BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA

Petition No: 27/2016

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 subsection (4) of Section 42 of the Electricity Act, 2003 & sub-regulation 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 Commission earlier approved the rate of additional surcharge as 78 paise per kWh vide its order dated 18.02.2016 in the petition No. 103/2015.
- 3. The HPSEBL has, vide the present petition, requested the Commission to approve the Additional Surcharge of 80 paise per unit for Short Term Open Access Consumers (STOA). 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. The other silent 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 Methodology adopted by HPSEBL is stated to be the same as adopted by the Commission in its order dated 18th February, 2016 in Petition No. 103/2015.
 - (iii) HPSEBL has considered the Fixed Cost for the same power plants as were considered by the Commission in its order dated 18th February, 2016 in respect of in Petition No. 103/2015. The average fixed cost of such projects at

generation end has been worked out as 95.30 paise per kWh as per the details given in Table –1:

<u>Table-1</u>
<u>Fixed Cost relating to Generating Capacity (at injection point)</u>

Name of Plant	Capacity in MW	Expected Generation (Net) as per Table-106 of MYT order 12.06.2014 (MUs)	Annual Fixed Cost (Rs. Lacs)	Annual fixed charges (Paise/kWh)	
1 2		3	5	6	
Anta Gas Plant	419.33	2210.44	20265.00	91.68	
Auriya (Gas)	663.36	2730.72	24312.90	89.03	
Rihand-I	1000	7006.53	52794.1	75.35	
Rihand-II	1000	1000 7159.68 62708.6		87.59	
Rihand-III 1000		6968.24	88419.70	126.89	
Total	4082.69	26075.61	248500.30	95.30	
Ave	rage rate of fixe	d cost at Injection Points (Pa	ise/kWh)	95.30	

(iv) HPSEBL has calculated applicable average rate of POC charge, reliability charges and HVDC charges of Power Grid and Transmission Charges of HPPTCL as fixed by appropriate Commission. The fixed costs relating to stranded transmission capacity have been worked out as below:

<u>Table-2</u>
Fixed Cost relating to Power Grid & HPPTCL Transmission System (at injection points)

		HPPTCL System		
Month	POC Slab Rate (Rs./MW/Month)	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	8643
June, 2015	43119	22669	13979	8643
July, 2015	56503	22034	13447	8643
August, 2015	56503	22034	13447	8643
September, 2015	56503	22034	13447	8643
October,2015	53874	21413	12984	8643
November, 2015	53874	21413	12984	8643
Dec, 2015	53874	21413	12984	8643
Jan,2016	61410	23703	20208	8643
Feb, 2016	61410	23703	20208	8643
March, 2016	61410	23703	20208	8643
Average / Month	54691	22452	15262	8643
Average fixed cost rate @73% Load Factor at injection point (Paise / kWh)		17.34		1.62

- (v) HPSEBL has considered Power Grid losses as 3.79% for FY 2015-16 till February, 2016 as per Annexure-B of the petition. As the Power Grid losses vary from time to time, therefore annual average percentage has been worked out.
- (vi) The losses for HPPTCL system and for 132KV and 220KV distribution system for FY 2015-16 have been taken as 0.75% and 4% respectively as per the respective tariff orders.

- (vii) HPSEBL has considered the net recovery through Demand Charges, eligible for adjustment against total fixed cost as 44.76 paise/unit, i.e. the same as considered by Commission in its order dated 18.02.2016.
- (viii) On this basis, the HPSEBL has worked out the rate of additional surcharge as 80 paise per kWh as per details given in Table-3 below:

<u>Table-3</u> Computation of Additional Surcharge

	Description	Fixed Cost at Injection point in paise/kWh	Fixed Cost at Consumer end in paise/kWh
(A)	Generation Capacity	95.30 (as per table 1)	103.96
(B)	Transmission Capacity:		
	(i) Power Grid System	17.34 (as per table 2)	18.92
	(ii) HPPTCL System	1.62 (as per table 2)	1.70
(C)	Total Fixed Cost at Consumer end (A+B)		124.58
(D)	Net Recovery through Demand Charges		44.76
	Eligible for adjustment (Paise/kWh)		
(E)	Balance payable in shape of Additional		79.82
	Surcharge in Paise/kWh (C-D)		(say 80 paise)

- 4. The salient features of the petition No. 27/2016 were published by the HPSEBL in the newspapers, "The Tribune" and "Punjab Kesari" on 16.06.2016 and 19.06.2016. The Commission then issued a public notice on dated 14.07.2016 in the newspapers namely "The Hindustan Times" and "Divya Himachal", inviting objections/suggestions on the aforesaid petition from the stakeholders. The complete text of the petition filed by HPSEBL for approval of the Additional Surcharge for Short Term Open Access was also made available to the stakeholders on the HPSEBL's website. The last date for submission of objections/suggestions was fixed as 04.08.2016. The Commission, vide letter dated 21.07.2016, 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.
- 5. The following stakeholders have filed their objections/suggestions:-
 - (a) M/s H.M. Steels Ltd;
 - (b) M/s J.B. Rolling Mills Ltd;
 - (c) M/s Birla Textile Mills;
 - (d) M/s Inox Air Products Ltd;
 - (e) Open Access Users Association.
- 6. The HPSEBL was requested to submit their reply on the suggestions/objections so received, to the Commission and the objectors by 12.08.2016. The objectors were given an option to file re-joinder, if any, by 20.08.2016. Subsequently, the public hearing in the subject matter was fixed on 28.09.2016 at 11.00 AM for which notices were inserted in the newspapers i.e. "The Times of India" and "Amar Ujala"

- on 17.09.2016. Separate notices were also issued to the above stakeholders who had filed objections. The Directorate of Energy (DoE), GoHP, HPSEBL and the SLDC were also informed regarding public hearing on the above matter.
- 7. In pursuance of above, the public hearing was held on 28.09.2016 in which the representative(s) of following stakeholders participated:

Table-4

Sr. No.	Name of Stakeholders	Represented by
(i)	M/s Birla Textile Mills, Sai Road, Bhatouli Khurd , Baddi, Distt Solan.	Ms.Mandakini Ghosh, Advocate. Sh. Anil Jain.
(ii)	M/s Inox Air Products Ltd., Village Kunjhal , Barotiwala, Distt. Solan.	Ms.Mandakini Ghosh, Advocate. Sh. V.M. Nayak.
(iii)	M/s Winsome Textiles Industries Ltd., Sector -34 A, Chandigarh.	Ms.Mandakini Ghosh, Advocate. Sh. Sanjeev Mittal.
(iv)	Open Access Users Association, 2 nd Floor, D-21, Corporate Park, Sector-21, Dwarka, New Delhi.	Ms.Mandakini Ghosh, Advocate.
(v)	HP Govt./DOE, Shimla	Sh. Shanti Sawroop (Legal Consultant).
(vi)	M/s Mittal Processors Pvt. Ltd., Panchkulla, Haryana.	Sh. PrateeK Agarwal. Sh. Upender Verma.
(vii)	M/s J.B. Rolling Mills, Village Johron, Tehsil Nahan, Distt Sirmour (HP).	Sh. Ajay Vaidya, Advocate.
(viii)	M/s H.M. Steels Ltd., Village Johron, Tehsil Nahan, Distt Sirmour (HP).	Sh. Ajay Vaidya, Advocate.
(ix)	HPSEBL, Vidyut Bhawan, Shimla-171004 (HP).	Er. Mahesh Sirkek, CE (Comm.). Er. K.L. Gupta, Dy. CE (SERC). Er. K.S. Sambyal (PC). Er. Gagan, AEE (ALDC). Er. D.R Sharma, AE(HPSLDC)

During the hearing, Ms. Mandakini Ghosh, Advocate, expressed the views/objections on behalf of M/s Birla Textile Mills, M/s Inox Air Products Ltd., M/s Winsome Textiles Industries Ltd. and Open Access Users Association and also submitted a copy of the re-joinder. Er. Mahesh Sirkek, CE (Comm.), HPSEBL, responded on behalf of petitioner i.e. HPSEBL. No views were expressed on behalf of any other stakeholders in the aforesaid public hearing.

8. Based on the objections/suggestions raised by stakeholders and the response given by HPSEBL, the Commission finds that the submissions made by the stakeholders in writing and the re-joinders submitted by M/s Birla Textile Mills, M/s INOX Air Products Ltd. and M/s Winsome Textiles (P) Ltd. during the public hearing are, by and large, of similar nature. Moreover, most of the objections/suggestions as well as the views expressed in the hearing are just repetition of those submitted earlier by the stakeholders in response to an earlier petition No. 103/2015 which was disposed of vide the Commission's order dated 18.02.2016. 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 comments furnished by the objectors on the

key issues, the response by HPSEBL as well as the Commission's views on such key issues are given in the following sub-paragraphs.-

8.1 MID-YEAR REVISION OF TARIFF:

8.1.1 **Comments:**

Amount payable under various heads can be decided in tariff petitions only. As per the Section 62 (4) of the Electricity Act, 2003, ordinary 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.

8.1.2 **HPSEBL's Response:**

HPSEBL has filed the petition as per directions of the HPERC in Order dated 18/02/2016 in Petition No. 103/2015 and provision of the Additional Surcharge Regulations, 2006, quoted by petitioner.

8.1.3 Commission's View:

The Commission duly expressed its intent in the tariff order of FY 2017 to determine the additional surcharge. The contention that the fixation of additional surcharge amounts to revision of the tariff is not accepted.

8.2 APPLICIABILITY OF ADDITIONAL SURCHARGE:

8.2.1 Comments:

Additional Surcharge cannot be charged retrospectively, which has been proposed w.e.f May, 2014. Without contrary to our submission, in no case additional surcharge to be allowed with retrospective effect. This is because of the reason that industrial unit cannot pass such cost through its consumers whom he has supplied its goods as consumers who have purchased power have not considered this cost while calculating the rate of purchase through power exchange which make it unviable and costly power to the consumers, thus huge loss to the consumer. It has been submitted that the additional Surcharge should not be levied from May, 2014 as consumers who have purchased power, have not considered this cost while calculating the rate of purchase through power exchange which make it unviable and costly power to the consumers, thus huge loss to the consumers.

