

Delhi Electricity Regulatory Commission
Viniyamak Bhawan, 'C' Block, Shivalik, Malviya Nagar, New Delhi – 17.

Proposal for Determination of Open Access Charges

The Delhi Electricity Regulatory Commission (hereinafter referred to as Commission) vide its order dated 29.08.2008 had decided Transmission and Wheeling Charges, Cross Subsidy Surcharge, Additional Surcharge and other applicable charges under Open Access. Subsequently, many tariff orders have been issued. Therefore, it became imperative to revise the charges in line with the latest Tariff Order dated July, 2013.

The Electricity Act 2003 (EA 2003) enables eligible consumers to have non-discriminatory Open Access (OA) to the network of a Licensee (except that of a local authority engaged in the business of distribution of electricity before the appointed date) on payment of applicable charges. The EA 2003 and National Electricity Policy (NEP) formulated thereunder, mandates the State Electricity Regulatory Commissions to frame the terms and conditions and timeframe for introduction of OA in the State.

2. Section 2 (47) of the Electricity Act, 2003 defines Open Access, while Section 42 of the Electricity Act, 2003 mandates the Distribution Licensees to provide open access to eligible consumers subject to payment of cross-subsidy surcharge, additional surcharge and other applicable charges. Section 86 (1) of the EA, 2003 mandates the Commission to determine the cross-subsidy surcharge.
3. The Commission in exercise of the power vested in it under section 39, 40, 2, 86 (1)(c) read with Section 181 of the Electricity Act, 2003 and all other powers enabling the Commission in this behalf, notified the Delhi Electricity Regulatory Commission (terms and conditions for Open Access) Regulations, 2005 (hereinafter referred to as Open Access Regulations). In the aforesaid Regulations, notified in the official gazette on 03rd January, 2006, open access was allowed to the Intra State Transmission System in the State immediately, subject to the satisfaction of the conditions contained in the Act or in these Regulations.
4. The Commission has kept in view the provisions of the Electricity Act, 2003, National Electricity Policy, National Tariff Policy and the Open Access Regulations of the Commission, while determining the open access charges payable by open access consumers under the following heads :
 - i. Transmission and Wheeling charges
 - ii. Cross Subsidy surcharge
 - iii. Additional surcharge
 - iv. Standby Charge
 - v. Other applicable charges.
- 5(i) Clause 18 of Delhi Electricity Regulatory Commission (Terms & Conditions for Determination of Transmission Tariff) Regulations, 2011 is as under:

"18. No distinction in charges shall exist in terms of long term, medium term or short term access to the intra-State Transmission System."
- (ii) In case of Short Term Open Access Consumer, Transmission Service Charges shall be calculated in accordance to following methodology:

$$ST_Rate = (ATSC / Av_CAP) / 365;$$

Where:

ST_Rate is the rate for short-term open access consumer in Rs. Per MW per day;

ATSC is Annual Transmission Service Charge;

Av_CAP means the average capacity in MW served by the transmission system of the Transmission Licensee in the last Financial Year and shall be computed as under :-

1	ST-Rate in Rs./MW/Day	$(ATSC / AV_CAP) / 365$
	Where, ATSC Annual Transmission Service Charges of the Transmission System for the current financial year & AV_CAP Average Transmission Capacity served in MW during the previous financial year.	
2	ATSC for DTL Transmission system as per DERC order	=Rs. Z crores
3	Average Transmission Capacity Served in MW by DTL during previous year	= Energy served (consumed in Delhi as per SEM data) in MUs X 1000 MWh / 365/24 = Y MW
4	ST_Rate for DTL Transmission System in Rs/MW/Day	= $Z \times 10000000 / Y / 365 = Rs. S$
5	ST_Rate for DTL Transmission System in Rs./ kWh	= S / 24000

- (iii) 25% of the charges collected from the Short Term Open Access consumer shall be retained by the Transmission Licensee and the balance 75% shall be considered as non-tariff income and adjusted towards reduction in the transmission service charges payable by the long term and medium term users."
6. The Government of India has notified the Tariff Policy (TP) under Section 3 (1) of the Electricity Act, 2003. Paragraph 8.5 (reproduced below) of the said Tariff Policy specifies the methodology for calculation of cross subsidy surcharge, additional surcharge and wheeling charges for open access consumers.

