

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

4th and 5th Floor, Metro Plaza, Bittan Market, Bhopal - 462 016



**Order on
ARR & Retail Supply Tariff for Special Economic Zone (SEZ) area,
Pithampur of MPAKVN (Indore) Ltd.
For Financial Year 2014-15**

Petition No. 58/2013

PRESENT:

Rakesh Sahni, Chairman

A.B. Bajpai, Member

Alok Gupta, Member

IN THE MATTER OF:

Determination of Aggregate Revenue Requirement and Tariff for the Financial Year 2014-15 based on application filed by the Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited (MPAKVN(I)L) for Special Economic Zone (SEZ) at Pithampur Area, District Dhar, Madhya Pradesh.

Represented by (Petitioner)

**Shri. N.K Sharma
Chief General Manager,
MPAKVN(I)L Indore**

Table of Contents

Sl. No	Content	Page No.
1.	Order	3
2.	Aggregate Revenue Requirement for FY 2014-15 of the Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited for Special Economic Zone (SEZ) Pithamapur Distt. Dhar MP.	7
3.	Fuel Cost Adjustment charge	38
4.	Wheeling Charges and Cross Subsidy Surcharge	41
5.	Retail Tariff Design	46
6.	Directions to the petitioner	52
7.	Public Objections & Comments	57
8.	Tariff Schedules for Low Tension Consumers (Annexure-1)	64
9.	Tariff Schedules for High Tension Consumers (Annexure-2)	77

ORDER

(Passed on this 18th Day of February, 2014)

This Order relates to petition no. 58/2013 filed by the MP Audyogik Kendra Vikas Nigam (Indore) Ltd., (hereinafter referred to as “MPAKVN(I)L” or the “petitioner” or the “licensee”) before the MP Electricity Regulatory Commission (hereinafter referred to as the “Commission” or “MPERC”) for determination of Aggregate Revenue Requirement (ARR) and retail supply tariff for its Special Economic Zone (SEZ) area at Pithampur, District Dhar, Madhya Pradesh for the financial year 2014-15. The petition has been filed under MPERC (Terms and Conditions for determination of tariff for supply and wheeling of electricity and methods and principles for fixation of charges) Regulations, 2012 (hereinafter referred to as the “Regulations”).

2. In accordance with the Regulations, MPAKVN(I)L was required to file the petition for determination of Annual Revenue Requirement (ARR) and retail supply tariff for FY 2014-15 latest by October 31, 2013. Vide letter dated October 30, 2013, petitioner requested the Commission to extend the date of filing until November 30, 2013. The Commission considered the request and directed the petitioner to file the petition by November 30, 2013. Vide letter dated November 20, 2013, the petitioner again requested the Commission to extend the date of filing until December 15, 2013. The Commission accepted this request. The petitioner filed the petition on December 17, 2013. The Commission held the motion hearing on January 7, 2014. The petition was found deficient on various items of ARR such as non-maintenance of separate accounts for Power Business, non-submission of status of compliance on the directives issued in retail supply tariff order for FY 2013-14, etc along with inconsistencies in the information submitted with regard to power purchase and other items of ARR. The Commission admitted the petition vide Order dated January 7, 2014. The petitioner was directed to substantiate the claims made in the petition on various items of ARR and remove the inconsistencies in the petition. The petitioner was also directed to issue a public notice in the matter. The public notice was published on January 9, 2014 to invite comments / suggestions / objections from the stakeholders. Last date for inviting comments / suggestions / objections was February, 1, 2014.
3. In response to the public notice, two stakeholders i.e. Pithampur Audhogik Sangathan and Ujaas Energy Ltd. Indore filed their suggestions/ comments/ objections and also made their

oral submissions during the public hearing conducted by the Commission on February 05, 2014.

4. The Commission has observed that the petitioner has submitted abstracts of the Balance Sheet and Profit and Loss Account of MPAKVN (I) Ltd., Indore for FY 2011-12 and FY 2012-13, for its power business of SEZ at Pithampur, certified by Chartered Accountants. It is observed that these abstracts of Balance Sheet and Profit and Loss Account of power business have been carved out from the annual accounts of MPAKVN (I) Ltd. on pro-rata basis making certain assumptions for each item of expense related to the power business. The petitioner could not submit actual expenses incurred in the power business. Thus, in this Tariff Order the Commission deems it appropriate to admit ARR of MPAKVN (I) Ltd. and determine tariff provisionally for FY 2014-15 subject to true-up on actuals.
5. The petitioner has stated that projections made in the petition are on the basis of the expected load growth and past data / information. Abstract of the ARR filed for FY 2014-15 is shown in the table below:

Table 1: ARR filed by the petitioner for FY 2014-15 (Rs. Crore)

Particulars	Amount
Revenue	
Revenue from sale of power	97.59
Expenditure	
Purchase of power	84.94
Inter-state transmission charges	2.87
Intra-state transmission (MP Transco) charges	2.39
Employee expenses	2.16
R&M expenses	0.84
A&G expenses including MPERC fees	1.64
Depreciation and related debits	0.45
Interest & finance charges	1.52
Other debits, write-offs (prior period and misc. expenses written off)	-
<i>Less: Interest and other expenses capitalized</i>	-
Income tax	0.36
RoE	0.53
Total expenses including RoE	97.70
Other income net of DPS	0.03
Total expenses net of other income	97.67
Revenue surplus /(Gap)	(0.08)

6. The Commission has admitted the ARR for FY 2014-15 as per details shown in the following table:

Table 2: ARR filed and admitted by the Commission for FY 2014-15

Particulars	FY 2014-15	
	As Filed	As Admitted
Sale and Power Purchase Requirement		
Sale MU	218.15	218.15
Distribution loss (%)	3.50%	3.50%
Distribution loss MU	7.90	7.91
Intra state transmission loss (%)	2.97%	2.97%
Intra state transmission loss MU	6.92	5.59
Inter- state losses (%)	3.65%	3.68%
Inter-state losses MU	9.98*	5.14
Total power purchase requirement MU	242.95*	236.79
Expenditure		
Purchase of power (Rs Crore)	84.94	74.86
Inter-state transmission charges (Rs Crore)	2.87	2.87
Intra-state transmission (MP Transco) charges (Rs Crore)		3.31
Other power purchase related expenses incl. SLDC charges (Rs Crore)	2.39	0.01
R&M expense (Rs Crore)	0.84	4.62
Employee expenses (Rs Crore)	2.16	
A&G expense (Rs Crore)	1.63	
Total O&M expenses (Rs Crore)	4.63	
MPERC fees (Rs Crore)	0.01	0.01
Depreciation and related debits (Rs Crore)	0.45	0.40
Interest & finance charges(Rs Crore)	1.52	1.37
Other debits, write-offs (prior period and misc. exp written off)	-	-
Less: Interest and other expenses capitalized	-	-
Income tax (Rs Crore)	0.36	0.14
Total expenses(Rs Crore)	97.17	87.58
RoE(Rs Crore)	0.53	0.40
Total expenses including RoE (Rs Crore)	97.70	87.98
Less: Other income(Rs Crore)	0.03	0.71
Total ARR (Rs Crore)	97.67	87.27
Revenue		
Revenue from sale of power (Rs Crore)	97.59	87.27
Revenue surplus / (Gap) (Rs Crore)	(0.07)	NIL

**Based on the petitioner's reply vide letter dated January 17, 2014*

7. With this Order, the Commission has determined the ARR/ tariff for FY 2014-15.

Implementation of the Order

8. The Commission has determined the distribution and retail supply tariffs for various consumer categories based on the ARR as admitted for FY 2014-15. The tariff determined by this Order for FY 2014-15 shall be applicable from 01st April, 2014 to 31st March, 2015, unless amended or modified by this Commission.
9. The Commission has thus accepted the petition with modifications and conditions, and has determined the retail supply Tariffs and charges recoverable by the petitioner in its licensed area of supply for FY 2014-15. The Commission directs that this Order be implemented along with directions given and conditions mentioned in the detailed Order and Tariff Schedules attached to this Order. The petitioner is permitted to issue bills to consumers in accordance with the provisions of this Tariff Order and applicable Regulations.
10. The petitioner is directed to take immediate steps to implement this Order after giving seven (7) days public notice in the newspapers, in accordance with Regulation 1.30 of MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004.

(Alok Gupta)

Member

(A. B. Bajpai)

Member

(Rakesh Sahni)

Chairman

Date: _____ February 2014

Place: Bhopal

2 AGGREGATE REVENUE REQUIREMENT FOR FY 2014-15 OF THE MADHYA PRADESH AUDYOGIK KENDRA VIKAS NIGAM (INDORE) LIMITED FOR SPECIAL ECONOMIC ZONE (SEZ) PITHAMAPUR DISTT. DHAR MP

Sales estimation / forecast as proposed by the petitioner:-

- 2.1 The petitioner has projected sale for FY 2014-15 on the basis of the historical data of category wise actual sales for the period from FY 2008-09 to FY 2012-13 and additional consumption expected from new connections as well as projected addition in load of existing consumers.
- 2.2 Summary of sales projections for FY 2014-15 is given in the table below:

Table 3: Summary of sales filed by the petitioner for FY 2014-15 (MU)

Consumer category	Projected sale
LT consumer categories	
Non-Domestic	0.10
Public Water Works and Street Light	0.28
Industrial	0.07
Total LT Sale	0.45
HT Consumer Categories	
Industrial	217.70
Non-Industrial	0.00
Total HT Sale	217.70
Total LT+HT Sale	218.15

Commission’s analysis of sales:-

- 2.3 The petitioner has projected sale of 218.15 MU for FY 2014-15, which is 9.99% higher than the revised sales submitted for FY 2013-14. Reasons attributed for increase in sale are expected addition of load of new consumers as well as enhancement of load by the existing consumers. The Commission has admitted the sale projections as filed by the petitioner for FY 2014-15.
- 2.4 The sale quantum admitted by the Commission for FY 2014-15 is shown in the table below:-

Table 4: Summary of sales admitted by the Commission for FY 2014-15 (MU)

Consumer category	Projected sale
LT consumer categories	
Non-Domestic	0.10
Public Water Works and Street Light	0.28
Industrial	0.07

Consumer category	Projected sale
Total LT Sale	0.45
HT Consumer Categories	
Industrial	217.70
Non-Industrial	0.00
Total HT Sale	217.70
Total LT+HT Sale	218.15

Energy Balance as proposed by the petitioner:-

2.5 The petitioner has filed the energy balance for FY 2014-15 as shown in the table below:

Table 5: Energy balance for FY 2014-15 filed by the petitioner

Sr. No.	Particulars	FY 2014-15	
		%	MU
1	Energy sales		
	LT sales		0.45
	HT / EHT sales		217.70
	Total energy sales		218.15
2	Distribution losses	3.50%	7.90
3	Energy requirement at T-D boundary		226.05
4	Intra-state transmission losses	2.97%	6.92
5	Energy requirement at the State periphery		232.97
6	Inter-state transmission losses	3.65%	9.98*
7	Total energy requirement		242.95

**Based on the petitioner's reply vide letter dated January 17, 2014*

2.6 The petitioner has submitted that the energy balance has been estimated considering the distribution losses as 3.50% and MPPTCL losses as 2.97% as per the MPERC tariff regulations for distribution and transmission. PGCIL system losses have been considered as 3.65% on the basis of the average loss level of 26 weeks for the Western Region of FY 2012-13. Further, in reply to the Commission's query in respect of data gaps vide letter dated January 17, 2014, the petitioner has revised the inter-State transmission loss from 5.11 MU as mentioned in the petition to 9.98 MU.

Assessment of Energy Availability by the petitioner:

- 2.7 The petitioner has submitted the assessment of energy availability for FY 2014-15 as per following parameters:
- a) Allocated generation capacity from NTPC stations - 17.96 MW
 - b) MPPKVVCL, Indore supplying through HT connection – 10 MW
 - c) Purchase of power from MPPMCL – 7MW
- 2.8 The petitioner has submitted that the energy availability from the NTPC stations for FY 2014-15 has been projected based on the average availability of past three years in conjunction with the Western Regional Power Committee (WRPC) Notification dated March 22, 2013 for capacity allocation among various constituents of Western Region.
- 2.9 Energy availability from MPPKVVCL has been projected based on the average availability of past three years taking into account the load enhancement in FY 2014-15. Further, the availability from MPPMCL is computed as per the proposed contracted capacity.
- 2.10 Annual projected availability from each of the sources as filed is shown in the table below:

Table 6: Energy Availability ex-bus as filed by the petitioner for FY 2014-15 (MU)

Sr. No.	Source	Allocation (MW)	Availability(MU)
1	NTPC	17.96	139.70
	Korba	7.19	56.48
	Vindhyachal I	4.98	40.36
	Vindhyachal II	3.95	32.88
	Kawas	0.85	4.28
	Gandhar	0.99	5.71
2	MPPMCL	7.00	53.51
3	MP Paschim KVVCL	10.00	49.74
4	Total	34.96	242.95

Assessment of Power Purchase Cost (Fixed and Variable Cost) by the petitioner

- 2.11 The petitioner has submitted that for NTPC generating stations, fixed costs have been considered (on per MW basis) same as per retail supply tariff order for FY 2012-13. Variable costs (including Fuel Price Adjustment) have been considered on the basis of actuals for FY 2012-13 and FY 2013-14 (till July, 2013). The petitioner has submitted that the other charges (including Electricity Duty/ Cess, etc.) have been considered as paid for FY 2012-13 and further escalated by 9.07%.

2.12 The cost of power purchase from MPPKVVCL has been considered as per the tariff for HV 3.1 category in the Retail Supply tariff order for FY 2013-14 dated March 23, 2013 for the distribution companies of the state.

2.13 Details of the fixed costs and variable costs as filed by petitioner for FY 2014-15 are shown in the table below:

Table 7: Details of fixed cost and variable cost filed by the petitioner for FY 2014-15

Sr. No.	Particulars	Fixed charge (Rs. Crore /MW)	Variable charges (Rs./Unit)	Other charges (Rs./Unit)
1	NTPC			
	Korba	0.39	1.07	0.13
	Vindhyachal I	0.45	1.30	0.53
	Vindhyachal II	0.46	1.23	0.56
	Kawas	0.69	2.57	0.00
	Gandhar	0.82	2.52	0.18
2	MPPKVVCL	0.45	5.10	-
3	MPPMCL	0.00	4.51	-

Assessment of Other Elements of Power Purchase Cost filed by the petitioner:

Inter-State Transmission Charges

2.14 The petitioner has submitted that the inter-State transmission charge (PGCIL cost) consists of charges to be paid for the transmission system of Western Region. The petitioner has further submitted that for projecting the inter-State transmission charges for FY 2014-15, the actual transmission charges paid by the MPAKVN(I)L in FY 2012-13 have been considered and 30% component (comprising of O&M cost of PGCIL) of the cost has been escalated as per the “Annual inflation rate for escalable transmission charges” of 10.76% notified by CERC for providing transmission service vide notification No. Eco T1/2013- CERC dated March 25, 2013.

Intra - State Transmission Charges

2.15 The petitioner has submitted that for the purpose of calculation of intra-State transmission costs, per MW charges as per the transmission tariff order for FY 2013-14 to FY 2015-16 dated April 2, 2013 for MP Transco have been considered. The SLDC charges are added to these costs to arrive at total intra-State transmission costs. The inter-State transmission charges, intra-State transmission charges and SLDC charges filed by the petitioner for FY 2014-15 are shown in the table below:

Table 8: Other elements of power purchase cost filed by the petitioner for FY 2014-15 (Rs Crore)

Sr. No.	Particulars	Amount
1	Inter-state transmission charges	2.87
2	Intra-state transmission charges	2.38
3	SLDC charges	0.01

Commission’s analysis on Energy Balance and Power Purchase:-

Distribution Losses

2.16 The distribution loss level trajectory as specified for the petitioner in Regulations for the tariff period from FY 2013-14 to FY 2015-16 is shown in the table below:

Table 9: Distribution loss trajectory as per Regulations

Sr. No.	Distribution Licensee	FY 2013-14	FY 2014-15	FY 2015-16
1.	SEZ, Pithampur	3.70%	3.50%	3.30%

2.17 The Commission has considered normative distribution losses for FY 2014-15 as mentioned in the above table for computing the energy requirement,.

External (PGCIL) Losses

2.18 The Commission has considered the inter-state transmission losses for Western Region based on past data of 52 weeks till week ending January 5, 2014 as available on the WRLDC website. Accordingly, the inter-State transmission losses have been considered as 3.68%.

Intra-State Losses

2.19 The Commission has considered intra-State transmission losses as 2.97% for FY 2014-15 in accordance with the MPERC (Terms and conditions for determination of transmission tariff) regulations, 2012. The energy balance / power purchase requirement on the basis of the sale admitted by the Commission for FY 2014-15 is presented in the table given below:

Table 10: Energy balance admitted by the Commission for FY 2014-15

Sr. No.	Particulars	FY 2014-15	
		%	MU
1	Energy sales		
	LT sales		0.45
	HT / EHT sales		217.70
	Total Energy sales		218.15
2	Distribution losses	3.50%	7.91

Sr. No.	Particulars	FY 2014-15	
		%	MU
3	Energy requirement at T-D boundary		226.06
4	Intra-state transmission losses for NTPC stations only	2.97%	5.59
5	Energy requirement at State periphery		231.65
6	Inter-state transmission losses	3.68%	5.14
7	Total energy requirement		236.79

- 2.20 The Commission has considered station-wise capacity allocation for NTPC as per WRPC notification dated December 04, 2013. In order to ascertain the energy availability individually from each station, the availability filed by the petitioner has been compared with the availability as worked out on the basis of past 3 years' performance of the generating stations. As regards energy availability from NTPC generating stations for FY 2014-15, the Commission has observed that the approach adopted by the petitioner is reasonable. Therefore, the Commission has admitted the energy availability from NTPC stations as filed by the petitioner.
- 2.21 As part of Medium Term Power Procurement (MTPP), petitioner has considered 7 MW of power from MPPMCL. The Commission has admitted the same.
- 2.22 The petitioner has not made any submission to purchase power from renewable sources to fulfill RPO(Renewable Purchase Obligation). Therefore, the Commission has computed the quantum of renewable energy power purchase as 16.58 MU considering the sales and power purchase requirement admitted in this order to fulfill the RPO for FY 2014-15 in accordance with MPERC (Co-generation and generation of Electricity from Renewable sources of energy) (Revision-I) regulations, 2010.
- 2.23 Requirement of purchase of power from MPPKVVCL has been reduced by the quantum of power purchase considered from renewable energy sources to fulfill RPO.
- 2.24 The station-wise allocation and energy availability for FY 2014-15 as admitted by the Commission is shown in the table below:

Table 11: Station-wise allocation and ex-bus energy availability admitted by the Commission for FY 2014-15 (MU)

Sr. No.	Source	Allocation (MW)	Availability(MU)
1	NTPC	17.96	139.70
	Korba	7.19	56.48
	Vindhyachal I	4.98	40.36
	Vindhyachal II	3.95	32.88
	Kawas	0.85	4.28

Sr. No.	Source	Allocation (MW)	Availability(MU)
	Gandhar	0.99	5.71
2	MPPMCL	7.00	53.51
3	Renewable Power Purchase		16.58
4	MP Paschim KVVCL	10.00	27.00
5	Total	34.96	236.79

Power Purchase Costs

2.25 The power purchase costs have two elements, i.e., fixed cost and variable cost. Working for these costs is discussed in the following paragraphs.