8.2.2 **HPSEBL'S Response:**

HPSEBL states that it has not made any request to make the rate of additional surcharge, proposed in this petition, applicable from May, 2014 as contended by the objectors.

8.2.3 Commission's View:

The Commission had in its Order dated 18.02.2016 determined the rate of additional surcharge as 78 paise per kWh upto 31.07.2016 and had also included enabling provisions for extending the outer date. Subsequently, it was mentioned in the Tariff Order issued on 25.05.2016 that the rate of additional surcharge determined in the previous order of 18.02.2016 shall continue to be applicable till the issuance of the fresh order of additional surcharge. The Commission decides to make the rate of additional surcharge being determined in this order, applicable w.e.f 01.11.2016.

8.3 FIXED CHARGES ALREADY COVERED IN OVERALL TARIFF:

8.3.1 **Comments:**

There is no justification for the levy of Additional Surcharge on the Open Access consumers in Himachal Pradesh. While considering the ARR of the Distribution Licensee, the Commission takes into account the combined tariff of various generation 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. Thus the fixed cost of the generation projects is already built in the cost of the power purchase allowed from each source. Even if some of the power scheduled to be purchased from these sources remains unutilized, the fixed cost is already accounted for in the tariff computation process. Moreover, the tariff approved for purchase of power by the HPERC from various sources is on per unit energy charge basis as is also considered for ARR purposes but no fixed charge to be paid to a generator has ever been approved in the ARR by the HPERC.

8.3.2 **HPSEBL's Response:**

The Commission has already clarified the objection in Point 7.4.3 of HPERC Order on Petition No. 103/2015. The same is reproduced below:

"7.4.3 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 to have been stranded. The details of various tariff components are also available in the respective orders of CERC and shall be accounted for accordingly."

Further, the tariff is determined by the HPERC in such a way that HPSEBL can meet the ARR of HPSEBL by way of expected sale of power in the State. With the decrease in sale of power to consumers, who are opting for Short Term open access facility, the recovery of ARR would decrease.

8.3.3 Commission's View:

The Commission finds that the ARR approved by it does include all the tariff components of the central sector thermal projects from which power is considered to have been stranded. For the purpose, the Commission follows the tariffs approved by the CERC from time to time. The Commission however otherwise also agrees with the views of HPSEBL that 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 shortfall in recovery of fixed costs, arising due to short term open access has therefore to be recovered through additional surcharge.

8.4 RECOVERY OF FIXED COSTS THROUGH OTHER CHARGES:

8.4.1 **Comments:**

The demand charges, being paid by the open access customers are being used to off-set the fixed charges towards power purchase. Moreover, Cross subsidy surcharge is being paid by the Open Access Consumers to take care of cross subsidy burden.

8.4.2 **HPSEBL's Response:**

HPSEBL has filed the petition as per directions of the HPERC in Order dated 18/02/2016 in Petition No. 103/2015.

8.4.3 Commission's View:

The demand charges, charged by the HPSEBL from its consumers do not fully cover the fixed charges towards power purchase as clearly mentioned in a separate paragraph. However, the net recovery of fixed charges through the demand charges shall be taken into account while computing the rate of demand charges. As regards the cross subsidy surcharge, the same is charged on the basis of totally different rationale and under separate provisions of the Act and it has no relevance with the computation of the rate of additional surcharge.

8.5 **EXTRA BURDEN:**

8.5.1 Comments:

The additional surcharge on wheeling charge is 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 has been requested that the Commission may direct 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.

8.5.2 **HPSEBL's Response:**

HPSEBL submits that the objection of M/s. Birla Textile Mills is already clarified in point 7.9.3 of HPERC Order in Petition No. 103/2015.

"7.9.3The 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."

8.5.3 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 by them, the HPSEBL would be under obligation to supply power to them to the extent of their contract demand. Such obligation to supply power involves certain fixed costs which are to be recovered through additional Surcharge. The Commission would however otherwise like to point out the transmission charges are payable to Power Grid & HPPTCL and not to the generators. Rates payable by HPSEBL to them, have been specified by HPSEBL as a part of their petition. However, no wheeling charges of distribution licensee are to be included as discussed in a separate paragraph. The comment therefore lacks relevance.

8.6 STOA CONSUMER NOT RESPONSIBLE:

8.6.1 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 from open access consumers. Demand forecast used to book long term power and actual demand in the State. The difference of forecasted demand and actual demand based on which HPSEBL book 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 retails tariff order. This cannot be loaded on to open access consumers as additional surcharge as they do not contribute to the same.

The intention of the HPSEBL is clear that they are not interested that consumers should avail open access through exchange and is unnecessarily burdening accessee on behalf of the overpriced commitment by HPSEBL with power generators through which they had made PPAs internal without going through the scene of power in India.

8.6.2 **HPSEBL's Response:**

The petition is filed under the provisions of the Additional Surcharge Regulations, 2006, quoted by petitioner. The provisions under Section 42 (4) of the Act as Regulations 6 (1) and 6 (3) of the HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006, have also been reproduced. HPSEBL also submits that same has already been clarified in point 7.9.3 of HPERC Order in Petition No. 103/2015:

"7.9.3The 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."

8.6.3 Commission's View:

The Commission feels that the arguments advanced by the objectors could be relevant to some extent only 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 all such consumers even if consumers are not able to tie-up power after submitting the schedule. In such situations, some power is bound to get stranded for which HPSEBL cannot be held responsible. In view of above, it will only be fair that the consumers availing short term open access should pay additional surcharge to compensate HPSEBL on this account, particularly, when the Act and the Regulations specifically provide for additional surcharge and moreover, the conditions attached with charging the additional surcharge have also been fully met, as is evident from the data given in the petition and the confirmation given by HPSEBL during the hearing. However, the quantum of power to be considered as stranded for the purpose of determination of additional surcharge rate shall be identified in an equitable manner only. HPSEBL has stated during the course of the hearing that

while computing additional surcharge, only that power has been considered which is stranded due to open access consumers. The Commission also agrees, as mentioned in a separate paragraph also, that only such power shall be considered as stranded to the purpose, which would, in normal situation, have been surplus to the requirement of the consumers in the absence of the short term open access. In fact, the surplus power to be purchased only to meet PPAs obligations has also been duly identified in the tariff order. Moreover, the fixed costs for the reserve maintained by HPSEBL for providing 24x7 supply shall not be considered for the purpose of determination of additional surcharge.

As regards the comment that the HPSEBL is not interested that the consumers should avail the open access, the Commission would like to point out that the HPSEBL is duty bound to allow open access in accordance with the Act & Regulations. However, the various charges payable in accordance with Act & Regulations have to be paid. The Commission, while determining the rate of additional surcharge, has to duly maintain balance between the interest of short term open access consumers and the other consumers in the State. The Commission has also clearly spelt out in the preceding part of the paragraph, its intention to identify the power to be considered as stranded in an equitable manner. As such, there is no question of over burdening of short term open access consumers and the comment made by the objector in this regard does not hold good.

8.7 INADEQUATE TRANSMISSION SYSTEM AND LONG TERM LOAD FORECAST:

8.7.1 Comments:

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 total excess energy is remaining stranded due to Open Access Consumers only.

8.7.2 **HPSEBL's Response:**

The contention of the objector is not true because even the power purchased by Short-Term OA consumers is wheeled through HPSEBL's network only.

8.7.3 Commission's View:

As discussed in a greater detail in a separate paragraph, neither HPSEBL has made any such claim, nor the Commission holds any such view, that the total quantum of energy getting stranded is due to open access consumers only. In view of above, the Commission, while otherwise appreciating the concerns about transmission and distribution constraints, feels that the issue raised by the objectors is not relevant to determination of additional surcharge for short term open access which is otherwise granted only if the existing system permits such power flows.

8.8 COMPETITIVENESS OF HPSEBL RATES:

8.8.1 Comments:

There is no substance in the argument given by the distribution licensee that it 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.

8.8.2 **HPSEBL's Response:**

HPSEBL is providing power in the state at very competitive rates. It is because of this reason that Open Access consumers opt for OA facility only for a short term.

8.8.3 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 helps in striking a healthy balance between the interests of STOA consumers and other consumers of HPSEBL.

8.9 COMPETITION IN ENERGY MARKET THROUGH OPEN ACCESS:

8.9.1 **COMMENTS:**

The provision of open access in the Electricity Act, 2003 was made for promoting competition in the energy market. The industry is reeling under recession and heavy input cost. Any move to put additional burden on the industry is likely to give a severe blow to its very existence in the state.

8.9.2 **HPSEBL's Response:**

HPSEBL has stated that the Electricity Act, 2013 and the Additional Surcharge Regulations, 2006 provide for recovery of additional surcharge to meet the fixed cost of such distribution licensee, arising out of his obligation to supply as specified by the Commission. HPSEBL further submits that regarding additional burden on industries, the Commission has already given clarification in point 7.9.3 of HPERC Order on Petition No. 103/2015. The same is reproduced below:

"7.9.3 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."

8.9.3 Commission's View:

The Act contains various provisions which adequately balance the interests of the various stakeholders in the energy market and have to be followed. The Commission agrees that there has to be healthy competition in the energy market. It is therefore, all the more important to strike a balance between interest of the consumers of HPSEBL and STOA consumers. In case such a balance is not maintained, it will amount to discouraging healthy competition. As stated by HPSEBL, the STOA consumers avail short-term 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 power involves certain fixed costs which are to be recovered through additional Surcharge.

8.10 REDUCTION IN FIXED COST BY PURCHASING THE POWER THROUGH EXCHANGE:

8.10.1 **Comments:**

The petitioner has submitted that the fixed costs could have been reduced, had the open access consumers availed the power from discom which they otherwise purchased under open access. Therefore, there is need to define the process of computation of Additional Surcharge.

