BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA

Petition No: 103/2015

CORAM S.K.B.S. Negi CHAIRMAN

IN THE MATTER OF:

Determination of Additional Surcharge on Short Term Open Access consumers purchasing power from within/outside the State of HP, in accordance with sub-section (4) of Section 42 of the Electricity Act, 2003 & sub-regulations 3 of the Regulation 6 of HPERC (Cross Subsidy Surcharge, Addl. Surcharge and Phasing of Cross Subsidy) Regulations, 2006.

AND

IN THE MATTER OF:

Himachal Pradesh State Electricity Board Limited (hereinafter referred to as "HPSEBL" or "The HPSEBL"), Vidyut Bhawan, Shimla-171004.

Applicant

ORDER

- 1. This order pertains to determination of Additional Surcharge on the consumers availing Short Term Open Access (STOA Consumers).
- 2. The distribution licensee (hereinafter referred as "HPSEBL") has filed petition No.103/2015 for approval of Additional Surcharge on the consumers availing Short Term Open Access (STOA). The salient features of the petition are as under:-
 - (i) The petition has been filed for determination of the additional surcharge for the consumers purchasing power through STOA from within/outside of the State of Himachal Pradesh in accordance with sub-section (4) of section 42 of the Electricity Act, 2003 (hereinafter referred as "Act") and sub-regulation (3) of regulation 6 of HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006 (hereinafter referred to as "Additional Surcharge Regulations, 2006").
 - (ii) The Himachal Pradesh Electricity Regulatory Commission (Commission) has allowed open access to all the consumers having contract demand of above 1MVA in Himachal Pradesh. As on date, no consumer has gone for

Medium Term/Long Term open access. However, under the ambit of specific regulations for the purpose, at present nine consumers of HPSEBL are purchasing power from outside the State at the platform of Energy Exchange through short term open access and this number is further likely to increase as many consumers are coming up for availing the same.

Earlier in 2014, while submitting the detailed procedure for short term (iii) open access, the nodal agency (SLDC) had expressed certain difficulties being experienced by them in power management in certain situations relating to short term open access transactions. The HPSEBL's concerns are that once a Short Term Open Access Consumer applies for scheduling to SLDC under intimation to HPSEBL on day-ahead basis for certain quantum of power against his Sanctioned Contract Demand, it is prudent for it to arrange to dispose of the surplus power pursuant to the applied schedule. However, if the consumer fails to firm up the supplier, he draws power from the HPSEBL system. In such a system, on one hand there may be under recovery from such mode of disposal vis-à-vis the recoveries as per tariff and on the other hand drawal of power may entail HPSEBL to pay higher charges in the deviation system. Such mechanism entails not only operational problems but also revenue loss to HPSEBL and the Customer has no risk or cost in venturing into such mechanism. HPSEBL's further concern is that choice and scheduling in Short Term Open Access necessarily eventuates from lower market rates of power visà-vis tariff and when it actually materialises, HPSEBL will suffer losses due to under recovery from disposal of surplus power either by surrender of power on short term basis or under deviation/balancing mechanism. The Commission addressed the genuine concerns in the context of operational problems as well as in the context of revenue shortfalls. Whereas some of the concerns expressed by HPSEBL were addressed within the framework of Regulations, some of the proposals with regard to revenue shortfalls could not be accepted as it was felt that the same would not be in conformity with the Regulations. However, HPSEBL was informed that in order to safeguard its interest in terms of shortfalls due to stranding of power purchase commitments for unavoidable obligations, the HPSEBL is entitled to file separate Petition of charging additional surcharge.

- (iv) The Commission, while passing the MYT Tariff Order on 12, June, 2014, as well as the Tariff Order for FY 2016, reiterated the need for filing the Petition for additional surcharge by HPSEBL;
- (v) In the Petition submitted by HPSEBL, the rate for the additional surcharge has been worked out by considering the amount of power surrendered from power plants and drawl of power from IEX by STOA consumers on a slot wise basis for months May14, Aug14, Dec14, Jan15, Feb15 & Mar15, along with effective per unit fixed cost slot wise for each month. The POC/transmission charges for the power Grid/HPPTCL System for the capacity stranded due to short term open access consumers have also been considered;
- (vi) The fixed cost and the stranded energy on above lines have been abstracted as per Table-1, as given below;

Duration	Stranded Energy (in lac units)	Fixed Cost (Rs. in lacs)
May 2014	20.57	37.47
August 2014	18.01	33.17
December 2014	52.10	94.90
January 2015	83.70	154.67
February 2015	132.14	240.34
March 2015	141.70	262.44
Total	448.21	822.99

Table- 1 Additional Surcharge

- (vii) The rate of additional surcharge has been worked out as Rs. 1.84 per kWh (unit) by dividing the total fixed cost with the total stranded energy.
- 3. The HPSEBL has requested the Commission to approve the Additional Surcharge of Rs. 1.84 per unit for Short Term Open Access Consumers and has also requested that the same rate may be made effective from 01.05.2014. It has further been requested that the Commission may also

pass such orders as are deemed fit and proper in the facts and circumstances of the case.

- 4. The Commission issued a public notice on dated 02.10.2015 in the newspapers namely "The Tribune" and "Amar Ujala" inviting objections/ suggestions on the aforesaid petition from the stakeholders. The complete text of the petition filed for approval of the Additional Surcharge on Short Term Open Access Consumers by the HPSEBL was also made available to the stakeholders on the HPSEBL's website. The last date for submission of objections/suggestions was 31.10.2015.
- 5. The Commission, vide letter dated 06.10.2015, also requested the major stakeholders, including the Industries Associations of the State, the Small Hydro Power Associations of the State, State Government, Directorate of Energy and HIMURJA to send their objections/ suggestions as per the aforesaid public notice.
- 6. Thirteen stakeholders (objectors), as enlisted to Table-2 submitted their comments on the proposal. Item wise replies have also been given by HPSEBL. In order to have better understanding of the objections raised by the stakeholders and the replies given by HPSEBL, the Commission convened hearing of all the stakeholders on 30.01.2016 in HPERC Office at Shimla. The names of persons who participated in the hearing have been given in Table-2.

Sr. No.	Name & address of petitioner/ stakeholders from whom Petition/	Name of persons representing the stakeholders in the hearing on
	Comments were received	30.01.2016
1.	The HP State Electricity Board Ltd., Vidyut Bhawan, Shimla-04,(Petitioner),	 (i) Sh. Mahesh Sirkek, CE (Comm.). (ii) Sh. K.L. Gupta, Dy. CE (SERC). (iii) Er. Deepak Uppal, SE (PR & ALDC). (iv) Er. Joginder Singh, ASE(PC) (v) Er. Gagan, AEE (vi) Er. Anshul Thakur, AE
2.		
3.	The Open Access Users Association, A-49, 2 nd Floor, Sector-8, Dwarka, New Delhi- 110077.Sh. Anirban Mandal, Legal Consultant.	
4	M/s Ambuja Cements Ltd.,Unit – SULI, Village-Rauri, P.O. Darlaghat, Teh. Arki, District Solan, HP.	Sh.P.C. Dewan, Advocate. Sh. Kishori Lal Singh, Sr. Manager a/w

Table-2

5	The Indian Energy Exchange, Unit No.	Sh. Kunal Gauba
	3,4,5 & 6,4 th Floor, Plot No. 7, IDE Centre,	
	District Centre, Jasola, New Delhi-110025.	
6	M/s ACC Limited, VPO. Barmana, Distt.	S/Sh. Anshul Gupta, Lokesh Sharma
	Bilaspur- 174013 (HP).	
7	M/s J.B. Rolling Mills Ltd., Vill. Johron,	Sh. Ajay Vaidya, Advocate.
	Teh. Nahan, Distt. Sirmour- 173030.	
8	M/s Jaypee Himachal Cement Plant, Vill.	
	Baga, Teh. Arki, P.O. Kandhar, Distt.	
	Solan-174001.	Sh. P.K. Singh, Sr. Vice President.
9	M/s Jaypee Himachal Cement Grinding &	
-	Blending, Unit- Bagheri, P.O. Khillian, Teh.	
	Nalagarh, Distt. Solan-174101 (HP).	
10	M/s Inox Air Products Ltd.,Vill. Kunjahl,	Sh. R.K. Jain, Adviser (Legal & Power).
	Industrial Area, Barotiwala, Distt Solan –	
	174103 (HP).	
11	M/s H.M. Steel Ltd., Vill. Johron, Teh.	Sh. Ajay Vaidya, Advocate.
	Nahan, Distt. Sirmour- 173030.	
12	The B.B.N. Industries Association, EPIP-	
	Jharmajri Road, EPIP Phase 1, Jharmajri	
	Baddi, Distt. Solan-174103 (HP).	
13	The Director, Directorate of Energy, GoHP,	Not participated in hearing.
10	Phase-III, Sector-6, New Shimla-171009	
	(HP).	
14	M/s Su-Kam Power Systems Ltd., Plot No.	
11	7, Apparel Park cum Ind. Area Katha,	
	Baddi, Distt. Solan-173205 (HP).	
15		Sh. Amit Joshi, Consultant, The
10		Feedback Information.
16	Present in the hearing but have neither	Sh. Anuj, Bhataik, M/s PTC India
_	given any written submission nor	Limited, 2nd Floor, NBCC Tower15,
	participated in discussion.	Bhikaji Cama Place, New Delhi – 110066.
17		Sh. PrateeK Agarwal, M/s Mittal
1 - '		Processors Pvt. Ltd., Antriksh Bhawan
		22, G Marg, New Delhi-110001.
-		22, C mars, new Donn 110001.