NTPC Generating Stations

2.26 The Commission has considered latest available tariff orders issued by CERC for the purpose of determination of fixed cost of the NTPC’s generating stations in the Western Region, , as shown in the table below –

Table 12: Fixed cost order reference for thermal generating stations

Sr. No.	NTPC- station	Petition No.	CERC Order dated
1	Korba	264 of 2009	12 October, 2012
2	Vindhyachal I	227 of 2009	11 October, 2012
3	Vindhyachal II	258 of 2009	25 May, 2012
4	Kawas	23 GT 2013	Revised order dated 01 August, 2013
5	Gandhar	23 GT 2013	Revised order dated 11 September, 2013

2.27 Fixed costs of the thermal power stations have been computed as per CERC (Terms and Conditions of Tariff) regulations, 2009.

2.28 As regards energy charges for FY 2014-15, the Commission has considered average of the variable cost as charged in actual bills for the period from November, 2012 to October, 2013 raised by the NTPC to MPPMCL.

2.29 The claim of the petitioner for levy of escalation factor on other charges has not been found appropriate by the Commission. Any change in the variable charges would be allowed on quarterly basis through Fuel Cost Adjustment charge mechanism which has been provided in this tariff order.

Purchase from MPPKVVCL

- 2.30 The Commission has considered the fixed cost and variable charges as per HV 3.1 tariff category provided in the retail supply tariff order for FY 2013-14 . Power purchase costs have been computed on the basis of the projected contract demand and quantum of purchase from MPPKVVCL. As a distribution licensee, the MPPKVVCL is authorized to charge FCA on quarterly basis from consumers. The MPPKVVCL is accordingly levying the FCA in bills issued to SEZ, in addition to the energy charges. The Commission, therefore, has considered addition to variable charges @ Rs. 0.16 per unit, which is an average of quarterly FCA charges approved for the MPPKVVCL for FY 2013-14. This has been included in the variable costs of power purchase from MPPKVVCL.

Purchase from MPPMCL

- 2.31 As a part of Medium Term Power Procurement (MTPP), petitioner has considered sourcing of 7 MW of power from MPPMCL at the rate of Rs. 4.51/kWh. The petitioner has mentioned that any further requirement of power will be met through MTPP procurement at the rate of 4.17/kWh. The Commission has observed that power purchase rate considered for procurement of energy from MPPMCL is significantly high. In response to a query, the petitioner has stated that the rate is based on power purchase made by them from MPPMCL in FY 12-13. It is however, observed that subsequently the MPPMCL has been purchasing MTPP power @ of Rs. 4.17 per unit for the Discoms of the state. The Commission, therefore, considers it appropriate to accept the rate of Rs.4.17 per unit only subject to finalization at true-up stage.

Purchase from Renewable Energy

- 2.32 The Commission has notified MPERC (Co-generation and generation of Electricity from Renewable sources of energy) (Revision-I) regulation, 2010 on November 19, 2010. In the retail supply tariff order for FY 2013-14, the Commission had directed the petitioner to ensure RPO compliance as per Regulations and any variation in power purchase costs would be considered during the true-up exercise. The petitioner has not filed any availability nor projected any requirement of power purchase from renewable sources for compliance of RPO for FY 2014-15. In order to ensure RPO compliance, the Commission has considered procurement of power from renewable energy sources.
- 2.33 The relevant section of MPERC (Co-generation and generation of Electricity from Renewable sources of energy) (Revision-I) regulation, 2010, is reiterated below:

“4.1 The minimum quantum of electricity to be procured by all the Obligated Entities from generators of Energy including Co-generation from Renewable Sources of electricity expressed as percentage of their total annual procurement of Electrical Energy during the following Financial Years shall be as under:-

<i>Financial Year</i>	<i>Cogeneration and other Renewable Sources of Energy</i>		
	<i>Solar (%)</i>	<i>Non Solar (%)</i>	<i>Total (%)</i>
<i>2010-11</i>	-	<i>0.80</i>	<i>0.80</i>
<i>2011-12</i>	<i>0.40</i>	<i>2.10</i>	<i>2.50</i>
<i>2012-13</i>	<i>0.60</i>	<i>3.40</i>	<i>4.00</i>
<i>2013-14</i>	<i>0.80</i>	<i>4.70</i>	<i>5.50</i>
<i>2014-15</i>	<i>1.00</i>	<i>6.00</i>	<i>7.00</i>

- 2.34 Accordingly, the quantum of solar and non-solar power purchase requirement has been computed based on the total energy requirement admitted by the Commission for FY 2014-15, as shown in the table below:

Table 13: Renewable Energy Requirement computed by the Commission (MU)

Particulars	FY 2014-15
RPO Solar	1.00%
RPO Non Solar	6.00%
Total	7%
Ex-bus requirement	16.58
RPO Solar (MU)	2.37
RPO Non Solar (MU)	14.21
Total (MU)	16.58

- 2.35 As regards purchase of renewable power, the Commission has considered the rates as per the submission made by MPPMCL in its petition for determination of ARR and retail supply tariff for FY 2014-15, subject to finalization at true-up stage. Renewable energy power purchase costs computation is shown in the table below:

Table 14: RE power purchase cost computed by the Commission

Particulars	FY 2014-15
Power Purchase Rate	Rs. /kWh
Solar	8.05
Non-Solar	3.89
Power Purchase Cost	Rs. Crore
Solar	1.91
Non-Solar	5.53
Total	7.43
Average Rate (Rs. /kWh)	4.48

2.36 Details of fixed charges and variable charges admitted by the Commission for FY 2014-15 are shown in the table below:

Table 15: Details of fixed charges and variable charges admitted for FY 2014-15

Sr. No.	Particulars	Fixed charge (Rs. Crore /MW)	Variable charge including other charges (Rs./Unit)
1	NTPC		
	Korba	0.39	0.96
	Vindhyachal I	0.45	1.45
	Vindhyachal II	0.46	1.44
	Kawas	0.57	2.38
	Gandhar	0.72	2.34
2	MPPMCL (single rate in Rs/unit)	4.17	
3	Renewable Energy purchase (Rs/ unit)	4.48	
4	MPPKVCL	0.46	5.26

Inter-State Transmission Charges

2.37 The Commission has observed that the claims filed by the petitioner for inter-state transmission charges are reasonable and therefore, admitted the same as shown in the table below:

Table 16: Inter-state transmission charges admitted for FY 2014-15 (Rs. Crore)

Sr. No.	Particulars	Amount
1	Inter-state transmission charges	2.87

Intra-state Transmission Charges

2.38 The Commission has admitted intra-State transmission charges in accordance with transmission tariff order for FY 2013-14 to FY 2015-16 dated April 2, 2013 which are Rs 0.1325 Crore per MW. Costs worked out for 24.96 MW contracted capacity are shown in the table below:

Table 17: Intra-State transmission charges admitted for FY 2014-15 (Rs. Crore)

Sr. No.	Particulars	Amount
1	Intra-state transmission charges	3.31

SLDC Charges

2.39 SLDC charges have been admitted as per Commission’s Order for FY 2013-14 as shown in the table below:

Table 18: SLDC charges admitted for FY 2014-15 (Rs. Crore)

Sr. No.	Particulars	Amount
1	SLDC charges	0.01

2.40 Total power purchase cost admitted by the Commission is summarized in the following table:

Table 19: Summary of the total power purchase cost admitted for FY 2014-15

Source	Particulars	As filed	As admitted
NTPC	Energy (MU)	139.70	139.70
	Amount (Rs. Crore)	30.96	26.35
	Rate (Rs./kWh)	2.22	1.89
MPPMCL	Energy (MU)	53.51	53.51
	Amount (Rs. Crore)	24.14	22.31
	Rate (Rs./kWh)	4.51	4.17
RE purchase	Energy (MU)	0.00	16.58
	Amount (Rs. Crore)	0.00	7.43
	Rate (Rs./kWh)	0.00	4.48

Source	Particulars	As filed	As admitted
MP Paschim KVVCL	Energy (MU)	49.74	27.00
	Amount (Rs. Crore)	29.84	18.77
	Rate (Rs./kWh)	6.00	6.95
Total	Energy (MU)	242.95	236.79
	Amount (Rs. Crore)	84.94	74.86
	Average Rate (Rs./kWh)	3.50	3.16

Pooled Power Purchase Cost

2.41 The CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) regulations, 2010 stipulates the provision for determining the pooled cost of power purchase for the purpose of computing the Floor and Forbearance price of Renewable Energy Certificates. The relevant provision of the Regulation is reproduced below:

“5 Eligibility and Registration for Certificates:

(1)

:

:

c. it sells the electricity generated either (i) to the distribution licensee of the area in which the eligible entity is located, at a price not exceeding the pooled cost of power purchase of such distribution licensee, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at market determined price.

Explanation.- for the purpose of these regulations ‘Pooled Cost of Purchase’ means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers long-term and short-term, but excluding those based on renewable energy sources, as the case may be.”

Accordingly the pooled power purchase cost is computed in the table below:

Table 20: Pooled Power Purchase Cost for FY 2014-15

Sr. No.	Particulars	Amount
1	Power purchase requirement excluding renewable energy sources (MU) ex-bus	220.21
2	Total power purchase cost excluding renewable energy sources (Rs. Crore)	67.43
3	Pooled power purchase cost (Rs./kWh)	3.06

Other Items of ARR

2.42 The petitioner has claimed expenses against the other items of ARR for FY 2014-15 as shown in the table below:

Table 21: Other items of ARR filed by the petitioner for FY 2014-15 (Rs. Crore)

Particulars	Amount
Employee expenses	2.16
R&M expenses	0.84
A&G expenses including MPERC fees	1.64
Depreciation and related debits	0.45
Interest & finance charges	1.52
Income tax	0.36
RoE	0.53
Other income net of delayed payment surcharge	0.03

2.43 The petitioner has submitted the abstracts of balance sheet and profit and loss accounts of MPAKVN (I) Ltd., Indore for FY 2011-12 and FY 2012-13, for its power business of SEZ at Pithampur, certified by chartered accountants. It is observed that these abstracts of balance sheet and profit & loss accounts of power business have been carved out from the annual accounts of MPAKVN (I) Ltd. on some assumptions for each item of expense related to power business. The petitioner could not submit details of actual expenses against the items related to power business as it does not have a separate balance sheet/ profit & loss account for its power business. The Commission therefore cannot accept the provisional accounts submitted by the petitioner as these accounts are based on some assumptions without a clear and transparent basis.

2.44 The Commission’s analysis on the expenses other than power purchase is discussed below:

Petitioner’s Submission

O&M expenses

R&M Expenses

2.45 The petitioner has submitted R&M expenses as 5% of the opening GFA for electricity business for FY 2014-15 as per MPERC tariff regulations, 2012, as shown in the table below:

Table 22: R&M expenses filed by the petitioner for FY 2014-15 (Rs. Crore)

Particulars	Amount
Opening GFA	15.35
Percentage	5.00%
R&M expenses	0.77

Employee Expenses

- 2.46 The petitioner has claimed Rs 0.66 Crore as employee expenses as per the MPERC tariff regulations, 2012 . As regards Dearness Allowance (DA), the petitioner has submitted that 7% increase in it on six monthly basis has been considered. Accordingly, average DA rate of 97.50% has been considered for projecting employee expenses for FY 2014-15.
- 2.47 As regards terminal benefits, the petitioner has submitted that only cash outflow has been considered as per the MPERC (Terms and conditions for allowing pension and terminal benefits liabilities of personnel of the Board and Successor Entities) Regulations, 2012.
- 2.48 The petitioner further submitted that the incentive/bonus is to be paid as per the past trend. Cost on account of sixth pay arrears has been considered as notified in the regulations.
- 2.49 Accordingly, total employee cost filed by the petitioner is shown in the table below:

Table 23: Total employee cost filed by the petitioner for FY 2014-15 (Rs. Crore)

Sr. No.	Particulars	Amount
1	Employee expenses excluding arrears, DA, terminal benefits and incentives	0.66
2	Arrears	0.00
3	DA	0.64
4	Incentives/ Bonus to the employees	0.00
5	Terminal benefits	0.67
6	Total employee cost	1.98

A&G Expenses

- 2.50 The petitioner has filed Administrative and General (A&G) expenses as per MPERC tariff regulations, 2012 as Rs 1.48 Crore excluding MPERC fees and taxes. The MPERC fee has been considered as Rs 0.01 Crore. A&G expenses for FY 2014-15 are given in the table below:

Table 24: A&G expenses filed by the petitioner for FY 2014-15 (Rs. Crore)

Particulars	Amount
A&G expenses	1.48
MPERC fees	0.01

Additional submission on O&M expenses as per Agreement with MPPKVVCL filed by the petitioner

- 2.51 The petitioner has entered into an agreement with MPPKVVCL, Indore dated March 26, 2013 to undertake all activities related to O&M of electrical network situated in the Special Economic Zone (SEZ) Phase I and Phase II in Pithampur area of Dhar District. The agreement also includes providing consultancy services in

various techno-commercial matters relating to the distribution and supply of electricity for an initial period of 3 years from the effective date of March 26, 2013. The petitioner has requested the Commission to allow the O&M expenses as per agreement made by it with MPPKVVCL. The O&M expenses claimed by the petitioner as per the agreement are shown in the table below:

Table 25: O&M expenses as per agreement with MPPKVVCL filed by the petitioner for FY 2014-15(Rs. Crore)

Sr. No.	Particulars	Amount
1	Fees for O&M expenses	4.28
2	Fees for consultancy services	0.35
3	Total as per agreement	4.63

Commission’s Analysis of O&M expenses

2.52 The Commission had already considered the contract between the petitioner and MPPKVVCL, Indore in the tariff order of FY 2013-14 . Relevant paragraphs of the order are reiterated below:

“2.47 The Commission noticed that the petitioner has filed O&M expenses as per the Regulations and has also filed the expenses as per the agreement signed with MPPKVVCL, Indore dated March 26, 2013. The petitioner has requested that the expenses in accordance with the agreement executed by them with MPPKVVCL be allowed. MPPKVVCL has to undertake all activities related to O&M expenses and also to provide consultancy services in various techno-commercial matters relating to the distribution and supply of electricity in the SEZ area. The Commission is of the view that looking at the difficulties faced by the petitioner in the past related to its power business, it would be prudent to consider the contract between the petitioner and MPPKVVCL, Indore in the interest of the consumers. MPPKVVCL is a State owned Distribution Licensee and has expertise in operation and maintenance of power distribution system.

2.48 As regards the amount of O&M expenses mentioned in the agreement, the Commission observed that the petitioner has considered the base O&M expenses as admitted by the Commission for FY 2012-13 and the consultancy fee of Rs.30 lakh. It has been further escalated @ 7.93% and 8% for projecting O&M expenses and consultancy fee respectively for arriving at the total O&M expenses for FY 2013-14. The Commission finds it appropriate to admit the O&M expenses as Rs 4.28 Crore as per the agreement.”

2.53 Accordingly, for FY 2014-15 the Commission has considered escalation @ 7.93% on the O&M expenses and @ 8% on consultancy fee admitted in the tariff order for FY 2013-14 .The Commission has admitted expenses of Rs. 4.27 Crore against O&M and Rs. 0.35 Crore against consultancy fee for FY 2014-15, totaling to Rs. 4.62 Crore.

MPERC Fees

2.54 The petitioner has submitted that it has estimated Rs. 0.01 Crore as MPERC fees for FY 2014-15 as per the provisions of the Regulations. The Commission has admitted the claim of the petitioner.

