ODISHA ELECTRICITY REGULATORY COMMISSION BIDYUT NIYAMAK BHAWAN UNIT-VIII. BHUBANESWAR – 751012

Present : Shri S. P. Nanda, Chairperson Shri S.P.Swain, Member Shri A. K. Das, Member

	Case No. 16/2014	
WESCO		 Petitioner
- Vrs. –		
DoE, GoO & others		 Respondents
	AND	
	Case No. 17/2014	
SOUTHCO		 Petitioner
- Vrs. –		
DoE, GoO & others		 Respondents
	AND	
	Case No. 18/2014	
NESCO		 Petitioner
- Vrs. –		
DoE, GoO & others		 Respondents
	AND	
	Case No. 23/2014	
CESU		 Petitioner

In the matter of:

- Vrs. – DoE. GoO & others

Applications of WESCO, SOUTHCO, NESCO & CESU for approval of Open Access Charges (Transmission/wheeling Charges, Surcharge and Additional Surcharge) for the FY 2014-15 applicable to open access customers for use of Intra-state transmission/distribution system in accordance with Sections 39, 40 and 42 of the Electricity Act, 2003 read with the provisions of Chapter II (Charges for Open Access) Regulations 4(1)(xiv),(2)(vii) & (3)(vi) of the OERC (Determination of Open Access Charges) Regulations, 2006.

Respondents

For Petitioner:

Shri K. C. Nanda, DGM (Fin.), WESCO, on behalf of WESCO, NESCO & SOUTHCO, Shri Samir Kumar Swain, AVP, SOUTHCO, Shri. Subrat Kumar Routray, DMF (Comm. & RA), SOUTHCO, Shri Niladri Khadenga, DM (RA), NESCO, Shri Sudarsan Nayak, CEO, CESU, Shri. S. K. Harichandan, AGM (Law), CESU, Shri P.K.Dash, CGM (Comm.), CESU, Shri Tapan Mohanty, GM (Elect.), CESU.

For Respondents:

Shri. Satyajit Ganguly, Vice President (Regulatory), M/s. Sesa Sterlite Limited, Shri Bibhu Charan Swain, Director, Swain & Son Power Tech Pvt. Ltd. for self and on behalf of, M/s. Adhunik Metaliks Ltd., M/s. Jayashree Chemicals Ltd., M/s. FACOR Power Ltd., M/s.VISA Steel Ltd., Shri R.P. Mohapatra for self, Shri Suryakanta Pati on behalf of M/s. OCL India Limited and Shri Thakuna Das, Under Secretary, DoE, GoO are present.

ORDER

Date of Order: 30.09.2014

- 1. The Distribution Licensees WESCO, SOUTHCO, NESCO and CESU had filed their applications before this Commission for Determination of Open Access Charges including Transmission /Wheeling Charge, Surcharge and Additional Surcharge for the FY 2014-15 applicable to open access customers for use of intra-state transmission/distribution systems following Sections 39, 40 & 42 of the Electricity Act, 2003, read with OERC (Terms and Conditions for Determination of Open Access Charges) Regulations, 2006.
- 2. As per direction of the Commission, the applications filed by the DISCOMs were published in the English and Odia Newspapers for inviting suggestions/objections, if any, from various stakeholders. The DISCOMs also have filed their rejoinders to the objections / suggestions of the stakeholders. The Commission had received the objections/ suggestions from the following persons/ institutions with regard to the application of DISCOMs for fixing Open Access charges.

M/s. Jayshree Chemicals Ltd. on the application of SOUTHCO, M/s. Facor Ltd. on the application of NESCO, M/s Swain & Sons, Power Tech Pvt. Ltd. on the applications of WESCO, NESCO, SOUTHCO & CESU, M/s. Visa Steel Ltd. on the application of NESCO, M/s. Adhunik Metaliks Ltd. on the application of WESCO, Shri R. P. Mohapatra on the applications of WESCO, NESCO, SOUTHCO & CESU, Shri Satyajit Ganguly, VP, M/s. Sesa Sterlite Ltd. on the application of WESCO, M/s OCL Ltd. on the application of CESU along with the submissions of DoE, GoO on the above applications for open access charges of the DISCOMs.