7. Based on the objections/suggestions raised by stakeholders and the response given by HPSEBL, the Commission finds that the submissions by the stakeholders are, by and large, of similar nature. As such the Commission finds it appropriate to discuss the key points raised by the objectors, instead of discussing each of the submissions separately. The key points raised by the objectors, the response by HPSEBL as well as the Commission's views on such key points are given in the following paragraphs.-

7.1 CONDITONS TO BE MET FOR ADDITIONAL SURCHARGE:

7.1.1 **<u>Comments:</u>**

The objectors have extracted sub-regulations (3) to (6) of regulation (6) of the Additional surcharge Regulations, 2006 and have stated that from the provisions under the Regulations it is clear that additional surcharge could be recovered in specific circumstances only i.e.-

- (i) 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 and that too only to the extent is due to the open access consumers;
- (ii) there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract;
- (iii) these charges are subject to the submission of accounts of fixed cost which the licensee is incurring towards his obligation to supply and due scrutiny by Hon'ble Commission.
- (iv) Additional surcharge would be levied on annual basis.

7.1.2 **HPSEBL's Response:**

HPSEBL maintains that all these conditions have been duly met. The rationale of charging additional surcharge has been described in reasonable detail.

7.1.3 Commission's View:

In this connection, the Commission observes as under:

(i) HPSEBL is required to meet the power requirements of its consumers on 24x7 basis. To meet this objective it has entered into long term PPAs/arrangements. In view of the peculiar features of short term open access, the obligations of the Discom, in terms of existing power purchase commitments, get stranded whenever a consumer avails short term open access, except for the rare situation of notified energy cuts. In merit order of operation, the power at the margin gets stranded. Moreover, since the short term open access is taken only for limited durations depending upon the market rates in particular time slots and HPSEBL has to meet the requirement of such open access consumers also in all other periods, the power commitments shall continue to get stranded, unlike the situation in case of long term open access where such commitment can be expected to taper down. However, as mentioned elsewhere also in this order, the capacity surrendered due to reasons other than short term open access shall not be considered for the purpose.

- (ii) In case of short term open access, the power at the margin in merit order operation gets stranded. The power from such sources involves certain fixed costs which have to be essentially paid by the Discom even if such power is stranded for short durations. The Commission shall however adopt a very reasonable approach while allocating the fixed costs to STOA and shall not consider the fixed costs for the capacities which would have got stranded even in absence of short term open access.
- (iii) The HPSEBL, in their petition, have submitted details of the fixed charges paid by them in respect of stranded power. The Commission shall however make due diligence while determining the rate of additional surcharge.
- (iv)The Additional Surcharge Regulations, 2006 provide for determination of additional surcharge on annual basis. Collection has to be made either as one time payment or on monthly basis. The Commission finds it appropriate that additional surcharge should be collected in the same billing cycle in which the HPSEBL collects its wheeling charges from the consumers availing short term open access.

In view of above the Commission finds that conditions brought out by the objectors are clearly met and there is a fit case for determination of the rate of additional surcharge for consumers availing short term open access.

7.2 MID-YEAR REVISION OF TARIFF:

7.2.1 **Comments:**

Amount payable under various heads can be decided in tariff petitions only. As per the Section 62 (4) of the Electricity Act, 2003, ordinarily tariff or part thereof cannot be revised in a Financial year. Levy of additional surcharge is a sort of additional element of tariff and hence it can be decided only while formulating the annual tariff.

7.2.2 HPSEBL's Response:

HPSEBL have stated that the petition has been filed as per directions imparted to it by the Commission in the MYT order (FY 15-19) and the tariff order for FY16.

7.2.3 Commission's View:

The Commission had already expressed its intent in the tariff order of FY 2016 to determine the additional surcharge. The contention that the fixation of additional surcharge amounts to revision of the tariff is not accepted particularly when the Commission intends to fix the rate of additional surcharge for the prospective period only.

7.3 **RECOVERY OF FIXED COSTS THROUGH OTHER CHARGES:**

7.3.1 **Comments:**

The objectors have stated that since the consumers availing open access are already paying fixed charges (Demand Charges + Cross Subsidy Charges + Wheeling Charges) to HPSEBL and all these charges are determined based upon ARR of HPSEBL and are built in the fixed cost of so called surrendered power, there is no case to levy additional surcharge on account on surrendered power.

7.3.2 HPSEBL's Response:

HPSEBL have stated that additional surcharge is to be charged as per provisions of the Act and Addition Surcharge Regulations, 2006 and that the calculations are based on surrendered power due to open access. It has also stated that it has demonstrated that power is getting stranded continuously for last quite a few months. It has further been mentioned that as a long term measure, it has already surrendered its costly shares.

7.3.3 Commission's View:

A harmonious reading of the various provisions in the Act, Additional Surcharge Regulations, 2006, Tariff Policy and National Electrical Policy clearly reveals that the wheeling charges, cross subsidy surcharge and the additional surcharge are meant to recover three distinct costs. The cross subsidy surcharge is towards cross subsidization to the subsidized category of consumers. This has already been determined in the tariff order for determination of retail tariff for FY 2016. The fixed costs relating to network assets of the Distribution System are to be recovered through wheeling charges, which have also been determined in the aforesaid tariff order. However the additional surcharge for meeting the fixed costs for obligation of HPSEBL to supply is to be determined in this order. As regards the recovery through demand charges, the same shall be allocated towards wheeling charges and fixed cost of power for the purpose of determining additional surcharge, as discussed separately in a greater detail in a succeeding paragraph.

7.4 **FIXED CHARGES COVERED IN OVERALL TARIFF:**

7.4.1 **Comments:**

While allowing the power purchase cost in the ARR, the Commission has already considered the overall tariff of the generating sources including the fixed cost and variable cost. It has also been mentioned that fixed charges payable to generators have not been approved. Hence, the computation of additional surcharge indicated by the petitioner is misleading.

7.4.2 HPSEBL's Response:

HPSEBL has stated that the Commission has allowed Power purchase cost in ARR and the same can be fully recovered from the consumers in the form of demand charge and energy charge. In case a consumer opts for open access these charges cannot be fully recovered to meet the fixed cost of such distribution licensee arising out of his obligation to supply. Therefore, Additional Surcharge shall be applicable on open access consumers.

7.4.3 Commission's View:

The Commission agrees with the views of HPSEBL. In case the additional surcharge is not charged, the HPSEBL shall not be in a position to recover the entire fixed cost in respect of the capacity getting stranded due to open access. The Commission also finds that the ARR approved by it includes all the tariff components of the central sector thermal projects from which power is considered have been stranded. The details of various tariff components are also available in the respective orders of CERC and shall be accounted for accordingly.

7.5 CHARGES PAID BY STOA CONSUMERS:

7.5.1 **Comments:**

The objectors have stated that the HPSEBL has raised the point that they are paying fixed charges even on the unutilized/surrendered power due to Open Access Consumers. Their case is that a Short Term Open Access consumer who is already a consumer of HPSEBL is paying the fixed charges to HPSEBL on total contract demand weather the consumer is consuming energy or not. It has also been stated that the Open Access Consumers are already bearing the losses as well as certain charges and fee as specified on power purchased from IEX along with other charges as specified below:-

Losses	on	power	purchased:-
		1	1

Sr. No.	DESCRIPTION	% Losses
1	State Transmission Losses	0.75%
2	Distribution Licensee Losses	4.00%
3	POC Losses	1.16%

B Various Charges:-

Sr.	DESCRIPTION	Charges			
No.					
1	Contract Demand Charges	Rs.350/kVA			
2	Peak Load Additional Charges	Rs. 100/kVA			
	on average demand				
3	CTU Transmission Charges	6.41 p/kWh			
4	STU Transmission Charges	2.0 p/kWh			
5	Distribution Charges	23 p/kWh			
6	Cross subsidy surcharge	9 p/kWh			
	(Normal Hours)				
7	Cross subsidy surcharge(Peak	273 p/kWh (In addition to			

	Load Hours)	higher tariff @ additional190 p/kVAH)
8	Application fee	Rs. 5000/ application/day
9	SLDC Operation Charges	Rs. 5000/ application/day
10	NLDC Application Fee	Rs. 5000/No. of Successful Portfolios
11	NLDC scheduling Operating charges	Rs. 2000 X (Regional entity buyers + Regional entity sellers)/No. of successful Portfolios
12	NOC/Concurrence fee	Rs. 5000/Month

It has been stated that since they are paying the above mentioned charges to different agencies including HPSEBL, it would be unfair on the part of HPSEBL to demand for compensation at the cost of Open Access Consumers.

