DISCOMs

Summary of Annual Revenue Requirement (ARR) & Retail Supply Tariff (RST) Proposal Submitted by Electricity Distribution Companies of Orissa for the FY 2016–17

1. Energy Sale, Purchase and Loss

A statement of Energy Purchase, Sale and Overall Distribution Loss from FY 2011–12 to 2016–17 as submitted by DISCOM of Orissa namely Central Electricity Supply Utility of Orissa (CESU), North Eastern Electricity Supply Company of Orissa Ltd (NESCO), Western Electricity Supply Company of Orissa Ltd (WESCO) and Southern Electricity Supply Company of Orissa Ltd (SOUTHCO) is given below

Table 1 Energy Sale, Purchase and Loss

DISCOMs	Particulars	2011-12 (Actual)	2012-13 (Actual)	2013-14 (Actual)	2014-15 (Actual)	2015-16 (App.)	2015-16 (Est.)	2016-17 (Est.)
	Energy Sale (MU)	4469.79	4662.96	5211.93	5484.35	6760.60	5698.86	6085.94
CSEU	Energy Purchased (MU)	7232.91	7398.92	7973.19	8297.32	8780.00	8480.05	8904.87
	Overall Dist. Loss (%)	38.20	37.00	34.63	33.90	23.00	32.80	3166
	Energy Sale (MU)	3301.53	3282.86	3337.83	3455.54	4286.63	3844.048	4187.33
NESCO	Energy Purchased (MU)	5023.40	5045.35	5045.29	5015.30	5250.00	5265.819	5583.10
	Overall Dist. Loss (%)	34.28	34.93	33.84	31.10	18.35	27.00	25.00
	Energy Sale (MU)	3775.04	3945.34	4201.07	4552.19	5909.4	4710.0	5087.0
WESCO	Energy Purchased (MU)	6177.74	6391.26	6634.90	7053.70	7350.00	7050.0	7350.0
	Overall Dist. Loss (%)	38.89	38.27	36.68	35.46	19.60	33.19	30.79
	Energy Sale (MU)	1507.53	1660.67	1720.36	1947.73	2547.90	2125.395	2307.666
SOUTHCO	Energy Purchased (MU)	2814.13	2929.88	2915.56	3192.83	3420.00	3325.0	3550.0
	Overall Dist. Loss (%)	46.43	43.32	40.99	39.00	25.50	36.08	35.00

2. AT&C Losses

The system Loss, Collection Efficiency and Targets fixed by OERC in reference of AT&C Losses of four DISCOMs since FY 2011–12 onwards are given hereunder:

Table 2 AT&C Losses

		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
DISCOMs	Particulars						
		(Actual)	(Actual)	(Actual)	(Actual)	(Est.)	(Est.)
	Dist. Loss (%)	38.20	37.00	34.63	33.90	32.80	31.66
	Collection	90.55	93.41	93.69	94.30	94.50	96.50
	Efficiency (%)	70.33	75.41	93.09	74.30	94.30	90.30
CESU	AT&C Loss (%)	44.04	41.16	38.75	37.67	36.49	34.05
	OERC Target						
	(AT&C Loss %) As	24.76	23.77	23.77	23.77	23.77	
	per Business Plan						
	Dist. Loss (%)	34.28	34.93	33.84	31.10	27.00	25.00
	Collection	93.99	91.63	95.93	96.96	95.00	97.00
	Efficiency (%)						
NESCO	AT&C Loss (%)	38.23	40.38	36.53	33.19	30.65	27.25
	OERC Target						
	(AT&C Loss %) As	19.22	19.17	19.17	19.17	19.17	
	per Business Plan						
	Dist. Loss (%)	38.89	38.27	36.68	35.46	33.19	30.79
	Collection	94.43	92.79	94.35	95.37	96.00	98.00
	Efficiency (%)						
WESCO	AT&C Loss (%)	42.30	42.72	40.26	38.45	35.86	32.17
	OERC Target						
	(AT&C Loss %) As	20.50	20.40	20.40	20.40	20.40	
	per Business Plan						
	Dist. Loss (%)	46.42	43.68	40.99	39.00	36.08	35.00
	Collection	91.58	93.88	92.39	90.75	93.50	95.50
	Efficiency (%)						
SOUTHCO	AT&C Loss (%)	50.94	47.13	45.49	44.64	40.23	37.92
	OERC Target						
	(AT&C Loss %) As	27.24	26.25	26.25	26.25	26.24	
	per Business Plan						