3. The DISCOMs have calculated Open Access Charges for the year FY 2014-15 and sought for approval of the Commission. The details of charge are given as under:

Table – 1
Surcharge and Wheeling Charge Proposed by the Licensees for Open Access consumer for FY 2014-15

Name of the Licensee	Open Access Surcharge for EHT	Open Access Surcharge for HT	Wheeling Charge at HT
	Consumer (P/U)	Consumer (P/U)	(P/U)
CESU	206.00 (405.00 for	190.00 (389.00 for	86.00
	Emergency Supply	Emergency Supply	
	to CGP consumer)	to CGP consumer)	
NESCO	249.00	129.00	115.00
WESCO	238.00	128.00	80.00
SOUTHCO	328.00	227.00	103.00

- 4. The DISCOMs submitted that the distribution licensee may be allowed to reserve adequate transmission corridor for new consumers while allowing open access. Further they submitted that while approving SMD in respect of each distribution licensee the Commission should take into consideration contract demand / recorded maximum demand of the Open Access consumers.
- 5. The respondents/ objectors have submitted the following points on the proposed Open Access before the Commission for consideration.
 - As per Electricity Act, the Cross subsidy Surcharge should be gradually reduced every year and also a road map is to be made by the Commission for reduction of same.
 - Due to very high cross subsidy surcharge in SOUTHCO, the total cost of the energy is very high and no consumer in SOUTHCO area can afford to purchase power through open access.
 - Computation of cross subsidy surcharge for EHT consumers is to be made based on the following methodology.

Table - 2

M.O. 11. 4						
Methodology 1						
Based on National Tariff			Based on OERC Tariff Order for			
	Tariff Order for FY		FY 2014-15 and Regulation 7			
	2014-15 and OA		(c) (iii) of Terms and Conditions			
	Regulation		of Determination Tariff			
			Regulation			
538.25		538.25	For CD 1 KVA average	497.00		
			tariff applicable to EHT			
			consumers considering			
			100% load factor			
483.31	Average	461.00		461.00		
(422.85	cost to serve					
+ 34.8	all					
+25.0 +	consumer					
0.5 +	(P/U)					
0.16)						
54.94	Surcharge	77.25	Surcharge (P/U)	36.00		
	(P/U)		•			
<u>'</u>	Fariff 538.25 483.31 422.85 + 34.8 -25.0 + 0.5 + 0.16)	Fariff Based on C Tariff Order 2014-15 an Regulati 538.25 Average 422.85 cost to serve + 34.8 all -25.0 + consumer 0.5 + (P/U) 0.16) Surcharge	Based on OERC Tariff Order for FY 2014-15 and OA Regulation	Based on OERC Tariff Order for FY 2014-15 and OA Regulation 538.25 Sample Sam		

- There should not be any cross subsidy surcharge payable by the consumer procuring renewable and cogeneration based energy from other sources.
- There is no ground to limit the quantum of open access power beyond its contracted capacity for the existing consumer till no new consumer starts drawing power from the network otherwise it will lead to poor utilization of Network.
- No Cross subsidy surcharge should be levied on the open access customer for procuring extra power from third party for the quantum beyond its contract demand as approved during start of financial year.
- Wheeling charges should be 25% of that for long term customers.
- For the purpose of determination of wheeling charge at HT, the applicable cost for the HT distribution system is to be taken into account instead of the total cost of distribution system.
- For computing wheeling charge on 50% (actual expenditure by the DISCOMs) of the R&M expenses should be considered and special R&M scheme may be deleted from the total R&M expenses.
- The Commission may devise a suitable mechanism for determination of the value of 'C' which is the weighted average cost of power purchase of top 5% at the margin.
- One objector suggested for the cross subsidy surcharge based on National Tariff Policy and OERC Tariff order is given below:

Table - 3

Average tariff as applicable to the EHT consumers as per	434
OERC Tariff (normal energy charge >60% = 395 P/U) and	
demand charge at 100% load factor 39 paisa	
Tariff of top 5% energy to be procured by GRIDCO including	483.31 (422.85 + 34.8
PGCIL, OPTCL tr. Charge, ERLDC & SLDC charge (P/U)	+25.0 + 0.5 + 0.16
Surcharge (P/U) (Considering formula laid down in NTP,	- 50.00
wheeling charge & system loss as 0%)	

It may be noted that for any energy intensive industries operating with more than 60% load factor like SSL the cross subsidy surcharge is negative. So there should not be any cross subsidy surcharge for these industries.

The existing open access charges and proposed open access charges of DISCOMs in Odisha is high compared to the other states, due to which consumer is generally disinterested to purchase power from other sources, therefore, very purpose of open access is defeated.

