

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

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



Order on

**ARR & Retail Power Supply Tariff for Electricity Distribution
Business of Special Economic Zone (SEZ) area,
Pithampur of MPAKVN (Indore) Ltd.**

Petition No. 21/2014

PRESENT:

Dr. Dev Raj Birdi, Chairman

A.B. Bajpai, Member

Alok Gupta, Member

IN THE MATTER OF:

**Determination of Aggregate Revenue Requirement and Tariff for the
Financial Year 2015-16 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 2015-16 of the Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited for Special Economic Zone (SEZ) Pithamapur Distt. Dhar MP.	8
3.	Fuel Cost Adjustment charge	33
4.	Wheeling Charges and Cross Subsidy Surcharge	37
5.	Retail Tariff Design	43
6.	Directions to the petitioner	48
7.	Public Objections & Comments	53
8.	Tariff Schedules for Low Tension Consumers (Annexure-1)	63
9.	Tariff Schedules for High Tension Consumers (Annexure-2)	76

ORDER

(Passed on this 23rd Day of March, 2015)

This Order relates to petition no. 21/2014 filed by the MP Audyogik Kendra Vikas Nigam (Indore) Ltd., (hereinafter referred to as “MPAKVN(I)L” or the “petitioner” or the “licensee”) before 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 2015-16. 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 ARR and retail supply tariff for FY 2015-16 latest by October 31, 2014. MPAKVN(I)L filed the petition on 31/10/2014. The Commission held the motion hearing on November 25, 2014. The Commission admitted the petition and directed the petitioner to file clarification, additional data/information as per observations of the Commission within 15 days. In response, the petitioner requested the Commission to allow time up to December 31, 2014 for filing response on the observations raised by the Commission. The Commission considered the request and vide letter dated 17/12/2014 allowed the petitioner to file the clarification, additional data / information by 31/12/2014. The petitioner filed response on 31/12/2014. Vide letter dated 09/01/2015 the Commission directed the petitioner to publish the public notice in newspapers by 13/01/2015 for obtaining the comments / objections / suggestions from the stakeholders. The petitioner was also directed to incorporate the clarification, additional data/information in the petition. The public notice was published on January 13, 2015. Last date for inviting comments / suggestions / objections was February, 4, 2015. The Commission held the public hearing on 10/02/2015.
3. In response to the public notice, two stakeholders i.e. Pithampur Audhogik Sangathan and Madhya Pradesh Power Transmission Company Ltd. Jabalpur filed their suggestions/ comments/ objections. Pithampur Audhogik Sangathan made its submissions in person during the public hearing conducted by the Commission on February 10, 2014.
4. With the filing of the ARR and retail supply tariff petition for FY 2014-15, the petitioner had 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 Accountant. 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. On this basis the Commission had determined the ARR and tariff provisionally for FY 2014-15. The petitioner is required to furnish the audited accounts for FY 2013-14 which has not been furnished. However, the petitioner has filed the actual data (on provisional basis i.e. unaudited) in the petition. In view of the lack of submission of Balance Sheet and Profit and Loss Account of MPAKVN (I) Ltd., Indore for FY 2013-14, the Commission deems it appropriate to consider the audited bases of 2012-13 and the provisional actual data for FY 2013-14 to admit ARR of MPAKVN (I) Ltd. and determine tariff provisionally for FY 2015-16.

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 2015-16 is shown in the table below:

Table 1: ARR filed by the petitioner for FY 2015-16 (Rs. Crore)

Particulars	Amount
Revenue	
Revenue from sale of power	96.45
Expenditure	
Purchase of power	81.77
Inter-state transmission charges	-
Intra-state transmission (MP Transco) charges	4.24
Employee expenses	2.34
R&M expenses	0.87
A&G expenses	1.79
Depreciation and related debits	0.70
Interest & finance charges	2.31
Other debits, write-offs (prior period and misc. expenses written off)	-
<i>Less:</i> Interest and other expenses capitalized	-
Income tax	0.86
RoE	1.13
Total expenses including RoE	96.02
Other income net of DPS	0.11
Total expenses net of other income	95.91
Revenue surplus /(Gap)	0.55

6. The Commission has admitted the ARR for FY 2015-16 as per details shown in the following table:

Table 2: ARR filed and admitted by the Commission for FY 2015-16

Particulars	FY 2015-16	
	As Filed	As Admitted
Sale and Power Purchase Requirement		
Sale MU	220.68	220.68
Distribution loss (%)	3.30%	3.30%
Distribution loss MU	7.53	7.53
Intra state transmission loss (%)	2.99%	3.00%
Intra state transmission loss MU	7.03	7.06
Inter- state losses (%)	0.00%	0.00%
Inter-state losses MU	0.00	0.00
Total power purchase requirement MU	235.24	235.27
Expenditure		
Purchase of power (Rs Crore)	81.77	77.91
Inter-state transmission charges (Rs Crore)	0.00	-
Intra-state transmission (MP Transco) charges (Rs Crore)		3.95
Other power purchase related expenses incl. SLDC charges (Rs Crore)	4.24	0.01
R&M expense (Rs Crore)	0.87	4.99
Employee expenses (Rs Crore)	2.34	
A&G expense(Rs Crore)	1.79	
Total O&M expenses (Rs Crore)	5.00	
MPERC fees (Rs Crore)	0.01	0.01
Depreciation and related debits (Rs Crore)	0.70	0.32
Interest & finance charges(Rs Crore)	2.31	1.39
Other debits, write-offs (prior period and misc. exp written off)	-	-
Less: Interest and other expenses capitalized	-	-
Income tax (Rs Crore)	0.86	0.14
Total expenses(Rs Crore)	94.89	88.73
RoE(Rs Crore)	1.13	0.42
Total expenses including RoE (Rs Crore)	96.02	89.15
Less: Other income(Rs Crore)	0.11	0.32
Total ARR (Rs Crore)	95.91	88.83
Revenue		
Revenue from sale of power (Rs Crore)	96.45	88.83
Revenue surplus / (Gap) (Rs Crore)	0.55	(0.00)

Capital Investment Plan (Capex)

7. The petitioner has filed Capex of Rs. 20.62 Crore for FY 2015-16 in the petition for determination of ARR retail supply tariff. Simultaneously, the petitioner has also filed a

petition (P-02/2015) for approval of Capex of Rs. 23.55 Crore for the period from FY 2014-15 to FY 2018-19. This includes the Capex for FY 2015-16 as submitted in the ARR petition. The Commission held the motion hearing on this petition on 10/02/2015 and observed that the major portion of the Capex is proposed to be taken up during FY 2015-16 therefore, this petition be addressed with the petition filed by MPAKVN(I)L, Indore for determination of ARR and retail supply tariff for FY 2015-16 (Petition No.21/2014) for SEZ Pithampur. At present the Commission has not considered the Capex filed by the petitioner for the period from FY 2014-15 to FY 2018-19 as the petitioner has neither furnished the details of the prospective consumers along with the details of increase in the demand of existing consumers from 32 MW to 50 MW nor the basis for the assumptions in the cost benefit analysis. The petitioner should file the Capex plan as per the appropriate guidelines issued by the Commission in this regard.

Implementation of the Order

8. The Commission has thus accepted the petition filed for determination of ARR and retail supply tariff for FY 2015-16 for SEZ Pithampur with modifications and conditions. The Commission has determined the distribution and retail supply tariffs for various consumer categories based on the ARR as admitted for FY 2015-16. The retail supply tariffs and charges shall be recoverable by the petitioner in its licensed area of supply for FY 2015-16. The tariff determined by this Order for FY 2015-16 shall be applicable from 01st April, 2015 to 31st March, 2016, unless amended or modified by this Commission. It is further ordered that the petitioner is permitted to issue bills to consumers in accordance with the provisions of this Tariff Order and applicable Regulations.
9. 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 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.

10. With this Order, the Commission has disposed of the petition 21/2014 in the matter of determination of ARR and retail supply tariff for FY 2015-16 for SEZ Pithampur and petition 02/2015 in the matter of filing of Capex plan for SEZ Pithampur filed by the petitioner. .

(Alok Gupta)

Member

(A. B. Bajpai)

Member

(Dr. Dev Raj Birdi)

Chairman

Date: 23 March 2015

Place: Bhopal

2 AGGREGATE REVENUE REQUIREMENT FOR FY 2015-16 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 2015-16 on the basis of the historical data of category wise actual sales for the period from FY 2009-10 to FY 2013-14 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 2015-16 is given in the table below:

Table 3: Summary of sales filed by the petitioner for FY 2015-16(MU)

Consumer category	Projected sale
LT consumer categories	
Non-Domestic	0.04
Public Water Works and Street Light	0.41
Industrial	0.11
Total LT Sale	0.56
HT Consumer Categories	
Industrial	220.12
Non-Industrial	0.00
Total HT Sale	220.12
Total LT+HT Sale	220.68

Commission’s analysis of sales:-

- 2.3 For FY 2015-16, the petitioner has projected sale of 220.68 MU which is 6.76% higher than the revised sales submitted for FY 2014-15. The reasons attributed for projection of sale in the petition are the additional requirement from expected addition of new consumers as well as enhancement of load by the existing consumers. The Commission has admitted the sales projection of 220.68 MU as filed by the petitioner for FY 2015-16, as given in the table below:

Table 4: Summary of sales admitted by the Commission for FY 2015-16(MU)

Consumer category	Projected sale
LT consumer categories	
Non-Domestic	0.04
Public Water Works and Street Light	0.41
Industrial	0.11
Total LT Sale	0.56
HT Consumer Categories	

Consumer category	Projected sale
Industrial	220.12
Non-Industrial	0.00
Total HT Sale	220.12
Total LT+HT Sale	220.68

Energy Balance as proposed by the petitioner:-

- 2.4 The commission has observed that in its submission of proposed energy balance for FY 2015-16, the petitioner has submitted total energy sales which are not in consonance with the sales filed by it for FY 2015-16. The commission has considered total energy sales for energy balance filed by the petitioner as per the petitioner's submission of total energy sales. Thus, the petitioner has filed the energy balance for FY 2015-16 as shown in the table below:

Table 5: Energy balance for FY 2015-16 filed by the petitioner

Sr. No.	Particulars	FY 2015-16	
		%	MU
1	Energy sales		
	LT sales		0.56
	HT / EHT sales		220.12
	Total energy sales		220.68
2	Distribution losses	3.30%	7.53
3	Energy requirement at T-D boundary		228.21
4	Intra-state transmission losses	2.99%	7.03
5	Energy requirement at the State periphery		235.24
6	Inter-state transmission losses	0.04%	0.00
7	Total energy requirement		235.24

- 2.5 The petitioner has submitted that the energy balance has been estimated by considering the distribution losses as 3.30% as per the Regulations for distribution and MPPTCL losses of 2.99% as per actual transmission losses for FY 2013-14. The petitioner has further submitted that it has not considered the PGCIL losses for FY 2015-16 as it will be directly procuring power from MP Power Management Co. Ltd. (MPPMCL).