7.5.2 **HPSEBL's Response:**

HPSEBL has referred to the provisions of subsection (4) of Section 42 of the Electricity Act, 2003 and regulation (6) of HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006 according to which Additional Surcharge is applicable on open access consumers.

7.5.3 Commission's View:

The various charges mentioned by the objectors, except for the contract demand charges or peak load additional charges on average demand, do not include any charge which may recover the fixed cost associated with HPSEBL's obligation to supply. As regards the demand charges, the matter has been dealt in detail in a separate paragraph.

7.6 **ESTIMATION OF STOA:**

7.6.1 **Comments:**

The objectors have stressed that there are only a few consumers who are availing short-term open access and their consumption can be estimated by the utility. It was mentioned that the stranding of power if any takes place only due to lack of planning by the utility.

7.6.2 HPSEBL's Response:

HPSEBL stated that the consumers avail short-term open access at a very short notice and that too only for limited time blocks of the day. As such it is not possible to estimate the requirement precisely for each time slot. It was also stated that even otherwise HPSEBL has to remain in readiness for meeting the requirement for the consumers for all times of the day, including that for the open access consumers, in respect of the period in which they avail open access. It has also been brought out that the commission has also allowed certain contingent power to meet the requirements of the consumers.

7.6.3 Commission's View:

The Commission feels that the arguments advanced by the objectors could be relevant in situations of medium/long term open access but may not be of much relevance in case of short-term open access where consumers avail short term access at very short notice and HPSEBL has to remain in readiness to meet the requirements of such consumer even if consumer is not able to tie-up power after submitting the schedule. In such situations some power is bound to get stranded for which HPSEBL can not be held responsible. The Commission however, also feels that degree of strandedness and its impact could be lesser in situations where the consumers may firm up the schedule well in advance as compared to situations where consumers may avail open access at very short notices (say up to 72 hours). The commission accordingly finds that it should be appropriate to fix the rates of additional charges in graded manner suitably linked with the duration of the open access and associated conditions at least from next year onwards.

7.7 **INADEQUATE TRANSMISSION SYSTEM AND LONG TERM LOAD** FORECAST:

7.7.1 **Comments:**

The objectors have stated as under :

"This is very well known fact that the distribution licensee is not able to assess their long term power requirements properly and have been unmindfully signing PPAs with new generating stations without knowing their load growth. The growth of power evacuation system has lagged far behind which has created a vast gap between the power available to the State and to the ultimate consumers. While new applicants are waiting for years to the get an electric connection or get their loads enhanced, the distribution licensee is not able to wheel the power to the consumer premises due to weak transmission and distribution network. If this is the scenario how the licensee could argue that the PPAs are remaining stranded due to open access consumers."

7.7.2 HPSEBL's Response:

On this, the Chief Engineer (Commercial), HPSEBL confirmed that the fixed charges corresponding to power which was actually stranded due to short term open access have only been considered and the power which was stranded for reasons other than open access has not been considered.

7.7.3 Commission's View:

The Commission, while appreciating the concerns about transmission and distribution constraints as well as imperfection in proper assessment of long term requirements, feels that the issues are not relevant to short term open access which is granted only if the existing system permits such flows.

7.8 STOA CONSUMER NOT RESPONSIBLE:

7.8.1 **Comments:**

Open access consumer is not responsible for any surrender of Energy by the State and also if there is any earlier commitment of the State with power exporter it cannot be recovered by open access consumers. Demand forecasted is used to book long term power and actual demand in the State. The difference of forecasted demand and actual demand based on which HPSEBL took long term power, is an additional fixed cost burden on the State and has to be shared as part of fixed/demand charges in the retail tariff order. This cannot be loaded on to open access consumers as additional surcharge as they do not contribute to the same.

7.8.2 HPSEBL's Response:

HPSEBL has not agreed with this contention and has stated that STOA consumes are liable to pay additional surcharge.

7.8.3 Commission's View:

The Commission reiterates the view that in view of the peculiar features of STOA, certain capacities get stranded in the time blocks in which STOA is availed. STOA consumers are therefore liable to pay additional surcharge as per the provisions of the Act and Regulations.

7.9 EXTRA BURDEN:

7.9.1 **Comments:**

The additional surcharge on wheeling charge will be an extra burden on the consumer and not mandated under the Electricity Act, 2003. The same should be disallowed. Further in order to know the exact wheeling charges burdened on the consumers under additional surcharge, no details are provided by HPSEBL. It is requested to the Commission that HPSEBL be directed to provide break up of additional wheeling charges paid to various generators and as claimed by it in the petition, supported by statutory auditors certificate.

7.9.2 HPSEBL's Response:

HPSEBL has stated that the petition has been filed as per subsection (4) of section (42) of Electricity Act 2003, HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006 and also as per direction of HPERC in MYT Order for 3rd control period (FY 15-19) and also in the order relating to determination of tariff for FY16. Therefore, additional surcharge should be allowed under these provisions. Data related to determination of additional surcharge has already been provided by HPSEBL along with petition.

7.9.3 Commission's View:

The additional surcharge is meant to meet the fixed cost of distribution licensee arising due to his obligation to Supply. In case of Short-term Open Access, the consumers avail open Access according to their convenience and economics. Even after having expressed their intention to avail Short-term Open Access, they actually tie up the power only if they are able to get power at rates suitable to them. However, in case the power is not tied up the HPSEBL is under obligation to Supply Power to them to the extent of their contract demand. Such obligation to Supply involves certain fixed costs which are to be recovered through additional Surcharge.

7.10 IMPACT OF ONLY STOA TO BE CONSIDERED:

7.10.1 **Comments:**

The Calculations should consider the stranded fixed cost which is due to the direct result of open access power bought during those time blocks, where the generating capacity is available but not scheduled solely due to such open access power.

7.10.2 **HPSEBL's Response:**

Calculations consider the power surrendered due to open access consumer only and correspondingly the stranded fixed cost.

7.10.3 Commission's View:

The Commission agrees that the capacities getting stranded as a result of Short-term Open Access only shall be considered for the purpose of determining additional surcharge.

7.11 ADDITIONAL SURCHARGE AS FRACTION OF WHEELING CHARGES:

7.11.1 **Comments:**

The objectors have reproduced the provisions of sections 42 (2) and 42 (4) of the Electricity Act, 2003 and have stated that there is distinct difference between the levy/payment of surcharge on open access and that of additional surcharge. While surcharge is to be paid in addition to the wheeling charges, the additional surcharge is a surcharge on wheeling charges. The two provisions are therefore to be seen in right perspective rather than the way it is misinterpreted by the Distribution Licensee. It has also been stated that surcharge can only be a small fraction of the principal.

7.11.2 **HPSEBL's Response:**

HPSEBL have stated that as per subsection (4) of section (42) of Electricity Act, 2003 and HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006 additional surcharge is to be charged to meet the fixed cost of distribution licensee arising out of his obligation to supply.

7.11.3 Commission's View:

The Commission finds that whereas the wheeling charges are payable for the utilisation of the licensee's system for conveyance of electricity, the additional surcharge is payable to meet the fixed cost of the distribution licensee arising out of the obligation to supply electricity to the consumers. The aforesaid two charges are therefore to be determined separately and do not have much co-relation with each other. The additional surcharge, as its name also indicates, is payable in addition to other charges. The Commission accordingly decides to determine additional surcharge per kWh in absolute terms instead of determining the same as a percentage of wheeling charges as suggested. However if one likes to read it as a percentage of wheeling charges, he can always work out such percentage according to his convenience. The Commission also does not find any merit in the contention that additional surcharge has to be a small fraction of the wheeling charges as both these charges are not co-related and are to be determined separately. However even if the additional surcharge were to be determined as a percentage of wheeling charges, there can be no binding to keep the same as a small percentage of wheeling charges. Such percentage can, in fact, be more than 100 also.

7.12 COMPETITIVENESS OF HPSEBL RATES:

7.12.1**Comments:**

There is no substance in the argument that distribution licensee has to surrender power due to more and more consumers opting for open access in the State. If the Petitioners could meet the demand of the consumers by providing power at economical rates, no consumer would opt to go out to buy power from outside sources. This is a pure myth created by the distribution licensee to hide their own inefficiencies.