Capital Expenditure (Capex) and Capitalisation

2.55 The petitioner has revised the Capex for FY 2013-14 from Rs. 1.25 Crore to Rs. 3.41 Crore. For FY 2014-15, the petitioner has proposed Capex of Rs. 0.47 Crore. Details of Capex submitted by the petitioner are shown in the table below:

Table 26: Details of Capex for FY 2014-15 submitted by the petitioner

Particular	Quantity (No.)	Rate(Rs.) /unit	Amount (Crore)
33 KV Single circuit on 15 meter long H-beam on panther conductor	1 KM	2,291,810	0.11
33 KV DP structure on 15 meter long H-beam	2	165,550	0.03
33 KV metering equipments with meter and modem	10	122,725	0.13
11KV metering equipments with meter and modem	2	767,750	0.16
HT energy meters with modem	12	34,725	0.04
Total capital investment plan			0.47

2.56 Details of capitalization submitted by the petitioner for FY 2013-14(RE) and FY 2014-15 are shown in the table below:

Table 27: Details of Capitalization for FY 2013-14(RE) and FY 2014-15 submitted by the petitioner (Rs. Crore)

S. No.	Particulars	FY 2013-14 (RE)	FY 2014-15
A	Opening balance of CWIP	0.00	0.00
B	Fresh investment during the year	3.40	0.47
	Total Capitalisation during the year (C+D)	3.40	0.47
C	Investment capitalised out of opening CWIP	0.00	0.00
D	Investment capitalised out of fresh investment	3.40	0.47
	Closing Balance of CWIP (A+B-C-D)	0.00	0.00

Commission’s Analysis

2.57 The Commission has observed that petitioner has revised the capex of FY 2013-14 from Rs. 1.25 Crore admitted by the Commission in tariff order to Rs. 3.40 Crore in revised estimate for FY 2013-14. The Commission asked petitioner to submit the updated status of works completed in FY 2013-14. Vide letter dated January 27, 2014, the petitioner has replied that the tendering process has been initiated and is likely to be completed by March, 2014 for execution of the major works. The petitioner has further submitted the details of works being completed during FY 2013-14, costs of which have been worked out based on the item wise cost mentioned in the petition, as shown in the table below:

Table 28: Details of capex for FY 2013-14 submitted by the petitioner in additional submission (Rs. Crore)

Particular	Quantity (No.)	Rate(Rs./unit)	Amount (Crore)
33 KV metering equipments with meter and modem	1	111,569	0.01
HT energy meters with modem	32	31,569	0.10
LT metering with modem	16	11,077	0.02
Total capital investment plan			0.13

2.58 The Commission has observed that as against proposed capex of Rs. 3.40 Crore during 2013-14 the petitioner has achieved capitalization of Rs. 0.13 Crore only till date. Therefore, the Commission has admitted Rs. 0.13 Crore only against capitalization during FY 2013-14. The petitioner has also revised its proposal for capex investment during FY 2014-15 vide their letter dated January 30, 2014. The petitioner has proposed to invest Rs 0.58 Crore during FY 2014-15. Looking to the past trends and the investments actually made during FY 2013-14 and the fact that some of the proposed works of FY 2013-14 are likely to spill over to FY 2014-15 , the commission has considered it appropriate to admit the capitalization based on past actual GFA addition. Average GFA addition of previous 3 years has been considered for admitting the capitalization for FY 2014-15 as shown in the table below:

Table 29: Details of GFA addition during FY 2011-12 to FY 2013-14 (Rs Crore)

SL No	Particulars	GFA addition		
		FY 2011-12	FY 2012-13	FY 2013-14
1	Furniture & Fixtures	0.04	0.00	0.00
2	Computers		0.00	0.00
3	Buildings	0.00	0.05	0.00

SL No	Particulars	GFA addition		
		FY 2011-12	FY 2012-13	FY 2013-14
4	Plant & Machinery	1.29	1.26	0.13
Total		1.34	1.31	0.13
Average <i>GFA addition</i> of past three years				0.92

2.59 Details of capitalization admitted by the Commission for FY 2014-15 are shown in the table below:

Table 30: Details of capitalization admitted by the Commission for FY 2014-15 (Rs. Crore)

Particulars	Amount
Furniture & Fixtures	0.01
Computers	0.00
Buildings	0.02
Plant & Machinery	0.89
Total	0.92

Depreciation

Petitioner's submission

2.60 The petitioner has considered the depreciation rate specified by the Commission in the MPERC tariff regulations, 2012 for computing the depreciation. The petitioner has submitted that depreciation has been computed from FY 2005-06 onwards as per the rates specified by the Commission. The petitioner has also submitted that it has reduced the value of the assets created from the consumer contributions from the gross value of the assets and thereafter worked out the depreciation. Depreciation claim filed by the petitioner for FY 2013-14 and FY 2014-15 is shown in the tables below:

Table 31: Depreciation during the year filed by the petitioner for FY 2013-14(RE) (Rs. Crore)

Particulars	FY 2013-14(RE)
Furniture & Fixtures	0.004
Computers	0.003
Buildings	0.062
Plant & Machinery	0.560
Total	0.629

Table 32: Depreciation expenses filed by the petitioner for FY 2014-15 (Rs. Crore)

Sl. No	Particulars	FY 2014-15					Net Block
		Gross Block			Depreciation		
		Opening	Addition during year	At end of year	Dep. during the year	Closing accumulated dep. amount	
1	Furniture & Fixtures	0.058	0.000	0.058	0.005	0.019	0.039
2	Computers	0.046	0.000	0.046	0.004	0.017	0.029
3	Buildings	1.832	0.000	1.832	0.062	0.427	1.405
4	Plant & Machinery	13.410	0.466	13.876	0.625	3.241	10.635
	Total	15.347	0.466	15.812	0.696	3.704	12.108

2.61 The petitioner has reduced the amortization of the assets capitalised from the consumer contributions. Details of consumer contribution and amortization during the year are given in the table below:

Table 33: Details of consumer contribution and amortization during the year filed by the petitioner for FY 2014-15 (Rs. Crore)

Year	Opening consumer contribution	Addition during the year	Closing consumer contribution	Amortisation during the year
FY 2006-07	0.00	0.73	0.73	0.04
FY 2007-08	0.73	0.28	1.02	0.05
FY 2008-09	1.02	0.54	1.56	0.08
FY 2009-10	1.56	1.32	2.88	0.15
FY 2010-11	2.88	0.89	3.76	0.20
FY 2011-12	3.76	0.21	3.98	0.21
FY 2012-13	3.98	0.12	4.10	0.22
FY 2013-14(RE)	4.10	0.41	4.50	0.24
FY 2014-15	4.50	0.28	4.79	0.25

2.62 Accordingly, net depreciation on GFA for FY 2013-14(RE) and FY 2014-15 after reducing amortization on consumer contribution is shown in the table below:

Table 34: Net depreciation filed by the petitioner for FY 2013-14(RE) and FY 2014-15 (Rs. Crore)

Particulars	FY 2013-14(RE)	FY 2014-15
Depreciation and related debits	0.63	0.70
Less: Consumer contribution amortized	0.24	0.25
Net depreciation and related debits	0.39	0.45

Commission’s Analysis of depreciation

2.63 The Commission has observed that higher rates for asset class-wise depreciation have been taken for working out depreciation claims by the petitioner for FY 2013-14 (RE) and FY 2014-15, as compared to the depreciation rates considered in tariff order of FY 2013-14. The Commission has also noticed that no asset has been added in some categories in the revised estimates of FY 2013-14. Therefore, for admitting the depreciation for FY 2013-14(RE) and FY 2014-15, the Commission has considered asset class-wise depreciation rates in accordance with MPERC tariff regulations, 2012. Accordingly, the Commission has admitted the expenses against depreciation as Rs. 0.60 Crore for FY 2013-14(RE) as shown in the table below:

Table 35: Depreciation expenses admitted by the Commission for FY 2013-14(RE) (Rs. Crore)

Particulars	FY 2013-14(RE)
Furniture & Fixtures	0.004
Computers	0.003
Buildings	0.061
Plant & Machinery	0.532
Total	0.600

2.64 The Commission has admitted depreciation for FY 2014-15 as shown in the table below:

Table 36: Depreciation expenses admitted by the Commission for FY 2014-15 (Rs. Crore)

Sl. No	Particulars	FY 2014-15					Net Block
		Gross Block			Depreciation		
		Opening	Addition during year	At end of year	Dep. during the year	Closing accumulated dep. amount	
1	Furniture & Fixtures	0.058	0.01	0.07	0.004	0.02	0.050
2	Computers	0.046	0.00	0.05	0.003	0.02	0.030
3	Buildings	1.832	0.02	1.85	0.061	0.43	1.420
4	Plant & Machinery	10.138	0.89	11.03	0.559	3.15	7.880
	Total	12.074	0.92	13.00	0.63	3.61	9.390

2.65 Further the Commission has admitted amortization during the year on the assets capitalised from the consumer contributions for FY 2013-14(RE) and FY 2014-15 as Rs. 0.22 Crore and Rs.0.22 Crore as shown in the table below:

Table 37: Amortisation on consumer contribution admitted by the Commission for FY 2013-14(RE) and FY 2014-15 (Rs. Crore)

Particulars	FY 2013-14(RE)	FY 2014-15
Opening consumer contribution (closing of FY 2012-13)	4.10	4.11
Addition during the year	0.02	0.27
Deduction	0.00	0.00
Closing consumer contribution	4.11	4.39
Depreciation	0.22	0.22

2.66 Accordingly, depreciation on GFA net of consumer contribution admitted by the Commission after reducing amortisation on consumer contribution is shown in the table below:

Table 38: Net depreciation expenses admitted by the Commission for FY 2013-14(RE) and FY 2014-15 (Rs. Crore)

Particulars	FY 2013-14 (RE)	FY 2014-15
Depreciation and related debits	0.60	0.63
Less: Consumer contribution amortized	0.22	0.22
Net depreciation admitted	0.38	0.40

Interest and Finance Charges

Interest on Project Loans

Petitioner's submission

2.67 The petitioner has stated that it has not borrowed any capital loan. As per the provisions in the regulations notified by the Commission, the petitioner has worked out normative loans and calculated the interest thereon by applying prevailing State-Bank Advance Rate (SBAR). The petitioner has considered debt: equity ratio as 70:30 for the assets capitalised during the year and notionally worked out the interest burden thereon. Details are shown in the table below:

Table 39: Interest on normative project loan filed by the petitioner for FY 2014-15 (Rs. Crore)

Sl. No.	Particulars	Amount
1	FY 06	
	Debt associated with GFA as on the beginning of the year	-
	70% of addition to net GFA considered as funded through debt	2.48
	Repayment during the year	0.11
	Total debt associated with GFA at the end of the year	2.38
2	FY07	

Sl. No.	Particulars	Amount
	Debt associated with GFA as on the beginning of the year	2.38
	70% of addition to net GFA considered as funded through debt	0.10
	Repayment during the year	0.08
	Total debt associated with GFA at the end of the year	2.40
3	FY08	
	Debt associated with GFA as on the beginning of the year	2.40
	70% of addition to net GFA considered as funded through debt	1.32
	Repayment during the year	0.12
	Total debt associated with GFA at the end of the year	3.59
4	FY09	
	Debt associated with GFA as on the beginning of the year	3.59
	70% of addition to net GFA considered as funded through debt	0.27
	Repayment during the year	0.15
	Total debt associated with GFA at the end of the year	3.72
5	FY10	
	Debt associated with GFA as on the beginning of the year	3.72
	70% of addition to net GFA considered as funded through debt	0.00
	Repayment during the year	0.13
	Total debt associated with GFA at the end of the year	3.59
6	FY11	
	Debt associated with GFA as on the beginning of the year	3.59
	70% of addition to net GFA considered as funded through debt	0.03
	Repayment during the year	0.25
	Total debt associated with GFA at the end of the year	3.36
7	FY12	
	Debt associated with GFA as on the beginning of the year	3.36
	70% of addition to net GFA considered as funded through debt	0.46
	Repayment during the year	0.28
	Total debt associated with GFA at the end of the year	3.54
8	FY13	
	Debt associated with GFA as on the beginning of the year	3.54
	70% of addition to net GFA considered as funded through debt	0.83
	Repayment during the year	0.36

Sl. No.	Particulars	Amount
	Total debt associated with GFA at the end of the year	4.01
9	FY14	
	Debt associated with GFA as on the beginning of the year	4.01
	70% of addition to net GFA considered as funded through debt	2.10
	Repayment during the year	0.39
	Total debt associated with GFA at the end of the year	5.72
10	FY15	
	Debt associated with GFA as on the beginning of the year	5.72
	70% of addition to net GFA considered as funded through debt	0.15
	Repayment during the year	0.45
	Total debt associated with GFA at the end of the year	5.42
	Rate of interest & finance charges	10.00%
	Interest & finance charges on normative basis for project loans	0.54

Commission’s Analysis of Interest and Finance Charges

2.68 The Commission has noted from the records filed by the petitioner that the petitioner has not obtained any loan. Therefore, there is no interest burden on the petitioner. As regards equity in excess of 30% of capital contribution, Regulation 21.2 of the MPERC tariff regulations, 2012 states that if the equity deployed is more than 30% of the Capital Cost, the additional equity shall be treated as normative loan. Relevant portion of the regulations is reproduced below:

“For a Project declared under commercial operation on or after 1.4.2013, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.”

2.69 Accordingly, the Commission has considered additional equity contribution, i.e., 70% of the capital employed for creation of the assets as normative loans. Consumer contribution has been reduced from the GFA for the purpose of computing normative loan.

2.70 As regards interest rate, the petitioner does not have any loans, therefore, it may not be possible to compute their actual weighted average rate of interest. Regulation 31.5 of MPERC tariff regulation, 2012 provides that:

“31.5. The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Project:

Provided that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered.

Provided further that if the Distribution System does not have actual loan, then the weighted average rate of interest of the Distribution Licensee as a whole shall be considered.”

- 2.71 Accordingly, the Commission has considered the weighted average interest rate of long term loans of distribution licensees of Madhya Pradesh admitted in SEZ tariff order for FY 2013-14, i.e., 9.48% as the tariff order for distribution licensees of Madhya Pradesh for FY 2014-15 has yet not been passed by the Commission. Details of the normative loan and interest admitted are shown in the table below:

Table 40: Interest on normative project loan admitted by the Commission for FY 2014-15 (Rs. Crore)

Particular	FY 2013-14 (RE)	FY 2014-15
Debt Associated with GFA as on the beginning of the year (Net of consumer contribution)	4.01	3.71
Addition to net debt	0.09	0.65
Consumer Contribution addition	0.01	0.19
Repayment during the year	0.38	0.40
Total debt associated with GFA at the end of the year	3.71	3.76
Weighted average interest rate of M.P Discoms	9.48%	9.48%
Interest on project loans(normative)	0.37	0.35

Interest on Working Capital Loan

Petitioner’s submission

- 2.72 The petitioner has submitted that the interest on working capital loan has been computed as per the norms specified in the Regulations. The computation of the working capital submitted by the petitioner for FY 2014-15 is given in the table below:

Table 41: Interest on Working Capital filed by the petitioner for FY 2014-15(Rs. Crore)

Sl. No.	Particulars	Amount
For wheeling activity		
A)	1/6th of annual requirement of inventory for previous year	0.02
B)	O&M expenses	
	R&M expenses	0.84
	A&G expenses	2.16
	Employee expenses	1.63
B) i)	Total of O&M expenses	4.64
B) ii)	1/12th of total	0.39

Sl. No.	Particulars	Amount
C)	Receivables	
C i)	Annual revenue from wheeling charges	
C ii)	Receivables equivalent to 2 months average billing of wheeling charges	
D)	Total working capital (A), B) ii), C) ii))	0.41
E)	Rate of interest	13.75%
F)	Interest on working capital	0.06
For Retail Sale activity		
A)	1/6th of annual requirement of inventory for previous year	0.01
B)	Receivables	
B i)	Annual revenue from tariff and charges	97.61
B ii)	Receivables equivalent to 2 months average billing	16.27
C)	Power purchase expenses	84.94
C i)	1/12th of power purchase expenses	7.08
D)	Consumers security deposit	11.24
E)	Total working capital (A+B ii) - C i) - D)	(2.05)
F)	Rate of interest	13.75%
G)	Interest on working capital	(0.28)
	Summary	
1	For wheeling activity	0.06
2	For retail sale activity	(0.28)
	Total interest on working capital	Nil

Commission’s Analysis of Interest on Working capital

2.73 MPERC Tariff Regulations, 2012 specifies that the total working capital shall consist of expenses towards working capital required for the supply activity and for the wheeling activity. Parameters that shall be considered for computation of working capital for wheeling and supply activities have also been specified separately. Further, as per the aforementioned tariff regulations, the rate of interest on working capital shall be equal to the State Bank Base Rate as on 1st of April of the relevant year plus 3.50%. Accordingly, the Commission has considered latest available SBI base rate as 10% for the computation of interest on working capital. Accordingly, the interest on working capital has been computed as shown in the table below:

Table 42: Interest on Working Capital admitted by the Commission for FY 2014-15(Rs. Crore)

Sl. No.	Particulars	Amount
For wheeling activity		
A)	1/6th of annual requirement of inventory for previous year	0.02

Sl. No.	Particulars	Amount
B)	Total O&M expenses	4.63
B) i)	1/12th of total	0.39
C)	Receivables	
C) i)	Annual revenue from wheeling charges	
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	
D)	Total working capital (A), B) ii), C) ii))	0.41
E)	Rate of interest	13.50%
F)	Interest on working capital	0.05
For Retail Sale activity		
A)	1/6th of annual requirement of inventory for previous year	0.00
B)	Receivables	
B) i)	Annual revenue from tariff and charges	87.22
B) ii)	Receivables equivalent to 2 months average billing	14.54
C)	Power purchase expenses	74.86
C) i)	1/12th of power purchase expenses	6.24
D)	Consumers security deposit	11.09
E)	Total working capital (A+B ii) - C i) - D)	(2.78)
F)	Rate of interest	13.50%
G)	Interest on working capital	(0.37)
Summary		
1	For wheeling activity	0.05
2	For retail sale activity	(0.37)
	Total interest on working capital	Nil

Interest on consumer security deposits

2.74 The petitioner has claimed Rs 0.95 crore against interest on security deposit for FY 2014-15 @ 8.50% as per RBI bank rate effective from April 1, 2013 . The Commission has observed that latest RBI bank rate is 8.75% which has been considered for computation . Accordingly, the interest on security deposit has been computed as shown in the table below:

Table 43: Interest on Consumer Security deposit admitted for FY 2014-15 (Rs. Crore)

Sl. No.	Particulars	Amount
1.	Consumer security deposit	11.24
2.	Interest amount claimed	0.98

Bank charges

2.75 Petitioner has claimed Rs 0.03 Crore for FY 2014-15 against bank charges . In reply to the Commission query regarding bank charges, petitioner has submitted that bank charges are claimed for the purposes of providing letter of credit (LC) and bank guarantee made with the bank for the power supplies to the petitioner . Accordingly, the Commission has admitted the bank charges of Rs. 0.03 Crore claimed by the petitioner. Summary of the interest and finance charges as filed and admitted are shown in the table below:

Table 44: Interest and Finance charges as filed and admitted by the Commission for FY 2014-15 (Rs. Crore)

Sl. No.	Interest	FY 2013-14(RE)		2014-15	
		As filed	As admitted	As filed	As admitted
1.	Project loans	0.57	0.37	0.54	0.35
2	Working capital loan	0.00	0.00	0.00	0.00
3	Consumer security deposit	0.94	0.94	0.95	0.98
4.	Bank charges	0.03	0.03	0.03	0.03
5.	Total	1.54	1.34	1.52	1.37