Assessment of Energy Availability by the petitioner:

- 2.6 The petitioner has submitted that it has discontinued all ongoing tie ups for power procurement from Central Generating Stations (CGS) and MPPKVVCL. For FY 2015-16 the petitioner has submitted that it will solely rely on MPPMCL for all future power procurement. The petitioner has informed that for FY 2014-15 there has been an interim arrangement with MPPMCL for supplying 32 MW power as short term power procurement @ Rs.3.16 per unit for which LOI has been issued by MPPMCL. For FY 2015-16 the petitioner has proposed the procurement of 32 MW power from MPPMCL @ Rs. 3.48 per unit. The petitioner has further submitted that

MPPMCL is in process of providing long term power through power purchase agreement to be executed.

2.7 Annual projected availability as filed is shown in the table below:

Table 6: Energy Availability as filed by the petitioner for FY 2015-16 (MU)

Sr. No.	Source	Allocation (MW)	Availability(MU)
1	MPPMCL	32.00	235.24
	Total	32.00	235.24

Assessment of Power Purchase Cost by the petitioner

2.8 Petitioner has considered sourcing of 32 MW of power from MPPMCL at the rate of Rs. 3.48/kWh for FY 2015-16.

2.9 Details of the cost as filed by petitioner for FY 2015-16 are given in the table below:

Table 7: Details of cost filed by the petitioner for FY 2015-16

Sr. No.	Particulars	Power procurement rate (Rs./Unit)	Power to be procured (MU)	Amount (Rs. Crore)
1	MPPMCL	3.48	235.24	81.86*

*The Petitioner has filed Rs. 81.77 Crore

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

Intra - State Transmission Charges

2.10 The petitioner has submitted that for the purpose of calculation of intra-State transmission costs, per MW charges admitted by the Commission in the 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 table below provides the intra-State transmission charges and SLDC charges filed by the petitioner for FY 2015-16:

Table 8: Other elements of power purchase cost filed by the petitioner for FY 2015-16 (Rs Crore)

Sr. No.	Particulars	Amount
1	Inter-state transmission charges	0.00
2	Intra-state transmission charges	4.13
3	SLDC charges	0.11

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

Distribution Losses

2.11 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 given 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%

2.12 Accordingly, for projecting the energy requirement, the Commission has considered 3.30% as distribution losses for FY 2015-16 as mentioned in the above table.

External (PGCIL) Losses

2.13 Since the petitioner is resorting to source the complete requirement of power from MPPMCL, there shall not be any external losses. Accordingly, the inter-State transmission losses have been considered as Nil.

Intra-State Losses

2.14 The Commission has considered intra-State transmission losses as 3.00% for FY 2015-16 as per actual profile of transmission losses for FY 2013-14. The energy balance / power purchase requirement on the basis of the sale admitted by the Commission for FY 2015-16 is presented in the table below:

Table 10: Energy balance admitted by the Commission for FY 2015-16

Sr. No.	Particulars	FY 2015-16	
		%	MU
1	Energy sales		
	LT sales		0.56
	HT / EHT sales		220.12
	Total Energy sales		220.68
2	Distribution losses	3.30%	7.53
3	Energy requirement at T-D boundary		228.21
4	Intra-state transmission losses	3.00%	7.06
5	Energy requirement at State periphery		235.27
6	Total energy requirement		235.27

2.15 For projecting availability from renewable energy source, the petitioner has not made any submission to fulfill Renewable Purchase Obligation (RPO) requirement. 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 2014-15, the Commission had directed the petitioner to ensure RPO compliance as per the aforementioned Regulations and any variation in power purchase costs would be considered during true-up exercise.

2.16 In response, the petitioner has submitted that since MPPMCL is procuring renewable energy along with conventional energy and ensuring RPO compliance as per the Regulations, it may not be required to additionally procure renewable power as per the requirement of MPERC (Co-generation and generation of Electricity from Renewable sources of energy) (Revision-I) regulation, 2010. The petitioner has neither filed any availability nor projected any requirement of power purchase from renewable sources for compliance of RPO for FY 2015-16.

2.17 The Commission has not accepted the argument put forth by the petitioner. The petitioner has to comply with the provisions of the appropriate Regulations in the capacity of a distribution licensee. Therefore, in order to ensure RPO compliance, the Commission has considered procurement of power from renewable energy sources. 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:-

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

2.18 For FY 2015-16 the Commission has specified the minimum percentage of RPO same as had been specified for FY 2014-15. Accordingly, the Commission has computed the quantum of solar and non-solar power purchase requirement based on the total energy requirement admitted by the Commission for FY 2015-16, as shown in the table below:

Table 11: Renewable Energy Requirement computed by the Commission (MU)

Particulars	FY 2015-16
RPO Solar	1.00%
RPO Non Solar	6.00%
Total	7%
Ex-bus requirement	16.47
RPO Solar (MU)	2.35
RPO Non Solar (MU)	14.12
Total (MU)	16.47

2.19 The power purchase requirement has been reduced by the quantum of power considered for purchase from renewable energy sources to fulfill RPO. The energy availability for FY 2015-16 as admitted by the Commission is given in the table below:

Table 12: Ex-bus energy availability as admitted by the Commission for FY 2015-16 (MU)

Sr. No.	Source	Availability(MU)
1	MPPMCL	218.80
2	Renewable Power Purchase	16.47
3	Total	235.27

Power Purchase Costs

2.20 Petitioner has considered sourcing of 32 MW of power from MPPMCL at the rate of Rs. 3.48/kWh for FY 2015-16 to meet the energy requirement of SEZ. The Commission has observed that during FY 2014-15 the petitioner has been procuring the power from MPPMCL @ 3.16 per unit as per the LoI issued by MPPMCL. The long term agreement for sourcing of power for FY 2015-16 is yet to be executed. The petitioner has indicated in the petition that the execution of long term agreement is under process. In the retail supply tariff orders for FY 2012-13, FY 2013-14 and FY 2014-15 the Commission has categorically directed the petitioner to finalise long term arrangements for procurement of power for SEZ after following due prescribed procedure in a transparent manner. The petitioner has an interim arrangement based on the LoI issued by MPPMCL for FY 2014-15. The petitioner has proposed the procurement of power from MPPMCL for FY 2015-16 at the rate of Rs. 3.16 plus 10% i.e. Rs. 3.48 per unit. The petitioner has not submitted any basis for considering the rate at 10% increase from FY 2014-15. Therefore, the Commission has considered the procurement of power @ 3.16/unit for FY 2015-16. Further, the petitioner is directed by the Commission to finalise the

long term power purchase arrangements as envisaged in the petition at the earliest. Any difference in power purchase cost subsequent to finalization of PPA shall be appropriately addressed in the true up.

Purchase from Renewable Energy

- 2.21 The Commission has considered the rate of power purchase from renewable sources of energy as per the petition filed by MPPMCL and distribution licensees for determination of ARR and retail supply tariff for FY 2015-16 subject to finalization at true-up stage. Renewable energy power purchase costs computation is shown in the table below:

Table 13: RE power purchase cost computed by the Commission

Particulars	Renewable Power Purchase		
	Rate	Quantum	Cost
	Rs. /kWh	MU	Rs. Crore
Solar	7.64	2.35	1.80
Non-Solar	4.94	14.12	6.97
Total		16.47	8.77

Intra-state Transmission Charges

- 2.22 The Commission has observed that at present as per the transmission tariff order for FY 2013-14 to FY 2015-16 the transmission capacity allocated to petitioner is 18 MW. Now the petitioner has proposed to source the complete requirement of 32 MW from MPPMCL to meet the energy requirement of SEZ. The intra-State transmission charges in accordance with transmission tariff order for FY 2013-14 to FY 2015-16 dated April 2, 2013 are Rs. 0.1235 Crore per MW per annum for FY 2015-16. Accordingly for 32 MW proposed capacity the transmission charges as admitted by the Commission are shown in the table below:

Table 14: Intra-State transmission charges admitted by the Commission for FY 2015-16 (Rs. Crore)

Sr. No.	Particulars	Amount
1	Intra-state transmission charges	3.95

- 2.23 The Commission directs the petitioner to revise the transmission service agreement with MPPTCL for proposed 32 MW capacity on finalization of PPA with MPPMCL at the earliest.

SLDC Charges

- 2.24 The Commission's Order for SLDC charges for FY 2015-16 is still to be issued.