"8.5 Cross subsidy surcharges and additional surcharge for open access.

8.5.1 National Electricity Policy lays down that the amount of cross subsidy surcharge and the additional surcharge to be levied from consumers who are permitted open access should not be so onerous that it eliminates competition which is intended to be fostered in generation and supply of power directly to the consumers through open access.

A consumer who is permitted open access will have to make payment to the generator, the transmission licensee whose transmission systems are used, distribution utility for the wheeling charges and, in addition, the cross subsidy surcharge, therefore, needs to be done in a manner that while it compensates the distribution licensee, it does not constrain introduction of competition through open access. A consumer would avail of open access only if the payment of all the charges leads to a benefit to him. While the interest of distribution licensee needs to be protected it would be essential that this provision of the Act, which requires the open access to be introduced in a time-bound manner, is used to bring about competition in the larger interest of consumers.

Accordingly, when open access is allowed the surcharge for the purpose of section 38, 39, 40 and sub-section 2 of section 42 would be computed as the difference between (i) the tariff applicable to the relevant category of consumers and (ii) the cost of the distribution licensee to supply electricity to the consumers of the applicable class. In case of a consumer opting for open access, the distribution licensee could be in a position to discontinue purchase of power at the margin in the merit order. Accordingly, the cost of supply to the consumer for this purpose may be computed as the aggregate of (a) the weighted average of power purchase costs (inclusive of fixed and variable charges) of top 5% power at the margin, excluding liquid fuel based generation, in the merit order approved by the SERC adjusted for average loss compensation

of the relevant voltage level and (b) the distribution charges determined on the principles as laid down for intra-state transmission charges.

Cross Subsidy 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;

- 8.5.2 No surcharge would be required to be paid in terms of sub-section (2) of Section 42 of the Act on the electricity being sold by the generating companies with consent of the competent government under Section 43(A)(1)(c) of the Electricity Act, 1948 (now repealed) and on the electricity being supplied by the distribution licensee on the authorisation by the State Government under Section 27 of the Indian Electricity Act, 1910 (now repealed), till the current validity of such consent or authorisations.
- 8.5.3 The surcharge may be collected either by the distribution licensee, the transmission licensee, the STU or the CTU, depending on whose facilities are used by the consumer for availing electricity supplies. In all cases the amounts collected from a particular consumer should be given to the distribution licensee in whose area the consumer is located. In case of two licensees supplying in the same area the licensee from whom the consumer was availing supply shall be paid the amounts collected.
- 8.5.4 The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges.
- 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.
- 8.5.6 In case of outages of generator supplying to a consumer on open access, standby arrangements should be provided by the licensee on the payment of tariff for temporary connection to that consumer category as specified by the Appropriate Commission."
7. The Commission has considered that the subsidized category of consumers are generally opposing the Open Access on the ground that the Cross Subsidy which is existing today is likely to be removed thereby increasing the tariff of the subsidized categories immediately. Even the law recognizes this fact and provides for levy of Cross Subsidy Surcharge initially which is required to be reduced over a period of time along with the reduction of Cross Subsidy in the Tariff Design. The Tariff Policy also envisages that the Cross Subsidy in tariff shall be brought to a level of +20% of average cost of supply by the year 2010-11. The

Commission also notes that any increase in the tariff of domestic category was subsequently averted by the Government of NCT of Delhi by providing subsidy to domestic consumers. As far as the Distribution Companies are concerned, their main objective seems to be adoption of the principle of "revenue neutrality" thereby implying that any loss in revenue arising on account of the introduction of Open Access be passed on through the ARR. Keeping in view the implications, The Commission's endeavour is to balance the interests of all the stake holders and introduce Open Access to promote competition in the Electricity Sector. Further, the Commission would also make efforts to make Open Access non discriminatory not only between the Open Access (OA) consumers but also between the OA and all other existing consumers.