8.10.2 **HPSEBL'S Response:**

The methodology given by the Commission in order dated 18/02/2016 for computing additional surcharge has been adopted by HPSEBL in the current petition.

8.10.3 Commission's View:

The Short Term Open Access Consumers purchase power from various sources on short term basis only. The question of HPSEBL's purchasing power from such sources would arise only in the power shortage situations. The situations in which the embedded consumers meet a part of their demand through short term open access result into stranding of power, tied-up by HPSEB Ltd. on long term basis to meet the requirement of the consumers round the clock. Thus the point raised by objectors is not relevant.

8.11 PARITY BETWEEN STOA CONSUMERS AND OTHER CONSUMERS:

8.11.1 Comments:

It has been stated that a consumer, other than the open access consumer is free to draw any quantum of energy within his contracted capacity and he is liable to pay only the fixed demand charges and the energy charges based on his actual consumption. There is no restriction on such consumer to consume any fixed minimum energy from the grid. On the other hand, an open access consumer is being discriminated with the other consumers by levy of additional surcharge. They are both similarly placed. In one case, the consumer is free to use any quantum of energy but the open access consumer is being discriminated with the other consumers by extra charge for his lesser drawl on account of his buying power from any other source. It has also been stated that this is similar to a consumer having a captive power plant. In that case also, the consumer would draw less power from the grid, depending on his own captive consumption. In this case also, he pays only the fixed charges and the energy charges as per his actual consumption from the grid. He is not required to pay any additional surcharge although the impact is the same i.e. reduction in the normal drawl from the grid. Therefore, this is also discrimination with the open access consumers.

8.11.2 **HPSEBL's Response:**

HPSEBL has stated that as per subsection (4) of the Electricity Act, 2003 and Regulation (6) of the Additional Surcharge Regulations, 2006, Additional Surcharge is applicable on open access consumers for wheeling of power along with other charges as specified by commission. Moreover, OA consumer is being charged Additional Surcharge because, HPSEBL is bound to supply power to all its consumers all the time for which many long term PPAs have been signed. If a consumer opts for OA facility, the power of HPSEBL gets stranded and results in loss to HPSEBL as fixed cost of the same is required to be paid regardless of purchase of power from these sources or not.

8.11.3 Commission's View:

The additional Surcharge is being determined in this order only for consumers, availing short term open access, keeping in view the specific features of short term

open access under which consumers intend to avail short term open access mainly during the conditions when Grid is surplus and accordingly, power is available in the Grid at cheaper rate. The Commission also observes that the per unit average rate corresponding to demand charges in case a consumer, covered in two parts tariff under utilizes his contract demand, automatically increases as compared to average rate and thus he indirectly compensates the HPSEBL to some extent for the fixed costs incurred by it in providing supply to the consumer. This automatic adjustment in case of consumers, availing power of open access does not happen. It is therefore necessary to impose additional surcharge in accordance with the provision of the Act. Moreover, as mentioned in the Order dated 18.02.2016 also, the demand charges, as being charged at present, do not fully cover all the fixed costs as are required to be incurred by HPSEBL for supply of power to its consumers. In case all the fixed costs were to be recovered through demand charges, there may not be any need to charge any additional surcharge and for that matter even wheeling charges, from such short term open access consumers who avail such open access within the overall limit of their contract demand as a normal consumer of HPSEBL. This contention is also supported by the fact that since the rates of demand charges have been marginally increased in the Tariff Order for FY 2016-17, the rate of additional surcharge would certainly get reduced at least to that extent.

8.12 REASONS FOR BACKING DOWN OF GENERATION:

8.12.1 **Comments:**

The objectors have stated that based on the data available on NRDLC site, the Himachal Pradesh makes considerable overdrawls from Northern region. In this connection, a copy of the LGBR, published by Central Electricity Authority has also been provided and based on same, it has been mentioned that during FY 2015-16, the State of Himachal Pradesh was under energy deficit scenario and the HPSEBL was not able to meet the full energy requirement of consumers in the State. It has been submitted that the very concept and legal basis of additional surcharge is inconsistent with the procurement of electricity on short term basis. Additional surcharge can be determined and made applicable only when the distribution licensees have surplus capacity tied up on long term basis, which is left stranded and continues to be stranded with unavoidable obligation to pay fixed charges due to open access consumers. If HPSEBL is required to procure short term electricity or overdraw power from grid to fulfill the demand of the

consumers in the State, the question of there being surplus capacity itself needs to be examined in detail. HPSEB has submitted the details of the short term power purchases made during the year 2015-16. It has also been stated that HPSEBL has imposed load shedding many times during winter as well as in the summer even when STOA consumers are purchasing energy from IEX. It has further been stated that based on their analysis, it becomes very clear the backing down has not been done by HPSEBL on account of availing power by consumers under open access, but due to several other reasons which may include the following:

- (i) Variation in the demand of retail consumers
- (ii) Over drawl from NR
- (iii) Return Banking
- (iv) Short Term Power Purchase
- (v) Drawl of power by Consumers under Short Term Open Access
- (vi) Low demand due to closure of industry or slump in the market.
- (vii) Breakdown of transmission lines due to cloud burst, heavy snow and heavy rains etc.
- (viii) Breakdown of transformer of sub-stations etc.
- (ix) Shut down of power houses due to heavy rains/silt etc.
- (x) Low Off take by the States with whom power banking arrangement has been made by HPSEBL due to low demand etc. in their States.
- (xi) Seasonal variation in demand of energy.

It has been mentioned that in the absence of complete details of hourly surplus capacity, backed down/surrendered and open access drawl in MW, they are not in a position to compute the additional surcharge by considering the fixed charges in Rs./MW and they have requested that the HPSEBL be directed to furnish the complete details and break up of backing down on account of various reasons, before determining the Additional Surcharge.

8.12.2 **HPSEBL's Response:**

To maintain the load balance and grid discipline, load shedding is required sometimes. However for computing Addl. Surcharge, only that power is considered which got stranded due to OA consumers and to that extent only.

8.12.3 Commission's View:

The grid conditions vary every minute i.e. on real time basis and the contention that there should not be any excess energy in certain times slots, if it has faced shortages over a certain period (say month) may not be correct. As also stated in a separate para of this order, the STOA consumers avail open access mostly during the conditions when the power is available in the grid at cheaper rates i.e. when grid is by and large, surplus in power. During the shortage conditions in the grid i.e. when there is no surplus power in grid, the power shall not be

available at cheaper rates. The open access consumers obviously shall not prefer to draw power through open access during such conditions, keeping in view option available to them to draw continuiously the power from the HPSEBL. The HPSEBL has submitted, as a part of the petition, the quantum of power stranded during 2015-16 (till February, 2016) which is substantially higher than the power drawn through open access. This establishes that power is stranded due to various reasons in addition to STOA. Even otherwise also, the additional surcharge is recoverable only when the energy under STOA is actually scheduled which happens virtually during the surplus conditions only. In such situations power gets stranded due to open access and as such the open access consumers are liable to pay for the fixed cost of the stranded power to the extent of their consumption through open access. The STOA consumers cannot escape the payment of additional surcharge simply because power may be stranded due to reason other than STOA also.

8.13 IMPACT OF ONLY STOA TO BE CONSIDERED:

8.13.1 **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. There needs to be conclusive evidence that such generating capacities have been and will continue to be stranded solely due to such open access consumers. When open access consumers have to pay transmission charges and wheeling charges as approved by the Commission, including Fixed Cost of Transmission and Distribution for computing, Additional Surcharge is not justified at all. Open Access consumers are also compensating for transmission and wheeling losses as approved by the Commission.

8.13.2 **HPSEBL's Response:**

HPSEBL submits that while computing additional surcharge, only that power has been considered which was stranded due to open access consumers.

8.13.3 Commission's View:

The Commission agrees that only the capacities getting stranded as a result of Short-term Open Access shall be considered for the purpose of determining additional surcharge. The fact that the quantum of total stranded power is considerably higher than the quantum of short term open access availed as per the data given in the petition, establishes that short term open access also results into stranding of power. There can, no doubt, be other reasons also. Moreover, as discussed in a separate paragraph also, the short term open access consumers avail short term open access at their convenience i.e. only when they are able to get power at cheaper rates, uncertainty always prevails due to STOA. As such unlike the features of long and medium term open access, the STOA may continue to result in stranding of power except for situation of power cuts etc. As regards the inclusion of fixed cost of Transmission charges, the rationale for the same has been explained in a separate paragraph of the order. However wheeling charges for Distribution are not to be included for the purpose.

8.14 OPTIONS FOR REDUCING LIABILITY:

8.14.1 **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.

8.14.2 **HPSEBL's Response:**

HPSEBL submits that details of Power sold (IEX & UI) by HPSEBL are already provided in Annexure A of the Petition. HPSEBL submits that while computing additional surcharge, only that power has been considered which was stranded due to open access consumers.

8.14.3 Commission's View:

The Commission exercises prudence check while determining the cost of power purchase in the respective Tariff Orders and not only expects, but also reasonably believes, that HPSEBL continuously exercises the prudence and also explores all the reasonable options for reducing the liabilities of power purchase. The Commission also observes that power becoming surplus due to STOA is normally surrendered from thermal sources. In most of the situations, it may be prudent from the view point of the determination of additional surcharge, to pay the fixed charges and strand the energy content rather than purchasing energy, particularly when the consumers tend to avail short-term Open Access mostly during situations when power is available in the Grid at lower rates. Suitable prudent decisions have however to be taken by HPSEBL in relevant time frames, including those on real time basis and this is a continuous process.