Therefore, the Commission has considered SLDC charges for FY 2015-16 as admitted in the Commission’s Order for FY 2014-15 subject to true up. SLDC charges admitted by the Commission for FY 2015-16 are shown in the table below:

Table 15: SLDC charges admitted by the Commission for FY 2015-16 (Rs. Crore)

Sr. No.	Particulars	Amount
1	SLDC charges	0.01

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

Table 16: Summary of the total power purchase cost admitted by the Commission for FY 2015-16

Source	Particulars	As filed	As admitted
MPPMCL	Energy (MU)	235.24	218.80
	Amount (Rs. Crore)	81.77	69.14
	Rate (Rs./kWh)	3.48	3.16
RE purchase	Energy (MU)	0.00	16.47
	Amount (Rs. Crore)	0.00	8.77
	Rate (Rs./kWh)	0.00	5.33
Total	Energy (MU)	235.24	235.27
	Amount (Rs. Crore)	81.77	77.91
	Average Rate (Rs./kWh)	3.48	3.31

Pooled Power Purchase Cost

2.26 The Central Electricity Regulatory Commission (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 worked out in the table below:

Table 17: Pooled Power Purchase Cost for FY 2015-16

Sr. No.	Particulars	Amount
1	Power purchase requirement excluding renewable energy sources (MU) ex-bus	218.80
2	Total power purchase cost excluding renewable energy sources (Rs. Crore)	69.14
3	Pooled power purchase cost (Rs./kWh)	3.16

Other Items of ARR

2.27 The petitioner has claimed the expenses against the other items of ARR for FY 2015-16 as shown in the table below:

Table 18: Other items of ARR filed by the petitioner for FY 2015-16 (Rs. Crore)

Particulars	Amount
Employee expenses	2.34
R&M expenses	0.87
A&G expenses including MPERC fees	1.80
Depreciation and related debits	0.70
Interest & finance charges	2.31
Income tax	0.86
RoE	1.13
Other income net of delayed payment surcharge	0.11

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

Capital Expenditure (Capex) and Capitalisation

2.29 The petitioner has submitted that for extending supply to new consumers in phase II of SEZ it has been envisaged to construct a 132/33 kV 63 MVA substation and a 33/11kV 5 MVA substation along with associated transmission lines in the area. Accordingly, the petitioner has submitted Capex of Rs. 20.62 Crore for FY 2015-16. Details of Capex are shown in the table below:

Table 19: Details of Capex for FY 2015-16 submitted by the petitioner

Particular	Unit	Quantity (No.)	Amount (Rs. Crore)
132 KV Line DCDS	KM	1	1.49
132/33 KV S/S, 63 MVA	Nos	1	17.81

33 KV line with Panther conductor	KM	2.5	0.57
New 33/11 KV S/S 5 MVA	Nos	-	
Distribution transformers – 200 KVA New	Nos	6	0.26
33 KV Metering Equipments with meter and modem	Nos	5	0.06
11 KV ME with meter and modem	Nos	1	0.007
HT Energy Meters with modem	Nos	2	0.002
LT Line 3 Ph 5 Wire with LT cable 3X50 Sq. mm. and 2X16 Sq. mm.	KM	4.5	0.22
Replacement of 33 KV VCB	Nos	2	0.04
Replacement of 11 KV VCB	Nos	1	0.01
Street Light Fixtures	Nos	91	0.02
11 KV Capacitor Bank 1500 KVAr	Nos	1	0.13
Total capital investment plan			20.62

2.30 Simultaneously, the petitioner has also filed a petition (P-02/2015) for approval of Capex for the period from FY 2014-15 to FY 2018-19. This petition includes the Capex for FY 2015-16 as submitted in the ARR petition. Details of Capex plan submitted by the petitioner are shown below:

Table 20: Details of Capex for the period from FY 2015-16 to FY 2018-19 submitted by the petitioner (Rs. Crore)

Particular	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	Total
132 KV Line	-	1.49	-	-	-	1.49
132/33 KV S/S	-	17.81	-	-	-	17.81
33 KV line with Panther conductor	2.36	0.57	-	-	-	2.93
New 33/11 KV S/S 5 MVA		-		-	-	-
Distribution transformers – New	-	0.26	-	0.096	0.104	0.46
33 KV Metering Equipments with meter and modem	0.04	0.056	0.047	0.05	0.054	0.25
11 KV ME with meter and modem	0.0063	0.0068	0.0073	0.0079	0.0085	0.04
HT Energy Meters with modem	0.0019	0.0019	0.002	0.0023	0.0024	0.01
LT Line 3 Ph 5 Wire with LT cable 3X50 Sq. mm. and 2X16 Sq. mm.	-	0.22	-	-	-	0.22
Replacement of 33 KV VCB	-	0.04	-	-	-	0.04
Replacement of 11 KV VCB	-	0.01	-	-	-	0.01
Street Light Fixtures	-	0.02	-	-	-	0.02

Particular	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	Total
11 KV Capacitor Bank 1500 KVAr	-	0.13	0.135	-	-	0.265
Total capital investment plan	2.41	20.62	0.19	0.16	0.17	23.55

2.31 Details of capitalization submitted by the petitioner for FY 2014-15(RE) and FY 2015-16 are shown in the table below:

Table 21: Details of Capitalization for FY 2014-15(RE) and FY 2015-16 submitted by the petitioner (Rs. Crore)

S. No.	Particulars	FY 2014-15 (RE)	FY 2015-16
1	Furniture and Fixtures	0.00	0.00
2	Computers	0.00	0.00
3	Buildings	0.00	0.00
4	Plant and Machinery	0.47	2.70
	Total Fixed Asset Addition	0.47	2.70

Commission’s Analysis

2.32 The Commission has deliberated upon the separate petition (P-02/2015) filed for approval of the Capex for the period from FY 2014-15 to FY 2018-19. The Commission has observed that major portion of the Capex is proposed to be taken up during FY 2015-16 only. The Commission held the motion hearing on this petition on 10/02/2015 and in the order dated February 10, 2015, the Commission had stipulated as under:

“ ...

3. The Commission admitted the petition with the direction that this petition be addressed with the petition filed by MPAKVN(I)L, Indore for determination of ARR and retail supply tariff for FY 2015-16 (Petition No.21/2014) for SEZ Pithampur.”

2.33 The Commission has analyzed the capital investment plan submitted by the petitioner for the period from FY 2014-15 to FY 2018-19. The petitioner has submitted that new infrastructure proposed in the Capex plan would cater the expected increase in the demand of SEZ from 32 MW to 50 MW in future along with overall improvement in the quality and reliability in the supply. The Commission has noted that the petitioner has not furnished the details of the increase in the demand from 32 MW to 50 MW. The petitioner has neither furnished the details of the prospective consumers nor the details of increase in the demand of existing consumers in the petition. Further, the basis for the assumptions in the cost benefit analysis is also not furnished. In this situation at present the Commission has not considered the proposed Capex. The petitioner may furnish the Capex plan with the detailed justification in conformity with the Commission’s guidelines for approval of the Commission.

- 2.34 Looking to the past trends and the investments actually made by the petitioner, the Commission has considered it appropriate to admit the capitalization based on past actual GFA addition. The Commission has considered average GFA addition of previous three years i.e., Rs. 0.93 Crore, for admitting the capitalization for FY 2014-15. The same has been considered for FY 2015-16. Average GFA addition of previous 3 years and capitalization for FY 2014-15 and FY 2015-16 is shown in the table below:

Table 22: Actual addition to GFA for the period from FY 2011-12 to FY 2013-14 and capitalization proposed for FY 2014-15 and FY 2015-16 (Rs. Crore)

Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Addition to GFA	1.34	1.31	0.14	0.93	0.93

O&M expenses**Petitioner’s submission****R&M Expenses**

- 2.35 The petitioner has submitted R&M expenses as 5% of the opening GFA for electricity business for FY 2015-16 as per Regulations, as shown in the table below:

Table 23: R&M expenses filed by the petitioner for FY 2015-16 (Rs. Crore)

Particulars	Amount
Opening GFA	15.81
Percentage	5.00%
R&M expenses	0.79

Employee Expenses

- 2.36 The petitioner has considered Rs 0.95 Crore as employee expenses as per the Regulations. The dearness allowance has been considered in addition to these expenses.
- 2.37 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), 2012. As the employee expense is booked in the accounts of the holding company, the cash outflow for terminal benefits is considered at 40%.
- 2.38 The petitioner has 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.
- 2.39 Accordingly, total employee cost filed by the petitioner is shown in the table below:

Table 24: Total employee cost filed by the petitioner for FY 2015-16 (Rs. Crore)

Sr. No.	Particulars	Amount
1	Employee expenses excluding arrears, DA, terminal benefits and incentives	0.95
2	Arrears	0.16
3	DA	0.64
4	Terminal benefits	0.46
5	Total employee cost	2.34

A&G Expenses

- 2.40 The petitioner has filed Administrative and General (A&G) expenses as per the Regulations as given in the table below:

Table 25: A&G expenses filed by the petitioner for FY 2015-16 (Rs. Crore)

Particulars	Amount
A&G expenses	1.79
MPERC fees	0.01

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

- 2.41 The petitioner has also submitted that it has entered into an agreement with MPPKVVCL, Indore (West Discom) 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 the Dhar District. The agreement also provides for 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 agreement provides for annual escalation at 7.93% on O&M expenses and at 8% on consultancy fees. Accordingly, the petitioner has requested the Commission to allow the total O&M expenses for FY 2015-16 as given in the table below:

Table 26: O&M expenses as per agreement with MPPKVVCL filed by the petitioner for FY 2015-16(Rs. Crore)

Sr. No.	Particulars	Amount
1	Fees for O&M expenses	4.62
2	Fees for consultancy services	0.38
3	Total as per agreement	5.00

Commission's Analysis of O&M expenses

- 2.42 The Commission had already considered the contract between the petitioner and MPPKVVCL, Indore in the tariff order of FY 2013-14 dated September 10, 2013. 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.”