7.12.2 HPSEBL's Response:

The HPSEBL has repeatedly stated that the STOA consumers avail Open Access at their will and convenience which cause problems in power management. They tend to avail STOA only in those slots in which power is cheaper.

7.12.3 Commission's View:

The Commission observes that the STOA consumers avail Open Access only during the period in which power is available at cheaper rates, and continue to draw power from HPSEBL in other periods, particularly in the periods when market price of power is higher. It will therefore not be fair to comment that the electricity rates of HPSEBL are not competitive or economical. The Commission feels that additional surcharge will strike a healthy balance between the interests of STOA consumers and other consumers of HPSEBL.

7.13 BUSINESS RISK:

7.13.1 Comments:

The Petitioner is in the business/trade of sale/purchase of electricity and as such like every trader/businessman it has to take the business risk annexed with the type of business being carried out instead of un-necessarily penalizing the consumer who opt to purchase power from a source other than the Petitioner.

7.13.2 HPSEBL's Response:

HPSEBL has repeatedly stressed in their replies that the Commission should approve/determine the rate of additional surcharge in view of provisions of the Act and Additional Surcharge Regulations, 2006.

7.13.3 Commission's View:

The Commission observes that business of Supply of Electricity is a regulated business and it is therefore essential that the various charges, as may be legitimately due, should be charged from the consumers. The additional Surcharge is a legitimate charge duly envisaged in the Act as well as in the Additional Surcharge Regulations, 2006. As such the charging of the said surcharge in a reasonable manner cannot be termed as unnecessary penalty.

7.14 OPTIONS FOR REDUCING LIABILITY:

7.14.1 **Comments:**

HPSEBL should confirm that it explored all the options of reducing its liability towards capacity charges payment on surplus capacity and selling the surplus capacity outside the state. Copies of the correspondence made in this behalf should be made known to the objectors.

7.14.2 HPSEBL's Response:

HPSEBL's reply is affirmative. It has also stated that it is taking all possible steps like regulation of own HEPs as well as IPP owned Baspa-II HEP/ banking/ sale through IEX before going for surrender of power shares.

7.14.3 Commission's View:

The Commission would like to believe HPSEBL about the confirmation given by them and also observes that power becoming surplus due to STOA is normally surrendered from thermal sources. In most of the sources which shall have to be considered for the purpose of determination of additional surcharge, it may be economical to pay fixed charges rather than purchasing energy particularly when the consumer tends to avail short-term Open Access during situations when power is available in the Grid at lower rates.

7.15 **RESTRICTION OF ADDITONAL SURCHARGE TO REASONABLE LEVELS:** 7.15.1 Comments:

The objectors have reproduced extracts from para 4 and 8 of the Tariff Policy and 5.8.3 of National Electricity Policy, notified by Govt. of India and have stated that a mere reading of these extracts from the Tariff Policy makes it amply clear that the Union Government's attempt to introduce open access in the transmission and distribution systems of the licensee was basically to create competition in the power distribution business and primarily in the larger interest of the consumers. It has been mentioned that the policy clearly lays down that the impact of cross subsidy surcharge, additional surcharge and wheeling charges etc., should not be so onerous that it eliminates competition and further that the Policy envisages a scenario where every electricity consumer pays for the cost to serve to the distribution licensee. It has further been mentioned that with this intention only it was specifically provided that the cross subsidy surcharge would be brought down progressively so as to attain a level of 20% of the opening level by the year 2010-11.

7.15.2 HPSEBL's Response:

HPSEBL have requested the Commission to finalize the additional surcharge based on the methodology and data submitted by them.

7.15.3 Commission's View:

The Commission agrees that the impact of cross subsidy surcharge, additional surcharge and wheeling charges should not be so onerous that it eliminates competition. The Commission has already fixed the cross subsidy surcharge and wheeling charges at very reasonable rates and shall duly keep this aspect into account while determining the rate of additional surcharge also.

7.16 **AVAILIABILITY OF CHEAPER IEX POWER TO HPSEBL:**

7.16.1 **Comments:**

It is not confirmed that HPSEBL has been taking advantage of opportunities of buying cheaper power from IEX, even when such opportunities are available.

7.16.2 HPSEBL's Response:

HPSEBL cannot rely on short term power procurement to meet up the demand of the State as there is no surety of getting required quantum of power at economical rates with such mode of procurements. This is also clear from the fact that the OA consumers themselves are not able to procure power through Short Term Open Access on regular basis on all days or in all time blocks of the day. Therefore based on the contracted demand of the consumers, Long Term arrangements are made by HPSEBL to ensure supply to its consumers without any power cut. Further the availability of power on account of purchase by Open Access consumers through Open Access is not known till the obligation report of IEX i.e. not before 4.00 PM for next day, as such either HPSEBL has to take steps like surrendering of costly ISGS shares to maintain grid security or has to sell power in advance and go for power cuts during real time operations which is not good for consumers as well as HPSEBL.

7.16.3 Commission's View:

The Commission, while appreciating the comments in their generality, agrees to the views of HPSEBL.

7.17 **RIGHT TO LOCATE SOURCE:**

7.17.1. Comments:

The objectors have stated that it is the right of the buyer to locate power from any source and such right should not be curtailed from HPSEBL by imposing additional surcharges because in any case the power requirements of existing consumers of the HPSEBL, in case of contingency condition have to be met by HPSEBL.

7.17.2 HPSEBL's Response:

The proposal is to approve/determine the additional surcharge and not to take away the right of buyer to locate power from a source of this choice.

7.17.3 Commission's View:

The Commission observes that the additional surcharge is payable as per the provisions of the Electricity Act, 2003 and the Additional Surcharge Regulations, 2006. The determination of rate of additional surcharge does not, in any way, take away such right of the consumer, particularly when the Commission intends to determine the rate in a reasonable manner only.

7.18 RECOVERY OF WHEELING CHARGES TRHOUGH ADDITIONAL SURCHRAGE:

7.18.1 **Comments:**

The objectors have stated that open access consumers are already paying transmission losses as well as transmission/wheeling charges, as approved by the Commission. which include the fixed cost of transmission and distribution. Hence, computation of additional surcharge is not justified at all. It has also been stated that network costs can not be charged through additional surcharge.

While determining Annual Revenue requirement (ARR) of HPSEBL, network related costs have been considered by the Commission and same are being recovered through tariff notified by the Commission. Thus, there would be double charging of same cost in case wheeling cost is allowed to be included in the computation of Additional Surcharge.

7.18.2 HPSEBL's Response:

In accordance with the Additional Surcharge Regulations, 2006 and the Act, the OA consumers are liable to pay additional surcharge to meet the fixed cost of licensee arising out of his obligation to supply. It has also been stated that network costs of the distribution system, which are to be met through wheeling charges, do not form part of additional surcharge. With regard to the loading of transmission charges for CTU system, HPSEBL has stated that it has entered into long term open access agreement with Power Grid for transference of its shares in outside the State power projects and thus paying charges for per MW of booked corridor. The quantum of energy receivable on this booked corridor gets reduced on surrendering of ISGS shares by HPSEBL. This surrender of power results in increase in per unit transmission cost for import of shares. As the surrender of power is also attributed to power purchase by Open Access consumers through Open Access, the Open Access consumers are also liable for bearing this impact. During hearing, HPSEBL also stated that transmission charges of power grid actually correspond to POC charges.

7.18.3 Commission's View:

The Commission agrees that wheeling charges of HPSEBL shall not be considered as fixed cost for computation of Additional Surcharge. However, as regards the POC charges/transmission charges of Power Grid/HPPTCL, the Commission agrees with the view of HPSEBL and finds that since the transmission charges are payable to the Power Grid and also to HPPTCL on per MW per month basis, the amount payable does not get reduced even if some power is stranded. As such, these charges shall have to be accounted for as fixed costs for determining the additional surcharge even if the open access consumer is otherwise also required to pay similar charges to Power Grid and HPPTCL for their open access drawls. In this connection it is also worth mentioning that if these costs are deemed to be recovered through demand charges, the net recovery through demand charges which is to be

subtracted from fixed cost for surrender of power shall also be reduced correspondingly and net result will remain same as explained in a separate paragraph also. As regards the transmission losses, the Commission feels that the same in respect of stranded capacity do not form part of fixed cost. However the rate of fixed charges worked out at the injection point shall be projected to the delivery point (Consumer end) for the sake of convenience of billing and this shall not lead to any extra burden for the consumer. For example if 100 kWh is tied up at the injection point and additional surcharge @ "P" paise per kWh is payable by the open access consumer at the injection point, the amount payable shall be "100 P". On the other hand, if he pays losses of L% on this energy, the rate projected at the consumer end shall be "P/(1-L/100)" paise/kWh, and this rate shall be payable on (100-L) kWh. Accordingly the amount payable even on this basis shall be "P/(1-L/100*(100-L)" = "100 P" which is same as that for the rate of "P" paise per kWh at the injection point.