- Further there should not be any open access charges i.e. no cross subsidy surcharge, no transmission charges and no wheeling charges applicable to any obligated entity procuring renewable and cogeneration energy from other sources for meeting its Renewable & Co-generation purchase obligation.
- In case power through open access is availed by a consumer during periods of statutory power cut or restrictions due to major breakdown in the transmission system, no cross subsidy surcharge should be payable.
- There should not be any additional surcharge when the open access consumer is availing power supply through dedicated transmission line constructed at its own cost of the consumer.
- 6. In reply to the objection raised by the Objector, the DISCOMs have submitted the rejoinder on the proposed Open Access Charges of DISCOMs for the year 2014-15 which are as follows:
 - Regarding calculation of 'C', they submitted that to consider average power purchase cost of top 5% of GRIDCO may not be correct as the DISCOMs are not purchasing power from the Generator directly to distribute the same to the consumers. GRIDCO is sourcing the power from different generator as a Trading Licensee under Single Buyer Model in Odisha.
 - Further, 5% of the approved energy purchase is only 1411 MU. However, the energy consumed by HT & EHT category is 10282 MU. The average purchase rate for 1411 MU is Rs.4.83 P/ Kwh, but pertaining to 10282 MU the average rate would be much lower. Therefore, to consider the average price of top 5% of the generator on merit order of GRIDCO is not correct.
 - The licensee would in no way stop incurring the other costs except BSP in case a consumer chooses to avail power supply under open access mechanism. Then recovery of other costs would required to be levied from consumers not availing open access.
 - The calculation suggested by M/s. Sesa Sterlite is only the rate for the consumption above 60% LF and the rate for the consumption upto 60% of LF has not been considered. Tariff at 100% LF means the average rate for consumption upto 60% and consumption more than 60% which would be Rs.4.58/- P/U instead of Rs.3.95/- P/U. Apart from the demand charges other charges like reliability surcharge, customer service charges, P.F. penalty if any

- etc. are also part of tariff. Hence while calculating tariff of any HT and EHT category the entire components have also required to be factored in.
- They submitted that the approved cost under different head in Tariff Order should be taken for determination of wheeling charge instead of actual cost as per audited accounts as suggested the objectors. This is because the actual cost is trued up subsequently with respect to approved cost which is finally passed on to the consumers.
- The approved figures of distribution cost including special R&M expenses should be considered by the Commission since CESU is implementing smart metering system on pilot basis which shall be extended to other areas.
- 7. The Commission has carefully examined all applications received from the DISCOMs as well as from objectors on the methodologies for estimating the Cross-subsidy Surcharge and the Additional Surcharge. As the subject matter of all the above cases is similar in nature, the Commission heard the views of all the applicants analogously and pass the following common order.
- 8. The Open Access Charges (Transmission / wheeling Charges, Surcharge and Additional Surcharge applicable to open access customers for use of Intra-state transmission/ distribution system) under the provisions of the Act were first fixed by the Commission for 2008-09 in its order dated 29.03.2008 in Case No. 66, 67, 68 & 69 of 2006. The detailed procedures and methodologies for computation of surcharge for different consumer categories have been elaborately described in the said order. Subsequently, the Commission has passed many orders for different years on Open Access Charges applicable to open access customers for use of Intra-state transmission/ distribution system based on the same principle. The Commission have also adopted the same principle for calculating wheeling Charges, Surcharge and Additional Surcharge applicable to open access customers for use of Intra-state transmission/ distribution system for the current year i.e. FY 2014-15.
- 9. The Commission have approved the Annual revenue requirement and Tariff of the following organization on dt.22.03.2014 for 2014-15 which had been made effective from 01.04.2014.
 - ARR & Transmission charges of OPTCL vide its order in Case No.83/2013
 - ARR & Retail Supply tariff of Distribution licensees in Case Nos.85, 86, 87 & 88 of 2013

- ARR & BSP of GRIDCO in Case No.84/2013
- ARR & Fees and Charges for SLDC vide Case No.82/2013

The Cross-subsidy Surcharge, Wheeling charge and Additional Surcharge to be charged to open access consumers now needs to be re-determined, basing on the new tariffs and costs approved by the Commission in the above orders.