- 2.43 Accordingly, for FY 2014-15 the Commission had already considered escalation on O&M expenses of 7.93% and consultancy fee of 8% as admitted in the tariff order of FY 2013-14. For FY 2015-16, on same premise the Commission has admitted O&M expenses and consultancy fee as Rs. 4.62 Crore and Rs. 0.37 Crore, total Rs. 4.99 Crore.

MPERC Fees

- 2.44 As regards MPERC fees for FY 2015-16, the petitioner has submitted that it has estimated the MPERC fees as per the provisions of the Regulations as Rs. 0.01 Crore. The same has been admitted by the Commission.

Depreciation

Petitioner’s submission

- 2.45 The petitioner has considered the depreciation rate specified by the Commission in the Regulations for computing the depreciation. 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 2014-15 and FY 2015-16 is shown in the tables below:

Table 27: Depreciation during the year filed by the petitioner for FY 2014-15(RE) and FY 2015-16 (Rs. Crore)

Particulars	FY 2014-15(RE)	FY 2015-16
Furniture & Fixtures	0.002	0.002
Computers	0.013	0.026
Buildings	0.068	0.068
Plant & Machinery	0.620	0.865
Total	0.704	0.961

- 2.46 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 28: Details of consumer contribution and amortization during the year filed by the petitioner for FY 2015-16 (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	0.67	2.23	0.12
FY 2010-11	2.23	1.06	3.30	0.17
FY 2011-12	3.30	0.68	3.98	0.21
FY 2012-13	3.98	0.12	4.10	0.22
FY 2013-14	4.10	0.41	4.51	0.24
FY 2014-15(RE)	4.51	0.25	4.76	0.25
FY 2015-16	4.76	0.26	5.02	0.26

2.47 Accordingly, net depreciation on GFA for FY 2014-15 (RE) and FY 2015-16 after reducing amortization on consumer contribution is shown in the table below:

Table 29: Net depreciation filed by the petitioner for FY 2014-15 (RE) and FY 2015-16 (Rs. Crore)

Particulars	FY 2014-15(RE)	FY 2015-16
Depreciation and related debits	0.70	0.96
<i>Less:</i> Consumer contribution amortized	0.25	0.26
Net depreciation and related debits	0.45	0.70

Commission’s Analysis of depreciation

2.48 For working out the depreciation for FY 2015-16, the Commission has considered weighted average depreciation rate of 4.92% for FY 2014-15 and 4.31% for FY 2015-16 as per the submission in the petition. Accordingly, the Commission has admitted gross depreciation for FY 2014-15 and FY 2015-16 as shown in the table below:

Table 30: Gross depreciation expenses admitted by the Commission for FY 2015-16 (Rs. Crore)

Sl. No	Particulars	GFA			Depreciation during the year
		Opening	Addition during year	Closing	
1	FY 2014-15	12.09	0.93	13.01	0.62
2	FY 2015-16	13.01	0.93	13.94	0.58

2.49 Further, the Commission has admitted amortization during the year on the assets capitalised from the consumer contributions for FY 2015-16 as Rs 0.26 Crore as shown in the table below:

Table 31: Amortisation on consumer contribution admitted by the Commission for FY 2015-16 (Rs. Crore)

Particulars	FY 2014-15	FY 2015-16
Opening consumer contribution (closing of FY 2013-14)	4.51	4.76
Addition during the year	0.25	0.26
Deduction	0.00	0.00
Closing consumer contribution	4.76	5.02
Depreciation		0.26

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

Table 32: Net depreciation expenses admitted by the Commission for FY 2015-16 (Rs. Crore)

Particulars	FY 2015-16
Depreciation and related debits	0.58
Less: Consumer contribution amortized	0.26
Net depreciation admitted	0.32

Interest and Finance Charges

Interest on Project Loans

Petitioner’s submission

2.51 The petitioner has stated that it has not borrowed any capital loan. As per the provisions in the Regulations, 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 33: Interest on normative project loan filed by the petitioner for FY 2015-16 (Rs. Crore)

Sl. No.	Particulars	Amount
1	FY 2012-13	
	Debt associated with GFA as on the beginning of the year	3.54
	70% of addition to net GFA considered as funded through debt	0.80
	Repayment during the year	0.36
	Total debt associated with GFA at the end of the year	3.97
2	FY 2013-14	
	Debt associated with GFA as on the beginning of the year	3.97
	70% of addition to net GFA considered as funded through debt	(0.02)
	Repayment during the year	0.39

Sl. No.	Particulars	Amount
	Total debt associated with GFA at the end of the year	3.57
3	FY 2014-15	
	Debt associated with GFA as on the beginning of the year	3.57
	70% of addition to net GFA considered as funded through debt	3.01
	Repayment during the year	0.45
	Total debt associated with GFA at the end of the year	6.12
4	FY 2015-16	
	Debt associated with GFA as on the beginning of the year	6.12
	70% of addition to net GFA considered as funded through debt	7.95
	Repayment during the year	0.70
	Total debt associated with GFA at the end of the year	13.38
5	Rate of interest & finance charges	10%
6	Interest & finance charges on normative basis for project loans	1.34

Commission’s Analysis of Interest and Finance Charges

2.52 The Commission has noted from the records filed by the petitioner that the petitioner has not borrowed any loan. Therefore, there is no interest burden on the petitioner. As regards equity in excess of 30% of capital contribution, 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.”

2.53 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.

2.54 The Commission has considered the debt associated with GFA as on the beginning of the year for FY 2014-15 as per the GFA submitted by the petitioner for FY 2014-15. The Commission has therefore computed the total debt associated with GFA at the end of the year as per the provisions of regulation.

2.55 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. As per regulation 31.5 of MPERC tariff regulation, 2012

*“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.”

- 2.56 Accordingly, the Commission has considered the average interest rate of long term loans of distribution licensees of Madhya Pradesh. As the tariff order for distribution licensees of Madhya Pradesh for FY 2015-16 has yet not been passed; the Commission has considered the average interest rate for the petitioner on the basis of of long term loans of distribution licensees of Madhya Pradesh admitted in tariff order for FY 2014-15, i.e., 10.20%. Details of the normative loan and interest admitted are shown in the table below:

Table 34: Interest on normative project loan admitted by the Commission for FY 2015-16 (Rs. Crore)

Particular	FY 2014-15	FY 2015-16
Debt Associated with GFA as on the beginning of the year (Net of consumer contribution)	3.57	3.67
Addition to net debt	0.65	0.65
Consumer Contribution addition	0.18	0.18
Repayment during the year	0.37	0.32
Total debt associated with GFA at the end of the year	3.67	3.82
Weighted average interest rate of M.P Discoms	10.20%	10.20%
Interest on project loans(normative)	0.37	0.38

Interest on Working Capital Loan

Petitioner’s submission

- 2.57 The petitioner has not indicated any requirement of working capital during FY 2015-16 and therefore has not worked out any interest on working capital.

Commission’s Analysis of Interest on Working capital

- 2.58 Regulations specify 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 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 35: Interest on Working Capital admitted by the Commission for FY 2015-16(Rs. Crore)

Sl. No.	Particulars	Amount
For wheeling activity		
A)	1/6th of annual requirement of inventory for previous year	0.02
B)	Total O&M expenses	5.00
B) i)	1/12th of total	0.42
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))	0.44
E)	Rate of interest	13.50%
F)	Interest on working capital	0.06
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	88.83
B) ii)	Receivables equivalent to 2 months average billing	14.80
C)	Power purchase expenses	77.91
C) i)	1/12th of power purchase expenses	6.49
D)	Consumers security deposit	11.24
E)	Total working capital (A+B ii) - C i) - D)	(2.93)
F)	Rate of interest	13.50%
G)	Interest on working capital	(0.40)
Summary		
1	For wheeling activity	0.06
2	For retail sale activity	(0.40)
	Total interest on working capital	(0.34)
	Total interest on working capital admitted	Nil

Interest on consumer security deposits

- 2.59 The petitioner has claimed Rs 0.96 Crore against interest on security deposit for FY 2015-16 @ 8.50%. 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 36: Interest on Consumer Security deposit admitted by the Commission for FY 2015-16 (Rs. Crore)

Sl. No.	Particulars	Amount
1.	Consumer security deposit	11.40
2.	Interest amount claimed	1.00

Bank charges

2.60 The Petitioner has claimed Rs. 0.01 Crore for FY 2015-16 against bank charges. The Commission has admitted the bank charges of Rs. 0.01 Crore claimed by the petitioner.