Return on Equity

Petitioner’s submission

2.76 RoE claimed by the petitioner is shown in the table below:

Table 45: Return on Equity filed by the petitioner for FY 2014-15 (Rs. Crore)

Particulars	Amount
FY 06	
Equity associated with GFA as on the beginning of the year	
30% of addition to net GFA considered as funded through equity	1.06
Total equity associated with GFA at the end of the year	1.06
FY07	
Equity associated with GFA as on the beginning of the year	1.06
30% of addition to net GFA considered as funded through equity	0.04
Total equity associated with GFA at the end of the year	1.11
FY08	
Equity associated with GFA as on the beginning of the year	1.11
30% of addition to net GFA considered as funded through equity	0.56
Total equity associated with GFA at the end of the year	1.67
FY09	
Equity associated with GFA as on the beginning of the year	1.67
30% of addition to net GFA considered as funded through equity	0.12
Total equity associated with GFA at the end of the year	1.79

Particulars	Amount
FY10	
Equity associated with GFA as on the beginning of the year	1.79
30% of addition to net GFA considered as funded through equity	0.00
Total equity associated with GFA at the end of the year	1.79
FY11	
Equity associated with GFA as on the beginning of the year	1.79
30% of addition to net GFA considered as funded through equity	0.01
Total equity associated with GFA at the end of the year	1.80
FY12	
Equity associated with GFA as on the beginning of the year	1.80
30% of addition to net GFA considered as funded through equity	0.20
Total equity associated with GFA at the end of the year	2.00
FY13	
Equity associated with GFA as on the beginning of the year	2.00
30% of addition to net GFA considered as funded through equity	0.36
Total equity associated with GFA at the end of the year	2.35
FY14	
Equity associated with GFA as on the beginning of the year	2.35
30% of addition to net GFA considered as funded through equity	0.90
FY15	
Equity associated with GFA as on the beginning of the year	3.25
30% of addition to net GFA considered as funded through equity	0.07
Total equity associated with GFA at the end of the year	3.32
Return on Equity @ 16%	0.53

Commission’s Analysis of Return on Equity

2.77 Based on the net equity identified with GFA and consumer contribution, the RoE admitted by the Commission for FY 2014-15, as per the regulations is shown in the table below:

Table 46: RoE admitted by the Commission for FY 2014-15(Rs Crore)

Particulars	FY 2013-14 (RE)	FY 2014-15
Equity associated with GFA as on the beginning of the year	2.35	2.39
30% of addition to net GFA considered as funded through equity	0.04	0.28

Particulars	FY 2013-14 (RE)	FY 2014-15
30% of consumer contribution added during the year	0.00	0.08
Total equity associated with GFA at the end of the year	2.39	2.58
Average equity associated with GFA at the end of the year	2.37	2.49
Return on equity @ 16%	0.38	0.40

Bad & Doubtful Debts

2.78 The petitioner has not claimed any expenses on account of Bad & Doubtful debts for FY 2014-15 which has been accepted by the Commission.

Income Tax

Petitioner's submission

2.79 The petitioner has claimed Rs. 0.36 Crore against the income tax as shown in the table below:

Table 47: Income Tax claimed by the petitioner for FY 2014-15 (Rs Crore)

Sl. No.	Particular	Amount
1.	Income tax	0.36

Commission's Analysis of Income tax

2.80 As regards Income tax for FY 2014-15, the petitioner has not submitted any supporting details. Therefore, in absence of the requisite information of profit earned and the income tax paid by the petitioner for its power business, the Commission has decided to admit the income tax in the ARR based on return on equity admitted by the Commission. The applicable rate of income tax is 33.99%. The admitted claim of income tax is shown in the table below:

Table 48: Income Tax claim admitted by the Commission for FY 2014-15 (Rs Crore)

Sl. No.	Particular	Amount
1.	Admitted return on equity (Rs. Crore)	0.40
2.	Income tax (Rs. Crore) @ 33.99% of RoE	0.14

Other Income**Petitioner’s submission**

- 2.81 The petitioner has submitted the other income of Rs. 0.03 Crore as shown in the table below:

Table 49: Other Income filed by the petitioner for FY 2014-15 (Rs. Crore)

Sl. No.	Particular	FY 2013-14 (RE)	FY 2014-15
1	Other income for ARR	0.02	0.03

Commission’s analysis of other income

- 2.82 The Commission has taken the average of past 3 years of other income to compute other income for FY 2014-15. Further, the Commission has noticed that the petitioner has not considered any income under miscellaneous charges though projections for FY 2014-15 indicate significant increase in the load of HT category. Thus as per MPERC (Recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply) regulations (Revision-I), 2009, dated September 7, 2009, the Commission has considered income from supply affording charge at the rate of Rs. 750/KVA for the projected increase in load for FY 2014-15. The Commission has admitted the other income for FY 2014-15 as shown in the table below:

Table 50: Other Income of petitioner admitted for FY 2014-15 (Rs. Crore)

Particulars	FY 2014-15
Other Non Tariff Income	
Other Miscellaneous receipts	0.02
Street light Charges	0.00
Power Application processing fees	0.00
Meter Rent	0.06
Recovery from theft of energy	0.00
Misc. charges from consumers (Supervision and supply affording Charges etc.)	0.63
Total	0.70

Revenue from Sale of Power

- 2.83 The petitioner has projected revenue income of Rs. 97.59 Crore for FY 2014-15 based on existing tariff. The Commission has revised the tariff to match the annual revenue requirement of the petitioner for FY 2014-15. The revenue from the revised tariff works out to Rs 87.27 Crore.

ARR filed and admitted for FY 2014-15

2.84 The Commission has determined prudent expenses against components of the ARR for FY 2014-15 as detailed in preceding paragraphs. Details of ARR claimed by the petitioner and as admitted by the Commission are shown in the table below:

Table 51: ARR as filed by the petitioner and as admitted by the Commission for FY 2014-15

Particulars	FY 2014-15	
	As Filed	As Admitted
Sale and Power Purchase Requirement		
Sale MU	218.15	218.15
Distribution loss (%)	3.50%	3.50%
Distribution loss MU	7.90	7.91
Intra state transmission loss (%)	2.97%	2.97%
Intra state transmission loss MU	6.92	5.59
Inter- state losses (%)	3.65%	3.68%
Inter-state losses MU	9.98*	5.14
Total power purchase requirement MU	242.95*	236.79
Expenditure		
Purchase of power (Rs Crore)	84.94	74.86
Inter-state transmission charges (Rs Crore)	2.87	2.87
Intra-state transmission (MP Transco) charges (Rs Crore)		3.31
Other power purchase related expenses incl. SLDC charges (Rs Crore)	2.39	0.01
R&M expense (Rs Crore)	0.84	4.62
Employee expenses (Rs Crore)	2.16	
A&G expense(Rs Crore)	1.63	
Total O&M (Rs Crore)	4.63	
MPERC fees (Rs Crore)	0.01	0.01
Depreciation and related debits (Rs Crore)	0.45	0.40
Interest & finance charges(Rs Crore)	1.52	1.37
Other debits, write-offs (prior period and misc. exp written off)	-	-
Less: Interest and other expenses capitalized	-	-
Income tax (Rs Crore)	0.36	0.14
Total expenses(Rs Crore)	97.17	87.58
RoE(Rs Crore)	0.53	0.40
Total expenses including RoE (Rs Crore)	97.70	87.98
Less: Other income(Rs Crore)	0.03	0.71
Total ARR (Rs Crore)	97.67	87.27
Revenue		
Revenue from sale of power (Rs Crore)	97.59	87.27
Revenue surplus / (Gap) (Rs Crore)	(0.07)	NIL

*Based on the petitioner's reply vide letter dated January 17, 2014

- 2.85 The Commission has determined the distribution and retail supply tariff for various consumer categories based on the ARR admitted.

3 FUEL COST ADJUSTMENT CHARGE

- 3.1 In view of Regulation 9 of the MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2012, the Commission hereby decides to continue with the FCA formula along with its associated mechanism/modalities with minor modifications as detailed in following paragraphs.
- 3.2 FCA formula for deriving Fuel Cost Adjustment for recovery/adjustment of uncontrollable costs due to increase or decrease in the cost of fuel in case of coal, oil, and gas for generating plants.

$$\text{FCA for billing quarter (p/u)} = \frac{\text{IVC (Rs. Crore)} \times 1000}{\text{Normative Sale (MU)}}$$

Where,

IVC = sum of – (a) difference in per unit variable cost actually billed by each long term coal or gas based power generator and variable cost as allowed in the Tariff Order, multiplied by (b) units availed from each such generating station in the preceding quarter. Variable costs of Hydel Generating Stations shall not be considered for the purpose of working out the increase in variable Cost of Power Purchase.

Preceding Quarter = the period of preceding three months excluding the period of two months immediately preceding to the billing quarter,

Billing Quarter = the period of three months for which FCA is to billed and shall be a period commencing on first day to last day of quarter for the quarter commencing from 1st April ending 30th June and so on.

Normative Sale = the sale grossed down from the total actual ex-bus drawal from all sources (Generators + Other sources) during preceding quarter by the normative PGCIL, transmission and distribution losses for the months of the preceding quarter provided in the Tariff Order.

- 3.3 FCA shall have to be worked out on the basis of the normative parameters as per respective generation Tariff Orders issued by the appropriate Commissions. Further variation if any, shall need prior approval of the Commission.
- 3.4 FCA charge shall be in the form of paise per unit (kWh) rounded off to the nearest integer. For this purpose, fraction up to 0.5 shall be ignored and fraction higher than 0.5 shall be rounded off to the next higher integer. This charge shall be added to or deducted from, as the case may be, the energy charges as per the existing tariff for the energy billed to every consumer and shall be indicated separately in the electricity bills issued to the consumers and shall be treated as part of energy charge.

- 3.5 FCA charge shall be uniformly applicable to all categories of consumers of the petitioner.
- 3.6 The responsibility of working out the rate of FCA every quarter shall rest with the petitioner.
- 3.7 The petitioner shall work out the change in variable cost of power purchase during the preceding quarter based on the bills received by them from the long term coal and gas based Generators. The information shall be prepared in the following manner for every month of the “preceding quarter” and summated thereafter for the quarter:

Table 52: Format for FCA charge

Month/ quarter	Name of generating station/ other source	Power Drawn ex-bus	Variable cost incurred based on actual variable charges		Variable cost as per rates provided in Tariff Order		Increase in variable cost of power purchase
		(MU)	Rate (paise/uni t)	Cost (Rs. Crore)	Rate (paise/uni t)	Cost (Rs. Crore)	[5-7] (Rs. Crore)
1	2	3	4	5	6	7	8
Total							

- 3.8 The petitioner shall workout “normative sale”. For this purpose, normative PGCIL, transmission and distribution loss (percentage /quantum) for the months of preceding quarter, as provided in the Tariff Orders, shall be subtracted from the total ex-bus power drawn during the preceding quarter to arrive at normative sale.
- 3.9 FCA charge shall be worked out by the petitioner based on the formula provided hereinabove and details shall be submitted to the Commission for verification at least 15 days before the commencement of the billing quarter. After approval of the Commission, FCA charge shall be leviable for the following quarter.
- 3.10 The petitioner shall commence billing of FCA charge from the first day of the billing quarter.

3.11 The rate and amount of FCA charge shall be shown separately in the consumer bills.

3.12 Following illustration is given for the purpose of understanding:

- a. If the “billing quarter” is say “July to Sept”, then the “preceding quarter” shall mean the period “Feb to April” and the period of May and June months is allowed to collect the data/ details and finalization of FCA charge.
- b. The details of the normative Losses for PGCIL System and MPPTCL System and normative distribution losses as per this Tariff Order of the Commission are indicated in the table below:

Table 53: PGCIL, MPPTCL and distribution losses %

Sr. No.	Month/Year	PGCIL Losses*		MPPTCL Losses**	Distribution Losses***
		Region	%	%	%
1	April, 14	W.R.	3.68%	2.97%	3.50%
2	May, 14	W.R.	3.68%	2.97%	3.50%
3	June, 14	W.R.	3.68%	2.97%	3.50%
4	July, 14	W.R.	3.68%	2.97%	3.50%
5	August, 14	W.R.	3.68%	2.97%	3.50%
6	September, 14	W.R.	3.68%	2.97%	3.50%
7	October, 14	W.R.	3.68%	2.97%	3.50%
8	November, 14	W.R.	3.68%	2.97%	3.50%
9	December, 14	W.R.	3.68%	2.97%	3.50%
10	January, 15	W.R.	3.68%	2.97%	3.50%
11	February, 15	W.R.	3.68%	2.97%	3.50%
12	March, 15	W.R.	3.68%	2.97%	3.50%

Note: * PGCIL Losses: % PGCIL loss is based on input from W.R.

** Transmission Losses: % M.P. Transmission losses are based on input at State periphery.

*** Distribution Losses: % Distribution losses are based on input at the petitioner’s area periphery.

4 WHEELING CHARGES AND CROSS SUBSIDY SURCHARGE

Determination of “wheeling cost”

- 4.1 For the purpose of determining wheeling cost, the Commission allocates the fixed costs of distribution (i.e., other than power purchase) for wheeling activity in the following manner:

Wheeling activity shall include:

- (a) O&M expenses
 - (b) Depreciation
 - (c) Interest on project loans
 - (d) Interest on working capital loans – on normative working capital for wheeling activity
 - (e) Return on Equity
 - (f) Other miscellaneous expenses including MPERC fees
 - (g) Less : Other Income as attributed to wheeling activity
- 4.2 On the basis of the admitted ARR for FY 2014-15, the expenditure towards wheeling activity for the petitioner is Rs. 6.52 Crore.

Segregation of costs among voltage levels

- 4.3 The costs of distribution identified as attributable to wheeling activity must further be distributed among the two voltage levels of distribution, i.e., 33 kV and below 33 kV. Though the EHT consumers (i.e., at voltages above 33 kV) are consumers of the Distribution Companies, they are not connected to the distribution system. Some costs are associated with EHT consumers (mainly costs associated with metering, billing and collection). However, the Commission, at this juncture, did not go into those details, primarily on account the fact that there are no consumers at EHV level in the area of the petitioner.
- 4.4 The SEZ presently does not maintain account of its costs on a voltage-wise basis.
- 4.5 The present accounting practices of SEZ does not permit segregation of GFA among the voltage levels directly. The Commission, therefore, considers it appropriate to adopt the approach to use the transformation capacity in MVA at interfaces of 33/11 kV and 11/0.4 kV.
- 4.6 The data used for this exercise for the value of the asset base, as filed by the petitioner, is given below:

Table 54: Identification of asset value

Voltage level of Lines	Cumulative length of lines (ckt-km)	Per unit cost (Lakh Rs./ckt-km)	Total Cost of lines (Rs. Crore)
33 kV	24.60	14.05	3.46
Below 33 kV			
(a) 11 kV	12.00	10.23	1.23
(b) LT	5.00	5.17	0.26
Sub-total			1.49
Total			4.94

Table 55: Total Cost of transformer voltage level

Transformer Voltage Level	Cumulative capacity (MVA)	Per unit cost (Lakh Rs./MVA)	Total Cost (Rs. Crore)
33/11 kV Transformer	5.00	38.26	1.91
11/0.4 kV Transformer	2.80	2.47 per 100 KVA	0.69
Total			2.60

4.7 In order to identify the asset values at different voltage levels, it is necessary to “assign” the interface transformers to either voltage levels. For this exercise, the Commission considers it appropriate to include the distribution transformers (11/0.4 kV) to be part of the 11 kV network, while the power transformers of 33/11 kV have been considered to be part of the 33 kV network. Based on this, the asset values at different voltage levels works out to:

Table 56: Identification of value of network at each voltage level

Voltage level	Cost of Lines (Rs. Crore)	Cost of Transformation (Rs. Crore)	Total Cost (Rs. Crore)
33KV	3.46	1.91	5.37
Below 33 KV	1.49	0.69	2.18
Total	4.94	2.60	7.55

4.8 The expenses of wheeling activity, identified as incurred for the above different voltage levels of distribution, shall now be worked out using the asset value ratios as obtained from above. This shall be as follows:

Table 57: Identification of network expenses (wheeling cost) at different voltage level

Voltage Level	Assets value (Rs. Crore)	Assets value Ratio (%)	Total wheeling cost (Rs Crore)	Wheeling Cost (Rs Crore)
33 kV	5.37	71.14%	6.52	4.64
Below 33 kV	2.18	28.86%		1.88
	7.55	100.00%		

Sharing of Wheeling costs

4.9 The cost of wheeling identified as above for the different voltage levels is again required to be allocated to the users at the same voltage levels. It is necessary to do so since the 33 kV network is used by the consumers at 33 kV and below 33 kV, while the below 33 kV network is used by the consumers at 11 kV and LT.

4.10 This allocation of wheeling cost at different voltage levels is done based on the usage of the network at different voltage level by consumers. The Commission has chosen to adopt “Units Sold” at different voltage levels as the measure of network usage to allocate the costs as detailed below:

Table 58: Allocation of wheeling cost over distribution system users

	Particulars	Rs Crore
A	Wheeling Cost at 33 kV- Rs Crore	4.64
B	Sales at 33 kV (MU)	217.23
C	Total Sales (MU) { HV + LV }	218.15
D	Proportion of 33 kV sales to total sales	99.58%
	Cost allocation	
E	Wheeling cost of 33 kV allocated to 33 kV users only (A*D)--Rs. Crore	4.62

4.11 The wheeling cost allocated to 33 kV thus works out to Rs. 4.62 Crore. Based on this allocation and considering the consumption at 33 kV, the wheeling charges in Rupees per unit are determined as below :

Table 59: Wheeling Charges

Voltage	Wheeling Cost allocated (Rs. Crore)	Sales (MU)	Wheeling charges (in Rs./unit)
EHT	-	-	-
33KV	4.62	217.23	0.21

Applicability of wheeling charges under different scenarios

4.12 Various scenarios of location of open access generators and their consumers and the consequent applicability of transmission and wheeling charges shall be as below:

- (a) Scenario 1: Generator is connected to Transmission network (EHT voltages), while the consumer is connected to the distribution network at 33 kV of Distribution Licensee: The scenario shall attract both transmission and wheeling charges since power required by the open access consumer will flow downstream from the transmission network through the distribution network up to the consumer's connection.
- (b) Scenario 2 Both generator and consumer are connected to the distribution system of the Distribution Licensee at 33 KV: The power generated by the open access generator will be consumed within the area of the petitioner and hence it will contribute to meeting the demand of the open access consumer. Therefore, there is no additional usage of transmission network in this transaction. Hence, such transactions shall attract only the wheeling charges.