3. Data Sources

NESCO, WESCO, SOUTHCO and CESU submitted that they have scrupulously complied with the information requested by the Commission for submitting the ARR and tariff for the FY 2016–17. The accounts up to March 2015 have been prepared as per companies act as well as financial formats prescribed by the Commission. While for compilation of data and preparation of ARR the licensee has relied upon the provisional accounts up to March 2015 and actual data up to Sep–15. However, actual bills received from the bulk

supplier, GRIDCO, transmission charges on the basis of actual energy received from OPTCL, SLDC charges on the basis of BSP rate has been taken in to account while compilation of data and preparation of ARR.

4. Revenue Requirement for FY 2016-17

Sales Forecast

For projecting the energy sale to different consumer categories, Licensees analysed the trend of consumption pattern for last fifteen years from 2001-2002 to 2014-15 and actual sales data for the first six months of FY 2015-16. With this, the four distribution utilities have forecasted their sales figure for the FY 2016-17 as detailed below with reasons for sales pattern.

Table 3 Sales Forecast

Licensee/	LT Sale	s for	HT Sal	es for	EHT Sa	les for	Total
Utility	FY 2016-17 (Est.)		FY 2016-17 (Est.)		FY 2016-		Sales
Othity	(MU)	% Rise	(MU)	% Rise	(MU)	% Rise	2016-17
	(MO)	over	(MO)	over FY 15	(MO)	over FY	(Est.) MU
		FY 15		over FY 15		15	(ESL.) MU
CECH	2005.26		122414	(20/	066 542		600F 04
CESU	3885.26	18.25%	1234.14	6.3%	966.542	(22.82%)	6085.94
Remarks		•		-			
NESCO	2128.102	18%		4%		0%	4187.330
Remarks	Impact of		Break in the d		Reduction i		
			trend of HT co		sales becau	se	
	of new villag	ges under	due to revival	of some	industries a	re setting	
	RGGVY & Bi	ju Gram	units and ener	gisation of	their own C	PP and	
	Jyoti Yojana	; and	new industry	under HT	some have o	opted for	
	growth fron	n existing	category		open access	s.	
	& new consi	_			•		
WESCO		17.79%	1240.0	1.22%	1450.0	0.00%	5087.00
Remarks	Impact of		Sales not incre	easing on	Reduction i	n EHT	
	electrification	on of new	account of rec		sales becau	se	
	villages und	er	steel & mining	sector	industries a	re setting	
	RGGVY & Bi		industrial slov		their own C		
	Jyoti Yojana		temporary				
	growth in do		closure/disco	nnection of			
	category.		steel of steel &				
			industries	Ü			
SOUTHCO	1739.573	11%	211.993	3.87%	356.10	1.71%	2307.66
Remarks	Impact of BI	PL & APL	Nominal addit	ion in	Slight grow	th in	
	consumers f		consumption (considered	consumptio		
	RGGVY, BGI	program,	based on earli		that of earli		
	Increase in	,	with addition		considered	J	
	agriculture a	and	consumer of le				
	Irrigation	- 	MVA for a per				
	consumptio	n from	l l l l l l l l l l l l l l l l l l l				
	Mega Lift Iri						
	project of Go						
	project of di	00					

5. Inputs in Revenue Requirement for FY 2016–17

Power Purchase expanses

The Licensees have proposed the power purchase costs based on their current BSP, transmission charges and SLDC charges. They have also projected their SMD considering the actual SMD during FY 2014-15 and additional coming in FY 2015-16 which is as shown in table given below.