Summary of the interest and finance charges as filed and as admitted are given in table below:

Table 37: Interest and Finance charges as filed and admitted by the Commission for FY 2015-16 (Rs. Crore)

Sl. No.	Particulars	2015-16	
		As filed	As admitted
1.	Interest on project loans	1.34	0.38
2	Interest on working capital loan	0.00	0.00
3	Interest on consumer security deposit	0.96	1.00
4.	Bank charges	0.01	0.01
5.	Total	2.31	1.39

Return on Equity

Petitioner’s submission

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

Table 38: Return on Equity filed by the petitioner for FY 2015-16 (Rs. Crore)

Particulars	Amount
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	0.34
Total equity associated with GFA at the end of the year	2.34
FY14	
Equity associated with GFA as on the beginning of the year	2.34
30% of addition to net GFA considered as funded through equity	0.01
Total equity associated with GFA at the end of the year	2.35
FY15	
Equity associated with GFA as on the beginning of the year	2.35
30% of addition to net GFA considered as funded through equity	1.30
Total equity associated with GFA at the end of the year	3.65
FY16	
Equity associated with GFA as on the beginning of the year	3.65

Particulars	Amount
30% of addition to net GFA considered as funded through equity	3.42
Total equity associated with GFA at the end of the year	7.07
Return on Equity @ 16%	1.13

Commission’s Analysis of Return on Equity

2.62 Based on the net equity identified with GFA and consumer contribution, the RoE admitted by the Commission for FY 2015-16, as per the Regulations is shown in the table below:

Table 39: RoE admitted by the Commission for FY 2015-16(Rs Crore)

Particulars	FY 2014-15	FY 2015-16
Equity associated with GFA as on the beginning of the year	2.34	2.54
30% of addition to net GFA considered as funded through equity	0.28	0.28
30% of consumer contribution added during the year	0.08	0.08
Total equity associated with GFA at the end of the year	2.54	2.74
Average equity associated with GFA at the end of the year	2.44	2.64
Return on equity @ 16%	0.39	0.42

Bad & Doubtful Debts

2.63 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

2.64 The petitioner has claimed Rs. 0.86 Crore against the income tax as shown in the table below:

Table 40: Income Tax claimed by the petitioner for FY 2015-16 (Rs Crore)

Sl. No.	Particular	Amount
1.	Income tax	0.86

Commission’s Analysis of Income tax

2.65 As regards Income tax for FY 2015-16, 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 41: Income Tax claim admitted by the Commission for FY 2015-16 (Rs Crore)

Sl. No.	Particular	Amount
1.	Admitted return on equity (Rs. Crore)	0.42
2.	Income tax (Rs. Crore) @ 33.99% of RoE	0.14

Other Income

Petitioner’s submission

2.66 The petitioner has submitted the other income of Rs. 0.11 Crore as shown in the table below:

Table 42: Other Income filed by the petitioner for FY 2015-16 (Rs. Crore)

Sl. No.	Particular	FY 2014-15 (RE)	FY 2015-16
1	Other income for ARR	0.12	0.11

Commission’s analysis of other income

2.67 The Commission has considered the average of past 3 years of various items under other income to compute the other income for FY 2014-15 except for Misc. charges from consumers (Supply affording charges, Supervision Charges etc).The Commission has noticed that the petitioner has considered lower income under miscellaneous charges though the load in HT category has been projected to be increased significantly in FY 2015-16. In this regard, the Commission has appropriately considered income under Misc. charges from consumers (Supply affording charges, Supervision Charges etc) in other income. 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 2015-16. The Commission has admitted other income for FY 2015-16 as shown in the table below:

Table 43: Other Income admitted by the Commission for FY 2015-16 (Rs. Crore)

Particulars	FY 2015-16	
	As Filed	As Admitted
Other Non Tariff Income		
Other Miscellaneous receipts	0.02	
Street light Charges	0.00	
Power Application processing fees	0.00	
Meter Rent	0.09	
Recovery from theft of energy	0.00	
Misc. charges from consumers (Supervision and supply affording Charges etc.)	0.21	
Total	0.32	

Revenue from Sale of Power

2.68 The petitioner has projected revenue income of Rs. 96.45 Crore for FY 2015-16 based on existing tariff while the Commission has computed revenue at existing tariff for FY 2015-16 as Rs. 89.49 Crore. The Commission has revised the tariff to match the annual revenue requirement of the petitioner as admitted by the Commission for FY 2015-16. The revenue from the revised tariff works out to Rs 88.83 Crore.

ARR filed and admitted for FY 2015-16

2.69 The Commission has determined the prudent expenses against components of the ARR for FY 2015-16 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 44: ARR as filed by the petitioner and as admitted by the Commission for FY 2015-16

Particulars	FY 2015-16	
	As Filed	As Admitted
Sale and Power Purchase Requirement		
Sale MU	220.68	220.68
Distribution loss (%)	3.30%	3.30%
Distribution loss MU	7.53	7.53
Intra state transmission loss (%)	2.99%	3.00%
Intra state transmission loss MU	7.03	7.06
Inter- state losses (%)	0.00%	0.00%
Inter-state losses MU	0.00	0.00
Total power purchase requirement MU	235.24	235.27
Expenditure		
Purchase of power (Rs Crore)	81.77	77.91
Inter-state transmission charges (Rs Crore)	0.00	
Intra-state transmission (MP Transco) charges (Rs Crore)		3.95
Other power purchase related expenses incl. SLDC charges (Rs Crore)	4.24	0.01
R&M expense (Rs Crore)	0.87	

Particulars	FY 2015-16	
	As Filed	As Admitted
Employee expenses (Rs Crore)	2.34	4.99
A&G expense(Rs Crore)	1.79	
Total O&M (Rs Crore)	5.00	
MPERC fees (Rs Crore)	0.01	0.01
Depreciation and related debits (Rs Crore)	0.70	0.32
Interest & finance charges(Rs Crore)	2.31	1.39
Other debits, write-offs (prior period and misc. exp written off)	-	-
Less: Interest and other expenses capitalized	-	-
Income tax (Rs Crore)	0.86	0.14
Total expenses(Rs Crore)	94.89	88.73
RoE(Rs Crore)	1.13	0.42
Total expenses including RoE (Rs Crore)	96.02	89.15
Less: Other income(Rs Crore)	0.11	0.32
Total ARR (Rs Crore)	95.91	88.83
Revenue		
Revenue from sale of power (Rs Crore)	96.45	88.83
Revenue surplus / (Gap) (Rs Crore)	0.55	(0.00)

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

3 FUEL COST ADJUSTMENT CHARGE

- 3.1 The Commission has observed that the petitioner has proposed to procure the power from MPPMCL and not from any generator directly. In this case the fuel cost adjustment charge shall not be applicable. If the petitioner resorts to procure the power directly from a generator the FCA charges as stipulated below would be applicable.
- 3.2 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.
- 3.3 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.

- 3.4 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.
- 3.5 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.

- 3.6 FCA charge shall be uniformly applicable to all categories of consumers of the petitioner.
- 3.7 The responsibility of working out the rate of FCA every quarter shall rest with the petitioner.
- 3.8 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 45: Format for FCA charge

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

- 3.9 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.
- 3.10 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.

3.11 The petitioner shall commence billing of FCA charge from the first day of the billing quarter.

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

3.13 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 MPPTCL System and normative distribution losses as per this Tariff Order of the Commission are indicated in the table below:

Table 46: PGCIL, MPPTCL and distribution losses %

Sr. No.	Month/Year	MPPTCL Losses**	Distribution Losses***
		%	%
1	November, 14	2.97%	3.50%
2	December, 14	2.97%	3.50%
3	January, 15	2.97%	3.50%
4	February, 15	2.97%	3.50%
5	March, 15	2.97%	3.50%
6	April, 15	3.00%	3.30%
7	May, 15	3.00%	3.30%
8	June, 15	3.00%	3.30%
9	July, 15	3.00%	3.30%
10	August, 15	3.00%	3.30%
11	September, 15	3.00%	3.30%
12	October, 15	3.00%	3.30%
13	November, 15	3.00%	3.30%

Sr. No.	Month/Year	MPPTCL Losses**	Distribution Losses***
14	December, 15	3.00%	3.30%
15	January, 16	3.00%	3.30%
16	February, 16	3.00%	3.30%
17	March, 16	3.00%	3.30%

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. 6.28 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. Similar is the case with other Govt. owned Distribution Companies.
- 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 is given below:

Table 47: Identification of asset value

Voltage level of Lines	Cumulative length of lines	Per unit cost (Lakh Rs./ckt-km)	Total Cost of lines (Rs. Crore)
33 kV	24.60	12.92	3.18
Below 33 kV			
11 kV	12.00	9.17	1.10
LT	5.00	5.20	0.26
Sub-total			1.36
Total			4.54

Table 48: 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	36.73	1.84
11/0.4 kV Transformer	2.80	2.52 per 100 KVA	0.07
Total			1.91

4.7 For the purpose of above, the data for length of lines and transformation capacity is as supplied by the petitioner as part of their filings.

4.8 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 49: 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	3.18	1.84	5.02
Below 33 KV	1.36	0.07	1.43
Total	4.54	1.91	6.45

4.9 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 50: 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	5.02	77.80%	6.28	4.88
Below 33 kV	1.43	22.20%		1.40
	6.45	100.00%		

Sharing of Wheeling costs

4.10 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.

4.11 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 51: Allocation of wheeling cost over distribution system users

	Particulars	Rs Crore
A	Wheeling Cost at 33 kV- Rs Crore	4.88
B	Sales at 33 kV (MU)	219.62
C	Total Sales (MU) { HV + LV }	220.68
D	Proportion of 33 kV sales to total sales	99.52%
	Cost allocation	
E	Wheeling cost of 33 kV allocated to 33 kV users only (A*D)--Rs. Crore	4.86

4.12 The wheeling cost allocated to 33 kV thus works out to Rs. 4.86 Crore. Based on this allocation and considering the consumption at 33 kV, the wheeling charges in Rupees per unit are determined as below :

Table 52: Wheeling Charges

Voltage	Wheeling Cost allocated (Rs. Crore)	Sales (MU)	Wheeling charges (in Rs./unit)
HT	-	-	-
33KV	4.86	219.62	0.22

Applicability of wheeling charges under different scenarios

4.13 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.

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

Determination of Cross-Subsidy Surcharge

4.15 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.