4.13 For encouraging open access, the Commission has determined the above applicability of charges. The formulations indicated above also conform to the principle that power flows on the network by displacement method.

Determination of Cross-Subsidy Surcharge

4.14 The Tariff Policy prescribes the following formula for determination of cross-subsidy surcharge for various categories of consumers.

“8.5 Cross-subsidy surcharge and additional surcharge for open access

Surcharge formula:

$$S = T - [C(1+L/100) + D]$$

Where,

S is the surcharge

T is the Tariff payable by the relevant category of consumers;

C is the Weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power.”

D is the Wheeling charge

L is the system Losses for the applicable voltage level, expressed as a percentage

“8.5.5 Wheeling charges should be determined on the basis of same principles

as laid down for intra-state transmission charges and in addition would include average loss compensation of the relevant voltage level.

- 4.15 The first step in the determination of cross-subsidy surcharge is to work out the cost of marginal power purchase of top 5% power. The total energy required in FY 2014-15 is 236.79 MU. The top 5% at the margin requirement shall be 11.84 MU which shall be met from supply by the West Discom at Rs 6.95 per unit.
- 4.16 The average tariff for HV industrial consumers works out to Rs.4.00 per unit.
- 4.17 Since the average tariff for HV industrial consumers is less than the cost of power purchase of top 5% at the margin, therefore cross subsidy surcharge shall be considered “Zero” for billing purposes for FY 2014-15.

5 RETAIL TARIFF DESIGN

Legal Position

- 5.1 The Commission has determined the Aggregate Revenue Requirement for FY 2014-15 for the petitioner based on the Regulations notified on 29 November, 2012, under Section 181(2) (zd) read with Sections 45 and 61 of the Electricity Act, 2003. The Aggregate Revenue Requirement admitted by the Commission for the petitioner forms the primary basis for recovery of charges from consumers through retail tariffs.
- 5.2 The Commission is also guided by the provisions of the Tariff Policy notified by the Government of India, in determining the consumer category-wise tariffs.

Commission’s Approach to Tariff Determination

Linkage to Average Cost of Supply

- 5.3 The Commission has given due consideration to the requirement of the Electricity Act, 2003 in determining the consumer category-wise tariffs so that consumer tariffs reflect the cost of supply. The average cost of supply for FY 2014-15 works out to Rs. 4.00 per unit. The consumer category wise tariffs have been kept within +/- 20% of overall average cost of supply.
- 5.4 While determining the tariff for various consumer categories, the Commission has given due consideration to the suggestions/ objections of the objectors and the proposals submitted by the petitioner and accordingly has made appropriate provisions.

Retail tariff categories

- 5.5 The petitioner has not proposed any changes in the consumer categories. The Commission has also not made any changes in the categories or any other terms and conditions.

Indicative Voltage-wise Cost of Supply

- 5.6 The Hon’ble APTEL vide Judgment dated July 26, 2012 in Appeal No. 13 of 2010, Appeal No. 198 of 2010 and Appeal No. 42 of 2011, ruled as under:

“15.4 The issue relating to voltage-wise cost of supply and cross subsidy has been decided in the judgment dated 30.05.2011 in Appeal nos. 102 of 2010 and batch in the matter of Tata Steel Ltd. Vs. Orissa Electricity Regulatory Commission & others. The relevant extracts of the judgment are reproduced below:-

“22. After cogent reading of all the above provisions of the Act, the Policy and the Regulations we infer the following:

...

“28. Of the above Judgments of this Tribunal, 2007 APTEL 931 Siel Limited vs. PSERC & Ors. has a clear finding on the cost of supply. The relevant extracts of the Judgment are reproduced below:

“110. Keeping in view the provisions of Section 61 (g), which requires Tariff to ultimately reflect the cost of supply of electricity and the National Tariff Policy, which requires Tariff to be within ± 20 per cent of the average cost of supply, it seems to us that the Commission must determine the cost of supply, as that is the goal set by the Act. It should also determine the average cost of supply. Once the figures are known, they must be juxtaposed, with the actual tariff fixed by the Commission. This will transparently show the extent of cross subsidy added to the tariff, which will be the difference between the tariff per unit and the actual cost of supply”.

...

“31. We appreciate that the determination of cost of supply to different categories of consumers is a difficult exercise in view of non-availability of metering data and segregation of the network costs. However, it will not be prudent to wait indefinitely for availability of the entire data and it would be advisable to initiate a simple formulation which could take into account the major cost element to a great extent reflect the cost of supply. There is no need to make distinction between the distribution charges of identical consumers connected at different nodes in the distribution network. It would be adequate to determine the voltage-wise cost of supply taking into account the major cost element which would be applicable to all the categories of consumers connected to the same voltage level at different locations in the distribution system. Since the State Commission has expressed difficulties in determining voltage wise cost of supply, we would like to give necessary directions in this regard.

“32. Ideally, the network costs can be split into the partial costs of the different voltage level and the cost of supply at a particular voltage level is the cost at that voltage level and upstream network. However, in the absence of segregated network costs, it would be prudent to work out the voltage-wise cost of supply taking into account the distribution losses at different voltage levels as a first major step in the right direction. As power purchase cost is a major component of the tariff, apportioning the power purchase cost at different voltage levels taking into account the distribution losses at the relevant voltage level and the upstream system will facilitate determination of voltage wise cost of supply, though not very accurate, but a simple and practical method to reflect the actual cost of supply.”

...

“34. Thus Power Purchase Cost which is the major component of tariff can be segregated for different voltage levels taking into account the transmission and distribution losses, both commercial and technical, for the relevant voltage level and upstream system. As segregated network costs are not available, all the other costs such as Return on Equity, Interest on Loan, depreciation, interest on working capital and O&M costs can be pooled and apportioned equitably, on pro-rata basis, to all the voltage levels including the appellant’s category to determine the cost of supply. Segregating Power Purchase cost taking into account voltage-wise transmission and distribution losses will be a major step in the right direction for determining the actual cost of supply to various consumer categories. All consumer categories connected to the same voltage will have the same cost of supply. Further, refinements in formulation for cost of supply can be done gradually when more data is available.”

...

“37. We, however, direct the State Commission to determine the cross subsidy for each consumer category after working out the voltage-wise cost of supply based on the directions given in the preceding paragraphs. The cross subsidy will be calculated as the difference between the average tariff realization for that category as per the Annual Revenue Requirement and the cost of supply for the consumer category based on voltage-based cost of supply.”(emphasis added)

...

“41. Summary of our findings

41.1. After considering the provisions of the Act, the National Electricity Policy, Tariff Policy and the Regulations of the State Commission, we have come to the conclusion that if the cross subsidy calculated on the basis of cost of supply to the consumer category is not increased but reduced gradually, the tariff of consumer categories is within $\pm 20\%$ of the average cost of supply except the consumers below the poverty line, tariffs of different categories of consumers are differentiated only according to the factors given in Section 62(3) and there is no tariff shock to any category of consumer, no prejudice would have been caused to any category of consumers with regard to the issues of cross subsidy and cost of supply raised in this appeal.”

- 5.7 As may be seen from the foregoing, the Hon'ble APTEL has concluded that the mandate of the Tariff Policy to limit cross subsidies to within +/- 20% of the average cost of supply can be applied to determine category wise retail tariff. However, determination of voltage wise cost of supply is essential to enable the Commission to evaluate cross subsidies prevalent at various voltages. The Commission would thus be guided by the voltage wise actual cost of supply in seeking to gradually reduce cross subsidies at various voltage levels.
- 5.8 In the absence of requisite data, the Hon'ble Tribunal has further advised that the power purchase cost which is the major component of the Distribution Licensee's costs, can be apportioned to different voltage levels in proportion to the sale and losses at the respective voltage levels. As regards the other costs such as Return on Equity, Interest on Loan, depreciation, interest on working capital and O&M costs, these costs can be pooled and apportioned equitably, on pro-rata basis, to all the voltage levels .
- 5.9 In view of the above, the Commission has endeavored to work out approximate category wise cross subsidy based on voltage wise cost of supply in spite of constraints in segregation of voltage level wise losses and capital expenditure related costs. The Commission is also aware of the fact that determination of voltage-wise losses would require detailed technical studies of the Distribution network. As a first step in the direction of working out category wise cross subsidy based on voltage wise cost of supply, the Commission has attempted to determine the same based on certain assumptions. The category wise cross subsidy so worked out is indicative in nature and is not accurate, as the base data for the same need to be duly culled out on actuals. The Commission has adopted following methodology for determination of voltage wise cost of supply:
- (i) Voltage wise cost of supply has been computed for two levels of the network of the petitioner. First is 33 kV level and second is 11 kV & below . The petitioner has no consumer above 33 kV level.
 - (ii) Sales as admitted by the Commission for 33 kV and 11 kV & below categories have been considered
 - (iii) Total technical loss of the petitioner has been considered as 3.50% specified by the Commission in the tariff regulations, 2012 for FY 2014-15.
 - (iv) As per submission of the petitioner, no Commercial losses have been considered.
 - (v) Total losses as admitted by the Commission have been segregated voltage level wise for 33 kV and 11 kV & below in the proportion as submitted by the petitioner.

- (vi) Power Purchase costs at the Discom periphery for 33 kV and 11 kV & below based on the voltage-wise input energy have been considered. All other costs of the Discom are allocated based on the sales at respective voltage-level.
- (vii) Voltage wise total cost derived has been divided by voltage wise sales for working out the voltage wise cost of supply

5.10 Based on the above discussed methodology, the Commission has worked out voltage wise cost of supply and commensurate cross subsidy as shown in the table below:

Table 60: Broad computation of voltage wise cost of supply

SL No	Particular		33 KV System	11 KV + LT System	Total
1	Sales admitted	MU	217.23	0.92	218.15
2	Technical Losses as per submission	%	4.15%	10.87%	4.18%
3	Energy Input as per submission	MU	226.64	1.03	227.67
4	Energy Input admitted	MU	225.04	1.02	226.06
5	Technical Losses admitted as per Regulations	%	3.47%	10.23%	3.50%
6	Commercial Losses as submitted by petitioner	%	0.00%	0.00%	0.00%
7	Admitted power purchase cost at Discom periphery - Allocated based on voltage-wise losses	Rs. Crore	80.68	0.37	81.05
8	Other costs - Allocated based on voltage-wise	Rs. Crore	6.14	0.03	6.17
9	Total Costs (ARR requirement)	Rs. Crore	86.82	0.40	87.22
10	VCoS	Rs. /kWh	4.00	4.30	4.00
11	Revenue from proposed tariff	Rs Crore	86.78	0.44	
12	Average Billing Rate		4.00	4.56	

SL No	Particular		33 KV System	11 KV + LT System	Total
13	Voltage wise cross subsidy		100%	106.12%	

5.11 Consumer category wise approximate cross-subsidy worked out based on voltage wise cost of supply for FY 2014-15 is shown in the table below:

Table 61: Cross subsidy based voltage wise cost of supply for FY 2014-15

Category	VCOS (Rs./ Unit)	Average billing rate (Rs./unit)	Ratio of Average billing Rate to voltage wise Cost of Supply (%)
LT CATEGORIES			
LV 2 : Non- Domestic	4.30	4.52	105%
LV 3 : Public Waterworks & Streetlights		4.25	99%
LV 4 : LT Industry		4.60	107%
HT CATEGORIES			
HV-1: INDUSTRIAL			
HV 1.1: Industrial Use			
33 kV	4.00	4.00	100%
11 kV	4.30	4.75	111%

6 DIRECTIONS TO THE PETITIONER

6.1 The petitioner is a deemed licensee and is obliged to submit its ARR/Tariff petition to the Commission for determination of ARR and Retail Supply Tariff for the consumers of SEZ area. While carrying out power supply business, the petitioner is required to follow the provisions of the Electricity Act, 2003, relevant Rules and Regulations notified as applicable to a distribution licensee.

6.2 The Commission has reviewed the status of compliance submitted by the petitioner. Directives issued to the petitioner in the tariff order for FY 2013-14 , response thereon by the petitioner and further observations/ directions of the Commission for compliance by the petitioner are as given below:-

6.3 Timely submission of ARR/Tariff Proposals

Directive: The Commission directed the petitioner to ensure timely submission of ARR/Tariff proposals as specified in the Regulations.

Response: The petitioner has submitted that it has now entrusted the task of preparing ARR/Tariff petitions to MPPKVVCL and hence shall submit its ARR/Tariff petitions in future in a timely manner before the specified due date.

Commission's observations/directions: The Commission has taken a note of the fact that the petitioner sought time extension twice for submission of the ARR/ tariff petition for FY 2014-15. The Commission directs that such delays be avoided in future.

6.4 Long term power purchase arrangements:

Directive: The Commission directed that the petitioner should finalize long term arrangements within next 6 months so as to ensure availability of supply under long term contracts from 1st April, 2013 onwards to the extent required during coming years.

Response: The petitioner has submitted that it has initiated the process of procuring power from MP Power Management Co. Ltd. (MPPMCL). The petitioner further submitted that PPA with NTPC is of 5 year or the validity of allocation, whichever is earlier. Petitioner further submitted that as MPPMCL is entrusted with the responsibility of procuring power for all the three Discoms of M.P, it would be better if Medium/Long term power procurement is proposed to be entrusted with MP Power Management Company. The petitioner also submitted that based on its special allocation, the petitioner has signed PPA with NTPC, long term BPTA with PGCIL and erstwhile MPSEB. Hence, it is stated that they are taking necessary steps to ensure long term power purchase arrangements to meet its demand.

Commission's observations/directions: The Commission has observed that despite repeated directions the petitioner has failed to comply with the directions of the Commission to ensure long term power procurement arrangements. Such long term arrangements would not only ensure certainty of supply sources for longer duration but would also help in reducing power purchase costs. Availing supply at retail rate from MPPKVVCL was allowed as an interim measure only to ensure that the consumers do not suffer from supply shortage. The Commission is not satisfied with the response of the petitioner in the matter. It is the prime responsibility of the petitioner to ensure long term power purchase arrangements not only to reduce the power purchase costs but also to ensure certainty of power availability. Present situation cannot be allowed to continue indefinitely. The Commission directs the petitioner to take urgent steps to expedite the process of procuring required power on long term basis. The petitioner should report to the Commission on a monthly basis on the action being taken in the matter. If the petitioner fails to comply with these directions or dithers in achieving the object, the Commission will not hesitate to initiate suitable action in the matter.

6.5 Energy Audit

Directive: The Energy Audit meters be installed on all sections of the distribution network and energy audit reports be compiled on a monthly basis and submitted to the Commission within 15 days after the reporting month.

Response: The petitioner has submitted the details of energy audit for FY 2013-14 for the period April 2013 to December 2013. The petitioner has also submitted that in future, it shall submit energy audit reports on a monthly basis within 15 days after the reporting month.

Commission's observations/directions: The petitioner did not submit any of the energy audit monthly reports in time and these reports were submitted only after the Commission sought these details after the filing of the petition. The Commission directs the petitioner to submit these report timely in future.

6.6 AMR metering for consumer connections

Directive: To provide Automated Meter Reading for all LT and HT connections by the end of FY 2012-13.

Response: The petitioner has submitted that it has completed the task of installing AMR meters on all HT and LT consumers in the SEZ area.

Commission's observations/directions: The Commission has noted the submission of the petitioner.

6.7 Maintaining separate account for Power Business

Directive: The Commission directed the petitioner that separate accounts for all the activities related to power business should be maintained sub-head wise and should be got duly audited and certified by the auditors and submitted to the Commission timely.

Response: The petitioner has stated that it has submitted financial statement pertaining to power business for FY 2012-13 certified by auditors.

Commission’s observations/directions: In accordance with the Section 51 of Electricity Act 2003, the Distribution Licensee has to maintain separate Accounts for Power Business. However, the petitioner has failed to comply with the Commission’s directions. Separate accounts of power business, as submitted by the petitioner, have been carved out from the total accounts of MPAKVN (I) Ltd. on apportionment basis on some assumptions and are not based on actual expenses against the items of power business. The Commission again directs the petitioner to maintain separate accounts for its power business to ensure that distribution business neither subsidizes in any way business other than power business nor encumbers distribution assets in any way to support other business. The response of the petitioner in the matter is not acceptable. The Commission again directs the petitioner to ensure compliance of the directives on this issue in letter and spirit.

6.8 Compliance of Regulations

Directive: The Commission directed the petitioner to ensure compliance of all the Regulations, Codes and guidelines that are applicable to the distribution licensee in the State and non-compliance of any of the provisions of these Regulations shall make the licensee liable for appropriate actions against it.

Response: The petitioner has submitted that it is ensuring compliance with all Regulations, codes and guidelines applicable as well as directions given by the Commission from time to time.

Commission’s observations/directions: The Commission finds that the petitioner has not submitted prescribed regular periodic returns as is being done by other distribution licensees. The Commission directs the petitioner to ensure compliance with all the Regulations, Codes and guidelines that are applicable to the distribution licensees in the State and also submit prescribed periodic returns to the Commission in the desired manner in future failing which the Commission may initiate requisite action against the petitioner as per law.

6.9 Capex Plan

Directive: The Commission directed the petitioner to file its Capex Plan every year to the Commission on a rolling basis in the month of July as stipulated in MYT Regulations and Capex guidelines.

Response: The petitioner has submitted that it has prepared its capital investment plan for FY 2014-15 with physical as well as financial details of additions/augmentation planned for the existing distribution network.

Commission’s observations/directions: The petitioner’s reply is inadequate. The petitioner has to file its Capex Plan every year to the Commission on a rolling basis in the month of July. The Commission directs the petitioner to comply with this requirement in future.

6.10 Accounting of rebates/incentives/surcharge

Directive: The petitioner is directed to capture data related to rebates/incentives/surcharge billed to the consumers for the previous year and submit it with next petition for determination of ARR/Tariff.