- 10. Surcharge is to be levied on open access customers under Section 42 (2) of the Electricity Act, 2003. While determining the surcharge, the Commission has to keep in view the loss of cross subsidy from such consumers who opt to take supply from a person other than the incumbent distribution licensee. The objective of the Electricity Act, 2003 is to reduce the cross subsidy in the tariff so that the consumers move towards the regime of meeting the full cost of supply with gradual reduction of the cross subsidy.
- 11. In this connection, the formula for computation of surcharge prescribed in the tariff policy in para 8.5.1 is quoted as under:

Surcharge formula:

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

Where

S is the surcharge

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

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

D is the Wheeling charge

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

Now we adopt the same principle as in the past laid out in the Tariff Policy for determination of cross-subsidy surcharge considering the uniqueness of the power sector of the State in structural and functional area as follows:

T = applicable tariff for EHT and HT consumers at 100% load factor

C = Power Purchase cost plus transmission & SLDC charge payable by DISCOMs.

Since Odisha follows single buyer model, the power is purchased from different generators first and then pooled at GRIDCO end. The same power is resold to DISCOMs at a price called Bulk Supply Price as approved by the Commission and includes the intra-State transmission loss. This is the power purchase cost of DISCOMs. In addition to that DISCOMs are to pay transmission charges to OPTCL and SLDC charges for the power purchased by them.

L = loss at HT 8% (assumed) since EHT loss is already in the BSP.

D = Wheeling charge levied by DISCOMs for power handled in HT = Distribution cost of DISCOMs/ Input units at HT

- 12. The wheeling charge is determined in pursuance to our Regulation which prescribes the adoption of same methodology as transmission for determination of the same. Since we have been following postage stamp method for determination of transmission charges we adopt the same for the determination of wheeling charge in the above formula considering only HT units handled by the system.
- 13. For the year 2014-15, the Commission have approved the following Bulk Supply Price in respect of four distribution companies.

1.	CESU	265.00 per KWH
2.	NESCO	280.00 per KWH
3.	WESCO	286.00 per KWH
4.	SOUTHCO	185.00 per KWH

In addition to that DISCOMs are to pay transmission charge @ 25 paise / Unit and SLDC charge as determined the Commission for the current year. All these constitute power purchase cost (C) of the DISCOMs.

14. For determination of wheeling charges we have utilized the ARR of DISCOMs approved by us in our Tariff order for current year. We have not considered the special R&M expenditure allowed in this year's ARR to the DISCOMs for calculating wheeling charge since these are project specific in nature. The calculation of wheeling charges pertaining to each DISCOM is tabulated below for ready reference:

Table – 4
Calculation of Wheeling Charge for FY 2014-15

	CESU	NESCO	WESCO	SOUTHCO	TOTAL
Purchase MU	9,040.00	5,330.00	6,820.00	3,340.00	24,530.00
Sale MU					
EHT	1,755.96	1,542.83	1,527.93	427.03	5,253.75
HT	1,238.18	449.20	1,313.00	191.68	3,192.06
LT	3,966.66	2,359.92	2,642.35	1,869.59	10,838.52

	CESU	NESCO	WESCO	SOUTHCO	TOTAL
TOTAL	6,960.80	4,351.95	5,483.28	2,488.30	19,284.33
Energy Handled at HT MU (Purchase - EHT sale)	7,284.04	3,787.17	5,292.07	2,912.97	19,276.25
Total RR excl. Mis Rev. & Spl R & M (Rs. in Crore)	3,121.15	1,977.24	2,459.49	953.99	8,511.87
Less Cost of PP, Transmission & SLDC Charge (Rs. in Crore)	2,623.05	1,626.51	2,122.11	701.94	7,073.61
NET DISTRIBUTION COST (Rs in Crore)	498.10	350.73	337.38	252.05	1,438.26
Wheeling Charge calculated for 2014-15 (P/U)	68.38	92.61	63.75	86.53	74.61

- 15. The tariff (T) in the surcharge formula has been adopted for HT and EHT consumers at 100% load factor without deviating from the principles of earlier years. This tariff includes not only energy charge but also other component of tariff called demand charge as applicable to the consumer at respective voltage level such as HT & EHT in the current year.
- 16. Accordingly, the Commission have computed the Open access charges on the basis of formula enumerated in tariff Policy as follows.