- 4.16 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 2015-16 is 235.27 MU. The top 5% at the margin requirement shall be 11.76 MU which shall be met from supply by the MPPMCL at Rs 3.16 per unit.
- 4.17 The average tariff for HV industrial consumers works out to Rs.4.02 per unit.
- 4.18 Tariff Policy specifies that the Loss level (term ‘L’) should be worked out for each voltage level separately. Losses at each voltage level are assumed as below for this purpose because of non-availability of required reliable data with the Discoms:

Table 53 : Voltage-wise losses

Voltage Level	Loss level (L)
EHT (transmission system) including External losses	-
33 kV (only 33 kV system)	3.26%

- 4.19 The cost of transmission shall be uniformly spread over all consumers at every voltage level, as the transmission network is utilized by all consumers. Therefore, similar to wheeling costs, the admitted transmission charges for FY 2015-16 are worked out as under:-

Table 54 : Transmission Charges

Particulars	Rs. Crore
PGCIL Charges	-
MPPTCL Charges	3.95
Total Charges	3.95
Units to be handled by MPPTCL	235.27
Transmission Charges per unit	0.17

- 4.20 As per the MPERC (Open Access) Regulations, 2005, the consumers with contract demand of 1 MW or above are allowed open access w.e.f. 1st October, 2007. These consumers are to be connected at 33 KV or above as per Madhya Pradesh Electricity Supply Code, as amended from time to time.
- 4.21 In accordance with the above, the total cost (Rs/unit) for various categories of HT consumers having contract demand of 1 MW or above at 132 kV/33 kV under

various scenario are worked out as detailed in the table below (“scenario wise cost”). The Cross-Subsidy Surcharge shall be the difference of average tariff and the total cost (Rs/unit) for the particular category at particular voltage. The category wise average tariff as per Tariff Order for FY 2015-16 is given in the table below (“category wise average tariff”). For example, for LV Non-domestic the average tariff for FY 2015-16 as per tariff order works out to Rs. 4.99 per unit and total cost works out to Rs. 3.66 per unit. Therefore, Cross-Subsidy Surcharge shall be Rs. 4.99 – Rs. 3.66 = Rs. 1.33 per unit. However, in case where cross-subsidy surcharge, based on above methodology, works out as negative, the same shall be considered as zero for billing purposes.

4.22 Aforementioned wheeling charges and cross subsidy surcharges are not applicable to consumers availing open access from renewable sources of energy.

Table 55 : Scenario wise cost (Rs. per unit)

Scenario	Cost of Power at 5% Margin	Cost of Power grossed up for distribution losses (3.26%)	Cost of Power grossed up for transmission losses (Nil)	Transmission charges	Wheeling charges	Total Cost
						[C(1+L/100)+D]
1	3.16	-	-	0.17	0.22	3.55
2	3.16	3.27	-	0.17	0.22	3.66

Table 56 : Category wise average tariff (Rs. per unit)

Category of HT/EHT consumers	Average Tariff 'T'
LV 1: DOMESTIC	-
LV 2: NON-DOMESTIC	4.99
LV 3: PUBLIC WATER WORKS AND STREET LIGHTS	4.25
LV 4: LT INDUSTRY	4.33
HV-1: INDUSTRIAL AND NON-INDUSTRIAL	
33kV	4.02
11kV	4.94
HV-2: HT IRRIGATION AND WATER WORKS	-

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 Voltage-wise Cost of Supply

- 5.3 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 & Another. 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.”

...

“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.”

- 5.4 As can be seen from the above extract of the Hon’ble Appellate Tribunal’s Judgment, the Hon’ble Tribunal has ruled that the voltage-wise cost of supply should be used to evaluate the cross-subsidy percentage for the consumers on a particular voltage level. 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 distribution 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 can be equitably apportioned based on their energy consumption.
- 5.5 In view of the above, the Commission has endeavoured to determine the voltage wise cost of supply with all the constraints of 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 the nature and not very accurate, as the base data for the same need to be duly culled out on actual. Thus for the purpose of determination of voltage wise losses, the Commission has considered the losses as entirely technical nature since there is no commercial losses in the petitioner area as submitted by the petitioner. Further, for determination of voltage wise cost of supply, the Commission has adopted the following methodology:

- (i) Voltage wise cost of supply has been computed for 33 kV and 11 kV & below categories only as currently petitioner has no consumer above 33 kV.
- (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 the same as specified by the Commission in tariff regulation, 2012 for FY 2015-16. i.e. 3.30%
- (iv) No Commercial loss has been considered as submitted by the petitioner.
- (v) Total loss as admitted by the Commission has been segregated voltage level wise for 33 kV and 11 kV & below in the same 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 to each voltage-level.
- (vii) Voltage wise total cost derived has been divided by voltage wise sales for working out the voltage wise cost of supply

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

Table 57: Broad computation of voltage-wise cost of supply

SL No	Particular		33 KV System	11 KV + LT System	Total
1	Sales admitted	MU	219.62	1.06	220.68
2	Technical Losses as per submission	%	3.26%	11.25%	3.30%
3	Energy Input as per submission	MU	227.02	1.19	228.21
4	Energy Input admitted	MU	227.02	1.19	228.21
5	Total Technical Losses admitted as per Regulations	%	3.26%	11.25%	3.30%
6	Commercial Losses	%	0.00%	0.00%	0.00%
7	Admitted power purchase cost at Discom periphery - allocated based on voltage-wise losses	Rs. Crore	81.45	0.43	81.87
8	Other costs - allocated based on voltage-wise	Rs. Crore	6.92	0.03	6.95
9	Total Costs (ARR requirement)	Rs. Crore	88.36	0.46	88.83

SL No	Particular		33 KV System	11 KV + LT System	Total
10	VCoS	Rs. /kWh	4.02	4.36	4.03
11	ABR	Rs. /kWh	4.02	4.61	
12	Cross subsidy		100%	106%	

5.7 Category wise cross-subsidy reduction admitted by the Commission for FY 2015-16 is shown in the table below:

Table 58: Cross subsidy based voltage-wise cost of supply for FY 2015-16

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	4.36	4.99	115
LV 3 : Public Waterworks & Streetlights		4.25	98
LV 4 : LT Industry		4.33	99
HT CATEGORIES			
HV-1: INDUSTRIAL			
HV 1.1: Industrial Use			
33 kV	4.02	4.02	100
11 kV	4.36	4.94	113

5.8 It is pertinent to mention here that in determination of retail tariff in this order for various consumer categories, the category wise cross subsidy has been kept within +/- 20% of overall average cost of supply in line with the provisions of the Tariff policy.

Retail tariff categories

5.9 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.

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, Tariff Policy, relevant Rules and Regulations notified, amended from time to time and 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 2014-15, 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 taken a note of the Commission's directive in this regard and will ensure timely submission of the petition.

Commission's observations/directions: The petitioner filed the petition for determination of ARR and retail supply tariff for FY 2015-16 as per schedule i.e. on 31st October 2014.

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 entered into a power procurement arrangement from Madhya Pradesh Power Management Company Limited (MPPMCL) for firm power of 32 MW on round the clock basis. The petitioner has further indicated that this is an interim arrangement with MPPMCL and MPPMCL is in the process of providing long term power for which the draft PPA is being prepared and shall be submitted to the Commission for approval by MPPMCL.

Commission's observations/directions: The Commission has observed that requisite PPA as indicated by the petitioner in its response is yet to be executed. Presently during FY 2014-15 the petitioner is resorting to the electricity requirement of SEZ area through a short term interim arrangement for supply of 32 MW power up to 31st March 2014. The petitioner is yet to finalise a long term power procurement arrangement. Such long term arrangements would not only ensure certainty of supply sources for longer duration but would also help in reducing power purchase costs. 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. The Commission directs the petitioner to take urgent steps to expedite the process for availing required power on long term basis. Further, subsequent to finalization of long term power purchase arrangement, the petitioner should also finalise the transmission service agreement with MP Power Transmission Co. Ltd. The petitioner should report the status to the Commission on a monthly basis till the agreements are executed.

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 is regularly submitting the energy audit reports and ensuring 100% compliance with this directive.

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

6.6 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 submitted that it is in the process of segregating the accounts for power business from its book of accounts and will subject the same for the Commission’s prudence check once the same is available.

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. The petitioner is in process of segregating its accounts for power business from comprehensive accounts of MPAKVN(I)L on apportionment basis on some assumptions and are not based on actual expenses against the items of power business but the same has also not been achieved by the petitioner. 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 its distribution assets in any way to support other business. The response of the petitioner in the matter is not acceptable. The Commission directs the petitioner to ensure compliance of the directives on this issue in letter and spirit.

6.7 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 has made a note of the petitioner’s submission and directs the petitioner to ensure timely compliance in future also.

6.8 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 the Capex Plan for FY 2015-16 has been submitted before the Commission on August 2014.

Commission's observations/directions: The petitioner had informed the Commission through a letter dated 27/08/2014 about the Capex plan for FY 2015-16. The Commission directed the petitioner to file appropriate petition for approval of Capex plan, which the petitioner filed on 30/12/2014. The Commission admitted the petition and addressed the same in this order. The petitioner is directed to submit the physical and financial progress of Capex plan to Commission on quarterly basis.

6.9 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 has submitted that it has taken all necessary steps to provide quality and reliable power supply to its consumers and enjoys the privilege of achieving loss levels well below the benchmarks set by the Commission for the petitioner. The petitioner further submitted that it will ensure to carry forward its performance in this regard in the future.

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 in future also.

6.10 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 it is still awaiting the judgment of Hon'ble APTEL in this regard.

Commission's observations/directions: The appeal filed by the petitioner in Hon'ble APTEL has been dismissed. The petitioner has now preferred an appeal before Hon'ble Supreme Court of India. Commission has observed that matter is since sub-judiced, it would be appropriate to wait for the judgment of the Hon'ble Supreme Court.

6.11 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 has submitted that since MPPMCL is procuring renewable energy along with conventional energy and ensuring RPO compliance as per the Regulations (reference letter no. GM(PM)/MPAKVN/Sale 14-15/868), it may not be required to additionally procure renewable power as per the requirement of MPERC (Co-generation and generation of Electricity from Renewable sources of energy) (Revision-I) regulation, 2010.

Commission’s observations/directions: The Commission has taken a note of the submission. In the capacity of a distribution licensee the petitioner needs to comply with MPERC (Co-generation and generation of Electricity from Renewable sources of energy) (Revision-I) regulation, 2010. While determining power purchase requirement and costs in this tariff order, the Commission has appropriately considered RPO. The requirements of energy to fulfill RPO and its costs have been included in the ARR. Accordingly; the petitioner should make timely arrangements for purchase of renewable power to ensure that RPO is duly fulfilled.