Table 4 Proposed SMD and Power Purchase Costs

DISCOMs	Est. Power	Est.	Distributio	Current	Est. Power Purchase	SMD
	Purchase	Sales	n Loss	BSP	Cost (Rs in Cr)	proposed
	in (MU)			(Paisa/Un		MVA
		(MU)		it)	(Including	
					Transmission and	
					SLDC charges)	
CESU	8904.87	6085.94	31.66%	285	2760.69	1872
NESCO	4187.33	5583.10	25%	302	1827.00	980
WESCO	5087.00	7350.00	30.79 %	310	2462.00	1350
SOUTHCO	2307.66	3550.00	35.00%	200	799.31	600

Employees Expenses

CESU, NESCO, WESCO and SOUTHCO have projected the employee expenses of Rs 433.66 Cr., Rs 288.48 Cr., Rs 294.86 Cr. and Rs 322.82 Cr respectively for FY 2016–17. Out of these proposed employee expenses, Rs 167.95 Cr, Rs.85.76 Cr, Rs 134.08 Cr and Rs 103.76 Cr respectively are proposed for employee terminal benefit trust requirement for FY 2016–17. The impact of 7th pay commission for the year 2016–17 has been estimated in Basic Pay and Grade Pay projected as Rs 59.00 Cr, Rs 70.00 Cr and Rs 77.24 Cr by NESCO, WESCO and SOUTHCO respectively. CESU has not considered the impact of implementation of 7th pay commission while making employee expenses projection.

Administrative and General Expenses

CESU, NESCO, WESCO and SOUTHCO have estimated the A&G expenses of Rs 97.67 Cr, Rs 52.99 Cr, Rs 70.16 Cr and Rs 65.84 Cr respectively based on expenses till September 2015. The 7% increase is taken on account of inflation on the normal A&G expenses.

As per licensees in case of A&G expenses, additional expenses for aforesaid initiatives e.g. automated meter reading activities, spot billing additional coverage, replacement & shifting of meters, energy audit-recurring cost, RTI expenditure, Cess on building construction and electrical installation, DSM operation and intra state ABT, prepaid meter running expenses have been considered while projecting the total A&G expenses

for FY 2016–17. The additional amounts of A&G expenses for NESCO, WESCO and SOUTHCO are mentioned as Rs 11.76 Cr, 12.09 Cr and Rs 34.87 Cr respectively.

Repair and Maintenance (R&M) expenses

All the DISCOMs have calculated R&M expenses as 5.4% of GFA including the RGGVY and BGJY assets at the beginning of the year. With regard to the R&M of the assets created through funding of the RGGVY and BGJY schemes, Commission in Para 421 the RST order for FY 2015–16 had allowed an additional sum of Rs. 5.00 Cr to each of the DISCOMs on a provisional basis which is not enough given the area over which the RGGVY assets have been spread out. They have prayed to allow the R&M on the RGGVY & BGJY assets so that they can maintain the assets.

The details of proposal under R&M expenses for ensuing financial year FY 2016–17 are given below:

Table 5 R&M Costs (Rs in Cr)

DISCOMS	GFA as at 31 st March of Current FY 2015−16	R&M (5.4% of GFA)	Additional R&M Requested for RGGVY and BGJY assets	Amount towards R&M of Smart Metering	Total R&M Requested
CESU	1783.38	96.30	3.68		99.98
NESCO	1357.42	73.30			73.30
WESCO	1084.79	58.58			58.58
SOUTHCO	1891.03	44.64	58.48		103.12

Provision for Bad and Doubtful Debts

Based on statutory auditor's observations regarding short provision of bad debt, CESU has made provision towards bad and doubtful debts to the tune of Rs 371.33 Cr for FY 2016–17. While NESCO, WESCO and SOUTHCO stated that, it is difficult for them to arrange working capital finance due to continuance of huge accumulated regulatory gaps to bridge the gap of collection inefficiency, therefore they have considered the amount equivalent to the collection inefficiency as bad and doubtful debts while estimating the ARR for FY 2016–17. NESCO, WESCO and SOUTHCO has requested the Commission to consider the mentioned amounts to enable the petitioner to recover its entire costs after duly considering the performance levels.