8.15 ADDITIONAL SURCHARGE AS FRACTION OF WHEELING CHARGES:

8.15.1 **Comments:**

Whereas as per Section 14 of the Electricity Act, 2003, HPSEBL is authorized for distribution of power to the State and can propose additional surcharge, however, under section 42, sub-section 4 of the Act which clearly shows that such consumer shall be liable to pay an additional surcharge on the charge of wheeling, as may be specified by the State Commission to meet the fixed cost of such distribution licensee, arising out of his obligation to supply. Hence, this additional surcharge can only be charged on wheeling charge and cannot be separately charged. Moreover surcharge on any normal charges cannot be greater than the principal charges and it could be a small fraction of percentage of the principal charges. Hence, the additional surcharge even if levied by the Commission could be a small percentage of the approved wheeling charges.

8.15.2 **HPSEBL's Response**

The Commission has also clarified the same in Point 7.11.3 of HPERC Order on Petition No. 103/2015.

"7.11.3 The Commission finds that whereas the wheeling charges are payable for the utilization 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 corelation 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 was 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."

8.15.3 Commission's View:

The Commission reiterates its earlier views that whereas the wheeling charges are payable for the utilization 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 corelation 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.

8.16 RESTRICTION OF ADDITONAL SURCHARGE TO REASONABLE LEVELS:

8.16.1 **Comments:**

Clause 5.8.3 of the National Electricity Policy, notified by the Ministry of Power, Govt. of India, has been reproduced as under:

"5.8.3 Under sub-section (2) of Section 42 of the Act, a surcharge is to be levied by the respective State Commissions on consumers switching to alternate supplies under open access. This is to compensate the host distribution licensee serving such consumers who are permitted open access under Section 42(2) for loss of the cross-subsidy element built into the tariff of such consumers. An additional surcharge may also be levied under sub-section (4) of the Section 42 for meeting the fixed cost of the distribution licensee, arising out of his obligation to supply in cases where consumers are allowed open access. The amount of surcharge and additional surcharge levied from consumers who are permitted open access should not become so onerous that it eliminates competition that is intended to be fostered in generation and supply of power directly to consumer through the provision of Open Access under Section 42 (2) of the Act. Further, it is essential that the Surcharge be reduced progressively in step with the reduction of cross-subsidies as foreseen in Section 42(2) of the Electricity Act, 2003."

The provisions in 2006 regulations regarding additional surcharge have also reproduced as under:-

- **"Additional surcharge .-** (1) An open access consumer shall also pay to the distribution licensee an additional surcharge to meet the fixed cost of such distribution licensee, arising out of his obligation to supply as provided under subsection (4) of section 42 of the Act.
- (2) Additional surcharge will be payable by any consumer including any consumer who puts up a captive plant for his own use.
- (3) The additional surcharge for obligation to supply as per sub-section 4 of section 42 of the Act shall 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.

- (4) Each distribution licensee shall submit to the Commission, details of fixed costs, which the licensee is incurring towards his obligation to supply.
- (5) In determining the additional surcharge, the Commission shall scrutinize the details of fixed costs submitted by the distribution licensee and invite and consider objections, if any, from the public and affected parties.
- (6) The additional surcharge shall be determined on annual basis and it can be collected either as onetime payment or on monthly basis."

It has been suggested that the Commission may consider that the rate of Additional Surcharge, proposed by HPSEBL makes open access burdensome, unaffordable and uncompetitive. Clause 8.5.1 of the Tariff Policy mandates that the Additional Surcharge cannot be so onerous that it constrains the introduction of competition. There is a mandate on this Commission to calculate Additional Surcharge in such a manner that the consumer is not burdened to the extent that it cannot avail Open Access. The methodology result in an exorbitant increase in open access charges as a result of which, open access will no longer be competitive/viable for consumers to procure power through short term open access. This is against the object and spirit of the Electricity Act, 2003. It has further being stated that in view of above extract from the relevant regulations and tariff policy, it is also essential that the additional surcharge levied should not become so onerous so that competition is eliminated and the provision of open access becomes only academic and cannot be put into practice in the State.

8.16.2 **HPSEBL's Response:**

HPSEBL submits that the Commission has already cleared this objection in Point 7.15.3 of HPERC Order on Petition No. 103/2015.

"7.15.3 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."

HPSEBL has filed the petition under the same provision of HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006, as has been quoted by petitioner and the provision of Tariff policy regarding OA facility cannot be promoted at the cost of jeopardizing the commercial viability of HPSEBL. The short-term OA consumers avail power from the IEX only during those slots when rate is lower in comparison to HPSEBL rates. However, HPSEBL is required to keep power available for them round the clock therefore HPSEBL has no option but to pay the fixed cost for the power which got stranded due to Consumers,

availing OA facilities. In case any consumer desires regular OA, he is free to go for medium/long term OA facility.

8.16.3 Commission's View:

The Commission reiterates its view that the impact of additional surcharge should not be so onerous that it eliminates competition. The Commission shall duly keep this aspect into account while determining the rate of additional surcharge.

8.17 SUBSTRACTIONS FROM THE PER UNIT COST OF STRANDED POWER:

8.17.1 **Comments:**

The objectors have pointed out that the pattern submitted by the petitioner as base value of fixed power purchase cost, the following items/values need to be subtracted:

- a) Per unit demand charges recovered from open access consumers in monthly bills.
- b) Cross subsidy surcharge.
- c) 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.
- d) Gain due to:
 - -Inadvertent flow
 - -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.
- e) The amount derived above should be transformed to per unit cost of stranded power, purchased.

8.17.2 **HPSEBL's Response:**

HPSEBL submits that the Commission has already cleared this objection in Points 7.3.3 & 7.4.3 of HPERC Order on Petition No. 103/2015. The same is reproduced below:

7.3.3 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.

8.17.3 Commission's View:

The Commission would like to reiterate its views, as reproduced by HPSEBL in the preceding sub-paragraph. The item-wise position is however also given as under:-

- (a) the per unit rate of estimated recovery from the consumers in shape of Demand Charges shall be duly considered after adjusting the wheeling charges as discussed in the greater detail in a separate paragraph.
- (b) 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;
- (c) the Commission has in the Tariff Order for FY 2016-17 provided for purchase of power by HPSEBL from the some costlier projects, under contingent situations, as per merit order operation. This is basically provided to enable the distribution licensee to meet the power requirements of the consumers on a continuous basis. However, the fixed costs of such projects, which have been considered as contingent reserve shall not be considered for determination of the rate of additional surcharge;
- (d) it could be true that in certain peculiar 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 exceed the recovery through additional surcharge.
 - The wheeling charges recovered from the STOA consumers are meant for meeting the fixed costs of network and cannot be subtracted from fixed cost of stranded power. It is however also pointed out that presently only 50% of the rate of wheeling charges computed by the Commission in the tariff order being charged on the STOA energy and remaining 50% are being adjusted through demand charges.
 - 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.
- (e) The points raised by the objectors are settled accordingly and the rate of additional surcharge shall be determined in paise/unit after duly considering the adjustment of the net recovery of demand charges as detailed in a separate paragraph.

8.18 FIXED COST OF STRANDED POWER:

8.18.1 **Comments:**

As per Section 61 of the EA 2003, while determining the tariff, the State Commission is guided by Tariff Policy. Moreover, while determining the Additional Surcharge, it is necessary to refer Section 61 of the EA 2003, Clause 8.5.4 of Tariff Policy and Regulation 6 of the Additional Surcharge Regulations. From a combined reading of the aforementioned provisions, it is clear that only

the fixed costs related to stranded power purchase commitment are to be considered to derive Additional Surcharge. The Additional Surcharge is for compensation of the fixed charges paid by the distribution licensee towards the stranded power in the given year, in the event the consumers opt for Open access and procure power from sources other than the distribution licensee.

8.18.2 **HPSEBL's Response**:

HPSEBL submits that data of stranded energy has already been provided in "Annexure A" of the Petition. Further, it is evident from the data that power has been continuously stranded due to open access consumers. Therefore, the contention of M/S Open Access Users Association is false.

8.18.3 Commission's View:

The computation of Additional surcharge shall be made on the basis of per unit rate of fixed charge for the standard power and the various provisions related of the Electricity Act, Tariff Policy and Regulations shall also be kept in view.

8.19 <u>METHODOLOGY FOR CONSIDERING FIXED CHARGES FOR STRANDED</u> CAPACITY:

8.19.1 **Comments:**

HPSEBL has considered the station wise fixed cost on per unit basis i.e., in Rs/kWh basis. It is important to note that the power stations, supplying power to the HPSEBL are Inter-State/Intra-State power stations, governed by the CERC tariff regulations and HPERC tariff regulations respectively. CERC as well as HPERC Tariff Regulations provide for payment of full annual fixed charges at target availability irrespective of quantum of energy drawn from each station. Hence, there is no logic of computing per unit fixed cost as fixed cost payments are not linked to quantum of energy availed from the generating stations. The Fixed Charges payable to Generating Stations are fixed in nature and are payable based on target availability. As the fixed charges are payable towards the capacity tied up for the system, the fixed charges need to be considered towards the capacity available in terms of Rs /MW of capacity tied up instead of considering fixed charges in Rs/kWh for the energy availed.

The total capacity tied up by the HPSEBL is to meet the demand of the State and due to various reasons certain proportion of capacity tied up becomes stranded during certain time blocks. Therefore, it will be more appropriate to consider the total Fixed Charges payable by HPSEBL during the period and total capacity available during the corresponding period to arrive at Fixed Charges of per MW Capacity available to HPSEBL. Accordingly, the cost of stranded capacity needs to

be determined on the basis of Fixed Charges per MW of Capacity Available and not in terms of per unit of energy.

8.19.2 **HPSEBL's Response**:

HPSEBL submits that while computing additional surcharge, only that power has been considered which was stranded due to open access consumers.

8.19.3 Commission's View:

Since the short term open access consumers avail different quantum in different time slots, the Commission finds it not appropriate to convert all the changes into per kWh rate. This will be much simpler for billing purposes. The Annual fixed charges as well as the energy quantum have been computed on the assumption that target availability shall be available. In case, the average capacity is less than the targeted availability then the energy quantum shall also reduce correspondingly. The net effective rate shall however be the same or may be even higher in case of shortfall in generation capacity.