6.12 Capitalisation as per MPERC tariff Regulations

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

Response: The petitioner has submitted that the accounts for FY 2013-14 are being prepared and therefore, the past trend of capitalization of assets in a year could not be arrived at. For the purpose of ARR petition of FY 2015-16, the petitioner submitted that it has assumed that the capital expenditure of FY 2015-16 will be capitalized in FY 2015-16. The petitioner further submitted that any variation in the same will be considered at the time of true-up.

Commission’s observations/directions: The Commission has considered the capitalization achieved by the petitioner in past years as a base for the purpose of determination of expenses in ARR in this order. Any difference would appropriately be addressed at the time of true up.

6.13 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.

Response: The petitioner requested the Commission to condone the delay in filing the true-up petition for FY 2012-13 and submitted that it will be filing the true-up petition for FY 2012-13 very soon.

Commission’s observations/directions: The Commission has observed that the true up petition for FY 2013-14 has also become due. The Commission directs the petitioner to file the true up petitions for FY 2012-13 and 2013-14 latest by 30th June 2015.

7 PUBLIC OBJECTIONS & COMMENTS ON LICENSEE’S PETITION

- 7.1 The petition was filed on October 31, 2014. The Commission directed the petitioner to publish the gist of ARR/Tariff proposal in the newspapers to invite comments/objections/suggestions from the stakeholders by February 04, 2015. Two comments/objections/suggestions from the Pithampur Audyogik Sangathan, Indore and the Madhya Pradesh Power Transmission Company Ltd. 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 10, 2015 at the office of the Commission. M/s Pithampur Audyogik Sangathan, Indore participated during the public hearing.
- 7.3 Suggestions from the objectors and response of the petitioner thereon are summarized in the following paragraphs.

Issue No.1: Non-submission of True-up petitions.

Issue raised by objector:

Objector has submitted that in spite of Commission’s directions on submission of true-up petition for FY 2012-13 by February 2014, the same is yet to be submitted. Further, the petition for true up of FY 2013-14 is also yet to be submitted. By not submits the true up costs, the petitioner seems to be unwilling to share profits with the consumers. The forecast for FY 2014-15 (RE) and FY 2015-16 in the petition for FY 2015-16 would also be affected as actual expenses could have formed the basis of forecast.

Response from Petitioner:

The petitioner has submitted that the matter is on record.

Commission’s view:

The issue has already been taken up by the Commission under chapter -6 “Directions to the Petitioner” in this order. The petitioner has been directed to file the true up petitions for FY 2012-13 and 2013-14 latest by 30th June 2015, failing which the Commission may initiate action under section 142 of Electricity Act 2003.

Issue No.2: Long Term Agreement.

Issue raised by objector:

Objector has submitted that despite directions given by the Commission on submission of Long Term Power Purchase Agreement before April 1, 2013, the same is yet to be submitted. The rate of power purchase considered by the petitioner is high and has no transparency. Power is being procured at lower rates by industries through power exchanges and traders.

Objector has further submitted that the rate is exclusive of UI energy charges and applicable charges. Since the load of Pithampur SEZ is fixed in nature and forms a small component of the total load of the Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company, no UI charges are to be payable.

The petitioner has now proposed to procure 32 MW on firm basis, the Commission is requested to direct the petitioner to undertake a Long Term Agreement with MPPTCL for capacity of 32 MW.

Response from Petitioner:

The petitioner has submitted that it has considered the existing rate of Rs. 3.16 per unit as the base for projection of power purchase costs for FY 2015-16. The existing contract is valid till March 31, 2015. Considering the ever increasing power purchase cost, the petitioner has estimated 10% increase on the approved rate of power purchase for FY 2014-15. The petitioner has further submitted that it is pursuing the Long Term Power Purchase Agreement from MPPMCL and requested that any change in the power purchase rate for FY 2015-16 be adjusted at the time of true-up. As the licensee is yet to enter into Long Term Power Purchase Agreement with MPPMCL and procurement cost of power purchase in short term will be high in nature, the petitioner requested the Commission to consider the power purchase cost at Rs. 3.48 per unit.

Commission's view:

The issue of Long Term Power Purchase Agreement has already been taken up by the Commission under chapter - 6 "Directions to the Petitioner" in this order. The petitioner has already been directed to finalise the long term arrangements for procurement of power for SEZ at the earliest. The of power purchase cost has also been deliberated in detail at Chapter – 1 "ARR for FY 2015-16 under power purchase cost, wherein the Commission has admitted rate of power purchase as Rs. 3.16 per unit.

Issue No.3: Maintenance of Separate Accounts for Power Business.

Issue raised by objector:

Objector has submitted that despite the directions of the Commission in the previous tariff orders, the petitioner is not maintaining separate accounts for power business. Objector has suggested disallowance of certain expenditures till separation of accounts has been completed.

Response from Petitioner:

The petitioner has submitted that it is in the process of segregating the account for power business from its book of accounts and will submit the same for the Commission's approval. The petitioner has further submitted that it has already opened an account with Kotak Mahindra Bank for all transactions related to the power business.

Commission's view:

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

Issue No.4: Reduction in existing tariff

Issue raised by objector:

Objector has submitted that petitioner has filed different estimates of ARR within the petition. Thus, it can be concluded that the ARR of Rs. 95.91 Crore submitted for FY 2015-16 has been arrived at after increasing expenditures. Objector has further submitted that surplus of Rs. 3.67 is about 3.8% of revenue and the consumers will welcome a tariff reduction of 3.8%.

Response from Petitioner:

The petitioner has submitted that net ARR for FY 2015-16 is Rs. 95.91 Crore and the revenue surplus is Rs. 0.55 Crore. The revenue surplus is marginal and may not invite a reduction in the existing tariff for the petitioner.

Commission's view:

The Commission has admitted the ARR after detailed analysis of each component of ARR as per Regulations and accordingly determined the tariffs for FY 2015-16.

Issue No.5: Estimation of Sales

Issue raised by objector:

Objector has submitted that in the past a suggestion was made on using end use method to estimate sales since CAGR method for estimation of sales is not appropriate for limited area and known consumers, which was not accepted. Objector has further submitted that the petitioner has revised sales for FY 2013-14 and FY 2014-15 by considering reduction of 10% and 6% respectively, while the petitioner has considered growth of 6.7% for FY 2015-16.

Response from Petitioner:

The petitioner has submitted that CAGR is a prudent practice adopted by various utilities to project sales. The petitioner has further submitted that while estimating sales for FY 2015-16, expected load growth, which was otherwise suppressed due to technical constraints of EHV transformer capacity, year on year variation and sales growth on the basis of past trends has been considered.

Commission's view:

After due consideration of relevant facts the Commission has observed that the sale projections made by the petitioner are reasonable considering the past trends and expected additions of new connections during FY 2015-16.

Issue No.6: Losses

Issue raised by objector:

Objector has submitted that despite actual distribution losses being considerably lower than the norms specified by the Commission, the petitioner has estimated losses on the basis of norms specified by the Commission. Objector further submitted that the benchmarks stipulated by the Commission sets the limits but does not inhibit better performance from

being considered. By not projecting losses as per actual loss levels, the petitioner is increasing the ARR and burdening the consumers.

Response from Petitioner:

The petitioner has not submitted its response on this issue.

Commission’s view:

Regulations specify that for determination of ARR, normative levels of losses shall be considered. In case the actual losses incurred by the petitioner are less than the normative levels, the gains thus made shall be allowed to be retained by the licensee to incentivise its operations. Therefore, the Commission has admitted intra state transmission losses and distribution losses in accordance with the loss trajectory specified in the Regulations.

Issue No.7: O&M charges

Issue raised by objector:

Objector has submitted that O&M costs as per norms of 5% are on the higher side. Actual expenses for FY 2012-13 and FY 2013-14, which should normally form the basis for O&M charges for FY 2015-16 are not available. Improvements on account of technical innovation, automation, etc., should be reflected. Objector has further submitted that employee costs should not include arrears. Objector has also requested that the Commission may consider a penalty for non-segregation of employee’s accounts. Further, The Commission may not allow cash outflow for terminal benefit at 40%.

Objector has also submitted that since the O&M agreement will expire in March, 2016 and fresh offers should be called for new engagement well before expiry of existing contract, benefit of new costs can be offered to consumers in FY 2015-16.

Response from Petitioner:

The petitioner submitted that it has claimed O&M costs as per the contract agreement signed with MPPKVVCL and approved by the Commission. The petitioner further submitted that escalation considered is in line with the methodology stipulated by the Commission in the tariff order for FY 2014-15. On the issue of O&M agreement, the petitioner referred to the Commission’s view on the same, in the order on petition no. 38/2013.

Commission’s view:

The Commission has admitted O&M expenses as per the agreement signed with MPPKVVCL and no other charges have been admitted. This has been elaborated in the section on “O&M charges” of this order. Further the Commission directs SEZ to submit actual O&M data of present Control Period within two months of this order so that projection for next control period may be incorporated in the draft Regulations.

Issue No.8: Charges for Open Access Consumers

Issue raised by objector:

Objector has submitted that the petitioner has not made any effort to collect data and work out wheeling charges, cross subsidy surcharge, additional surcharge and transmission charges for open access consumers. The status quo of no levy of cross subsidy surcharge to be continued as there is no consumer availing open access.

Response from Petitioner:

The petitioner has submitted that while there are hardly any open access consumers in the area of supply, it cannot be assumed that the status quo will continue in the future. The petitioner has requested the commission to determine the wheeling charges and cross subsidy surcharge within the provisions of National Tariff Policy.

Commission's view:

The Commission has determined the wheeling charges and cross subsidy surcharge in the "Wheeling Charges and Cross Subsidy Surcharge" chapter.