8. Considering all above factors, existing laws, Government policies and to promote competition in the Electricity Sector, the Commission decides the following open access charges :

(1) Cross Subsidy surcharge.

- i. The Cross Subsidy surcharge shall be calculated based on the surcharge formula laid-down in Para 8.5 of the Tariff Policy issued by the Government of India with some assumptions taking into account some state specific issues, as specified in this order.
- ii. Since the tariff for each category of consumers is fixed by the Commission on year-to-year basis, the surcharge shall also be decided on a year-to-year basis.
- iii. The reduction in Cross Subsidy needs to be done duly taking into account the reduction in AT&C losses and improvement in the Performance Standards. The Commission observes that the primary aim in Delhi has been to reduce the AT&C losses from high level of 48% to 57% to a level of about 12%-13% (BRPL 12.5%, BYPL 14.5%, TPDDL 11.5% & NDMC 9.85%) by 31st March, 2015.
- iv. The Wheeling charges shall also be varying from year-to-year on account of investments being made in the sector for meeting the load growth, AT&C loss reduction and improving the performance standards.
- v. Keeping in view all the above points, it will be appropriate to determine the surcharge on a yearly basis either along with the tariff exercise or separately.
- vi. For calculation of the Cross Subsidy surcharge using the formula stipulated in the Tariff Policy of the Government of India, the weighted average cost of power purchase of top 5% at the margin excluding Liquid Fuel based generation, Renewable Power and overdrawl at UI rates is to be considered. However, Merit Order Despatch of these stations is also required to be taken into account for calculating the surcharge.
- vii. The Commission has not stipulated any merit order operation in the Tariff Order in view of the fact that all the Power Purchase Agreements which are operative at present, are being fully utilized for meeting the requirements of Delhi. Any surplus arising either during a day or during any season is mostly banked with others and re-used whenever shortages are faced in the Delhi system. However, optimum scheduling is being ensured at the time of scheduling, on a daily basis, by the SLDC, as stipulated in the Delhi Grid Code/Electricity Act, 2003.
- viii. Based on the data available in Tariff Order for the DISCOMs issued by the Commission, the Commission has calculated the Cross Subsidy surcharge applicable to different consumers at different voltages/and different class of consumers along with certain assumptions which are indicated in **Annexure –**

1. Accordingly, the charges indicated in **Annexure – 2, 3 & 4** shall be payable by the Open Access consumers by way of Cross Subsidy surcharge in the TPDDL, BRPL & BYPL areas respectively. Wherever the cross subsidy surcharge worked out in Annexures 2, 3 & 4 is negative, no cross subsidy surcharge shall be payable by the OA consumer.

(2) Transmission and Wheeling Charges:

- i. The transmission charge for Open Access consumers availing Open Access from the Delhi Transco Limited's transmission system shall be regulated in terms of the provisions of the MYT regulations which is already discussed in Para 5 of this Order.
- ii. The Wheeling charges leviable by the distribution licensees shall be in accordance with the charges determined by the Commission in the respective Tariff Orders in paisa/KWhr. The Commission would over-see any gaming i.e. the over-drawl and under-drawl by an Open Access consumer without adhering to the contract, through the SLDC. Based on the complaints received from the SLDC, necessary proceedings can be conducted by the Commission to restrict such gaming practices.
- iii. As regards the procedure for settlement of deviations etc. the Open Access consumers shall also be governed by the Scheduling Process being adopted by the licensees as per the Intra-State ABT Order of the Commission and subsequent clarification thereof in the matter. The Open Access consumer shall also be liable for payment of the SLDC charges, UI charges, Re-active energy charges etc. as per the prevailing orders of the Commission, as amended from time-to-time.
- iv. For the calculation of the surcharge, the system losses shall be considered based on average figures and the Commission is not in favour of post-facto correction of the surcharges or the energy transactions based on the actual losses, for the present. In case the issue gets complex, the Commission would review this at an appropriate time either suo-moto or on an application moved by any stake holder.
- v. The charges payable to the other States/PGCIL etc. for Open Access by using Inter-State or Inter-regional links shall be payable extra by the Open Access consumers in accordance with the applicable regulations, rules/orders in the matter.
- vi. Wherever system strengthening/augmentation of distribution system is involved, any associated cost for this purpose would have to be borne by the long term Open Access consumers.
- vii. In the event of non-availability of power supply due to any reason including outage of generator supplying the Open Access consumer, the distribution licensees shall provide the power supply to such Open Access consumers on payment of the charges leviable to similarly placed consumers of the DISCOMs availing temporary connection from the distribution company.
- viii. No wheeling and transmission charges are applicable for solar renewable sources.