7.19 SUBSTRACTIONS FROM THE PER UNIT COST OF STRANDED POWER:

7.19.1 **<u>Comments:</u>**

The objectors have also suggested that the following items should be subtracted form the per unit cost of stranded power.-

- (i) Cross subsidy surcharge;
- (ii) To meet consumers demand, some reserve is required in power purchase, therefore, some percentage of fixed cost of overall power purchase is also to be reduced;
- (iii) Gain due to:

-Inadvertent flow of power;

-Wheeling charges recovered;

-Difference of amount recovered from sale of power and variable cost of power;

-Any other deduction as deemed fit to the Commission.

7.19.2 **HPSEBL's Response:**

HPSEBL have stated that as per subsection (4) of section (42) of Electricity Act, 2003 and the HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006 additional surcharge is to be charged to meet the fixed cost of distribution licensee arising out of his obligation to supply.

7.19.3 Commission's View:

The Commission finds that:-

- (i) the cross subsidy surcharge is meant to take care of the impact of cross subsidization and is payable in addition to the additional surcharge and there is no co-relation or justification of deducting this amount from the fixed cost of stranded power;
- (ii) the power purchase in view of long term requirement of the consumers is not to be loaded. However, the fixed costs for the reserve maintained by HPSEBL for providing 24x7 supply shall be equitably considered for the purpose of determination of additional surcharge;
- (iii) it could be true that in certain rare situations there can also be marginal gains due to flow of power through short term open access arrangement. However, the fact also remains that in many situations arising due to STOA the HPSEBL may have to suffer shortfall in revenue which may far exceed the recovery through additional surcharge;
- (iv) the wheeling charges recovered from the STOA consumers are meant for meeting the fixed costs of network and can not be subtracted from fixed cost of stranded power;
- (v) surrender of power normally takes place from thermal stations where the variable cost may be much higher as compared to the market rate during the scenarios in which consumers tend to avail STOA. Accordingly if the variable cost of power is to be considered, it may, in many situations further aggravate the shortfall. The impact of such situations will more than off set the gains if any, which are sought to be adjusted.

In this background the Commission decides that it shall only consider the fixed cost of the stranded power for the purpose of determination of additional surcharge. However, the Commission, in the interest of fair play, also decides that no additional surcharge shall be payable for the STOA availed during the time slots in which HPSEBL may impose energy cuts in the area in which the consumer is located.

7.20 **RELATIONSHIP WITH DEMAND CHARGES:**

7.20.1 **Comments:**

The objectors have stated that the additional surcharge claimed by HPSEBL is not legal and valid as the consumers availing short term open access continue to pay demand charges for full demand even if drawl of a part of energy is made through short term open access. As the impact of Fixed Cost is already taken care of while considering Annual Revenue Requirement of the Distribution Licensee, there is no justification for the levy of Additional Surcharge on the Open Access consumers in Himachal Pradesh. It has also been mentioned that while considering the ARR of the Distribution Licensee, the Commission takes into account the combined tariff of various generating stations. The Tariff assumed in the cost of power purchase is the sum total of the 'Fixed Cost' as well as the 'Variable Cost' of energy to be purchased from each of the projects and thus the fixed cost of the generation projects is already built in the cost of the power purchase allowed from each source. It has further been mentioned that even if some of the power is scheduled to be purchased from these sources remains unutilized, the fixed cost is already accounted for in the tariff computation process.

The objectors have further stated that the Distribution and Retail Supply Tariff determined by the Commission has two components i.e. 'Fixed Demand Charges' and the 'Energy Charges'. The fixed demand charges so determined do include the fixed charges liability of the distribution licensee. When the Open Access consumer purchases power through source other than the distribution licensee, he continues to pay the total fixed demand charges according to sanctioned Contract Demand irrespective of the power being purchased from any external sources. Thus the fixed charges component is already recovered from the open access consumers like that of any other consumer as an essential part of the tariff.

7.20.2 HPSEBL's Response:

During the course of hearing, HPSEBL stated that the additional surcharge has no bearing with the demand charges.

7.20.3 Commission's View:

The Commission does not agree to the HPSEBL'S version that additional surcharge has no bearing with the demand charges. The Commission has in fact considered this aspect in reasonable detail as per para 6.2 of the tariff order dated 10.04.2015 for the first APR of 3rd Control Period and determination of tariff for FY 2016. The said para 6.2 is also reproduced for ready reference.

"6.2 Issues related to tariff structure

Philosophy of demand charges.

6.2.1 The aggregate cost of supply can be divided on the basis of functions performed such as generation/power purchase, transmission and distribution etc. Each of the functionalized cost can be further classified, based on intrinsic nature into fixed and variable costs. The total fixed costs would primarily comprise of demand related costs which would have mainly two distinct and independent components i.e. the one relating to network cost and the other one relating to power procurement. The fixed network cost comprises of the wheeling charges of the Distribution System and the same corresponding to power procurement would normally include the fixed charges associated with the PPAs for purchase of power and the corresponding transmission charges and losses of Power Grid and HPPTCL etc. Ideally all the demand related fixed costs

should be recovered from the consumers in the area of supply through demand charges. The category wise rates of demand charges should be fixed by taking into account such fixed costs and the pattern of the consumption for various categories of consumers such as load factor and demand factors etc. Since the demand charges have to be payable irrespective of the actual usage of the sanctioned contract demand, it may not be practicably feasible to fix the rates of demand charges at such levels in view of historical trends and the tariff shocks and other distortions/anomalies that may be caused in the category wise tariff by way of exorbitant higher average charges in respect of the particular periods in which the consumption by a consumer may be low due to certain reasons.

- 6.2.2 The Commission is also aware of the fact that determination of demand charges on cost to serve basis would require detailed studies based on the coincident demand of each category of consumers during different time blocks as well as during the period in which the peak demand occurs. Such detailed exercise would be more relevant at the stage when Commission shifts to the pricing on the basis of cost to serve model instead of that based on average cost. In case of EHT and HT consumers (above 1 MVA), the demand charges, based on voltage wise wheeling charges and other fixed costs, including cost of power, Power Grid/HPPTCL charges losses, forming part of the total ARR for power procurement, work out to be of the order of Rs.1100 per kVA per month. As such, the present rates of demand charges broadly work out to be of the order of only about one third of the indicative rate as mentioned above. The Commission has however not revised the present rates in view of the practical problems as described above.
- 6.2.3 The Commission also observes that in some cases, the consumers may avail open access in distribution system on

short term basis, even on daily basis or for certain discrete or indiscrete time blocks of a day. In such cases, open access consumers retain their normal prevalent contract demands as consumers of distribution licensee and as such are required to pay the demand charges in full apart from the open access charges. In order to avoid any anomalous situations, the Commission clarifies that in case where a consumer availing short-term open access retains his contract demand, the wheeling charges shall be charged at 50% of the normal rates and remaining 50% shall be deemed to have been included in the demand charges. The balance portion of demand charges, if any, after adjusting the wheeling charges in the aforesaid manner shall be considered to have been provided for on account of a part of the fixed costs in relation to power procurement including transmission cost. Even though the Commission may duly account for such balance portion while fixing the rates of additional surcharge, if any, the consumers shall always be required to pay the demand charges even if there is no additional surcharge determined."

A perusal of above clearly reveals that the demand charges fixed for various categories of consumers do not fully cover all the fixed costs as are required to be incurred by HPSEBL for supply of power to its consumers. The reasons for actually keeping the rates of demand charges at much lower level have already been brought out and do not need any reiteration. The Commission finds that if all fixed costs were to be recovered through demand charges, there would not be any need to charge any additional charge or even wheeling charges for short term open access by the consumers of HPSEBL. However since the demand charges are actually being charged at much lower rates and balance recovery is made through energy charges, the additional surcharge shall essentially have to be charged. As a matter of fact, this can be considered as one of the methods for reasonable determination of the rate of additional surcharge after suitable validation and rationalisation.

It has also been stated that the rates of demand charges in H.P. are higher than those applicable in other States. The Commission finds that this may not be relevant to matter under consideration. However, it would like to point out that even though the fixed costs are actually much higher than those recovered through demand charges, the rates of demand charges are fixed by taking into account various related factors, including the possible hardships of consumers in case of temporary decline in their consumption which can be due to shut down of their plants or in some other cases can even be due to restrictions attributed to system constraints. In HP, demand charges are fixed in quite liberal manner particularly when the consumer can also temporarily reduce their demand subject to certain conditions and the quality of supply is, by and large, quite good.

