet Singh Valiya, Chhattisgarh Bijali Karmchari Sangh-Mahasangh |
| 26. | Shri Pankaj Sharma, President, Jila Congress Committee Raipur Gramin |
| 27. | Chhattisgarh Udyog Mahasangh, Panjabi Colony, Katoratalab, Raipur |
| 28. | Shri Mohan Antey, Raipur |
| 29. | Sesa Sterlite – Korba Chhattisgarh, Tanmay Sinha, AGM & Head Power sale. |
| 30. | C.G. Secondary Steel Manufacturer Association, Pandri, Raipur |
| 31. | Shri Gopal Mukharjee, Member of Rajya Salahkar Samiti, Chhattisgarh Rajya Vidyut Niyamak Ayog, Rajkishor Nagar Bilaspur |

11. ANNEXURE – 2: LIST OF PERSONS WHO PRESENTED THEIR VIEWS DURING HEARING ON 21ST MAY 2014 AND 22ND MAY 2014.

| Sr. No. | Name of Persons |
|---------|-----------------------------|
| 1. | Shri Ritesh Thakkar |
| 2. | Shri Mukesh Agrawal |
| 3. | Shri Hitesh Varu |
| 4. | Shri Sandeep Tiwari |
| 5. | Shri Bhupendra Dubey |
| 6. | Shri Sunil Ganesh |
| 7. | Shri Ashok Tamrakar |
| 8. | Shri Dhananjay Mahapatra |
| 9. | Shri Rajkumar Gupta |
| 10. | Shri I.K. Verma |
| 11. | Shri Dilip Deshmukh |
| 12. | Shri Bishat Chandrakar |
| 13. | Shri Suraj Upadhyay |
| 14. | Smt. Kiranmyee Nayak |
| 15. | Shri Ramesh Valyani |
| 16. | Shri Udho Verma |
| 17. | Shri Mohan Anty |
| 18. | Shri Vishnu Namdev |
| 19. | Shri Raza Ahemad |
| 20. | Shri Satnam Singh |
| 21. | Shri Fingeshwar Sahu |
| 22. | Shri Omkar Sahu |
| 23. | Shri Dhansingh Rajput |
| 24. | Shri Tejram Vidrohi |
| 25. | Dr. Anand |
| 26. | Shri Sharda Prasad Vajpeyee |
| 27. | Shri Dilip Chandrakar |
| 28. | Shri Dilip Agrawal |
| 29. | Shri Pankaj Sharma |
| 30. | Shri Virendra Pandey |

| Sr. No. | Name of Persons |
|---------|--------------------------|
| 31. | Shri M.A. Iqubal |
| 32. | Shri Ashok Surana |
| 33. | Shri Sanjay |
| 34. | Shri Rahul Agrawal |
| 35. | Shri Manish Dhuppad |
| 36. | Shri Ankit Singh |
| 37. | Shri Nihit Kumar Agrawal |
| 38. | Shri Chand Singh |
| 39. | Shri Namal Das |
| 40. | Shri Suresh |
| 41. | Shri Ketan Patil |
| 42. | Shri S.Sharma |
| 43. | Shri S.K.Tawari |
| 44. | Shri Sanjay Patel |
| 45. | Shri Abhay Singh |