Table 6 Provision for Bad and Doubtful Debt

DISCOM	Collection Efficiency (%)	Proposed Bad Debts (Rs in Cr)
CESU	96.50%	371.33
NESCO	97%	62.17
WESCO	98%	26.07
SOUTHCO	95.5%	44.82

Depreciation

All the four DISCOMs have adopted straight-line method for computation of depreciation at pre-92 rate. No depreciation has been provided for the asset creation during ensuing year. Depreciation for FY 2016–17 is projected at Rs 138.19 Cr for CESU, Rs 48.98 Cr for NESCO, Rs 38.91 Cr for WESCO and Rs 68.62 Cr (includes Rs 38.98 Cr on RGGVY assets) for SOUTHCO.

Interest Expenses

CESU, NESCO, WESCO & SOUTHCO have submitted the interest expenses and the interest income for the FY 2016–17. The net interest expenses proposed by these licensees are Rs 224.24 Cr, Rs 92.54 Cr, Rs 108.10 Cr and Rs 44.77 Cr respectively. The major components of the interest expenses of these licensees are as follows:

GRIDCO Loan

Commission in its Order dated 29.03.2012 and 30.03.2012 resolved the dispute on the Power Bond and the amount arrived after the settlement adjustments issued as New Loan to three DISCOMs. NESCO and WESCO don't have any outstanding payable to GRIDCO towards New Loan while SOUTHCO has liability of Rs 5.24 Cr which is included in total interest cost. For CESU, no interest has been calculated on Rs. 174 Cr cash support provided by GRIDCO.

World Bank Loan Liabilities

The Distribution licensees NESCO, WESCO & SOUTHCO have calculated the interest liability of Rs 10.38 Cr, Rs 11.82 Cr and Rs 8.57 Cr respectively against the loan amount at an interest rate of 13% and repayment liability of Rs 9.13 Cr, Rs 9.10 Cr and Rs 7.26 Cr respectively.

World Bank (IBRD) Loan

CESU has submitted that the interest on World Bank Loan has been calculated as Rs 136.35 Cr @ 13% as per the subsidiary loan & project implementation agreement with Government of Orissa.

Interest on CAPEX Loan from Govt. Of Orissa

NESCO, WESCO & SOUTHCO have estimated the interest at the rate of 4% p.a. on the Capex loan issued by the GoO which amounts to Rs 7.37 Cr, Rs 7.50 Cr and Rs 3.35 Cr respectively for the ensuring year.

Interest on APDRP Loan Assistance

About loan from Govt, CESU has submitted that they have availed APDRP assistance of Rs 37.09 Cr from GOI through Govt of Orissa whose interest cost works out to be Rs 19.60 Cr; and borrowed counter funding from PFC amounting Rs 35.52 Cr whose interest cost works out to be Rs 0.24 Cr.

In the ensuing year, NESCO, WESCO & SOUTHCO have estimated nothing to be expended under APDRP scheme. For the assistance already availed by the licensees previously interest @ 12% per annum has been considered for the ensuing year on the existing loan. NESCO, WESCO and SOUTHCO have estimated an interest of Rs 0.76 Cr, Rs 0.66 Cr and Rs 0.72 Cr, respectively on this account.

Interest on SI scheme Counterpart funding from REC for GoO CAPEX

SOUTHCO has existing balance of loan of Rs 3.18 Cr taken from REC and the interest on such loan for FY 2016–17 is estimated as Rs 0.29 Cr.

Interest on Security Deposit

CESU, NESCO, WESCO and SOUTHCO have submitted that the interest on security deposits for FY 2016–17 have been worked out to be Rs 48.98 Cr, Rs 44.51 Cr, Rs 50.46 Cr and Rs 14.11 Cr respectively.

6. Revenue and Truing up ARR

Non Tariff Income

NESCO, WESCO and SOUTHCO have proposed non-tariff income for FY 2016–17 to the tune of Rs 68.00 Cr, Rs 95.84 Cr and Rs 17.13 Cr respectively. However, they have proposed to exclude the income from meter rent as the same is intended to be used towards replacement of the meters. CESU has proposed non tariff income of Rs.114.36 crore.