In this case, it is also worth mentioning that in case the per unit charges were to be computed on the basis of the fixed charges actually payable and the energy actually drawn i.e. excluding the energy surrendered, the per unit rate shall obviously be higher than that as per the methodology adopted by the Commission, keeping in view, the fact that in such cases, the fixed charges shall remain unchanged but energy quantum of energy shall reduce.

8.20 FLAW IN METHDOLOLGY:

8.20.1 **Comments:**

The methodology is flawed as it calculates Additional Surcharge based on net generation of 5 NTPC plants, namely- Anta (G), Auriya (G), Rihand I, II and III. It is stated that the power from Anta, Auriya & Rihand III cannot be treated as stranded. It is necessary to consider that as per this Commission's order in Approval of the Aggregate Revenue Requirement (ARR) for FY 2016 and the first Annual Performance Review (APR) of the Third MYT Order for the Control Period (FY15-FY19) dated 10.04.2015, the power from Anta & Auriya has been surrendered by HPSEBL w.e.f 01.04.2016. Therefore, this Commission has not considered availability of energy from these stations during FY 2016. The availability from Rihand-III has also been considered as contingent i.e. in case of any unforeseeable difficulty i.e. shutdown of any large generating station, increase in sales within State etc. in the merit order for FY 2016 at table 73, page 114 of the tariff order dated 10.04.2015. In such circumstances, the methodology is flawed as it takes erroneous to treat any power from Anta, Auriya & Rihand-III as stranded.

It is clear from the tariff order dated 10.04.2015 that the power from the aforementioned NTPC generating stations has either been surrendered by HPSEBL or is for contingency reserve and not envisaged to be scheduled to the consumers of the State.

The methodology has calculated the average fixed costs of the aforementioned generating stations on the basis of the expected generation for the entire FY 2014-15. This is erroneous to consider the expected annual generation for FY 2014-15. It is stated that Additional Surcharge should be calculated, based on the fixed costs of actual stranded generation capacity for only the months when there was STOA and not the whole year of 2014-15.

8.20.2 **HPSEBL's Response:**

HPSEBL submits that in Order in Petition No. 103/2015, the Commission has rightly considered power from NTPC Plants i.e. Anta, Auriya & Rihand because HPSEBL's Bhaba HEP met with an accident in January, 2015 due to which no power could be generated by it in FY 2016. Bhaba contributes, on an average, 500 MUs in a year. This non-availability of cheaper power to the tune of 500 MUs has to be met by procuring power from other stations to meet the domestic demand of the state.

HPSEBL also submits that the expected generation from the above mentioned plants is for the period FY15-FY19 as per Table 106 in page 136 of MYT order, third control period from FY 2014-15 to FY 2018-19. So the considered generation for FY 2015-16 in petition is correct. Further, only the stranded power due to open access consumers is considered while determining additional surcharge.

8.20.3 **Commission's View:**

The Commission has, by exercising prudence, identified in the Tariff Order of 25.05.2016, the Conventional Thermal Sources from which power is required for meeting normal requirement under merit order operation. The power from other costlier thermal/gas projects which has been provided for meeting the contingent purchase or for meeting the PPAs obligations, shall not be considered for computing the rate of additional surcharge and instead only such Conventional Thermal Sources which meet the requirement of merit order operation shall be considered. On this basis, the projects to be considered include four stations Rihand-I (235 MUs), Rihand-II (226 MUs), Rihand-III (68 MUs) and Singroli (102 MUs). This reasonably ensures that the fixed charges of costlier capacities getting stranded or surplus due to reasons other than STOA, are not loaded for

computing the additional surcharge. The Commission also observes that the quantum of energy considered in the Tariff Order dated 25th May, 2016, table 134 (merit order for FY 17), Part-II "Conventional Thermal Sources" on the basis of merit order operation does not constitute uniform percentage of the total estimated energy from the corresponding stations. Moreover out of the total energy share of 228 MUs (68 MUs+160 MUs) of Rihand-III, Units-1 and 2 (which has higher per unit fixed cost as compared to other three projects), only 68 MUs are to be considered for this purpose (29.82 % of total quantum) and the remaining 160 MUs (70.18% of the total) forms a part as contingent purchase which is not to be considered for this purpose. The Commission shall accordingly consider the weighted average rate of fixed cost, based on the energy quantums of the projects to be considered in the merit order for this purpose.

8.21 METHODOLOGY AND RELIABILITY OF DATA FURNISHED BY THE LICENSEE:

8.21.1 **Comments:**

Basic principle adopted for considering the fixed charges in Rs./kWh instead of Rs./MW and making entire computation on that basis only. The objectors have observed that the fixed charges have been considered while making calculations in the petition in Rs./kWh whereas generation capacity has been calculated on the basis of MW. There should be only one unit of measurement for making all computations to arrive at correct cost.

8.21.2 **HPSEBL's Response:**

HPSEBL is following the methodology given by the HPERC in its order dated 18/02/2016 for computing the Additional surcharge.

8.21.3 Commission's View:

It is true that the capacities from various projects are allocated in MW, but the generation from the allocated capacities is not available round the clock. Fixing the rate on Rs. per MW basis may amount to various anomalies, including for billing and other purposes. On the other hand, the rate fixed in Rs. Per kWh is much simpler to be followed, particularly the short term open access consumers avail open access on short term basis for different quanta of power in different time slots. As such, it is considered to be more appropriate to convert the fixed cost into paise per kWh. In fact, the Commission feels that computation of rate in paise per kWh may serve the interest of STOA consumers in a better way.

8.22 AVAILAIBILTY OF DATA FOR FULL YEAR:

8.22.1 **Comments**:

The data/calculations given are for the period of FY 2015-16 i.e. from May, 2015 to March, 2016 and some months are not considered hence, true picture is not presented by the petitioner hence we humble submit to the Commission to look into the details. Open Access Consumers cannot be levied on Additional Surcharge till they remain the consumer of the licensee of his area and continue to pay fixed charges by way of contract demand charges.

8.22.2 **HPSEBL'S Response:**

The surrendered power data, considered is from April, 2015 to February, 2016. Therefore, the contention of the M/S Birla Textile Mills is incorrect. HPSEBL has filed the petition on 7th April, 2016 and at that time, data only up to February, 2016 was available. If the Commission desires, the data for the month of March, 2016 shall be provided.

8.22.3 **Commission's View:**

Since, the Commission intends to compute the average rate in paise per kWh, on the basis of estimated annual values, the comment in this regard does not impact the determination of additional surcharge.

8.23 **DATA REQUIREMENTS:**

8.23.1 Comments:

The Objectors submitted that the petition is a sketchy presentation and is devoid of complete data required for determination of additional surcharge. It has been submitted that the total installed/contracted capacity in the State has not been given. Neither the break-up of hydro-thermal non-conventional power availability has been mentioned. The power purchased through open access for the year is though provided but total energy consumption in the state, separately for open access consumers and others has not been given.

8.23.2 **HPSEBL'S Response:**

Complete data has been provided by HPSEBL along with Petition.

8.23.3 Commission's View:

The general information about available capacities and consumption etc. of HPSEBL is available in the Tariff Order which is already in public domain. The Commission considers it appropriate to proceed on the basis of the available facts rather than putting off the matter due to such objections. HPSEBL should however, while filing such petition (s) for the future periods, provide all such general data in the petition(s) itself at least for the sake of clarity and knowledge to the

stakeholders even if HPSEBL otherwise finds to be not of direct relevance to the computation of additional surcharge, based on the methodology followed by it.

8.24 REVENUE TO THE GENERATORS FROM SURRENDERED POWER:

8.24.1 Comments:

HPSEBL should share long term power purchase agreement, it has with various power plants. Recently, the Central Generating Stations have been allowed to sell their surrendered power in exchange and earn additional revenue. Under such circumstances, the additional revenue earned by Generators in excess of energy charges needs to be reduced from Fixed Charges payable by HPSEBL while computing the average Fixed Cost/MW. No details have been shared by HPSEBL on such arrangements and the extent to which demand charges have already been offset. It has been requested that the needful audited details may be shared by HPSEBL.

8.24.2 **HPSEBL's Response:**

Purchase of power by OA consumers is mostly during the time slots when IEX rate is less than the cost of Central Sector thermal/gas power projects. As such the other utilities prefer to purchase power through IEX instead of booking the power, surrendered by other utilities during such time slots. As such there is nil recovery of fixed charges for such surrendered power.

8.24.3 Commission's View:

As mentioned by HPSEBL, STOA consumers avail open access in the situations when there is a surplus power in the grid i.e. in situation when the power is available at IEX at rates lower than that for the Central sector thermal power projects. During such situations, utilities prefer to purchase power through IEX instead of booking the surrendered power. The Commission agrees with the views of HPSEBL in this regard. In fact if the energy is treated as actually generated and sold, there could be situations in which even the full variable cost may not be recovered in the surplus situation. However, in some situations, marginal gains can also be there. The Commission, in order to maintain a balance, intends to consider only the fixed cost for the stranded capacity and does not intend to include such variations for the purpose of determining additional surcharge.

8.25 APPROVAL OF PPAs BY THE COMMISSION:

8.25.1**Comments:**

HPSEB Ltd. has not provided the details of the PPAs executed by him for drawing power. It has also not been stated that the said PPAs were executed with the approval of the HPERC.

8.25.2 **HPSEBL's Response:**

HPSEBL has long term agreement with NTPC for purchase of power from their Rihand-I, Rihand-II, Rihand-III, Unchar-I, Unchar-II & Unchar-III thermal stations and Anta, Auriya & Dadri gas stations. Additional power is also allocated by GoI from other thermal/gas stations out of its unallocated quota during winter deficit months. The tariff of these stations is determined by CERC as per relevant regulations. For details of fixed cost components, CERC (Terms & Conditions of Tariff) Regulations, 2014 along with Order of power station can be referred to. Also, Power from ISGS is allocated to different States by GoI and States bear the fixed costs of these stations in proportion to their percentage allocation and thus HPSEBL is also paying the fixed cost of these projects in proportion to power allocated to HP.