(3) Additional Surcharge

- (i) Presently DISCOMs have surplus power on RTC basis in most of the months. In case any bulk consumer opts for open access during off peak hours, in such a case DISCOM has to bear the fixed charges as well as energy charges which may be higher from the current exchange rate/UI rate. Therefore, the additional surcharge has been calculated to nullify the impact of costs due to stranded power on other consumers of Delhi. In such a scenario, additional surcharge shall be maximum.
- (ii) In case bulk consumers opt for open access during peak hours and DISCOM would have had to purchase additional peaking power at higher rate, the open access consumer

would be helping in reducing the power purchase at peak time and hence, additional surcharge for open access consumer in that time slots shall be minimum.

- (iii) The additional surcharge has been calculated on the basis of difference in projected demand of DISCOMs and availability of power from long term agreements. The cost difference between sale at UI rate and the rate of power from long term agreements gives the additional surcharge during that period.
- (iv) The additional surcharge shall be payable as per Annexure-5.

(4) Standby Charges

In cases of outages of generator supplying to open access consumer under open access, standby arrangements will be provided by the distribution licensee for a maximum period of 42 days in a year, subject to the load shedding as is applicable to the embedded consumer of the licensee and the licensee shall be entitled to collect tariff under Temporary rate of charge for that category of consumer in the prevailing tariff schedule or as decided by the Commission from time to time.

Provided also that open access consumers would have the option to arrange standby power from any other source. Standby charges would be applicable from 00.00 Hrs after the 24 hrs of serving the notice by Open Access Consumer till that time consumer would have to pay the charges as per UI rate for drawal plus Rs 1/unit for that energy to distribution licensees. The Standby charges for the power availed by the Open Access Consumer beyond the notice period would be paid to Distribution company as in the case of similarly placed consumers of Discoms availing temporary connection the Distribution Company.

- 9. i. In order to ensure smooth implementation of Open Access within Delhi, the Commission may over-see all Intra-State Open Access transactions in consultation with SLDC, in the initial phase and until the system of Open Access gets stabilized.
- ii. It is further clarified that no Cross Subsidy surcharge shall be payable in cases specifically exempted from payment of Cross Subsidy surcharge by the provisions of the Electricity Act, 2003 and the Tariff Policy of Government of India.
- iii. Power from Renewable Sources has been dealt with in detail in the tariff order issued by the Commission. Open Access related issues in case of renewables will be reviewed by the Commission in due course based on the experience of Open Access transactions.
- iv. Applicable Charges for an Open Access Consumer

Where a consumer opting for Open Access purchases electricity from a source other than the DISCOM of his area, he shall be liable to pay:-

- a) Energy charges to the seller of electricity as per the contract entered into by him;
- b) Wheeling charges to the DISCOM in whose area he is located, at the rate fixed in the Tariff Order;
- c) Cross subsidy surcharge fixed in this order to the DISCOMs in whose area, the consumer is located, if applicable;
- d) Additional surcharge as applicable;
- e) Standby charges as applicable;
- f) Transmission charges to DTL at the rate fixed as per 5(ii) of this order;
- g) Scheduling and system operating charges to SLDC at the rate Rs. 2000/- per day or the rate fixed by the Commission from time-to-time;
- h) UI charges to the DISCOMs in whose area, the consumer is located at the prevalent rate;
- i) Reactive energy charges to the DISCOMs in whose area, the consumer is located at the rate @ 10 Ps/kVARh or the rate fixed by the Commission from time-to-time;