 $Table-5 \\ Computed Surcharge for Open access consumer 1MW \& above$

DISCOM	CESU	NESCO	WESCO	SOUTHCO
Surcharge for EHT Consumer (P/U)	205.89	190.89	184.89	285.89
Surcharge for HT Consumer (P/U)	119.30	78.87	101.25	187.55

17. As per mandate of the Electricity Act, 2003 under Section 42 the cross subsidy surcharge is to be reduced progressively. The Commission is authorized to evolve a methodology for such reduction. Different objectors / suggestors have also advised the Commission in this regard during the hearing. Therefore, as a first step this Commission have considered the reduction in cross subsidy for the current year. Therefore, for the current year the cross subsidy surcharge leviable to the Open Access consumers shall be 80% of the amount as computed by the formula discussed above. This will indicate our commitment for reduction of Cross subsidy surcharge in future years. Accordingly the cross subsidy surcharge applicable to open access customer for the current year is given in the table below.

Table-6 Leviable Surcharge, Wheeling Charge & Transmission Charge for Open access consumer 1MW & above for FY 2014-15

Name of the licensee	Cross Subsidy Surcharge (P/U)		Wheeling Charge P/U applicable to	Transmission Charges for Short Term Open
	EHT	HT	HT consumers	access Customer
			only	(applicable for HT &
				EHT consumers)
CESU	164.71	95.44	68.38	Rs. 1500/MW/day or
CESU	104.71	93.44	06.36	Rs.62.5/MWh
NESCO	152.71	63.09	92.61	Rs. 1500/MW/day or
NESCO	132.71	03.09	92.01	Rs.62.5/MWh
WESCO	147.91	81	63.75	Rs. 1500/MW/day or
WESCO	147.91	61	03.73	Rs.62.5/MWh
SOUTHCO	228.71	150.04	86.53	Rs. 1500/MW/day or
SOUTHED	220.71	130.04	00.33	Rs.62.5/MWh

18. In addition to above other charges as applicable as per Regulation 4 of OERC (Determination of Open Access Charges) Regulations, 2006 will also be paid by the customer availing Open Access.

Additional Surcharge:

- 19. As per principle followed in the previous order, we have not determined additional surcharge over and above the surcharge to be paid to the DISCOMs to meet the fixed cost of licensee arising out of his obligation to supply as provided under Sub-Section 4 of Section 42 of the Act. This is because no such case has been brought before us by the DISCOMs.
- 20. In view of several objections regarding delay in granting permission to open access transaction, SLDC is directed to consider and allow Open Access applications of all the consumers within the permissible time frame on receipt of requisite fee and on completion of all formalities as detailed in OERC Regulation without any discrimination except in case of technical difficulties due to Transmission constraint and statutory order of Govt. or other barriers, if any as per the Act under intimation to the applicant within the stipulated period.
- 21. With regard to the contention of one of the respondent that open access charges should not be applicable to the consumers availing power from renewable sources it is to be mentioned here that as per Regulation 11 of OERC (Renewable and Co-Generation Purchase Obligation and its Compliance) Regulation, 2010 third party sale from Renewable energy sources shall be exempted from the cross-subsidy surcharge

determined by the Commission from time to time. The Commission also decide that the open access consumer availing renewable power except co-generation and biomass through third party sale shall pay wheeling charges 20% of the same charge applicable to other consumers in the current year.

- 22. In case there is statutory power cut or restriction due to major break down the crosssubsidy surcharge is also to be accordingly calculated basing on the actual power drawn and not on the schedule of drawal.
- 23. We don't agree with the contention of DISCOMs that their SMD over shoots due to open access consumers for which they must be compensated. This is because the DISCOMs must be well aware of the demand inside their DISCOMs well in advance and accordingly estimate the SMD before submitting the same to the Commission for approval.
- 24. The summary of our directions are as follows:
 - (i) The existing principle and rate of cross-subsidy surcharge and wheeling charges as determined by the Commission for FY 2012-13 shall continue till 31.03.2014.
 - (ii) The wheeling charge and surcharge as indicated in Table -6 shall be applicable for the financial year 2014-15 retrospectively from 01.04.2014.
 - (iii) The normative transmission loss at EHT (3.75%) and normative wheeling loss for HT level (8%) shall be applicable for the year 2014-15.
 - (iv) No Cross-subsidy surcharge charges is payable by the consumers availing Renewable power through open access.
 - (v) 20% wheeling charge is payable by the consumers drawing power through open access from Renewable source excluding Co-generation & Bio mass power plant.
- 25. These charges as notified for the FY 2014-15 will remain in force until further order.
- 26. Accordingly the Case Nos. 16, 17, 18 & 23 of 2014 relating to Open Access proceedings are disposed of.

Sd/- Sd/- Sd/
(A.K.DAS) (S. P. SWAIN) (S. P. NANDA)

MEMBER MEMBER CHAIRPERSON