Provision for contingency Reserve

NESCO, WESCO and SOUTHCO have proposed provision for contingency at 0.375% of Gross Fixed Assets at the beginning of the year for FY 2016–17. The exposure towards contingency provisions is to the tune of Rs 5.09 Cr, Rs 4.07 Cr and Rs 3.04 Cr respectively.

Return on Equity/Reasonable Return

CESU has claimed Rs 11.64 Cr as ROE calculated @16% on equity capital. Rest of three Licensees submitted that due to negative returns (Gaps) in the ARR and carry forward of

huge Regulatory Assets in previous years, they could not avail the ROE over the years, which otherwise would have been invested in the Company for improvement of the infrastructure. As it is followed by various Commissions, the Licensees submit that the ROE to be allowed on the amount of the equity and the accrued ROE for the previous year. This would increase the availability of more funds for the consumer services. Therefore, NESCO, WESCO, SOUTHCO have assumed reasonable return amounting to Rs10.54 Cr, Rs 7.78 Cr and Rs 6.03 Cr as calculated @ 16% on equity capital including the accrued ROE as per the earlier Orders of the Commission.

Truing Up for FY 2015-16

Based on the actual sales, revenue and expenses for the first half of the current year 2015–16 and based on estimates for next half of current year, the uncovered gap for NESCO, WESCO and SUTHCO are Rs 268.49 Cr, Rs 412.78 Cr and Rs 362.46 Cr as against the surplus of Rs 9.11 Cr, Rs 14.75 Cr and Rs 4.18 Cr respectively. To avoid tariff shock NESCO and WESCO have submitted $1/3^{\rm rd}$ of uncovered gap i.e. Rs 89.50 Cr, Rs 137.59 Cr and Rs 120.82 Cr respectively for consideration in the ensuing year ARR.

Revenue at Existing Tariff

The Licensees have estimated the revenue from sale of power by considering the sales projected for FY 2016–17 and by applying the various components of existing tariffs. The total revenue based on the existing tariffs applicable for the projected sales is estimated at Rs 2986.63 Cr, Rs 2072.22 Cr, Rs 2607.14 Cr and Rs 995.89 Cr by CESU, NESCO, WESCO and SOUTHCO respectively.

Summary of Annual Revenue Requirement and Revenue Gap

The proposed revenue requirement of DISCOMs have been summarised below:

Table 7 - Proposed Revenue Requirement of DISCOMs for the FY 2016-17 (Rs in Cr)

	CESU	NESCO	WESCO	SOUTHCO
Total Power Purchase, Transmission & SLDC	2,760.69	1,826.53	2,462.09	799.31
Total O&M and Other cost	1,413.88	618.48	593.21	648.89
Return on Equity	11.64	10.54	7.78	6.03
Total Distribution Cost (A)	4,186.20	2,455.55	3,063.09	1,454.23
Total Special Appropriation (B)	0	94.58	141.66	123.86
Total Cost	4,186.20	2,550.13	3,204.75	1,578.09
Less: Miscellaneous Receipt	114.36	68.00	95.83	17.13
Total Revenue Requirement	4,071.84	2,482.13	3,108.91	1,560.95
Expected Revenue (Full Year)	2,986.63	2,072.22	2,607.14	995.89
Gap at Existing Tariff (+/-)	(1,085.21)	(409.91)	(501.77)	(565.06)

Tariff Proposal

CESU, NESCO, WESCO and SOUTHCO have proposed to reduce the revenue gap through revision in Retail Tariff and/or Govt. subsidy as the Commission may deem fit or combination of all above as the commission may deem fit to the extent as given below.