8.25.3 Commission's View:

As discussed in a separate paragraph also, the Commission approves the power purchase in Tariff Order after exercising prudence checks. Moreover, the Commission shall, for the purpose of identifying the Stations from where power is to be considered as stranded, consider power from only such thermal sources which would have been required in normal situations, as specifically provided in the retail Tariff Order based on the merit order operation. Even the costlier power purchase approved for meeting contingent situations shall not be considered.

8.26 <u>DATA AND INFORMATION REQUIRED FOR DETERMINING ADDITIONAL</u> SURCHARGE:

8.26.1 Comments:

The objectors have, during the course of hearing on 28.09.2016, submitted that due to inadequacy of data they are unable to present their detailed analysis and have requested the commission to provide the information and data as enlisted in their written submissions. They have also supplied the copy of order issued by Gujrat Electricity Regulatory Commission on 12.03.2014 (in the petition No. 1302/2013 decided by them), outlining the Methodology to be adopted and assumptions considered to determine the Additional Surcharge.

8.26.2 **HPSEBL's Response:**

Complete data has been provided by HPSEBL along with Petition.

8.26.3 Commission's View:

The Commission would like to mention here that the rate of Additional Surcharge is being determined in this order for STOA only and as such the methodology to be adopted has to be more focused on the features of short term open access. The peculiar features of STOA have also been discussed in separate paragraph. The

Commission also observes that the rate of 42 paise /kWh determined by the Gujrat Electricity Regulatory Commission (GERC) for the period 04/2013 to 09/2013, as referred to by the objectors, has been increased considerably in their orders for subsequent period(s). Moreover, the rate determined by GERC is payable on the quantum of energy scheduled by open access consumers. This Commission has however followed a methodology under which rate is determined payable for quantum of energy deliverable at consumer end. Since the magnitude of the energy deliverable at the consumer end is always lesser than the energy scheduled by a quantum equivalent to the applicable T&D losses, the rate on the deliverable energy has to be higher by about 8-9% (say) as compared to the situation in which the rate is made applicable on the energy scheduled. As regards the suggestions that the fixed cost should be considered on the basis of average for the total purchase, the Commission has adopted a methodology which is more focused on the short term open access and finds it appropriate to consider the fixed cost of only such projects as identified for the purpose on the merit order operations. In this connection, the Commission finds that the fixed cost of the project, identified for the purpose is only 81.71 paise per unit at the generating station(s), which forms less than 40 % of the total average cost of power purchase. In case the fixed costs were to be considered on the basis of overall average, the other components i.e. wheeling charges and losses etc. in distribution system may also have to be considered on average basis which may escalate the rate of additional surcharge and may not serve the interest of the STOA consumers. In view of the above, the Commission finds it appropriate to continue the methodology of identifying the projects on the merit order operation rather than adopting the overall averages with an objective of arriving at the rate of additional surcharge in a manner which is closer to the realities of merit order operations in actual practice and also gives reasonable rate. However as mentioned in repeat paragraph, the HPSEBL in its future petition should carry out such exercises also.

8.27 BACKING DOWN DUE TO TRANSMISSION CONSTRAINTS:

8.27.1 **Comments**:

The petitioner has not furnished data regarding backing down due to transmission constraints. The petition submitted by the petitioner has not specified the content of fixed cost. The fixed cost associated with these major plants that are backed down for surrendering the power are the plants in which HPSEBL has a certain

percentage of power allocation. Therefore, the total fixed cost per unit paid by petitioner cannot be charged from open access consumer. The annexure submitted by the petitioner does not show the terms and conditions for the agreement with power generations in the State and export of power by the State to any other State due to seasonal conditions.

8.27.2 **HPSEBL'S Response:**

The surrendering of power during real time operations is allowed in case of thermal and gas stations only. HPSEBL has long term agreement with NTPC for purchase of power from their Rihand-I, Rihand-II, Rihand-III, Unchar-I, Unchar-II & Unchar-III thermal stations and Anta, Auriya & Dadri gas stations. Additional power is also allocated by GOI from other thermal/gas stations out of its unallocated quota during winter deficit months. The tariff of these stations is determined by CERC as per relevant regulations. For details of fixed cost components, the same can be referred to in CERC (Terms & Conditions of Tariff) Regulations, 2014. Power from ISGS is allocated to different States by GoI and States bear the fixed costs of these stations in proportion to their percentage allocation and thus HPSEBL is also paying the fixed cost of these projects in proportion to power allocated to HP.

8.27.3 Commission's View:

The Commission feels that since HPSEBL may have to make full payments of the fixed cost irrespective of the generation even in case of backing down of the stations, resulting into loss of generation, the per unit average fixed cost payable by it shall be higher. In Order to avoid loading of such additional cost to STOA consumers, the Commission intends to consider the fixed costs and the total estimated annual generation from the concerned projects, without taking into account the impact due to any backing down of the stations.

8.28. IDENTIFICATION OF STRANDED POWER:

8.28.1**Comments:**

The petition fails to identify the stranded energy caused directly due to Short-Term Open Access (STOA) consumers. No data has been placed on record to establish that the power surrendered is on account of STOA. The Additional Surcharge is payable by an Open Access Consumer, receiving power from a person other than the distribution licensee to the extent of the fixed charges commitment of the distribution licensee which is unavoidable—and is in addition to the charges for usage of network assets, recoverable through wheeling charges. In terms of Regulation 6 (3), the Additional Surcharge is only payable by consumers availing

STOA if it is conclusively proved by the distribution licensee that the obligation of the licensee is and continues to be "stranded". The present methodology does not measure stranded power and the fixed costs that become unavoidable liabilities for the distribution licensee, caused by stranded power due to short-term open access. It is also to be noted that energy from the 5 Nos. NTPC plants may have been surrendered due to various reasons and not necessarily due to STOA. It has been suggested that this Commission may first direct HPSEBL to establish that any power has been surrendered/stranded due to consumers, opting for STOA rather than taking supply from the distribution licensee. It has also to be confirmed by the petitioner that back down of generation was solely on account of the non-utilization of scheduled power by the open access consumer and not because of any other reason.

8.28.2 **HPSEBL'S Response:**

HPSEBL submits that stranded energy data has already been provided in the Petition. Further, it is evident from the data that power has been continuously stranded due to open access consumers, particularly when the power stranded is much more than the quantum of short term open access. Therefore, the contention of M/S Open Access Users Association is false. HPSEBL also submits that while computing additional surcharge, only that power has been considered which was stranded due to open access consumers.

8.28.3 Commission's View:

The data and response given by the HPSEBL establishes that power does get stranded due to short term open access. It is not denied that power gets stranded due to reasons other than STOA also. However, this shall not alter the liability of the STOA consumer to pay additional surcharge which is to be levied on per unit basis that on the deliverable energy, based on the energy scheduled through open access and not for the entire stranded power. Further the power stations are to be picked up out of the stations already identified in the Tariff Order. The Commission has carried out the computation on the basis of average fixed costs of the plants, considered for the purpose base of merit order.

Based on the above and discussion in earlier paras, the overall annual fixed charges to be considered for this purpose at the injection point to be worked out as 81.71 paise per unit in the following table:

<u>Table-5</u>
Fixed cost relating to Generating Capacity (at Generating Stations)

Name of Plant	Capacity in MW	Expected Annual Generation (Net) (MUs)	Annual Fixed Cost (Rs. Lacs)	Annual fixed charges (Paise/kWh)	Power Purchase (MUs)	Total Fixed cost of power purchase (Rs. Crores) (8=6*7)		
1	2	3	5	6	7	8		
Rihand-I	1000	7006.53	52794.10	75.34	235	17.70		
Rihand-II	1000	7159.68	62708.60	87.58	226	19.80		
Rihand-III	1000	6968.24	88419.70	126.89	68	8.63		
Singroli	2000	13541	72073	53.22	102	5.43		
Total	5000	34675.45	275995.4 0		631	51.56		
Average of	Average of fixed cost rate (Paise/kWh) = (8/7) (51.56/631) = 81.71							

In this connection, the Commission also finds it appropriate to mention here that the rate of 81.71 paise per unit is less than the rate of 95.30 paise per unit, considered by the petitioner-HPSEBL which incidentally has also been endorsed by most of the objectors by way of adopting the said rate of 95.30 paise per unit in the calculations made by them, as incorporated in a separate paragraph. The Commission has thus adopted a methodology which, according to it, is not only fair and prudent but also serves the interest of the open access consumers in a better way.

8.29 RECOVERY OF WHEELING CHARGES THROUGH ADDITIONAL SURCHRAGE:

8.29.1 Comments:

As open access consumer already paying for transmission lossess as well as transmission/wheeling charges as approved by the Comission, this includes the fixed cost of transmission and distribution. Hence, computation of additional surcharge is not justified at all.

8.29.2 **HPSEBL's Response:**

The contention of M/s. Birla Textile Mills that entire cost of surrendered power of the State is being transferred on Open Access consumers is not correct as HPSEBL has claimed recovery of fixed charges for the energy equivalent to power purchased by Open Access Consumers and the remaining fixed charges are being borne by HPSEBL only. As far as the loading of transmission charges for CTU system is concerned, it is added that HPSEBL has entered into long term open access agreement with Power Grid for transfer of its share in power projects outside the State and thus paying charges 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 power. 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.