7.21 **INCENTIVE FOR GROWTH OF INDUSTRALISATION:**

7.21.1**Comments:**

The objectors have commented that cheap and reliable electricity is the only incentive for the industries in the State and imposition of surcharge would only create hurdles in growth of industrialization in the State and would discourage the industrial consumers to stick to this remote State. As such it may only provide some relief to the consumers taking supply from HPSEBL. It was also mentioned that the consumption of more electricity through open access would amount to bringing cheaper electricity for consumption in the State and in case it is not availed, some other States would get the benefit. It has also been stated that the Commission has to protect the interests of the consumers in the State as per provisions of section 60 of the Electricity Act, 2003 and if rate of Rs. 1.84 paise per unit is accepted then the viability of open access power will be totally finished and the industry will never be able to utilize open access power. The industrial scenario in the State is already very poor and the industry might be forced to take a flight from the State.

7.21.2 HPSEBL's Response:

HPSEBL stated that the objective here is to facilitate recovery of charges which are legitimately due as per the Act and the Regulations, and not to create any hurdles or to discourage open access. It was mentioned that the argument advanced by the objector is not relevant to the matter under consideration and the additional surcharge as per the provisions of the Act and the Regulations should be allowed to be recovered.

7.21.3 Commission's View:

The Commission agrees to the views of HPSEBL in this regard. The Commission would also like to mention here that the amount to be collected on this account is not to be pocketed by the utility but is to be adjusted in the ARR. It is thus felt that determination of the rate of additional surcharge in a reasonable manner would only facilitate equitable balancing of the interests of open access consumers and the consumers, including industrial consumers, of HPSEBL. The Commission finds it necessary to determine the rate of additional surcharge in discharge of its duties.

7.22 SHARING OF STOA CHARGES OF CTU:

7.22.1 Comments:

As per Central Commission's Regulations, STOA charges levied by CTU are disbursed to the Long term beneficiaries in which HPSEBL is a beneficiary. Therefore, HPSEBL is also getting its share of STOA charges when a consumer of HPSEBL is availing inter-state Open Access.

7.22.2 HPSEBL's Response:

The STOA charges being received by HP are further reimbursed to the long term beneficiaries i.e. HPSEBL and GoHP. Charges being received by HPSEBL are accounted for while working out the ARR of HPSEBL and thus passed on to the consumers of HPSEBL.

7.22.3 Commission's View:

The entire direct/indirect relief/payment available to the HPSEBL has to be adjusted in the ARR and all the consumers, including those availing Short-term Open Access shall get indirect relief in the tariff. The argument advanced by the objectors doesn't in anyway, justify any reason for not determining the additional surcharge.

7.23 MAGNITUDE OF STOA:

7.23.1 **<u>Comments:</u>**

The objectors brought out that additional surcharge may not be charged as the number of consumers availing short-term open access as well as their power consumption through open access is very minuscule as compared to total no. of consumers and total consumption of the State.

7.23.2 HPSEBL's Response:

Chief Engineer (Comm.), HPSEBL, stated that additional surcharge can not be disallowed simply because the number of open access consumers or their power consumption is small. The objective is to set out the principles and mechanism for charging the additional surcharge in case where it is legitimately due. It was also mentioned that even otherwise the consumption against open access is now increasing quite rapidly.

7.23.3 Commission's View:

The Commission agrees with the view of HPSEBL in this regard and does not find it appropriate to disallow additional surcharge simply because only a few consumers are availing open access. The Commission will also like to point out that the amount recovered on account of additional surcharge will ultimately be adjusted towards the ARR of the HPSEBL and as such this does not form additional revenue for the HPSEBL. In fact, the consumers availing open access may also get direct or indirect relief in the charges payable by them for the electricity consumed by them as consumers of HPSEBL. The suggestion of the objectors is therefore not acceptable.

7.24 **Exemption from Additional Surcharge in case of under drawl:**

7.24.1 **<u>Comments:</u>**

The objectors have stated that if the open access consumer is not able to draw the power purchased through open access, he is being settled through a deviation mechanism which is just a mere formality and the open access consumer gets a meager amount in return. Also, the additional charges for deviation applicable for the under drawl in accordance with the regulations of the CERC are payable to HPSEBL by the open access customers whose actual drawl is less than the scheduled. Therefore there is no question to re-compensate HPSEBL on account of under drawl.

7.24.2 HPSEBL's Response:

HPSEBL has reiterated the provisions for payment of additional surcharge.

7.24.3 Commission's View:

In case a STOA consumer is not able to draw the scheduled power due to transmission or distribution constraints, he will not be charged the additional surcharge for such energy as could not be drawn due to such constraints. The Commission has also decided in a separate paragraph that no additional surcharge shall be charged for the short-term open access available for the periods in respect of which HPSEBL may impose energy cuts in the particular area in which the consumer is located. However, if the consumer is not able to draw power due to reasons attributed to him, no relief in additional surcharge can be given as the capacity gets stranded and the HPSEBL would have to bear fixed charges for the same.

7.25 COST TO SERVE MODEL:

It has been stated that detailed Study of the tariff clearly shows that in case of HT/EHT consumers, the average tariff being recovered is more than the average cost to serve and the Commission's action to shift from cost to serve model to average cost model caused losses to such consumers. The Commission finds that these aspects relate to tariff fixation and not to the determination of additional surcharge. The suggestion is thus not relevant to the matter under consideration particularly when the consumers availing short term open access pay only a few components of the HPSEBL tariff.

7.26 **GENERAL:**

7.26.1**Comments:**

The Directorate of Energy suggested that the effective per unit fixed cost should be worked out on monthly basis to avoid voluminous calculations.

7.26.2 HPSEBL's Response:

The HPSEBL has not commented on the suggestion.

7.26.3 Commission's View:

The Commission observes that the fixed cost at the Thermal Station is normally spread uniformly over the year. As such it will consider the annual average per unit fixed cost based on the expected annual generation as also described in a greater detail in a succeeding paragraph.

7.27 TRUE - UP OF ADDITIONAL SURCHARGE:

7.27.1 Comments of Director of Energy (DoE):

The Additional Surcharge should be determined on annual basis and it can be collected either as onetime payment or on monthly basis. Further the excess/less recovery, if any, shall also be adjusted during true up of MYT.

7.27.2 HPSEBL's Response:

As suggested by DOE the excess/less recovery, if any, shall also be adjusted during true up of MYT. HPSEBL would like to mention that the said suggestion can be proposed for amendment of HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006.

7.27.3 Commission View:

There is no express provision in the Regulations to recover access/less recovery if any on account of additional Surcharge during the true-up of MYT. The Commission otherwise also does not find it feasible at the present stage to adjust such under/over recovery of additional surcharge and accordingly decides that rate of additional surcharge shall remain fixed for the period for which it is made applicable and there will not be any true-up on this account.

7.28 FLAW IN METHDOLOLGY:

7.28.1 **Comments:**

Indian Energy Exchange has commented that it is imperative that surrendered power on account of open access should be the costlier power in the system. IEX has also compared the energy charges recoverable from the EHT consumers with the energy charges for the LF/LNG units of various Central Sector Stations and have stated that this could lead to an inference that HPSEBL has in fact saved a considerable amount on account on the short term open access. Based on the comparative study it has been stated that basic flaw in methodology proposed by HPSEBL is non-identification of stranded capacity due to open access transmission and therefore same can not be adopted for calculation of additional surcharge.

7.28.2 HPSEBL's Response:

HPSEBL has stated that as a long term measure HPSEBL has already surrendered its costlier long term shares in Tehri, Koteshwer, Parvati –III and Chamera –III HEPs. Also economic surrenders of costly power during real time operation are done by HPSEBL and the resultant financial benefit is passed on to its consumers through ARR.

7.28.3 Commission's View:

The Commission finds that the comparison of the energy charges as per tariff with the energy rate in respect of LF/LNG units is erroneous. The HPSEBL shall obviously draw power, if any, from such units only during the situations of the power shortages/low frequency. On the other hand, the consumers tend to avail short term open access when the price of power in the exchange is significantly low. Even otherwise the energy tariff rate of Rs. 4.20 per kVAh represents the pooled rate of energy from all sources and not from the costlier sources only. The Commission however, while agreeing with the basic suggestion of IEX about the need to follow a realistic methodology for working out the additional surcharge, decides to follow a realistic methodology for the purpose.