Response: The petitioner has submitted details of rebates/incentives/surcharge for FY 2012-13.

Commission’s observations/directions: The Commission has made note of the petitioner’s submission and directs the petitioner to ensure compliance in future also.

6.11 Filing of ARR and Tariff Proposals in Hindi

Directive: The petitioner is directed that the ARR and Tariff Proposals should also be filed in Hindi in hard copy and soft copy along with the English version in the submission for next year.

Response: The petitioner has submitted that ARR and Tariff petitions are required to be filed in Hindi to ensure that the masses, who are consumers of the utility, are able to comprehend all the submissions made in the petition. However, the petitioner has further submitted that it has a very limited consumer base and all its consumers are high profile industrial consumers for whom the medium of official communication is English only. Hence, the petitioner requested the Commission to exempt it from requirement of filing the ARR and Tariff petition in Hindi.

Commission’s observations/directions: The Commission has made note of the petitioner’s submission.

6.12 Distribution Loss

Directive: The Commission directed the petitioner to ensure that the losses do not increase further in future and to take all actions to contain the loss levels.

Response: The petitioner submitted that it has achieved distribution losses among the lowest loss levels recorded by the distribution companies for FY 2011-12 and FY 2012-13, and even lower than the Commission approved loss levels in respective Tariff Orders. The petitioner submitted that to reduce T&D losses further it has capital investment plans aimed at improvement/expansion of existing network.

Commission’s observations/directions: The Commission has made note of the petitioner’s submission and directs the petitioner to continue to take all required steps to reduce the losses.

6.13 Adjustment of surplus income from the consumers

Directive: The Commission directed the petitioner that the adjustments / credit in consumers bills on account of surplus income be allowed to the consumers in their monthly bills in 18 equal installments commencing from the month of October billed in November, 2012.

Response: The petitioner has submitted that the Commission has postponed the hearing regarding adjustment of surplus income as this matter is pending before the Hon’ble Appellate Tribunal for Electricity.

Commission’s observations/directions: The Commission will take a view on receipt of judgment of the Hon’ble APTEL.

6.14 Issue of Tariff cards to all consumers

Directive: Issue Tariff Card to all consumers containing details of tariff for various categories applicable as per Tariff Order for FY 2013-14.

Response: The petitioner has submitted that all consumers have been provided a copy of tariff schedule.

Commission's observations/directions: The Commission has noted the submission of the petitioner and directs the petitioner that tariff card to all consumers be provided within a month of issue of the tariff Order and compliance reported to the Commission within 45 days of the order.

6.15 RPO compliance

Directive: The Commission has notified regulation for Renewable Purchase Obligation (RPO), effect of which on power purchase has not been considered by the Commission in the present order as the petitioner has not filed any availability of power from renewable sources. However, the petitioner is directed to ensure RPO compliance for FY 2013-14 as per RPO Regulations and any variation in power purchase costs will be considered during true-up exercise.

Response: The petitioner submitted that the RPO obligation as per regulations needs to be complied with by MPAKVN. However, as MPAKVN is already in the stage of discussions with MPPMCL for availability of long term power, thus MPAKVN will request MPPMCL for compliance of the said regulations.

Commission's observations/directions: The Commission has taken a note of the submission and directs petitioner to comply with the regulations. While determining power purchase requirement and costs in this tariff order, the Commission has taken RPO into consideration. The requirements of power to fulfill RPO and its costs have been included in the ARR determination. The petitioner accordingly should make timely arrangements for purchase of renewable power to ensure that RPO is duly fulfilled.

FRESH DIRECTIVE

6.16 Capitalisation as per MPERC tariff regulations

Directive: The Commission directs petitioner to compute capitalization as per the MPERC tariff regulations considering only those works which got completed and put to use during the year instead of considering works which are in progress.

6.17 Delay in submission of ARR true-up petition for FY 2012-13

Directive: The petitioner has failed to submit the ARR true-up petition for FY 2012-13 in time in spite of the Commission's directives. The Commission directs that the petitioner should submit the ARR true-up petition for FY 2012-13 by end of Feb, 2014.

7 PUBLIC OBJECTIONS & COMMENTS ON LICENSEE’S PETITION

- 7.1 The petition was filed on December 19, 2013. The Commission directed the petitioner to publish the summary of ARR/Tariff proposals in the newspapers to invite comments/objections/suggestions by February 1, 2014 from the stakeholders. Two comments/objections/suggestions from the Pithampur Audyogik Sangathan, Indore and the Ujaas Energy Limited were received in the matter.
- 7.2 The Commission invited all willing stakeholders to present their suggestions/objections related to the ARR and tariff proposal in person during the public hearing which was held on February 5, 2014 at the office of the Commission. Two stakeholders namely M/s Pithampur Audyogik Sangathan, Indore and Ujaas Energy Limited participated in the public hearing.
- 7.3 Suggestions from the objectors and response of the petitioner thereon are summarized in the following paragraphs.

Issue No.1: Reduction in existing tariff.

Issue raised by objector:

Objector has submitted that there is trend of reduction in tariff around the country and requested the Commission to reduce the existing tariff. Objector has further submitted that the filing for FY 2011-12 and revised estimates for FY 2012-13 show surplus of Rs 7.69 Crore and Rs 3.68 Crore, respectively, which indicates the possibility of reduction in tariff.

Response from Petitioner:

The petitioner has submitted that tariff is determined by the Commission in accordance with the tariff regulations notified by the Commission.

Commission’s view:

The Commission has admitted the ARR after detailed analysis of each component of ARR in accordance with the MPERC tariff regulations, 2012. As regards adjustment of surplus for FY 2011-12, the Commission has already undertaken provisional true up based on provisional audited accounts. Accordingly, the Commission had directed adjustments in consumer bills. The matter however is sub-judice and on the outcome of the judgement a final view could be taken. Adjustments, if any, for FY 2012-13 can be considered only when true up for FY 2012-13 is undertaken.

Issue No.2: Long Term Agreement.

Issue raised by objector:

Objector has submitted that various news articles suggest that cost of power is gradually reducing as power deficit at the National level is reducing. Further, various news paper reports also suggest that profit margins of central undertakings will reduce by 10% on the basis of the Draft Regulations notified by CERC. Thus, the petitioner should avail the opportunity to get competitive rates for long term power supply arrangement.

Objector has further submitted that the Commission in the tariff order for FY 2013-14 has directed petitioner to sign long term power purchase agreement by end of this financial year. The supply from MPPKVVCL was allowed on interim basis to ensure that consumer do not suffer power shortage. In this regard, it is suggested that no power purchase should be allowed from MPPKVVCL as it is an expensive power instead of power purchase from MPPMCL or MTPP may be allowed.

Response from Petitioner:

The petitioner has submitted that it has initiated the process of procuring power through MPPMCL as it is procuring power for all three Discoms of M. P. Since MPAKVN(I)L is also GoMP corporation thus it would be better if the work of medium/long term power procurement may be entrusted with MPPMCL.

Commission's view:

The Commission's views/ directions in the matter have been elaborated under the "Directives" chapter.

Issue No.3: ARR Petition is deficient of key factors

Issue raised by objector:

Objector has submitted that petitioner has filed revised estimate for FY 2012-13 without providing any explanation of major deviation in the ARR admitted by the Commission. Further, petitioner has not submitted the compliance report on the directives provided by the Commission in the tariff order for FY 2013-14.

Response from Petitioner:

The petitioner has submitted that it has submitted the compliance report on directives for FY 2013-14 in response to letter no. 50 dated January 27, 2014 of the Commission.

Commission's view:

The Commission has noticed that petitioner has not submitted compliance report and major reasons for revised estimate in this petition. However, in reply to data gaps petitioner has provided compliance report on the directives and submitted the updated status of actual work undertaken during FY 2013-14, which is elaborated in the relevant sections of this order.

Issue No.4: Estimation of sales should be based on "end use method".

Issue raised by objector:

Objector has submitted that in the past a suggestion was made that CAGR method for determination of consumption may lead to unrealistic values as the numbers of consumers of the petitioner are less. Objector has further submitted that growth in consumption in FY 2014-15 considered as 10% is on the higher side and needs to be reconsidered realistically. The number of consumers as mention in the ARR petition does not match with the press note issued by Shri. Rathore, Development Commissioner, Indore SEZ, wherein it is mentioned that 46 units are operational in the zone while another 05 units are under implementation.

Response from Petitioner:

The petitioner has submitted that the sales projection has been done on the basis of past data, present trend of consumption as well as future load growth in the SEZ area. Earlier demand

of consumers was suppressed due to capacity constraint at 132/33 kV transformer. Recently 20 MVA transformer has been augmented with 40 MVA transformer at 220/132/33 kV S/S Pithampur, hence, load growth is expected.

As regards number of consumers, MPAKVN(I)L has submitted that the number of consumer data given in ARR Petition is actual.

Commission's view:

After due consideration of relevant facts the Commission has observed that the sale projections made by the petitioner are reasonable considering past trends and expected additions of new connections during FY 2014-15.

In reply to the Commission's query, petitioner has submitted the list of existing consumers. The number of consumers mentioned in the petition is in line with the number of consumers mentioned in the ARR petition for FY 2014-15

Issue No.5: Losses

Issue raised by objector:

- (1) Objector has submitted that the Commission may review distribution losses for FY 2014-15 based on the Energy Audit Report submitted by the petitioner.
- (2) Objected has further requested the Commission to review the inter-State and intra-State losses.

Response from Petitioner:

- (1) Petitioner has submitted the details of energy audit for the FY 2013-14 in response to the letter no 50 dated January 27, 2014.
- (2) Petitioner has submitted that inter-State and intra-State losses computed on the basis of information received from Western Region Power Committee (WRPC).

Commission's view:

- (1) The Commission has considered the distribution losses based on the loss trajectory specified in the MPERC Tariff Regulations, 2012.
- (2) The Commission has admitted the intra- State transmission losses in accordance with the loss trajectory specified in Transmission Tariff Regulations, 2012 and inter- State transmission losses as per the average of 52 weeks loss specified by Western Region Power Committee (WRPC).

Issue No.6: O&M charges

Issue raised by objector:

Objector has submitted that in view of the expected improvement in the working efficiency, no charges over and above the norms specified by the Commission in the Tariff Regulations should be allowed.

Response from Petitioner:

The petitioner has not submitted its response on this issue.

Commission's view:

The Commission has admitted O&M expenses as per the agreement signed with MPPKVCL and no other charges have been admitted. This has been elaborated in the section on "O&M charges" of this order..

Issue No.7: Segregation of Accounts and Gross Fixed Assets

Issue raised by objector:

Objector has submitted that despite the directions of the Commission in the previous tariff order, the petitioner is not maintaining separate accounts for power business.

Response from Petitioner:

The petitioner has submitted that it is trying its level best to follow the accounting principles and details of power business are being capture separately.

Commission's view:

The Commission has again directed the petitioner to maintain separate accounts for its power business to ensure that distribution business neither subsidises business other than power business nor encumbers distribution assets in any way to support other businesses. However, in absence of the required data, the Commission has accepted prudent costs only considering relevant norms.

Issue No.8: Capital Investment Plan.

Issue raised by objector:

Objector has submitted that the petitioner's investment plan should be reviewed on the basis of past trends and not on the basis of Capex plan submitted by the petitioner.

Response from Petitioner:

The petitioner has submitted that for FY 2013-14 detailed capital investment plan has been submitted in the month of September, 2013. For FY 2014-15, the capital investment plan has been submitted in response to the letter no 50 on January 27, 2014.

Commission's view:

The Commission has considered GFA addition based on past trends and not as per the capex plan projected by the petitioner. Details are given under the relevant section of this order.

Issue No.9: Interest on project loans

Issue raised by objector:

Objector has submitted that as the petitioner is not having any actual loans, the Commission to consider lower interest rate to reduce burden on consumers and also to review increased interest charges in revised estimates for FY 2013-14.

Response from Petitioner:

The petitioner has submitted that increase in the interest cost is due to the increase in the revised capex plan for FY 2013-14.

Commission's view:

While approving the interest on project loans, the Commission has considered the average interest rate of all the three Distribution Licensees of Madhya Pradesh as per provisions of MPERC Tariff Regulations, 2012.

Issue No.10: Depreciation and Return on Equity (RoE).

Issue raised by objector:

Objector has submitted that consumer contribution should be considered while computing depreciation and RoE.

Response from Petitioner:

The petitioner has submitted that it has computed the depreciation in line with the Commission's regulations for tariff determination applicable for the deemed licensee and duly accounted for consumer contribution while computing depreciation and ROE.

Commission's view:

The Commission has given due treatment to consumer contributions as per MPERC Tariff Regulations, while admitting depreciation and the return on equity.

Issue No.11: Other Income.

Issue raised by objector:

Objector has submitted that other income of FY 2011-12 and FY 2012-13 was Rs 0.22 Crore and Rs 0.17 which is far more than other income projected for FY 2014-15 as Rs 0.02 Crore. In this regard, requested the Commission to scrutinise the other income for FY 2014-15.

Response from Petitioner:

The petitioner has submitted that it is following the guiding principles of regulation and accordingly not considered delayed payment surcharge as income.

Commission's view:

The other income of the petitioner has been admitted after duly taking in to account relevant factors including the projected addition of consumer loads. This has been elaborated in this order section on "Other income".

Issue No.12: Annual Revenue Requirement

Issue raised by objector:

Objectors has submitted that ARR has a scope of reduction of at-least 10% and thus there is scope of reduction in tariff to this extent.

Response from Petitioner:

The petitioner has submitted that its projections of expenditure and revenue are as realistic as possible in consideration of various existing and planned power purchase agreements as well as norms specified by the Commission.

Commission's view:

The Commission has admitted the ARR after detailed analysis of each component of ARR and has accordingly revised retail tariff for FY 2014-15.

Issue No.13: Tariff proposal for FY 2014-15

Issues raised by objector:

- (1) Objector has submitted that fixed cost should be based on actual fixed cost and consumers with higher load factor should be benefitted.
- (2) Objector has requested the Commission to abolish the TOD charges. TOD tariff is dependent on system load curve and as per recent judgement of Hon'ble ATE in case of Rajasthan the applicable existing TOD charges may be reviewed.
- (3) Objector has requested the Commission to abolish minimum charges as fixed charges are proposed to be fully recovered.

Response from Petitioner:

- (1) The petitioner has submitted that approval of ARR, revenue surplus/gap and resultant tariff comes under the purview of the Commission.
- (2) The petitioner has submitted that additional power purchase during peak hours is generally higher as compared to off- peak hours due to increase in system demand. Similarly, rate of additional power purchase during off-peak period is less as compared to normal period due to decrease in system demand. The price of short term transaction through trader is provided on the CERC website wherefrom it can be seen that price of power through peak period is higher than the price of power traded round the clock generally by more than 15%. It can also be seen that price of power during off peak period is marginally lower than the price of power traded round the clock.
- (3) The petitioner has not submitted the reply.

Commission’s view:

- (1) The Commission is of the view that if the fixed costs of the licensees are fully recovered by levying commensurate fixed charges then it may lead to tariff distortion which may not be desirable for the consumers.
- (2) Implementation of the TOD mechanism is a progressive step and is in accordance with the directives of the Tariff policy. This is required to move towards flattening of load curve and is a DSM measure. The Commission therefore is inclined to continue with the TOD mechanism.
- (3) Normally minimum charges should not be recovered from consumers if the fixed cost is fully recovered through fixed charges. However, if fixed charges are at a lower level then there is no alternative left but to levy minimum charges so as to keep revenue balance.

Issue No.14: Fulfilment of RPO compliance

Issue raised by objector:

Objector has submitted that the petitioner has not considered the impact of their RPO compliance in their ARR projections for FY 2014-15. The Commission should direct the petitioner to consider the impact of the same in ARR petition for FY 2014-15.

Objector has further submitted that since the distribution licensee has not complied with RPO till now in FY 2013-14, the petitioner should be asked to fulfil the maximum extent its deficient RPO through purchase of REC up to FY 2013-14.

Response from Petitioner:

Petitioner has submitted that it is in the process of procuring renewable power through various sources. Petitioner has further submitted that once the agreement is signed with MPPMCL for procuring power, then RPO targets will be met adequately.

Commission’s view:

The Commission has considered the renewable energy cost in the power purchase cost admitted for FY 2014-15 and accordingly directs the petitioner to fulfil the RPO compliance.

Annexure-1 (Tariff Schedules for Low Tension Consumers)

**ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR
FINANCIAL YEAR 2013-14**

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

**TARIFF SCHEDULES FOR LOW TENSION CONSUMERS OF
MPAKVN (Indore), LTD., SEZ PITHAMPUR**

Table of Contents

Tariff Schedules	Page No.
LV-1 Domestic	66
LV – 2 Non-Domestic	67
LV – 3 Public water works and Street Lights	69
LV – 4 LT Industrial	70
General Terms and Conditions of Low Tension Tariff	72

Tariff Schedule-- LV-1

DOMESTIC: ---

Applicability:

This tariff is applicable for light, fan and power for residential use only. Dharamshalas, old age houses, rescue houses, orphanages, places of worship and religious institutions will also be covered under this category.

Tariff:

Energy charges (paise per unit)	Monthly Fixed Charges (in Rs)
350	50 per connection

Minimum charges: Rs. 60 per connection per month as minimum charges towards energy charges are applicable for above category.

Specific Terms and conditions for LV-1 category

- a) In case energy charges for actual consumption are less than minimum charges, minimum charges shall be billed towards energy charges. All other charges, as applicable, shall also be billed.
- b) Other terms and conditions shall be as specified under General Terms and Conditions for Low Tension consumers.