Issue No.9: Energy Requirement & Power Purchase Cost

Issue raised by objector:

- (1) Objector has submitted that no calculation has been submitted to show that demand will be 32 MW. Load factor of the system at 220.72 MU works out to be 78.73%, which is high.
- (2) Objector has submitted that actual losses may be considered for working out ARR for FY 2014-15 and FY 2015-16.
- (3) Objector has submitted that the per unit rate for short term power is Rs. 3.16 per unit whereas the long term power is proposed at a rate of Rs. 3.48 per unit. The basis for considering these rates are to be given. Objector has suggested that the petitioner may invite national tenders in this respect with the help of MPPMCL. For 32 MW of power at 78.73% load factor the annual rates will be attractive, especially from power plants which have been recently commissioned.
- (4) Objector has submitted that power is purchased from MPPMCL or MPPaKVCL and therefore liability of UI charges and applicable charges should not arise. The Commission may consider disallowing the same.
- (5) Objector has submitted that the total power purchase requirement and power purchase cost approved for FY 2014-15 is 236.79 MU and Rs. 74.86 Crore, which works out to be Rs. 3.16 per unit. The FY 14-15 (RE) rate submitted by the petitioner is Rs. 3.9 for requirement of 214.20 units at a cost of Rs. 83.65 Crore. The Commission is requested to disallow the same.

Response from Petitioner:

The petitioner has submitted that;

- (1) Capacity of 32 MW has been tied up with MPPMCL to meet the average load observed as required, which has been augmented to 35 MW for a period from February 1, 2015 to March 31, 2015 due to enhancement of contract demand by some consumers. Petitioner has submitted that objector has calculated the load factor by taking maximum demand meet instead of contract demand.
- (2) The petitioner has submitted that loss percentage has been worked out as per the loss trajectory mentioned by Commission.
- (3) The petitioner has submitted that it has entered into a short-term agreement with MPPMCL at Rs. 3.16 per unit and is contemplating a long term PPA. Since the short term power procurement costs are high and the licensee is yet to enter into a long term PPA with MPPMCL, the petitioner has estimated 10% escalation over the current procurement rate.
- (4) The petitioner has submitted that terms and conditions as stated by it are as per the agreement entered into with MPPMCL.

Commission's view:

The Commission has addressed the issue of power purchase in detail in Chapter 1 – “ARR” under the energy requirement and power purchase cost.

Issue No.10: Capital Investment Plan.

Issue raised by objector:

Objector has submitted that requirement of 132 KV sub-station at cost of Rs. 19.29 Crore has to be justified with load projections. The load increase in connected load is 2784 KW and thus, does not justify creation of a new substation. Therefore, the Capex needs to be drastically reduced.

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 the capital investment plan envisaged by the licensee is for facilitating reliable and quality power supply to the consumers and envisaging load growth in the future. The envisaged substation will be commissioned at a later time after which the licensee will be able to cater any augmentation in the load as well.

Commission's view:

The Commission's view on the matter is elaborated in the relevant section.

Issue No.11: Smart Distribution System

Issue raised by objector:

Objector has submitted that the petitioner has not complied with the Commission's directions on creating an efficient and smart distribution system.

Response from Petitioner:

The petitioner has submitted that it has already introduced AMR facility in the license area for all the consumers. The petitioner has further submitted that any other measures are unnecessary at this moment; however, with the advent of superior technology, it shall adopt the same.

Commission's view:

The petitioner should explore the possibility of introducing superior technology in the distribution system so as the consumer may be benefitted. .

Issue No.12: Determination of Tariff

Issue raised by objector:

Objector has submitted that for an industrial area whose load predominantly consists of industries, it will not be difficult to determine the tariff for a period of 5 years, in line with the determination of tariff for generating stations of NTPC and transmission charges of PGCIL by the Hon'ble CERC and National Tariff Policy.

Response from Petitioner:

The petitioner has submitted that the petition is in line with the methodology stated by the Commission in Regulations.

Commission's view:

The Commission, while determining ARR and tariff, is to be guided by the principles specified in Regulations. Since Regulations specify annual determination of tariff, the Commission has considered the same.

Issue No.13: Other Costs

Issue raised by objector:

Objector has submitted that proposed increase of Rs. 0.45 Crore and Rs. 1.58 Crore for depreciation and interest & finance charges as approved by the Commission for FY 2014-15 should be disallowed. The objector has further submitted that the projection of Rs. 0.70 Crore towards depreciation for FY 2015-16 will require scaling down based on figures of FY 2014-15 and due to scaling down of capital expenditure.

Response from Petitioner:

The petitioner has submitted that it has considered depreciation and interest and finance charges as per the provisions of the Commission's regulation.

Commission's view:

The Commission has admitted the ARR after detailed analysis of each component of ARR for FY 2015-16 on the basis of revised projections submitted by the petitioner for FY 2014-15.

The actual expenditure incurred by the petitioner during FY 2014-15 and FY 2015-16 will be reviewed at the time of true-up.

Issue No.14: Other Income.

Issue raised by objector:

Objector has submitted that the petitioner has scaled down other income to Rs. 0.21 Crore for FY 2014-15 and projected revenue of Rs. 0.11 Crore for FY 2014-15. These figures are on the lower side. Objector has further submitted that the default in payment of loans does not arise as no loans have been taken. In this context, revenue from delayed payment surcharge needs to be considered as other income.

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 the relevant factors including the projected addition of consumer loads. This has been elaborated in the section on "Other income" of this order.

Issue No.15: Revised Estimates for FY 2014-15

Issue raised by objector:

- (1) Objector has submitted that sales have been projected at 206.70 MU, which is 5.25% less than the approved sales of 218.15 MU for FY 2014-15.
- (2) Objector has submitted that realization rate was projected as Rs. 4.00 per unit whereas the realization rate projected in working revenue for revised FY 2014-15 is Rs. 4.37 per unit.
- (3) Objector has submitted that approved rate of power purchase for FY 2014-15 is Rs. 3.16 per unit, while the petitioner has projected expenditure at Rs. 3.53 per unit. The objector has requested that this increase be disallowed. The objector has further submitted that although the units purchased by the petitioner are projected to be less than that approved by the Commission, the power purchase costs have increased.
- (4) Objector has submitted that expenditure on depreciation, interest and finance charges and return on equity have increased vis-a-vis expense approved by the Commission for FY 2014-15.

Response from Petitioner:

- (1) The petitioner has submitted that sales have been revised as per the actual trend seen in previous years. Sales as projected in previous year's petition are on the higher side and a minimal dip in sales is envisaged in the future.
- (2) The petitioner has requested the Commission to review the same.

- (3) The petitioner has submitted that actual expense on power purchase of Rs. 43 Crore including transmission charges as incurred till August 2014 has been considered. This includes the cost of power purchase, incurred UI charges and associated transmission charges. Thus, power purchase cost is revised based on the actual bills received.
- (4) The petitioner submitted that it has considered finance charges, return on equity and depreciation as per the provisions of Regulations.

Commission’s view:

The Commission has admitted the ARR after detailed analysis of each component of ARR for FY 2015-16 on the basis of revised projections submitted by the petitioner for FY 2014-15. The actual expenditure incurred by the petitioner during FY 2014-15 will be revised at the time of true-up.

Issue No.16: Annual Revenue Requirement

Issue raised by objector:

Objectors has submitted that ARR has a scope of reduction of at-least 5% and thus there is scope of reduction in tariff to this extent.

Response from Petitioner:

The petitioner has submitted that its projections for ARR for FY 201-5-16 are realistic basis and there is hardly any scope for further reduction as it will put the licensee in revenue deficit situation.

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 2015-16.

Issue No.17: 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 minimum charges as fixed charges are proposed to be fully recovered.

Response from Petitioner:

- (1) The petitioner has submitted that there is no scope for further reduction of costs and reduction of existing tariff as it will create revenue deficit. Hence, the petitioner requested that existing tariffs may be allowed to be recovered from the consumers in the ensuing year as well.

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) 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 lower level then there is no alternative left but to levy minimum charges so as to keep revenue balance.

Annexure-1 (Tariff Schedules for Low Tension Consumers)

**ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR
FINANCIAL YEAR 2015-16**

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	64
LV – 2 Non-Domestic	65
LV – 3 Public water works and Street Lights	67
LV – 4 LT Industrial	68
General Terms and Conditions of Low Tension Tariff	70

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)
325	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	325	45 per KW
On all units in case monthly consumption exceeds 50 units	350	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)	350	94 per KW or 75 per kVA of billing demand
<u>Mandatory demand based tariff for contract demand above 20 kW</u>	350	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	350
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 2015-16**

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	77
HV – 2 Public Water Works	79
HV – 3 Synchronization and start up power for Generators	80
General Terms and Conditions of High Tension Tariff	81

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	345
	33 KV supply	199	333
1.2	Non-Industrial		
	11 KV supply	225	365
	33 KV supply	240	345

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	360
33 kV supply	200	330

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.
- 1.1 Character of Service: The character of service shall be as per Madhya Pradesh Electricity Supply Code, 2013.
- 1.2 Point of Supply: The point of supply shall be as per provisions of Madhya Pradesh Electricity Supply Code, 2013.
- 1.3 **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.
- 1.4 **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.
- 1.5 **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

1.6 **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

1.7 **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)

1.8 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.

1.9 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.

1.10 **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)	5% of Normal rate of Energy Charge as Surcharge
2.	Off peak load period (10 PM to 6 AM next day)	15 % 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

1.11 **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.

1.12 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.

1.13 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.

1.14 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.

1.15 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:

1.16 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.

1.17 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.

- 1.18 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.
- 1.19 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.
- 1.20 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.
- 1.21 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.
- 1.22 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.
- 1.23 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.
- 1.24 All conditions prescribed herein shall be applicable notwithstanding if any contrary provisions, exist in the agreement entered into by the consumer with the licensee.