- j) Miscellaneous charges in respect of metering and other requirements as necessary under Intra-State ABT mechanism, to be provided by DTL. These charges are to be paid to DTL as per actual cost incurred by DTL;
 - k) Any other charges not mentioned above, but covered by this Order and the detailed procedures drawn by STU for operationlization of Open Access in Delhi;
- v. All the charges relating to Open Access Transactions shall be collected by the Distribution Licensee in whose area the Open Access consumer is located and as per the detailed procedures drawn by STU for operationlization of Open Access in Delhi. Those charges which relates to other agency involved in such open access transactions and collected by a particular DISCOM shall be paid within 3 working days to respective agencies failing which late payment surcharge @ 1.25% per month shall be payable.
- vi. The DISCOMs shall not cater to any OA consumer by resorting to load shedding of its existing consumers.
- vii. All the utilities are further directed to furnish details of Open Access transactions, available capacity for Open Access etc. on their websites. The format for furnishing the above details shall be worked out by SLDC and submitted to the Commission for approval of the same after which the details shall be notified on the websites of DTL and DISCOMs.
10. As mandated in Section 42 (2) of the Electricity Act, 2003 and as provided in the DERC (Terms and Conditions for Open Access) Regulations, 2005 issued on 03.01.2006, the Open Access, for the present, is applicable only to consumers with a load of 1 MW and above. However, the Commission may allow open access to consumers with capacity requirement less than one MW subject to review of the Operational Constraints and other factors and the experience of open access for loads above 1MW.

Assumptions

- 1) For calculation of cross subsidy surcharge, 5% of the marginal power purchase has been computed with the data available in the Tariff Order dated July, 2013 for FY 2013-14.
- 2) Top 5% of the costliest power has been allocated to various power procurement starting from the highest cost and going down to the level at which the top 5% quantum get completed.
- 3) While calculating the top 5% of power procurement, liquid fuel generation, renewable power as well as over drawal at UI rates have been ignored keeping in view their availability and unpredictability.
- 4) For calculation of the total energy received at the DISCOM periphery losses have been assumed at 3.59% for PGCIL and 1.21% for DTL.
- 5) Net energy purchase from stations located in Delhi has been computed after allowing 1.21% loss in the DTL system.
- 6) The average cost of power purchase in the above calculation has been arrived at after grossing up for the losses.
- 7) The distribution losses and wheeling charges for each of the DISCOM shall be as per the Tariff Order dated July, 2013 for FY 2013-14 and will also correspond to voltage level at which open access is being sought.
- 8) 'T' is the average tariff in paise per unit for various consumer categories as per Average Billing Rate (ABR) specified in Tariff Order dated July, 2013 for FY 2013-14.
- 9) Wherever the surcharge works out to be negative, it shall be limited to zero.
- 10) For hydropower stations, power purchase has been assumed considering availability of 6 months in a year while for other stations, availability is assumed throughout the year.
- 11) Presently DISCOMs have surplus power on RTC basis in most of the months. In case any bulk consumer opts for open access during off peak hours, in such a case DISCOM has to bear the fixed charges as well as energy charges which may be higher from the current exchange rate/UI rate. Therefore, the additional surcharge has been calculated to nullify the impact of costs due to stranded power on other consumers of Delhi. In such a scenario, additional surcharge shall be maximum.
- 12) In case bulk consumers opt for open access during peak hours and DISCOM would have had to purchase additional peaking power at higher rate, the open access consumer would be helping in reducing the power purchase at peak time and hence, additional surcharge for open access consumer in that time slots shall be minimum.
- 13) The additional surcharge has been calculated on the basis of difference in projected demand of DISCOMs and availability of power from long term agreements. The cost difference between sale at UI rate and the rate of power from long term agreements gives the additional surcharge during that period.