Tariff Schedule – LV-2

NON-DOMESTIC: ---

Applicability:

This tariff is applicable for light, fan and power to Railways (for purposes other than traction and supply to Railway Colonies/water supply), Shops/showrooms, Parlours, All Offices, Hospitals and medical care facilities including Primary Health Centres, clinics, nursing homes belonging to either Govt. or public or private organisations, public buildings, guest houses, Circuit Houses, Government Rest Houses, X-ray plant, recognized Small Scale Service Institutions, clubs, restaurants, eating establishments, meeting halls, places of public entertainment, circus shows, hotels, cinemas, professional's chambers (like Advocates, Chartered Accountants, Consultants, Doctors etc.), bottling plants, marriage gardens, marriage houses, advertisement services, advertisement boards/ hoardings, training or coaching institutes, petrol pumps and service stations, tailoring shops, laundries, gymnasiums, health clubs, telecom towers for mobile communication and any other establishment (except those which are covered in LV 2.1), who is required to pay Commercial tax/service tax/value added tax (VAT)/entertainment tax/luxury tax under any Central/State Acts., Educational Institutions including workshops and laboratories of Engineering Colleges / Polytechnics/ITIs (which are registered with /affiliated/ recognized by the relevant Govt. body or university), Hostels for students or working women or sports persons (run either by Govt. or individuals)

Tariff:

Sub category	Energy charges (paise/unit)	Monthly Fixed charges (in Rs)
LV 2.1 Sanctioned load based tariff (only for connected load up to 20kW)		
On all units if monthly consumption is not more than 50 units	350	45 per KW
On all units in case monthly consumption exceeds 50 units	380	75 per KW
LV 2.2 contract demand based tariff		
<u>OPTIONAL</u> Demand based tariff (only for contract demand above 10 KW and up to 20kW)	380	94 per KW or 75 per kVA of billing demand
<u>Mandatory demand based tariff for contract demand above 20 kW</u>	380	94 per KW or 75 per kVA of billing demand

Temporary connections including Multi point temporary connection at LT for Mela*	425	94 per KW or 75 per kVA or part thereof of sanctioned or connected or recorded load whichever is highest
For X-Ray plant	Additional Fixed charges (Rs. per machine per month)	
Single Phase	450	
Three Phase	650	
Dental X-ray machine	50	

*In case permission for organizing Mela is granted by Revenue Authorities of Government of Madhya Pradesh or by MPAKVN(I)/SEZ.

Specific Terms and Conditions for LV-2 category:

- a) **Minimum consumption:** The consumer shall guarantee a minimum annual consumption of 360 units per kW or part thereof of **sanctioned load or contract demand (in case of demand based charges)**. However, the load of X-Ray unit shall be excluded while considering the load of the consumer for calculation of minimum consumption. The method of billing minimum consumption shall be as given in General Terms and Conditions of Low Tension tariff.
- b) **Additional Charge for Excess demand:** Shall be billed as given in General Terms and Conditions of Low Tension tariff.
- c) Other terms and conditions shall be as specified under General Terms and Conditions.

Tariff Schedule – LV-3

PUBLIC WATER WORKS AND STREET LIGHTS

Applicability:

The tariff LV-3.1 is applicable for Public Utility Water Supply Schemes, Sewage Treatment Plants, Sewage Pumping Installations run by SEZ or any other organization authorised by the Government in the area of SEZ to supply/ maintain public water works / sewerage installations and shall also be applicable to electric crematorium maintained by local bodies/trusts.

Note: Private water supply scheme, water supply schemes run by institutions for their own use/employees/townships etc. shall not fall in this category. These shall be billed under the appropriate tariff category to which such institution belongs. In case water supply is being used for two or more different purposes then entire consumption shall be billed for purpose for which the tariff is higher.

The tariff LV-3.2 is applicable to traffic signals and lighting of public streets or public places including parks, town halls, monuments and its institutions, museums, public toilets, public libraries, reading rooms run by Government or Local Bodies or SEZ and Sulabh Shochalaya.

Tariff: For Public Water Works and Street Light

Category	Energy Charges (paise per unit)	Monthly Fixed Charges (in Rs. per KW)	Minimum Charges (Rs)
LV 3.1 Public Water Works	425	NIL	300 per kW
Temporary supply for Public Water Works	1.3 times the applicable tariff		
LV 3.2 Street light	425	NIL	300 per kW

Specific Terms and Conditions for LV-3 category:

(a) Incentives for adopting Demand Side Management

An **incentive** equal to 5 % of energy charges shall be given on installation and use of energy saving devices (such as ISI energy efficient motors for pump sets and programmable on-off/ dimmer switch with automation for street lights). **Incentive** will be admissible only if full bill is paid within due dates failing which all consumed units will be charged at normal rates. Such incentive will be admissible from the month following the month in which energy saving devices are put to use and are verified by a person authorized by the licensee. This incentive will continue to be allowed till such time these energy saving devices remain in service. The licensee is required to arrange wide publicity of above incentive.

(b) Other terms and conditions shall be as specified under General Terms and Conditions.

Tariff Schedule – LV-4**LT INDUSTRIAL****Applicability:**

Tariff LV-4 is applicable to light, fan and power for operating equipment used by printing press and any other industrial establishments and workshops (where any processing or manufacturing takes place including tyre re-treading). These tariffs are also applicable to cold storage, gur (jaggery) making machines, flour mills, Masala Chakkies, hullers, khandsari units, ginning and pressing units, sugar cane crushers (including sugar cane juicing machine), power looms, dal mills, besan mills, and ice factories and any other manufacturing or processing units (excluding bottling plant) producing/processing food items or processing agriculture produce for preservation/increasing its shelf life and Dairy units (where milk is processed to produce other end products of milk other than chilling, pasteurization etc.)

Tariff: For industrial consumers

	Category	Monthly Fixed Charges (in Rs.)	Energy Charges (paise per unit)
4.1	Industrial consumers		
4.1 a	Demand based tariff (for Contract demand up to 150 HP)	94 per kW or 75 per kVA of billing demand	355
4.1 b	Temporary connection	1.3 times of the applicable tariff	

Terms and Conditions:

- (a) The maximum demand of the consumer in each month shall be reckoned as four times the largest amount of kilovolt ampere hours delivered at the point of supply of the consumer during any continuous fifteen minutes in that month.
- (b) Demand based tariff is mandatory and the licensee shall provide Tri vector/ Bi vector Meter capable of recording Demand in kVA/ kW, kWh, kVAh and Time of Use consumption
- (c) **Minimum Consumption:** Shall be as per following:
 - i. The consumer shall guarantee a minimum annual consumption (kWh) based on 360 units per HP or part thereof of contract demand irrespective of whether any energy is consumed or not during the year.

- ii.** The consumer shall be billed monthly minimum 30 units per HP per month in case the actual consumption is less than above specified units.
- iii.** Method of billing of minimum consumption shall be as given in the General Terms and Conditions of Low Tension tariff.
- (d) Additional Charge for Excess Demand:** Shall be billed as given in the General Terms and Conditions of Low Tension tariff.
- (e)** Other terms and conditions shall be as specified under General Terms and Conditions.

GENERAL TERMS AND CONDITIONS OF LOW TENSION TARIFF

1. **SEZ Area** means the area notified by Government of Madhya Pradesh (GoMP) as may be amended from time to time.
2. Rounding off: All bills will be rounded off to the nearest rupee i.e. up to 49 paise shall be ignored and 50 paise upwards shall be rounded off to next Rupee.
3. Billing Demand: In case of demand based tariff, the billing demand for the month shall be the actual maximum kVA demand of the consumer during the month or 90% of the contract demand, whichever is higher. The billing demand shall be rounded off to the nearest integer number i.e. fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.
4. Fixed charges billing: Unless specified otherwise, fractional load for the purposes of billing of fixed charges shall be rounded off to nearest integer i.e. fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored. However for loads less than one kW/HP, it shall be treated as one kW/HP.
5. **Method of billing of minimum consumption:**
 - a. The consumer shall be billed one twelfth of guaranteed annual minimum consumption (KWH) specified for his category each month in case the actual consumption is less than above mentioned minimum consumption.
 - b. During the month in which actual cumulative consumption equals or is greater than the annual minimum guaranteed consumption, no further billing of monthly minimum consumption shall be done in subsequent months of the financial year and only actual recorded consumption shall be billed.
 - c. Tariff minimum consumption shall be adjusted in the month in which cumulative actual or billed monthly consumption exceeds cumulative monthly prorated minimum annual guaranteed consumption. If actual cumulative consumption does not get fully adjusted in that month, adjustment shall continue to be provided in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption where prorated monthly minimum consumption is 100 kWh based on annual consumption of 1200 kWh

Month	Actual cumulative consumption (kwh)	Cumulative minimum consumption * (kwh)	Higher of 2 and 3 (kwh)	Already billed in the year (kwh)	To be billed in the month = (4-5) (kwh)
1	2	3	4	5	6
April	95	100	100	0	100
May	215	200	215	100	115
June	315	300	315	215	100
July	395	400	400	315	85
Aug	530	500	530	400	130
Sept	650	600	650	530	120
Oct	725	700	725	650	75
Nov	805	800	805	725	80
Dec	945	900	945	805	140
Jan	1045	1000	1045	945	100
Feb	1135	1100	1135	1045	90
March	1195	1200	1200	1135	65

6. Additional Charge for Excess Demand: Shall be billed as per following procedure:

a) **Consumers availing supply at demand based tariff:** The consumers availing supply at demand based tariff shall restrict their actual maximum demand within the contract demand. However, in case the actual maximum demand recorded in any month exceeds 105% of the contract demand, the tariff in this schedule shall apply to the extent of 105 % of the contract demand only. The consumer shall be charged for demand recorded in excess of 105% of contract demand (termed as Excess Demand) and consumption corresponding thereto at the following rates:-

b) **Energy charges for Excess Demand:** The consumer shall pay charges @ 1.3 times the tariff for energy charges for consumption corresponding to excess demand in case the maximum demand recorded exceeds the 105% of the contract demand.

Example: If a consumer having a contract demand of 50 kVA records a maximum demand of 60 kVA, the billing of energy charges for excess demand of $(60 \text{ kVA} - 52.5 \text{ kVA}) = 7.5 \text{ kVA}$ shall be = (total consumption recorded during the month* $7.5 \text{ kVA}/\text{maximum recorded demand}$)*1.3* energy charge unit rate.

c) **Fixed charges for Excess Demand:** These charges shall be billed as per following:

1. **Fixed charges for Excess Demand when the recorded maximum demand is up to 115% of the contract demand:-** fixed charges for Excess Demand over and above the 105 % of contract demand shall be charged at 1.3 times the normal rate of fixed charges

2. Fixed charges for Excess Demand when the recorded maximum demand exceeds 115% of contract demand :- In addition to fixed charges in 1 above, recorded demand over and above 15 % of the contract demand shall be charged at 2 times the normal rate of fixed charges

- d) The above billing for Excess Demand, applicable to consumers is without prejudice to the licensee's right to ask for revision of agreement and other such rights that are provided under the regulations notified by the Commission or under any other law.
- e) The maximum demand of the consumer in each month shall be reckoned as four times the largest amount of kilovolt ampere hours delivered at the point of supply of the consumer during any continuous fifteen minutes in that month.

7. Other Terms and Conditions:

- (a) For **advance payment** made before commencement of consumption period for which bill is prepared, a rebate of 1 % per month on the amount (excluding security deposit) which remains with the licensee at the end of calendar month shall be credited to the account of the consumer after adjusting any amount payable to the licensee.
- (b) **Incentive for prompt payment:** An incentive for prompt payment @0.25% of the bill amount (excluding electricity duty and Cess) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. One lakh. The consumers in arrears shall not be entitled for this incentive.
- (c) The Sanctioned load or connected load in case of connected load based tariff should not exceed 112.5 kW / 150 HP. In case of demand based tariff the contract demand should not exceed 112.5 kW / 150 HP without any ceiling on connected load. If the consumer exceeds his load / demand beyond this ceiling on more than two occasions in two billing months during the tariff period, the Licensee may insist on the consumer to avail HT supply.
- (d) Metering Charges shall be billed as per schedule of Metering and Other Charges as prescribed in MPERC (Recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply), Regulations (Revision-I),2009. Part of a month will be reckoned as full month for purpose of billing.
- (e) In case the cheque presented by the consumer is dishonoured, without prejudice to Licensee's rights to take recourse to such other action as may be available under the relevant law, a service charge of Rs. 150 per cheque shall be levied in addition to delayed payment surcharge
- (f) Other charges as stated in schedule of miscellaneous charges shall also be applicable.

- (g) **Welding surcharge** is applicable to installations with welding transformers, where the connected load of welding transformers exceeds 25% of the total connected load and where suitable capacitors of prescribed capacity have not been installed to ensure power factor of not less than 0.8 (80%) lagging. Welding Surcharge of 75 (seventy five) paisa per unit shall be levied for the consumption of the entire installation during the month. However, no welding surcharge shall be levied when recorded power factor is 0.8 or more.
- (h) For purposes of computing the connected load in kW of the welding transformers, a power factor of 0.6 (60%) shall be applied to the maximum current or kVA rating of such welding transformers.
- (i) Existing LT power consumer shall ensure that LT capacitor of proper rating is provided. In this regard, Madhya Pradesh Electricity Supply Code 2013 may be referred for guidance. It shall be the responsibility of the consumer to ensure that overall average power factor during any month is not less than 0.8 (80%) failing which the consumer shall be liable to pay low power factor surcharge on the entire billed amount against energy charges during the month at the rates given below:
1. **For the consumer whose meter is capable of recording average power factor:**
 - a. Surcharge @ 1 % of energy charges for every 1% fall in power factor below 80% up to 75 %.
 - b. Surcharge of 5% plus 1.25% of energy charges for every 1% fall in power factor below 75% up to 70%.

The maximum limit of surcharge will be 10 % of the energy charges billed during the month.
 2. **For LT consumer having meter not capable of recording average power factor:** The consumer shall ensure that LT capacitors of proper rating are provided and are in good working condition. In this regard, Madhya Pradesh Electricity Supply Code, 2013 may be referred for guidance. In case of failure to meet the above criteria, the consumer would be levied a low power factor surcharge of 10% on the entire billed amount against energy charges during the month and would be continued to be billed till such time the consumer meets the above criteria .
- (j) Levy of welding / power factor surcharge as indicated hereinabove shall be without prejudice to the rights of the Licensee to disconnect the consumer's installation, if steps are not taken to improve the power factor by installing suitable shunt capacitors.
- (k) In case of any dispute on applicability of tariff on a particular LT category, the decision of the Commission shall be final.

- (l) The tariff does not include any tax, cess or duty, etc. on electrical energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall also be payable by the consumer in addition to the tariff charges and applicable miscellaneous charges.
- (m) **Delayed payment Surcharge for all categories:** Surcharge at the rate of 1.00 % per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date subject to a minimum of Rs.5/- per month for total outstanding bill amount up to Rs. 500/- and Rs 10/ per month for amount of bill more than Rs.500/. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be levied for the period after supply to the consumer is permanently disconnected.
- (n) In case of conversion of LT connection into HT connection, it is mandatory on the part of both the consumer and the licensee to get the HT agreement executed before availing supply at HT.
- (o) **Power Factor Incentive:**

If the average monthly power factor of the consumer is equal to or more than 85%, incentive shall be payable as follows:

Power Factor	Percentage incentive payable on billed energy charges
Above 85% up to 86%	0.5
Above 86% up to 87%	1.0
Above 87% up to 88%	1.5
Above 88% up to 89%	2.0
Above 89% up to 90%	2.5
Above 90% up to 91%	3.0
Above 91% up to 92%	3.5
Above 92% up to 93%	4.0
Above 93% up to 94%	4.5
Above 94% up to 95%	5.0
Above 95% up to 96%	6.0
Above 96% up to 97%	7.0
Above 97% up to 98%	8.0
Above 98% up to 99%	9.0
Above 99%	10.0

For this purpose, the “average monthly power factor” is defined as the ratio in percentage of total Kilo Watt hours to the total kilo volt Ampere hours recorded during the month.

- (p) Use of mix loads in one connection: Unless otherwise permitted specifically in the tariff category, the consumer requesting for use of mix loads for different purposes shall be billed for the purpose for which the tariff is higher.
- (q) No change in the tariff or the tariff structure including minimum charges for any category of consumer is permitted except with prior written permission from the Commission. Any action taken without such written permission of

the Commission shall be treated as null and void and shall also be liable for action under relevant provisions of the Electricity Act, 2003.

- (r) All conditions prescribed herein shall be applicable to the consumer notwithstanding if any contrary provisions exist in the agreement entered into by the consumer with the licensee.

8. Additional conditions for Temporary Supply at LT:

- (a) Temporary supply cannot be demanded by a prospective/ existing consumer as a matter of right but will normally be arranged by the licensee when a requisition giving due notice is made. The temporary additional supply to an existing consumer also shall be treated as a separate service and charged subject to following conditions. However service under Tatkal Scheme shall be made available within 24 hours according to the charges specified in the order of the Commission regarding Schedule of Miscellaneous Charges.
- (b) Fixed Charge and energy charge for temporary supply shall be billed at **1.3** times the normal charges as applicable to relevant category if not specified otherwise specifically.
- (c) Estimated bill amount is payable in advance before serving the temporary connection subject to replenishment from time to time and adjustment as per final bill after disconnection. No interest shall be given to consumers for this advance payment.
- (d) The Sanctioned load or connected load in case of connected load based tariff should not exceed 112.5 kW / 150 HP. In case of demand based tariff the contract demand should not exceed 112.5 kW / 150 HP without any ceiling on connected load.
- (e) The month for the purpose of billing of charges for temporary supply shall mean 30 days from the date of connection. Any period less than 30 days shall be treated as full month for the purpose of billing.
- (f) Connection and disconnection charges and other miscellaneous charges shall be paid separately as may be specified in the Schedule of Miscellaneous Charges.
- (g) Power factor incentive/penalty shall be applicable at the same rate as applicable for permanent connection.

Annexure-3 (Tariff Schedules for High Tension Consumers)

**ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR
FINANCIAL YEAR 2013-14**

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

**TARIFF SCHEDULES FOR HIGH TENSION CONSUMERS OF
MPAKVN (Indore), LTD., SEZ PITHAMPUR**

Table of Contents

Tariff Schedules	Page No.
HV – 1 Industrial and Non Industrial	79
HV – 2 Public Water Works	81
HV – 3 Synchronization and start up power for Generators	82
General Terms and Conditions of High Tension Tariff	83

Tariff Schedule – HV - 1**INDUSTRIAL AND NON-INDUSTRIAL****Applicability:**

The **tariff HV-1.1(Industrial)** shall apply to all HT industrial consumers including Mini Steel Plants (MSP), MSP with rolling mills/ sponge iron plants in the same premises, electro chemical/ electro thermal industry, Ferro alloy industry etc for power, light and fan etc. which shall mean and include all energy consumed for factory and lighting in the offices, main factory building, stores, canteen, residential colonies of industries, compound lighting, common and ancillary facilities such as Banks, General purpose shops, Water supply, Sewage pumps, Police Stations etc. in the premises of the industrial units and Dairy units where milk is processed (other than chilling, pasteurization etc.) to produce other end products of milk.