8.29.3 **Commission's View:**

The Commission agrees with the objectors to the extent that wheeling charges of HPSEBL shall not be considered as fixed cost for computation of Additional Surcharge. However, as regards the 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 STOA consumers are otherwise required to pay similar charges to Power Grid and HPPTCL for their open access drawls also. Based on above and the discussions in the earlier paragraphs, the Commission has worked out the per unit rate of the transmission charges of power grid and HPPTCL in the following Table:

<u>Table-6</u>
Fixed cost relating to Power Grid & HPPTCL Transmission System (at injection points)

		HPPTCL System		
Month	POC Slab Rate (Rs./MW/Mon th)	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	8643
June, 2015	43119	22669	13979	8643
July, 2015	56503	22034	13447	8643
August, 2015	56503	22034	13447	8643
September, 2015	56503	22034	13447	8643
October,2015	53874	21413	12984	8643
November, 2015	53874	21413	12984	8643
Dec, 2015	53874	21413	12984	8643
Jan,2016	61410	23703	20208	8643
Feb, 2016	61410	23703	20208	8643
March, 2016	61410	23703	20208	8643
Average /Month	54691	22452	15262	8643
Average fixed cost rate @ 80% Load Factor at injection point (Paise / kWh)		15.82		1.48

The Commission has worked out the per unit basic rate of the Power Grid charges and HPPTCL Transmission charges as 15.89 paise per unit and 1.48 paise per unit respectively as against rates of 17.34 paise per unit and 1.62 paise per unit, proposed by HPSEBL in their petition. The marginal reduction is due to the reason that the

Commission has based its calculations on the plant load factor derived from the data in Table-5 of this Order.

8.30 TRANSMISSION AND DISTRIBUTION LOSSES COMPENSATION:

8.30.1 **Comments:**

As the open access consumers are compensating for losses separately, per unit additional surcharge may be computed, considering the fixed cost per unit of power purchase payable to Generating Company and not the Fixed Cost per unit of Energy Supplied by Distribution Company. Further, the Regulations nowhere mention that the Fixed cost needs to be computed at consumer end by grossing up the Fixed Cost applicable at Generator end with transmission and distribution losses. Hence this approach of grossing up the fixed charges with transmission and distribution losses is not a correct approach as per the Commission's Regulations. Further, the entire transmission losses and distribution losses are considered by the Commission while determining the ARR and Tariff and total energy inputs requirement of HPSEBL is computed by grossing up the projected energy sales with transmission and distribution losses. Under such circumstances, if transmission and distribution losses are again considered to compute the stranded fixed costs for determining the additional surcharge, it will be double counting of losses and hence part of the losses will be allowed to HPSEBL twice which is logically also not correct at all.

8.30.2 **HPSEBL's Response:**

HPSEBL submits that additional surcharge is determined by considering the fixed cost per unit of power purchase, payable to generating stations.

8.30.3 Commission's View:

The intention is not to claim any compensation for losses (which have otherwise to be charged separately) through the additional surcharge. The adjustment on this account for determining the rate of additional surcharge is to be done only for projecting the rate of additional surcharge at a single consumer point i.e. at the delivery point to the consumers without altering the effective rate. In case this is not done, the accounting/billing shall become complicated, particularly when the different charges from the generating stations (where the power is stranded) to the consumer end are to be loaded in the cascaded manner. To illustrate the matter further, if 100 units (say) of energy are stranded at the generating station and after meeting the losses of intermediate systems, 90 units (say) are deliverable to the consumer and the per unit rate of fixed costs, projected at the generating station is 54 paise (say), the per unit rate of fixed costs projected at the delivery point to the

consumer shall to 60 paise per unit (approximately). This rate of 60 paise is to be charged on the energy deliverable at the delivery point and is effectively equivalent to only 54 paise at the generating station. In fact, in case of in ability of STOA consumers to draw the scheduled power due to transmission constraints on power cuts, no additional surcharge is to be charged on such component. Thus, there is no additional burden on this account. As such this method may provide some relief to the STOA consumers in case of situations, involving transmission constraints or power cuts. On the other hand, if compensation for losses were to be recovered through additional surcharge, the cost of losses of 10 units i.e. about Rs. 3.0 per unit (say) i.e. Rs. 30/- would have jacked up the rate of additional surcharge by another about 33 paise per unit. This is however not intended to be done, keeping in view the fact that the STOA consumers have to compensate for losses separately. As such the contention of the objector in this regard is not at all correct and is therefore not agreed.

8.31 **RELATIONSHIP WITH DEMAND CHARGES:**

8.31.1 **Comments:**

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 to include the fixed charge 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 the approved tariff schedule i.e. higher of the actual demand and 90% of his sanctioned Contract Demand irrespective of the power being purchased from any external source. Thus the fixed charge component is already recovered from the open access consumers like that of any other consumer as an essential part of the tariff.

Additional Surcharge claimed by the petitioner is not legal and valid in terms of provision of Electricity Act, 2003 because the objector is an embedded consumer and is paying demand charges for full demand even if drawl of part energy is made from open access. Open Access consumers cannot be levied any Additional Surcharge till they remain the consumer of the licensee of his area and continue to pay Fixed Charges by way of Contract Demand Charges. The demand charges collected from embedded consumers have not been credited by the petitioner in his calculations.

8.31.2 **HPSEBL's Response:**

HPSEBL submits that the Commission has already clarified in Point 7.20.3 of HPERC Order on Petition No. 103/2015 that:

"7.20.3 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."

8.31.3 Commission's View:

The views expressed by the Commission in its previous order of additional surcharge dated 18.02.2016, as reproduced by HPSEBL in the preceding sub-paragraph, are quite clear and hardly need any further consideration. The Commission however, reiterates its acceptance to adjust the eligible component of demand charges on the pattern in which it was done by it in its earlier order of 18.02.2016. As regards the values to be adopted for adjustment of demand charges collected from the embedded consumers, the matter has been dealt in a separate paragraph.

8.32 <u>COMPARISION OF THE FIXED COSTS PAID AND DEMAND CHARGES</u> RECOVERED:

8.32.1**Comments:**

The methodology fails to correctly account for the demand charges already paid by the STOA consumers to the distribution licensee in the State. It is stated that the STOA consumers pay demand charges for the contract demand maintained with HPSEBL. The demand charges, to a certain extent, off-set the HPSEBL's liabilities towards the fixed cost of generation. However, the methodology only subtracts 44 paise/unit as demand charges from the per unit fixed cost of generation (based on the average of fixed costs of the 5Nos. NTPC generating stations) to derive the Additional Surcharge. It is submitted that HPSEBL should have first identified the actual fixed cost of stranded power as paid by themselves for the units availed via STOA, and compared it with the total demand charges paid by the open access consumers and regular consumers of the State against the contract demands maintained with HPSEBL. The Additional Surcharge should have then been calculated to compensate the difference if any. The methodology is flawed as it makes a per unit deduction without considering the actual amount of demand charges recovered and off-setting the same against the payments made for the allegedly stranded units of power.

8.32.2 **HPSEBL'S Response:**

HPSEBL submits that the Commission has already cleared the objection in point 8(vi) of HPERC Order on Petition No. 103/2015. The same is reproduced below:

"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 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".

8.32.3 Commission's Views:

The consumers of HPSEBL avail short term open access for the different quantums of power and at different time slots of the day, discrete or indiscrete, and it may not be practically feasible to compute the amount recovered, if any, for STOA component. Even if this is done, it may give distorted results depending on the quantum of open access viz-a-viz contract demand and actual consumption pattern of a consumer. As such it may not be fair to apply the same uniformly to the STOA consumers. The Commission feels that it shall be equitable and fair to work out the average rate of the demand charges and compute the amount in terms of per unit rate to be adjusted to the fixed cost

after considering the wheeling charges for the distribution system, payable by the short term open access to HPSEBL.

8.33 NON-TRANSFER OF SHCEDULED POWER DUE TO SYSTEM CONSTRAINTS:

8.33.1 **Comments:**

There have been occasions when the open access consumer is prepared to take supply but on account of outage of transmission system or distribution system, the open access consumer is prevented from utilizing the injected power.

8.33.2 **HPSEBL's Response:**

To maintain the load balance and grid discipline, load shedding is required sometimes. However for computing Addl. Surcharge, only that power is considered which got stranded due to OA consumers and to that extent only.

8.33.3 Commission's View:

This aspect has already been addressed in the previous order of 18.02.2016 and the additional surcharge shall be continued to 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.

8.34 **OTHER ISSUES:**

8.34.1 **Comments:**

There cannot be any such rules that the consumer need to buy in all time blocks, minimum 50% of the any other time bidding and it can be treated as overdrawl and will be charged as per wish of HPSEBL. It has been stated that Clause No. 2.2 (2) of petition is not acceptable. The objectors have also given that the Commission has to protect the interest of the consumers in the State as per provision of Section 60 of the Electricity Act, 2003 and if rate of Rs. 1.84 per unit is accepted then the viability of open access power will be totally finished and the industry 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. It has also been submitted that Open Access allows consumers to purchase power from sources other than Discom as per their requirement and demand. If power required by consumers is less than 50 % of their contract demand then they cannot purchase power through Open Access which is de-motivating Open Access.

8.34.2 **HPSEBL's Response**:

HPSEBL states that it has neither raised any claim nor sought any relief in this regard in the petition. HPSEBL also submits that the Commission has already cleared this objection in Point 7.15.3 of HPERC Order on Petition No. 103/2015 which is also quoted in Point 15 above. Further, HPSEBL has projected a rate of 79.82 Paise/Unit and not Rs.1.84 per unit.

8.34.3 Commission's View:

The Commission feels that the comment made by the objectors as per this sub-paragraph lacks relevance to the present petition, especially in view of the reply given by HPSEBL that it has neither raised any claim nor sought any relief in this regard in the petition and also in view of the fact that the present petition does not envisage any rate of Rs. 1.84/ kWh.

9. COMPUTATION OF ADDITIONAL SURCHARGE:

The Commission now proceeds to consider the specific value suggested by the HPSEBL and the objectors for computation of the rate of additional surcharge and to compute the said rate as per the following sub-paragraph.