Open Access Charges Calculation (Cross Subsidy Surcharge)

TPDDL

1	Net Power Purchase quantum at periphery (MUS)	8411
2	Top 5% of (1) above (MUS)	420.55
3	1st costliest Power Purchase (from Pragati-III Bawana @ Rs. 6.22/kWhr)	420.55
7	Average Power Purchase cost of top 5%	Rs.6.22/kWhr

Average Power Purchase cost of 5% of Power at the margin as per Tariff Order dated July, 2013 works out to Rs. 6.22/kWhr for TPDDL.

1. Therefore average power purchase cost of top 5% of total power purchase (C) = Rs.6.22 ps /kwh
2. Details of approved Distribution Loss and Wheeling charges of TPDDL as per Tariff Order dated July, 2013 for FY 13-14 is as under:

Voltage levels	Distribution Loss (L) in %	Wheeling charges (D) in paise per unit
Above 66 kV	0.00	67
At 33/66 kV	1.25	68
At 11 kV	3.96	71
At LT Level	8.1	77

3. Surcharge formula (S) : $S = T - [C (1 + L / 100) + D]$

If $X = C (1 + L / 100)$, where C is Rs. 6.22/kWhr,

Surcharge (S) is calculated as follows :

Voltage levels	X paise / kwh	X + D Paise/ kwh	Industrial (T= 744.00 paise/kwh)	Non Domestic (T= 932.00 paise/kwh)	Domestic (T= 517.00 paise/kwh)	Railway (T= 761.00 paise/kwh)	DMRC (T= 599.00 paise/kwh)	DJB (T= 879.00 paise/kwh)
Above 66kv	622.00	689.00						
At 33/66 kV	629.78	697.78	46.23	234.23	-180.78	63.23	-98.78	181.23
At 11kV	646.63	717.63	26.37	214.37	-200.63	43.37	-118.63	161.37
At LT level	672.38	749.38	-5.38	182.62	-232.38	11.62	-150.38	129.62

Note :

1. If surcharge as calculated for different consumer became (-) it would be zero
2. Average Tariff (T) is taken from ABR of Tariff Order - July, 2013

Open Access Charges Calculation (Cross Subsidy Surcharge)

BRPL

1	Net Power Purchase quantum at periphery (MUS)	11348
2	Top 5% of (1) above (MUS)	567.4
3	1st costliest Power Purchase (from Pragati-III Bawana @ Rs. 6.22/kWhr)	567.4
7	Average Power Purchase cost of top 5%	Rs. 6.22/kWhr

Average Power Purchase cost of 5% of Power at the margin as per Tariff Order dated July, 2013 works out to Rs. 6.22/kWhr for BRPL .

- Therefore average power purchase cost of top 5% of total power purchase (C) = Rs. 6.22 /kwh
- Details of approved Distribution Loss and Wheeling charges of BRPL as per Tariff Order dated July, 2013 for FY 13-14 is as under:

Voltage levels	Distribution Loss (L) in %	Wheeling charges (D) in paise per unit
Above 66 kV	0.00	0.00
At 33/66 kV	1.39	61
At 11 kV	2.35	63
At LT Level	12.52	72

3. Surcharge formula (S) : $S = T - [C (1 + L / 100) + D]$

If $X = C (1 + L / 100)$, where C is Rs. 6.22/kWhr,

Surcharge (S) is calculated as follows :

Voltage levels	X paise / kwh	X + D Paise/ kwh	Industrial (T= 749.00 paise/kwh)	Non Domestic (T= 883.00 paise/kwh)	Domestic (T= 623.00 paise/kwh)	Railway (T= 723.00 paise/kwh)	DMRC (T= 589.00 paise/kwh)	DJB (T= 847.00 paise/kwh)	DIAL (T= 745.00 paise/kwh)
Above 66kv	622.00	622.00							
At 33/66 kV	630.65	691.65	57.35	191.35	-68.65	31.35	-102.65	155.35	53.35
At 11kV	636.62	699.62	49.38	183.38	-76.62	23.38	-110.62	147.38	45.38
At LT level	699.87	771.87	-22.87	111.13	-148.87	-48.87	-182.87	75.13	-26.87