The **tariff HV-1.2 (Non Industrial)** shall apply to establishments like Railway Stations, Offices, Hotels, Hospitals, Institutions etc. (excluding group of consumers) having mixed load for power, light and fan etc. which shall mean and include all energy consumed for lighting in the offices, stores, canteen, compound lighting etc. This shall also cover all other categories of consumers, defined in LT non-domestic category subject to the condition that the HT consumer shall not redistribute/sub-let the energy in any way to other person.

Tariff:

S. No.	Category	Monthly Fixed Charges (Rs./kVA of billing demand per month)	Energy charges (Paise / unit)
1.1	Industrial		
	11 KV supply	160	350
	33 KV supply	202	335
1.2	Non-Industrial		
	11 KV supply	225	370
	33 KV supply	240	350

Specific Terms and Conditions:

- (a) **Guaranteed Minimum Consumption** for all the above categories shall be on following basis :

Supply Voltage	Sub- category	Guaranteed annual minimum consumption in units(KWH) per kVA of contract demand
<i>For supply at 33 kV or 11 kV</i>	Contract demand up to 100 kVA	600
	Others	1200

Note: The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension tariff.

- (b) **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension tariff.
 - (c) Other terms and conditions shall be as specified under General Terms and Conditions of High Tension Tariff.
-

Tariff Schedule – HV - 2**PUBLIC WATER WORKS****Applicability:**

The Tariff Category HV-2 shall apply to supply of power to Public Utility Water Supply schemes, sewage treatment plants /sewage pumping plants and for energy used in lighting pump house and dairy (for those dairy units where only extraction of milk and its processing such as chilling, pasteurization etc. is done)..

Note: Private water supply scheme, water supply schemes run by institutions for their own use/employees/townships etc. will not fall in this category but billed under the appropriate tariff category to which such institution belongs. In case water supply is being used for two or more different purposes then the highest tariff shall be applicable.

Tariff:

Category	Monthly Fixed charges (Rs. / kVA of billing demand per month)	Energy Charges (paise per unit)
11 kV supply	175	370
33 kV supply	200	340

Specific Terms and Conditions:

- (a) **Guaranteed Annual Minimum Consumption** shall be 720 units (KWH) per kVA of contract demand. The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension tariff
- (b) **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension tariff.
- (c) Other terms and conditions shall be per the General Terms and Conditions of High Tension Tariff.

Tariff Schedule – HV - 3

**SYNCHRONIZATION AND START UP POWER FOR GENERATORS
CONNECTED TO THE GRID**

Applicability:

This Tariff shall apply to those generators who are already connected to the grid but who are not consumers of the Distribution Licensee and seek to avail power for synchronization with the grid or for start-up.

Tariff for all voltages:

Category	Energy Charge (Paise/unit)
Generators for Start up power or synchronization with Grid	550

Terms and Conditions:

- (a) The supply for synchronization with the grid or for start-up power shall not exceed 15% of the capacity of unit of highest rating in the Power Plant.
- (b) The condition for minimum consumption shall not be applicable to the generators including CPP. Billing shall be done for energy recorded on each occasion of availing supply.
- (c) The supply shall not be allowed to the CPP for production purpose for which they may avail stand-by support under the relevant Regulations.
- (d) The synchronization with the grid or the start-up power shall only be made available after commissioning of plant and in the event of outages for annual planned maintenance, other maintenance, forced outages of generating units or also in the event of separation of generator from grid.
- (e) The synchronization with the grid, power shall be provided for a maximum period of 2 hours on each occasion. This time limit shall not be applicable to start up activity
- (f) The generator including CPP shall execute an agreement with the Licensee for meeting the requirement of synchronization with the grid or for start-up power incorporating the above terms and conditions.

GENERAL TERMS AND CONDITIONS OF HIGH TENSION TARIFF

The following terms and conditions shall be applicable to all HT consumer categories subject to specific terms and conditions for that category as mentioned in the tariff schedule of respective category:

- 1.1 The contract demand shall be expressed in whole number only.
- 1.2 Character of Service: The character of service shall be as per Madhya Pradesh Electricity Supply Code, 2013.
- 1.3 Point of Supply: The point of supply shall be as per provisions of Madhya Pradesh Electricity Supply Code, 2013.
- 1.4 **Determination of Demand:** The **maximum demand** of the supply in each month shall be four times the largest number of kilovolt ampere hours delivered at the point of supply during any continuous 15 minutes during the month as per sliding window principle of measurement of demand.
- 1.5 **Billing demand:** The billing demand for the month shall be the actual maximum kVA demand of the consumer during the month or 90% of the contract demand, whichever is higher. The billing demand shall be rounded off to the nearest integer number i.e. the fraction of 0.5 or above will be rounded off to next integer figure and the fraction of less than 0.5 shall be ignored.
- 1.6 **Tariff minimum consumption shall be billed** as follows :
 - 1) The consumer shall be billed for guaranteed annual minimum consumption (KWH) based on number of units per kVA of contract demand specified for his category, irrespective of whether any energy is consumed or not during the year.
 - 2) The consumer shall be billed one twelfth of guaranteed annual minimum consumption (KWH) specified for his category each month in case the actual consumption is less than above mentioned minimum consumption.
 - 3) During the month in which actual cumulative consumption equals or greater than the annual minimum guaranteed consumption, no further billing of monthly minimum consumption shall be done in subsequent months of the financial year.
 - 4) In the month which cumulative actual or billed monthly consumption of the consumer exceeds the cumulative monthly prorated minimum annual guaranteed consumption and if the consumer was charged in earlier months for tariff minimum difference consumption on account of his actual consumption being less, then such tariff minimum consumption shall be adjusted in the month in which cumulative actual or billed monthly consumption exceeds cumulative monthly prorated minimum annual guaranteed consumption. If such tariff difference consumption does not get fully adjusted in that month, such adjustment shall continue to be done in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption

where prorated monthly minimum consumption is 100 kWH based on annual consumption of 1200 kWH.

Month	Actual cumulative consumption (kwh)	Cumulative minimum consumption * (kwh)	Higher of 2 and 3 (kwh)	Already billed in the year (kwh)	To be billed in the month = (4-5) (kwh)
1	2	3	4	5	6
April	95	100	100	0	100
May	215	200	215	100	115
June	315	300	315	215	100
July	395	400	400	315	85
Aug	530	500	530	400	130
Sept	650	600	650	530	120
Oct	725	700	725	650	75
Nov	805	800	805	725	80
Dec	945	900	945	805	140
Jan	1045	1000	1045	945	100
Feb	1135	1100	1135	1045	90
March	1195	1200	1200	1135	65

1.7 **Rounding off:** All bills will be rounded off to the nearest rupee i.e. up to 49 paisa shall be ignored and 50 paisa upwards shall be rounded off to next Rupee.

Incentive/ Rebate / penalties

1.8 **Power Factor Incentive**

Power factor incentive shall be payable as follows:

Power Factor	Percentage incentive payable on billed energy charges
Above 95% and up to 96%	1.0 (one percent)
Above 96% and up to 97%	2.0 (two percent)
Above 97% and up to 98%	3.0 (three percent)
Above 98 % up to 99%	5 (five percent)
Above 99 %	7 (seven percent)

1.9 For **advance payment** made before commencement of consumption period for which bill is prepared, an incentive of 1 % per month on the amount which remains with the licensee at the end of calendar month (excluding security deposit) shall be credited to the account of the consumer after adjusting any amount payable to the licensee.

1.10 An incentive for prompt payment @0.25% of the bill amount (excluding electricity duty and other Government levies) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. One lack. The consumers in arrears shall not be entitled for this incentive.

1.11 **Time of Day Surcharge / Rebate:** This scheme is applicable to the categories of consumers where it is specified. This is applicable for different periods of the day i.e. normal period, peak load and off-peak load period. The surcharge / rebate on energy charges according to the period of consumption shall be as per following table:

S. No.	Peak / Off-peak Period	Surcharge / Rebate on energy charges on energy consumed during the corresponding period
1.	Evening peak load period (6PM to 10 PM)	15% of Normal rate of Energy Charge as Surcharge
2.	Off peak load period (10 PM to 6 AM next day)	7.5 % of Normal rate of Energy Charge as Rebate

Note: Fixed charges shall always be billed at normal rates i.e. ToD Surcharge / Rebate shall not be applied on Fixed Charges

1.12 **Power Factor Penalty**

- (i) If the average monthly power factor of the consumer falls below 90 percent, the consumer shall be levied a penalty @ 1% (one percent), for each one percent fall in his average monthly power factor below 90 percent, on total amount of bill under the head of “Energy Charges”.
- (ii) If the average monthly power factor of the consumer falls below 85 percent, the consumer shall be levied a penalty of 5% (five percent) plus @ 2% (two percent) for each one percent fall in his average monthly power factor below 85 percent. , on the total amount of bill under the head of “Energy Charges”. This penalty shall be subject to the condition that overall penalty on account of low power factor does not exceed 35%.
- (iii) Should the average monthly power factor fall below 70%, the Licensee reserves the right to disconnect the consumer’s installation till steps are taken to improve the same to the satisfaction of the Licensee. This is, however, without prejudice to the levy of penalty charges for low power factor in the event of supply not being disconnected.
- (iv) For this purpose, the “average monthly power factor” is defined as the ratio expressed in percentage of total Kilo Watt hours to the total kilo volt Ampere hours recorded during the billing month. This ratio (%) shall be rounded off to the nearest integer figure and the fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.
- (v) Notwithstanding what has been stated above, if the average monthly power factor of a new consumer is found to be less than 90% in any month during the first 6 (six) months from the date of connection, the consumer shall be entitled

to a maximum period of six months to improve it to not less than 90% subject to following conditions:

- a) This period of six months shall be reckoned from the month following the month in which the average power factor was found for the first time to be less than 90%.
- b) In all cases, the consumer will be billed the penal charges for low power factor, but in case the consumer maintains the average monthly power factor in subsequent three months (thus in all four months) to not less than 90%, the charges on account of low power factor billed during the said six months period, shall be withdrawn and credited in next monthly bills.
- c) The facility, as mentioned herein, shall be available not more than once to new consumer whose average monthly power factor is less than 90% in any month during 6 months from the date of connection. Thereafter, the charges on account of low average power factor, if found less than 90%, shall be payable as applicable to any other consumer.

1.13 Additional Charges for Excess Demand

- i. The consumer shall at all times restrict their actual maximum demand within the contract demand. In case the actual maximum demand in any month exceeds 105% of the contract demand, the tariffs given in various schedules shall apply to the extent of the 105% of the contract demand only. The consumer shall be charged for excess demand computed as difference of recorded maximum demand and 105% of contract demand on energy charges and fixed charges and while doing so, the other terms and conditions of tariff, if any, shall also be applicable on the said excess demand. The excess demand so computed, if any, in any month shall be charged at the following rates from all consumers except Railway Traction
- ii. **Energy charges for excess demand:** The consumer shall pay charges @ 1.3 times the tariff for energy charges for consumption corresponding to excess demand in case the maximum demand recorded exceeds 105% of the contract demand.

Example: If a consumer having a contract demand of 200 kVA records a maximum demand of 250 kVA, the billing of energy charges for excess demand of $(250 \text{ kVA} - 210 \text{ kVA}) = 40 \text{ kVA}$ shall be = (total consumption recorded during the month* $40 \text{ kVA} / \text{maximum recorded demand}$)*1.3* energy charge unit rate.

- iii. **Fixed charges for excess demand:** - These charges shall be billed as per following:
 1. **Fixed charges for Excess Demand when the recorded maximum demand is up to 115% of the contract demand :-** fixed charges for

Excess Demand over and above the 105 % of contract demand shall be charged at 1.3 times the normal fixed charges

- 2. Fixed charges for Excess Demand when the recorded maximum demand exceeds 115% of contract demand :-** In addition to fixed charges in 1 above, recorded demand over and above 15 % of the contract demand shall be charged at 2 times the normal fixed charges

Example for fixed charges billing for excess demand: If the contract demand of a consumer is 100 kVA and the maximum demand recorded in the billing month is 140 kVA, the consumer shall be billed towards fixed charges as under:-

- a) Up to 105 kVA at normal tariff.
- b) Above 105 kVA up to 115 kVA i.e. for 10 kVA at 1.3 times the normal tariff.
- c) Above 115 kVA up to 140 kVA i.e. for 25 kVA at 2 times the normal tariff.

While doing so, other provisions of electricity tariff (such as tariff minimum charge etc.) will also be applicable on aforesaid excess demand.

- iv. The excess demand computed in any month will be charged along with the monthly bill and shall be payable by the consumer.
- v. The billing of excess demand at higher tariff is without prejudice to the Licensee's right to discontinue the supply in accordance with the provisions contained in the Electricity Supply Code, 2013.

1.14 Delayed Payment Surcharge: Surcharge at the rate of 1.00 % per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be applicable after supply to the consumer is permanently disconnected.

1.15 Service Charge for Dishonoured Cheques: In case the cheque(s) presented by the consumer are dishonoured, a service charge at the rate of Rs. 1000/- per cheque shall be levied in addition to delayed payment surcharge as per rules. This is without prejudice to the Licensee's rights to take action in accordance with any other applicable law.

1.16 Temporary supply at HT: If any consumer requires supply for a temporary period, the temporary supply shall be treated as a separate service and charged subject to the following conditions:

- (a) Fixed Charges and Energy Charges shall be charged at 1.3 times the normal tariff. The fixed charge shall be recovered for the full billing month or part thereof.

- (b) The consumer shall guarantee minimum consumption (KWH) as applicable to the permanent consumers on pro-rata basis based on number of days as detailed below:

$$\begin{array}{l} \text{Minimum consumption} \\ \text{for additional supply} \\ \text{for temporary period} \end{array} = \frac{\begin{array}{l} \text{Annual minimum consumption as applicable to} \\ \text{permanent supply X No. of days of temporary} \\ \text{connection} \end{array}}{\text{No. of days in the year}}$$

- (c) The billing demand shall be the demand requisitioned by the consumer or the highest monthly maximum demand during the period of supply commencing from the month of connection ending with the billing month, whichever is higher. For example:

Month	Recorded Maximum Demand (kVA)	Billing Demand (kVA)
April	100	100
May	90	100
June	80	100
July	110	110
August	100	110
September	80	110
October	90	110
November	92	110
December	95	110
January	120	120
February	90	120
March	80	120

- (d) The consumer shall pay the estimated charges in advance, before serving the Temporary Connection subject to replenishment from time to time and adjustment as per final bill after disconnection. No interest shall be given on such advance payment.
- (e) The consumer shall pay rental for the metering system.
- (f) Connection and Disconnection Charges shall also be paid.
- (g) In case of existing HT consumer, the temporary connection may be given through existing permanent HT connection on following methodology of assessment :
- (i) Deemed contract demand for the month to be billed for the fixed charge= C.D. (existing) on normal tariff for permanent connection + C.D. for temporary connection on normal tariff for temporary supply.

(ii) Billing demand for the month shall be as per tariff order for the deemed contract demand for that month.

(iii) Consumption during the month may be billed for Permanent connection (A)

Contract demand (Permanent)

$$A = \frac{\text{Total consumption}}{\text{Deemed contract demand}} \times \text{Total consumption}$$

Consumption of Temporary connection = Total consumption - (A)

(iv) The consumption worked out above for temporary connection shall be billed at 1.3 times the normal energy charges.

(v) The demand in excess of deemed contract demand as calculated above at (g) (i) shall be treated as Excess Demand. For billing purposes such Excess demand, if any, in any month shall be treated as pertaining to temporary connection load and shall be charged at 1.5 times the normal fixed charges & energy charges of temporary connection. Additional charges for excess demand recorded during the period of temporary connection shall be calculated as given below :

Fixed charges for excess demand = fixed charges per kVA for temporary connection * excess demand* 1.5 (one and half)

Energy charges for excess demand = energy charges per unit for temporary connection * 1.5(one and half)*(excess demand/deemed contract demand)*total consumption

(h) Power factor incentives/penalties and the condition for Time of Day Surcharge/ rebate shall be applicable at the same rate as for permanent connection.

Other Terms and Conditions for permanent connections:

1.17 The existing 11KV consumer with contract demand exceeding 300 kVA who want to continue to avail supply at 11kV at his request, shall be required to pay additional charge at 5 % on the total amount of Fixed Charges and, Energy Charges billed in the month.

1.18 The existing 33KV consumer with contract demand exceeding 10,000 kVA who want to continue to avail supply at 33kV at his request, shall be required to pay additional charge at 3% on the total amount of Fixed Charges and Energy Charges billed in the month.

- 1.19 Metering Charges shall be billed as per schedule of Metering and Other Charges as prescribed in MPERC (Recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply), Regulations (Revision-I), 2009 as amended from time to time. Part of a month will be reckoned as full month for purpose of billing.
- 1.20 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 then in force. Such charges, if any, shall be payable by the consumer in addition to the tariff charges.
- 1.21 In case any dispute arises regarding interpretation of this tariff order and/or applicability of this tariff, the decision of the Commission will be final and binding.
- 1.22 No changes in the tariff or the tariff structure including minimum charges for any category of consumer are permitted except with prior written permission of the Commission. Any order without such written permission of the Commission will be treated as null and void and also shall be liable for action under relevant provisions of the Electricity Act, 2003.
- 1.23 In case a consumer, at his request, avails supply at a voltage higher than the standard supply voltage as specified under relevant category, he shall be billed at the rates applicable for actually availed supply voltage and no extra charges shall be levied on account of higher voltage.
- 1.24 All consumers to whom fixed charges are applicable are required to pay fixed charges in each month irrespective of whether any energy is consumed or not.
- 1.25 All conditions prescribed herein shall be applicable notwithstanding if any contrary provisions, exist in the agreement entered into by the consumer with the licensee.