7.29 <u>METHODOLOGY AND RELIABILITY OF DATA FURNISHED BY THE</u> <u>LICENSEE:</u>

7.29.1 Comments:

The objectors, other than IEX whose comments have been considered in a preceding paragraph, have also raised objections and doubts with regard to adequacy and reliability of the data and methodology used by HPSEBL for working out the rate of additional surcharge. Some of the points specifically raised by the objectors are as under:-

- (i) HPSEBL has not shared the copies of PPAs and the detailed data used by them for working out the fixed costs and additional surcharge. They have also mentioned that the data relating to certain periods is totally missing and also that the proposal does not demonstrate as to whether HPSEBL has taken adequate steps to minimize its liability towards payment of capacity charges.
- (ii) The proposal is based on wide approximations.
- (iii) The sampling of data has been done in a haphazard manner i.e. instead of 100% assessment the data has been submitted for a single day in specific months i.e. May-14, Aug.-14, Dec.-

14, January to March-15, which cannot be taken as the accurate assessment.

- (iv) Based on these arbitrary samples, monthly averages have been worked out. When the question of charging money comes it cannot be done on approximations rather it has to be exact.
- (v) Backing down is always not because of the open access consumers but due to power demand going down on account of other reasons such as rains, lower requirement, festival/gazetted holidays, etc. Therefore, assuming per day backing down for all the 30 days in a month or 365 days in a year is totally absurd and not permissible under any law.
- (vi) The data submitted by the Petitioner should mention slot-wise surrender/backing down of power from different sources on a particular day over 96 time slots. As per the Tariff Policy power should be surrendered in the order of cost of power i.e. the costliest power should be surrendered first and so on so forth. This merit order surrender principle has not been followed by the Petitioner. In addition it does not mention about open access drawl by the Licensee over IEX and PSIL platforms. It also does not mention about open access used by captive power plants. The Licensee needs to certify that the backing down was as per their instructions and not a fait accompli.
- (vii) Simple arithmetic calculation of backing down is totally unscientific as it is possible on that day or time, the generation station could be generation less due to breakdown/planned shutdown. No such contingency has been accounted for.
- (viii) The method of ascertaining the veracity of stranded power, the data of past corresponding period needs to be closely examined as per the guidelines contained in the Tariff Policy and the Regulations and the assessment of fixed cost of power remaining stranded should be critically examined.

- (ix) Since the state of HP is surplus in power and is selling about 200 MW power to other States at very attractive rates, it is wrong to say that it is surrendering power due to open access consumers.
- (x) Petition filed by HPSEBL does not merit any consideration and needs to be dismissed outrightly.

7.29.2 HPSEBL's Response:

The HPSEBL however maintains that sufficient data has been furnished. HPSEBL has also stated that it has furnished data for all ninety six time blocks of each day of the months in which short term open access has been availed and no sampling has been done. It has also mentioned that details of stranding due to short term open access only have been included and the implications of the power stranded due to other reasons have not been included. It has also stated that prudent practices of merit order operation have been followed.

7.29.3 Commission's View:

The Commission observes that the systematic data relating to stranded capacity based on an objective approach is an important input for determining the additional surcharge. The Commission partly agrees with the view of objectors with regard to the qualitative content of the data submitted by HPSEBL and feels that there is a lot of scope of improving the quality of data. It also agrees that the rate of Rs. 1.84 per kWh, as proposed by HPSEBL, is totally unrealistic and unreasonable. The Commission however does not accept the plea that claim should be rejected straightway particularly when the Commission intends to apply the rate of additional surcharge from a prospective date only and the rejection of claim would amount to absolving the short term open access consumers from paying the additional surcharge even to the extent it is legitimately due, which is, in fact, already over due. However, the Commission shall use the data given by the HPSEBL in this petition with due diligence so as to ensure that additional surcharge is determined on a very reasonable and justifiable basis only. For this purpose, it may also use the data already available in public domain so as arrive at reasonable results.

Further, as mentioned in preceding paragraphs also, some of features of short term open access are quite distinct and rather complex as compared to long term open access. In case of short term open access, the consumers retain their demand with HPSEBL thereby obligating HPSEBL to meet their power requirement at all times i.e. even when they are not able to get power from market at cheaper rates after having expressing their intention for availing short term open access for particular time slots. The power availability to such consumers through open access is firmed up only at advanced stage of finalization of day ahead schedule which creates problems with regard to the power management for HPSEBL. In case HPSEBL surrenders the power becoming surplus due to STOA in anticipation of power availability to the consumers but subsequently if the consumer is not able to arrange power, the power requirements have to be met by arranging power from the grid which may be at higher rates. Similarly in case HPSEBL does not surrender this power in anticipation and the consumer is able to arrange power, the power becoming surplus may get disposed at throwaway price, sometimes even at zero or at an effective negative price. Apart from the cost considerations, this uncertainty also leads to grid operation problems. All these aspects merit consideration while determining additional surcharge. The Commission is also aware that in view of complex nature of the transactions under short term open access, it sometimes becomes inevitable to make reasonable assumptions. In order to determine additional surcharge in a reasonable and equitable manner, adoption of a reasonable methodology which leads to harmonious

results is therefore also equally important. The Commission shall accordingly also evolve methodology for determination of additional surcharge with a reasonable and objective approach which shall also ensure that only such fixed costs which are attributable to short term open access are included for the purpose of determining additional surcharge.

7.30 **OTHER ISSUES:**

The objectors have also given comments in the context of Para 2.2 of the Petition which gives only the background to the petition and is not relevant to the proposal under consideration. As such the Commission has not discussed this in this order. Similarly certain other issues have also been raised which lack relevance to the matter under consideration or otherwise do not merit specific mention. The Commission does not consider it necessary to specifically mention such issues in this order.

8. COMMISSION'S ANALYSIS OF HPSEBL'S PROPOSAL:

After having expressed its views on various points raised by the objectors and also having observed that the rate of Rs. 1.84 per kWh, as proposed by HPSEBL, lacks reasonableness so far as the extent of rate is concerned, the Commission proceeds further to analyse the proposal of HPSEBL and to compute the rate of additional surcharge by using the data given in the petition alongwith the other data available in public domain, as detailed in following sub-paragraphs:

(i) The HPSEBL has identified the generating sources from which the capacities have been stranded during different time blocks due to short term open access. These sources include Anta-gas, Anta- LNG, Anta-LF, Auriya-G, Auriya –LNG, Auriya –LF, Dadri-G, Dadri-LNG, Dadri-LF, Unchahar-I, Unchahar-II, Unchahar-III, Rihand-I, Rihand-II, Rihand-III, Kahalgaon-II, Dadri-II, Jhajhar and Singrauli Projects. In this connection, the Commission would like to refer Table 73 of the tariff order dated 10th April, 2015 containing merit order for power purchase which clearly

considers the power from Unchahar-I, Unchahar-II, Unchahar-II, Kahalgaon-II and NTPC bundled power (solar) as surplus to the requirement of consumers. The power from Rihand-III project has been considered under a contingent provision only. In this back ground the power from the costlier projects from which HPSEBL is not expected to purchase power under normal situations cannot be considered to have been stranded due to short term open access and accordingly, the fixed cost for the shares from such projects shall not be accounted for while computing the additional surcharge rate. The Commission finds that it will be a fair proposition to consider the fixed costs of Anta (gas), Auriya (gas) Rihand-I, Rihand-II and Rihand-III projects for determination of the rate of additional surcharge. Even though the quantum of total power surrendered from these projects is more than the quantum of short term open access, the impact to be considered shall be restricted to the same due to STOA as the Commission shall work out only per kWh rates.

- (ii) The per unit rates of fixed costs for the power stranded from various sources have been computed by dividing the payments made with the units received. This is a faulty procedure and the per unit cost shall be determined on the basis of expected net generation, as given in MYT order, which translates to about 73% load factor for the projects being considered, as aforesaid.
- (iii) The Average rate of fixed cost per kWh, calculated on the basis of fixed charges for the aforesaid projects, has been computed as per the details in Table-3.

Table-5
Fixed cost relating to Generating Capacity (at injection points)

Table 2

Name of Plant	Capacity in MW	Expected Generation (Net) MUs as per Table-106 of MYT order 12.06.2014 (MU)	Annual Fixed Cost in (Rs. Lacs)	Annual fixed charges (Paise/kWh)
1	2	3	5	6
Anta Gas Plant	419.33	2210.44	20765.00	93.94
Auraiya (Gas)	663.36	2730.72	24312.90	89.00
Rihand-I	1000	7006.53	52794.1	75.34

Av	Average rate of fixed cost rate at Injection Points (Paise/kWh)					
Total	4082.69	26075.61	249000.3	95.49		
Rihand-III	1000	6968.24	88419.70	126.88		
Rihand-II	1000	7159.68	62708.6	87.58		

(iv) The rate of 52 paise/kWh, as accounted for by HPSEBL on account of POC/transmission charges is exorbitantly high. Moreover no break-up of this component has been given by HPSEBL. The Commission finds if appropriate to compute such rates based on applicable average rates for POC charges, reliability charges and HVDC charges of Power Grid and Transmission Charges of HPPTCL and the expected net generation. The Commission is aware that in some cases where energy is considered as purchased and then sold, such charges may have to be paid for to and fro flows. However it does not find it appropriate to consider such charges for determining additional surcharge, keeping in view the fact that in case of surrender of capacity, only fixed charges would be payable without involving any energy charges. The fixed costs relating to stranded transmission capacity have been worked out as per details given in Table- 4.