Note:

- If surcharge as calculated for different consumer became (-) it would be zero
- Average Tariff (T) is taken from ABR of Tariff Order - July, 2013

Open Access Charges Calculation (Cross Subsidy Surcharge)

BYPL

1	Net Power Purchase quantum at periphery (MUS)	6542
2	Top 5% of (1) above (MUS)	327.1
3	1st costliest Power Purchase (from Pragati-III Bawana @ Rs.6.22 /kWhr)	327.1
7	Average Power Purchase cost of top 5%	Rs. 6.22/kWhr

Average Power Purchase cost of 5% of Power at the margin as per Tariff Order dated July, 2013 works out to Rs. 6.22/kWhr for BYPL.

1. Therefore average power purchase cost of top 5% of total power purchase (C) = Rs. 6.22/kwh

2. Details of approved Distribution Loss and Wheeling charges of BYPL for FY 13-14 is as under :

Voltage levels	Distribution Loss (L) in %	Wheeling charges (D) in paise per unit
Above 66 kV	0.00	0.00
At 33/66 kV	0.9	68
At 11 kV	2	69
At LT Level	14.65	81

3. Surcharge formula (S) : $S = T - [C (1 + L / 100) + D]$

If $X = C (1 + L / 100)$, where C is Rs. 6.22/kWhr,

Surcharge (S) is calculated as follows :

Voltage levels	X paise / kwh	X + D Paise/kwh	Industrial (T= 760.00 paise/kwh)	Non Domestic (T= 898.00 paise/kwh)	Domestic (T= 517.00 paise/kwh)	DMRC (T= 566.00 paise/kwh)	DJB(T= 849.00 paise/kwh)
Above 66kv	622.00	622.00					
At 33/66 kV	627.60	695.60	64.40	202.40	-178.60	-129.60	153.40
At 11kV	634.44	703.44	56.56	194.56	-186.44	-137.44	145.56
At LT level	713.12	794.12	-34.12	103.88	-277.12	-228.12	54.88

Note:

1. If surcharge as calculated for different consumer became (-) it would be zero
2. Average Tariff (T) is taken from ABR Tariff Order - July, 2013

Additional Surcharge

April-July	
Time Slots	Ps/Unit
0-3	30
3-9	130
9-12	30
12-18	30
18-24	30

August-November	
Time Slots	Ps/Unit
0-6	300
6-12	300
12-18	300
18-24	300

December-March	
Time Slots	Ps/Unit
0-6	300
6-12	100
12-18	100
18-24	100

Illustrative case of Open Charges of Intra State Open Access availed by DJB for 1MW at 11 KV Bus of BRPL for 01 month

S.N.	Particular	Chargers	Calculation	Charges for 1 MW capacity for 01 Month(Rs)
	Total Power transferred in a month(units)		720000 (24*30*1000)	
1	State Transmission charges	219 Rs/MWH	(1*24*30*219)	157680
2	State Transmission Loss of % in kind which will be deducted from the energy input	1.21%	(1*24*30*219*0.0121)	1908
3	Net State Transmission Charges	in Rs	(1+2)	159588
4	Transmission Charges (CGS)(Drawal+Injection)	25 Ps/unit	(1*24*30*25*1000/100)	180000
5	Injection & Drawal Losses loss of % in kind which will be deducted from the energy input	(2%+1.5%)	(1*24*30*25*10*.035)	6300
6	Net Transmission Charges	in Rs	(4+5)	186300
7	Distribution Transmission Charges(Depend on Licensees) say BRPL	63 Ps/unit	(1*24*30*.63*1000)	453600
8	Dist. Transmission Loss of % in kind which will be deducted from the energy input	2.35%	(1*24*30*0.63*.0235*1000)	10660
9	Net Dist. Transmission Charges	in Rs	(7+8)	464260
10	Operating Charges (SLDC Charges)	Rs2000/day	(2000*30)	60000
11	Operating Charges (RLDC Charges)Minimum	Rs2000/day	(2000*30)	60000
12	Cross Subsidy Surcharge	147.38 Ps/unit	(1*24*30*1000*1.4738)	1061136
13	Additional Surcharges depend on case to case basis	300 Ps/unit(Aug-Nov)	(1*24*30*1000*3.00)	2160000
14	Interconnection Charges depend on case to case basis			
15	Standby charges depend on case to case basis			
16	Parallel Operation Charges			
17	Other Charges			
18	Connectivity Charges			