9.1 **Comments:**

The objectors have stated that they are of the view that the methodology adopted by HPSEBL for computing the additional surcharge is not a correct methodology. However, in the methodology adopted by HPSEBL itself, there are certain conceptual aspects which need to be corrected. Further as the Commission has already issued the Order on Second Annual Performance Review for 3rd MYT Control Period (FY15 to FY19) & Determination of Tariff for FY2016-17 on May 25, 2016, figures of recovery from Demand Charges and Wheeling Charges to be adjusted from Demand Charges need to be revised by considering the Demand Charges and Wheeling Charges as approved by the Commission in its Order. Without prejudice to their rights on the issues, raised regarding methodology to be adopted for Additional Surcharge, they have submitted their observations on various aspects of Additional Surcharge computations, proposed by HPSEBL and revised Additional Surcharge computations for consideration of the Commission, they have computed the rate of additional surcharge as 37.70 paise per kWh as per the detail given in the table below:

Table-7

	Description	Unit	Value
(A)	Fixed Cost of Stranded Capacity as assumed by HPSEBL	Paise/kWh	95.30
(B)	Transmission Capacity		
	(i) Power Grid system		0.00
	(ii) HPPTCL system		0.00
(C)	Total Fixed Cost payable to Generator	Paise/kWh	95.30
(D)	Recovery of Fixed Charges from EHT Consumers		
	Demand Charges for EHT in FY 2015-16 Order	Rs/kVA	350
	Demand Charges for EHT in FY 2016-17 Order	Rs/kVA	425
	Recovery from Demand Charges as per revised Demand Charges	Rs/kWh	84.10
(E)	50% of Wheeling Charges for EHT Consumers as per FY 17 Order	Paise/kWh	26.50
(F)	Net Recovery through Demand charges, Eligible for adjustment (D-E)	Paise/kWh	57.60
(G)	Balance payable in shape of Additional Surcharge in Paise/kWh (C-F)	Paise/kWh	37.70

9.2 **HPSEBL's Proposal:**

The HPSEBL has computed rate of additional surcharge as 79.82 paise per kWh as per details given in Table-3 of this Order which is also reproduced below for ready reference.

9.3 **Commission's View:**

The Commission now proceeds to compute the rate of additional surcharge after duly taking into account the proposal of HPSEBL, discussion in the aforesaid paragraphs and the calculations submitted by the objectors. In the first instance, the Commission finalizes the itemwise values as under:

A. FIXED COST OF STRANDED CAPACITY:

The HPSEBL has considered the fixed cost of stranded capacity as 95.30 paise per unit. The objectors have also adopted the same figure of 95.30 paise per unit in

their calculations. The Commission has however, after exercising its prudence, computed the value as 81.71 paise per unit as per the details given in Table-5. The value of 81.71 paise per unit has however been further projected to the consumer end by considering the Power Grid, HPPTCL transmission and distribution losses as 3.79%, 0.75% and 4% respectively, in view of the position explained in a separate paragraph and the value so projected at consumer end works out to 89.13 paise per unit against 103.96 paise per unit, proposed by HPSEBL in their petition.

B. TRANSMISSION CAPACITY:

The HPSEBL has proposed the basic values of 17.34 paise per unit for Power Grid losses and 1.62 paise per unit for HPTCL transmission losses. The objectors however considered the values as zero which is not acceptable as discussed in a separate paragraph. The Commission has marginally reduced the basic values proposed by HPSEBL, worked out the basic values as 15.82 paise per unit for Power Grid charges and 1.48 paise per unit for HPPTCL charges as per details given in Table-6. The corresponding values, projected to consumer end are 17.25 paise per kWh and 1.55 paise per kWh as against the values of 18.92 paise per unit and 1.70 paise per unit, proposed by the HPSEBL in their proposal/petition.

C. TOTAL FIXED COST PAYABLE TO THE GENERATOR:

This being a simple summation of Items A and B does not need any discussion.

D,E&F. NET RECOVERY THROUGH DEMAND CHARGES ELIGIBLE FOR ADJUSTMENT:

The HPSEBL has proposed the net recovery through Demand Charges, eligible for adjustment @ 44.76 paise per unit (i.e. 69.26 paise/kWh - 24.50 piase/kWh) which is based on the rate of Demand Charges applicable for EHT consumers during FY 2015-16 and does not account for the revision made in the Tariff order for FY 2016-17 in respect of the Demand Charges and Wheeling Charges. The Objectors have worked out the values of net recovery to be adjusted as 57.60 paise per unit (i.e. 84.10 paise/kWh - 26.50 paise/kWh) based on the rates determined for FY 2016-17. The Commission finds merit in the value of net recovery, suggested by the objectors and accepts the same in principle. The Commission has however worked out the average rate of demand charges as per the rate fixed in the Tariff Order for FY 2016-17 as 85.27 paise/kWh and after adjusting 26.50 paise/kWh (i.e. 50 % of the wheeling charge rate), the net value works out to 58.77 paise/kWh. The Commission has adopted these values for computing the rate of additional surcharge.

G. BALANCE PAYABLE IN THE SHAPE OF ADDITIONAL SURCHARGE:

Based on above discussion, the Commission has computed the rate of additional surcharge as 49 paise/kWh as per details given in the Table-8, which also depicts the comparison of the proposal given by the HPSEBL and computation made by the objector.

Table -8

Sr. No.	Description	Computation of Addl Surcharge by HPSEB Ltd		Computation of Addl Surcharge by M/s Birla Textile Mills,M/s Winsome & M/s Inox Air Products	Computation of Addl. Surcharge by HPERC	
1	2	3	4	5	6	7
A)	Fixed cost of Stranded Capacity (Paise/kWh)	Fixed cost at injection point	Fixed cost projected at consumer end	Fixed cost considered by objectors on HPSEB Ltd Methodology	Fixed cost at injection point	Fixed cost projected at consumer end
		95.30	103.96	95.30	81.71	89.13
В)	Transmission Capacity: (i) Power Grid	17.34	18.92	0.00	15.82	17.25
	System (Paise/KWh) (ii) HPPTCL System (Paise/KWh)	1.62	1.70	0.00	1.48	1.55
C)	Total Fixed Cost payable to Generator (A+B) (Paise/kWh)	-	124.58	95.30	-	107.93
D)	Recovery of Fixed Charges as demand charges from EHT Consumers		69.26	84.10	-	85.27
E)	50% of wheeling charges for EHT Consumers (Paise/kWh)	-	24.50	26.50	-	26.50
F)	Net Recovery through Demand charges, Eligible for adjustment (Paise/kWh)	-	44.76	57.60	-	58.77
G)	Balance Payable in shape of Additional Surcharge (Paise/kWh) (C-F)	-	79.82	37.70	-	49.16 (say 49 paise per kWh)

10. **APPLICABILITY PERIOD:**

The Commission had earlier, vide its order dated 18.02.2016, determined the rate of additional surcharge upto 31.07.2016 and also included the enabling provisions to extend the outer date of applicability of the said rate. The Commission in its Tariff Order, issued on 25.05.2016 also provided that the additional surcharge of 78 paise per kWh, as determined in the previous order, shall continue to be applicable till the

determination of the fresh rate and fresh rate shall be applicable from the date of issuance of that order, determining the additional surcharge. The objectors in their comments have stated that the rate shall not be made applicable with retrospective effect from May, 2014, which is not relevant as also explained in a separate paragraph. The Commission decides to make the rate of additional surcharge, being determined in this order applicable w.e.f 01.11.2016. This rate shall remain applicable till 31.03.2017 or till any other date as the Commission may, by order, revise.

11. **DETERMINATION OF ADDITIONAL SURCHARGE RATE:**

The Commission considers the rate of 49 paise per kWh, computed in Table-8, to be quite reasonable, interalia keeping in view the facts that this rate is to be recovered on the energy deliverable at the consumer end and also that the short term open access consumers, paying demand charges are required to pay only 50% of wheeling charges. Moreover, the fact that the rate of Additional Surcharge under this order has been reduced substantially from the previous rate of 78 Paise/kWh and is substantially less than the rate of 80 Paise/kWh claimed by the Petitioner also establishes that the methodology used by the Commission is quite fair and reasonable. 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 @ 49 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 be applicable for the STOA, availed during the period starting from 01.11.2016 and ending on 24 hours of 31.03.2017 or till any other date as the Commission, may by order, revise.

(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 subjected to any revision due to any true-up etc.

12. **Petition for FY 2017-18:**

- 12.1 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, the Commission expects HPSEBL also to carry out suitable exercise(s), in the petition for FY 2017-18 to compute the rate of additional surcharge by following, mutatis mutandis, the patterns suggested by the stakeholders and to provide the same, alongwith required data, as a part of petition, so as to provide suitable relief, if due to STOA consumers or to at least remove any doubts in the mind of the stakeholders that they are being overburdened. Similarly, if HPSEBL feels aggrieved due to adoption of this methodology, it may also suggest a different methodology, alongwith complete justification and requisite data, and may submit the proposal based on such alternative methodology also in addition to the same based on the present methodology. In fact, the Commission shall not be averse to follow any other methodology which meets the ends of justice in a fair and equitable manner. As such, any suggestions for fine tuning of the present methodology, for future period, in an objective manner will be welcome. The Commission expects the HPSEBL to submit the petition for determination of additional surcharge for FY 2017-18 expeditiously and preferably within two months of issuance of this Order but in any case, not later than 31st January, 2017, so that the rate of additional surcharge for FY 2017-18 can be decided at the beginning of the year itself.
- 12.2 The Commission had expressed a view in its earlier order of 18.02.2016 that it 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 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.

HPSEBL was expected to consider this aspect and do the needful, but it has not commented at all on this aspect in the petition. Even though the Commission has, in this order, determined only an uniform rate of additional surcharge, it would also 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.

Place: Shimla.

Date: 28th October, 2016

Chairman

(S.K.B.S. Negi)

Sd/-