Tabele-4

Fixed cost relating to Power Grid & HPPTCL Transmission System (at injection points)

		Power Grid System		
Month	POC Slab Rate (Rs./MW/Mont h)	Reliability Support Charges Rate (Rs./MW/Month)	HVDC Charges Rate for NR (Rs./ MW/Month)	Transmission Charges (Rs./MW/Month)
1	2	3	4	5
May, 2015	43119	22669	13979	8576
June, 2015	43119	22669	13979	8576
July, 2015	56503	22034	13447	8576
August, 2015	56503	22034	13447	8576
September, 2015	56503	22034	13447	8576
October,2015	53874	21413	12984	8576
November, 2015	53874	21413	12984	8576
Dec, 2015	53874	21413	12984	8576
Average / Month	52171	21959	13406	8576
Average fixed cost rate @73% Load Factor at injection point (Paise / kWh)		16.43		1.61

- (v) The Commission finds it appropriate that the additional surcharge shall be charged on the energy deliverable at the delivery point in the distribution system (i.e. at the consumer end) based on the energy scheduled for each time block. Accordingly, for this purpose, the rates as per Table-3 and Table-4 above shall be projected at the consumer end by considering transmission and distribution losses for respective systems. The Power Grid Transmission losses to be borne by the HPSEBL in H.P. vary from time to time and have been taken as 3.6% (i.e. annual average payable by HPSEBL for drawl of power from central stations). The losses for HPPTCL system and 132 kV & 220 kV distribution systems have been taken as 0.75% and 4% respectively as per the tariff orders.
- (vi) The average per kWh recovery from EHT consumers through Demand Charges, as considered for the purpose of estimation of revenue under the Tariff Order for FY 16, is 69.26 paise per unit. After adjusting 24.5 paise/kWh (i.e. 50% of the wheeling charges for EHV consumers), the balance recovery through demand charges works out to Rs. 44.76 paise/kWh. In view of the discussions in preceding paragraphs, the fixed costs computed on above lines shall be reduced by 44.76 paise/kWh to arrive at the rate of additional surcharge. It is worth mentioning here that the POC/Transmission Charges of Power Grid and HPPTCL are not being adjusted out of Demand Charges due to the reason that these charges have been considered as a part of fixed cost recoverable through additional surcharge. In case these are not considered in this manner, the aforesaid rate of 44.76 paise/kWh will get reduced correspondingly.
- (vii) Based on the findings in the preceding paragraphs, the rate of additional surcharge works out to 78 paise/kWh as per details given in Table -5.

Table-5 Computation of Additional Surcharge Rate

Sr. No.	Description	Fixed Cost at Injection point in Paise/kWh	Fixed Cost Projected at Consumer end in Paise /kWh
1	2	3	4
A)	Generating Capacity	95.49 (As per Table -3)	103.96
B)	Transmission Capacity (i) Power Grid System (ii) HPPTCL System	16.43 (As per Table-4) 1.61 (As per Table-4)	17.89 1.69
C)	Total Fixed Cost at Consumer end (A+B)		123.54
D)	Net Recovery through Demand charges Eligible for adjustment (Paise /kWh)		44.76
E)	Balance payable in shape of Additional Surcharge in Paise/ kWh (C-D)		78.78 (Say 78 Paise/kWh)

The Commission observes that this rate of 78 paise per kWh is less than even 43% of the rate claimed by HPSEBL.

9. <u>Applicability Period</u>

- 9.1 The objectors have stated that HPSEBL has submitted the fixed cost data for the year 2014-15 in September 2015 and has requested the Commission to not to allow it to be charged w.e.f. May 2014. It was stressed that fixation of additional charges from any retrospective date would not be equitable and shall also be bad in the eyes of law. The objectors have also stated that additional surcharge for the past period, if any, would put them to loss as they would not be able to load any such cost for the past period to their customers. It has also been pointed out that the Commission had advised HPSEBL to file the petition for additional surcharge vide its order of 19th September, 2014 and the additional surcharge has been proposed from a date which precedes even the date of said order.
- 9.2 During the course of hearing on 30th January, 2016, HPSEBL stated that the petition for additional surcharge could not be filed earlier as

this was the first petition of its kind and it took sometime for its preparation. It was also stated that the rate of additional surcharge may be fixed w.e.f September, 2014 instead of May, 2014, as proposed.

9.3 The Commission finds that adequate enabling provisions already exist in the Electricity Act, 2003 as well as in the Additional Surcharge Regulations, 2006. HPSEBL certainly did not require any advise from the Commission to file any such petition. The suggested date of September 2014 therefore does not have any relevance to the date of applicability of the additional surcharge. The Commission, however, otherwise also finds that no compelling reasons or circumstances have been explained by HPSEBL to justify application of the rate from any retrospective date. As such, the rate of Additional Surcharge as determined in this order shall be made applicable from the prospective date only. It is also felt that since the petition for determining the rate of additional surcharge for FY 2017 has not been filed so far and even after its filing, the finalization thereof may take some time, the rate determined hereunder should be continued to be applicable till the expected date of fixation of rates based on the petition for FY 2017. The Commission expects HPSEBL to file the petition latest by 31st March, 2016 and the decision can be expected by 31.07.2016. The rate fixed under this order shall accordingly come into force w.e.f 24th February, 2016 and shall remain applicable upto 31.07.2016 or the date of determination of rate(s) of additional surcharge under the petition for FY 2017, whichever is earlier. The Commission however reserves the right to extend this date of 31.07.2016 with a stipulation that in case the extension is to be granted beyond a period of two months after 31.07.2016, the matter regarding extension beyond 30.09.2016 shall be considered only after giving due opportunity to the stakeholders. The rate determined hereunder shall otherwise remain

fixed till the date upto which these remain applicable and there shall be no true-up on this account.

10. Determination of Additional Surcharge Rate

The Commission considers the rate computed in Table-5 above, as quite reasonable from the point of view of the open access consumers as well as HPSEBL. Accordingly, in view of above and based on other findings in the preceding paragraphs, the Commission determines the rate of additional surcharge and associated conditions, as under:-

- (a) Additional surcharge shall be payable by the consumers of HPSEBL availing Short-term Open Access @ 78 paise per/kWh on the energy deliverable at the consumer end, which shall be computed on the basis of the energy scheduled under short term open access for each time slot. However, the additional surcharge shall be curtailed in the following situations-
 - (i) in respect of the time slots for which HPSEBL may impose energy cuts, no additional surcharge shall be payable;
 - (ii) if a consumer is not able to draw full quantum of the energy scheduled in any time slot due to transmission and/or distribution system constraints, the additional surcharge shall not be payable for the energy which could not be drawn by the consumer through short term open access due to such constraints in such time slot.
- (b) The above rate of additional surcharge shall come into force on 24th February, 2016 and shall be applicable till 31st July, 2016 or till any other date as may be revised by the Commission in accordance with para 9.3 of this order.
- (c) The above rate shall be considered as a fixed rate in respect of the duration for which it remains applicable and shall not be subject to any revision due to any true-up etc.

11. <u>PETITION FOR FY-2017:</u>

- 11.1 The Commission intends to use the methodology, as adopted in this order for determination of the rate of additional surcharge, for the purposes of determining such rates, on annual basis, for the remaining years of the current control period also. HPSEBL shall therefore submit all the data for the preceding 12 months, as required for implementing this methodology in their future petitions. However, if HPSEBL feels aggrieved due to adoption of this methodology, it may suggest a different methodology with complete justification alongwith requisite data and may submit the proposal based on such alternative methodology also in addition to the same based on the present methodology. Needless to mention, the Commission expects the HPSEBL to submit the present methodology, for future period, in an objective manner will also be welcome.
- 11.2 As mentioned in the preceding paragraphs also, the Commission finds merit in fixing differential rates of additional surcharge linked with the amount of uncertainty caused due to the short term open access. In the situations where the short term open access consumer gives his firm schedule well in advance and agrees to not to alter it at eleventh hour except for the reasons attributed to system constraints, as distinct from the price of power in the particular time slots, the rate of additional surcharge can be marginally lower as compared to situations where no such firm schedule is given well in advance. Even though the Commission has, in this order, determined only an uniform rate of additional surcharge, it would expect HPSEBL to make suitable proposal alongwith the terms and conditions for such differential rates, after assessing the extent upto which such mechanism can help it in managing the power system, in the context of uncertainties caused due to short term open access consumer, in a better way.

It is so ordered.

Shimla: Date:18th February, 2016 Sd/-(S.K.B.S. Negi) Chairman