19	OA Application Registration Fee	Rs5000/Application	(Rs 5000*1)	5000
20	OA agreement fee	0	0	0
21	Net Open access Charges	in Rs	(Sum from 1 to 20)	4156284
22	Effective Open access Charges (without 14 to 18)	in Rs/unit		5.77

Note: To drive out the Cross Subsidy Charges for the FY 2013-14, the following charges are considered from Tariff Order July, 2013 of BRPL

		As per Tariff Order July, 2013
DJB Tariff (T) in Ps/unit.		847
Avg. Power Purchase Cost of (C) Top 5% of total power purchase in Ps/unit		567.4
Losses at 11 kV in %(L)		2.35
Wheeling Charges in Ps/unit(D)		63
Surcharges (S)= $T - \{c(1+L/100)+D\}$ in Ps/unit		147.38

Illustrative case of Open Charges of Intra State Open Access availed by Non-Domestic Consumers for 1MW at 11 KV Bus of BRPL for 01 month

S.N.	Particular	Charges	Calculation	Charges for 1 MW capacity for 01 Month(Rs)
	Total Power transferred in a month(units)		720000 (24*30*1000)	
1	State Transmission charges	219 Rs/MWH	(1*24*30*219)	157680
2	State Transmission Loss of % in kind which will be deducted from the energy input	1.21%	(1*24*30*219*0.0121)	1908
3	Net State Transmission Charges	in Rs	(1+2)	159588
4	Transmission Charges (CGS)(Drawal+Injection)	25 Ps/unit	(1*24*30*25*1000/100)	180000
5	Injection & Drawal Losses loss of % in kind which will be deducted from the energy input	(2%+1.5%)	(1*24*30*25*10*.035)	6300
6	Net Transmission Charges	in Rs	(4+5)	186300
7	Distribution Transmission Charges(Depend on Licensees) say BRPL	63 Ps/unit	(1*24*30*.63*1000)	453600
8	Dist. Transmission Loss of % in kind which will be deducted from the energy input	2.35%	(1*24*30*0.63*.0235*1000)	10660
9	Net Dist. Transmission Charges	in Rs	(7+8)	464260
10	Operating Charges (SLDC Charges)	Rs2000/day	(2000*30)	60000
11	Operating Charges (RLDC Charges)Minimum	Rs2000/day	(2000*30)	60000
12	Cross Subsidy Surcharge	183.38 Ps/unit	(1*24*30*1000*1.8338)	1320336
13	Additional Surcharges depend on case to case basis	300 Ps/unit(Aug-Nov)	(1*24*30*1000*3.00)	2160000
14	Interconnection Charges depend on case to case basis			
15	Standby charges depend on case to case basis			
16	Parallel Operation Charges			
17	Other Charges			
18	Connectivity Charges			

19	OA Application Registration Fee	Rs5000/Application	(Rs 5000*1)	5000
20	OA agreement fee	0	0	0
21	Net Open access Charges	in Rs	(Sum from 1 to 20)	4415484
22	Effective Open access Charges (without 14 to 18)	in Rs/unit		6.13

Note: To drive out the Cross Subsidy Charges for the FY 2013-14, the following charges are considered from Tariff Order July, 2013 of BRPL

		As per Tariff Order July, 2013
Non-Demestic Tariff (T) in Ps/unit.		883
Avg. Power Purchase Cost of (C) Top 5% of total power purchase in Ps/unit		567.4
Losses at 11 kV in %(L)		2.35
Wheeling Charges in Ps/unit(D)		63
Surcharges (S)=T-(c(1+L/100)+D) in Ps/unit		183.38