Table 8 Revenue Gap for Ensuing Year 2016-17 (Rs in Cr)

	CESU	NESCO	WESCO	SOUTHCO
Revenue Gap with existing Tariff	1,085.21	409.91	501.77	565.06
Excess Revenue with Proposed Tariff	1,065.92	0	0	0
Proposed Revenue Gap	19.29	409.91	501.77	565.06

7. Tariff Rationalization Measures proposed by Licensees:

Proposal by CESU

CESU proposed to meet the revenue gap of Rs 1,085.21 Cr by the way of revision of retail tariff as per the proposed tariff schedule and/or Government subsidy as the Commission may deem fit or a combination of proposals suggested on RST. Proposal on retail tariff ensuing year & issues that need to be addressed in the proceedings are discussed as under:

a. Over Drawl by Existing HT/EHT Category Consumers

These consumers pay over drawl penalty only for quantum of load over and above 120% of contract demand in off-peak hours and 100% of contract demand for peak hours. By such over drawl consumer load factor goes up and he gets incentive as per the graded slab tariff structure. Over drawl also leads to Grid indiscipline warranting deviation settlement. So part of penalty should be passed on to the consumer as higher load factor incentive. Utility has no control on such over drawl and in ABT environment Utility has to pay BST plus deviation settlement charges implementation.

CESU proposed that over drawl penalty should be levied on both demands as well as energy charges for HT/EHT category consumers.

b. Steps for Flattening of Load Curve

CESU has submitted that, at present they witnesses a demand surge of 500MW in peak hours in comparison to off-peak hours. Similarly, Orissa grid faces peak/off-peak demand difference of 1600 MW. Industrial demand comprises 50% of total demand of the Licensee. Under such circumstances migration of industrial load only can contribute to flattening of the load curve. The incentive measures so far given in the tariff orders have no compelling effect on industrial consumers. Rather they take advantage of the incentives and overload the network both in peak and off-peak hours.

Hence it is proposed that the peak hour load drawl by HT/EHT industries/ consumers may be de-incentivized by formulating higher demand as well as energy charges.

c. Temporary Higher Demand by the HT/EHT Consumers due to Seasonal Factors

CESU submitted that, from analysis of last three years demand scenario of some HT/EHT industries, they found that some industries require temporary surge of load during the agreement period. Sales projections for these consumers are based on past year's consumption pattern. So, any sudden rise in demand puts the Utility to over drawl situation with unscheduled costing.

So, provision may be allowed in the Tariff Order for HT/EHT consumers having loads of 1 MVA & above to draw temporary excess demand by paying higher energy & demand charges for drawl of over & above estimated demand during the tariff period. This provision may also be applicable to new industries who intend to avail supply during tariff year and who are not included in the tariff proceedings.

d. Reliability Surcharge

Reliability surcharge is presently levied on HT/EHT consumers availing reliable and quality power supply through feeders from the EHT grid substations or primary substations of the Utility. However, CESU submitted that the reliability surcharge of 10 paise per unit levied in the RST Order for FY 2015-16 is quite low. The Utility is spending substantial amount in maintaining such infrastructure to extend for such reliable and quality supply to the consumer.

Hence, they proposed to levy reliability surcharge @ 20 paise per unit which was prevailing in the FY 2014-15 on a dedicated feeder concept applicable for EHT or HT consumer so as to collect sizeable amount for maintenance of infrastructure to provide reliable power.

e. Monthly Minimum Fixed Charges for consumers having contract demand more than 70KVA but less than 110KVA.

The three-phase consumers whose contract demand is more than 70KVA but less than 110KVA are provided with static meters having facility to record demand during billing period. Commission vide its Tariff Order for Financial Year 2013-14 allowed to levy MMFC based on recorded Maximum Demand. CESU loses substantial revenue from MMFC as these consumers generally avail lower demand than their contract demand. CESU as a licensee has to keep the infrastructure ready and in healthy condition to meet their contract demand by incurring fixed cost. MMFC is meant for meeting the fixed cost to make the demand available to the consumer. So, when the consumer is paying MMFC based on recorded Maximum Demand, the required fixed cost is not recovered fully.

Hence, CESU proposed that consumers having contract demand more than 70KVA but less than 110KVA may be charged MMFC based on contract demand.

f. Power Factor Penalty for Three-phase Consumers having Contract Demand less than 110 KVA

CESU submitted that many of the three-phase consumer's particularly industrial ones in this load range are availing their load at lower power factor than normal. Such behaviour puts extra burden on the distribution network and also leads to higher technical loss. This aspect has been verified from actual data also. There is no disincentive measure in the tariff order for these consumers to enhance their average power factor by installing capacitor bank.

So, they proposed that power factor penalty may be extended to all three-phase consumers having contract demand less than 110 KVA which will put indirect pressure on them to install capacitor banks to improve their power factor.

g. Interest on Security Deposit

From FY 2014-15 interests on Security Deposit were enhanced in the tariff order to 8.75% equalizing to RBI notified bank interest. The licensee will have to park entire Security Deposit realized in long term deposits to meet the interest burden leaving no money for working capital of the licensee. Besides when a consumer either exits or enters in agreement in a mid-year approved interest on SD is not realized during the exit or entry year.

At present CESU is liable to pay interest on security deposit @ 8.75% per annum where as present bank rate is 7.25% per annum. So, CESU has to pay 1.5% extra over the bank rate. So, it is requested that the Commission may consider 6.75% as the interest rate for security deposit with consideration of 0.5% as contingent cost for security deposit management due to the following reasons:

- 1. CESU has to pay interest from date of deposit where as CESU took some time to deposit the amount with the bank.
- 2. RBI is marking downward revision of interest rate, very often during a financial year
- 3. To maintain the security deposit account and fixed deposit account CESU is incurring some expenditure.

h. Meter Rent

As per Clause No.54(1) of OERC Distribution (Conditions of Supply) Code, 2004, all the meters shall be static type. But at present, the OK mechanical meters have not been replaced with static meters in all cases primarily for the objections by the consumers on repayment of rental afresh. They are insisting that it is not an obligation on their part to pay the meter rent, when the existing meters are in OK condition.

CESU suggests reworking on rental for meter replacement in case of OK mechanical meters by providing for rental realization afresh.

i. Creation of Contingency Fund

Creation of contingency fund to meet expenses arising out of natural disasters like cyclone, flood & earthquake etc. CESU is very often facing natural calamities like cyclone & flood. Due poor financial health of the Utility restoration work getting delayed for want of funds.

To expedite the restoration work without waiting for the Govt. assistance it is proposed to create a disaster management fund to the tune of Rs.60 crores by levying 1% surcharge on energy charges for coming two years. Surcharge will be lifted once the requisite fund is created.

j. Supervision Charges

The licensee is entitled to collect the requisite supervision charge for checking and ensuring that the capital works have been done as per the standards and in addition, the inspection fees for inspection pertaining to safety and security as notified by the Government of Orissa from time to time. The licensee should ensure inspection of works by the Electrical Inspector.

Scope of Supervision Charge is meant for recovery of expenditure for the following works/responsibilities:

- A. Supervision of survey works: Preliminary, detailed, check measurement.
 - 1. Obtaining various statutory clearances etc.
 - 2. Supervision/Checking of the erecting work as per the approved drawings, designs, and technical specifications.
 - 3. Testing/Checking of the materials associated with the work as per the approved drawings, designs, and technical specifications, such as materials like transformers, switchgears etc. and cables and other line materials.
 - 4. Arrangement for power shut down at the time of execution of the work and line clearances etc.
 - 5. Assistance in the inspection of Electrical Inspectorate
 - 6. Charging of the electrical installations.
- B. Justification for enhancement of Supervision Charge to 10% of the estimated Cost:
 - 1. Above scope of work directly attracts the involvement of the Man days.
 - 2. The employees cost has gone up after the introduction of 6th Pay Revised scales.
 - 3. There is a considerable rise in fuel and vehicle used for the above said work.
 - 4. Existing 6% supervision charge has not been enhanced since more than 10 years.
 - 5. For the above scope of work, the Supervision Charge introduced in other states is quite high.

So it is proposed to enhance the Supervision Charge from 6% to 10%.

k. Regulatory mandate for some provision to be rolled out by the licensee within the regulatory frame work

CESU proposed the following provisions to be mandated in the ensuing tariff order for better acceptance by the consumers and impact:

- KYC (Know Your Consumer) Mandate: Electricity bill is a proof of address for various Govt. and Banking transaction purposes. Licensee wants to roll out a KYC data build up for better communication/service to the consumers. To roll out such provisions the licensee requested the Commission to pass a mandate in the tariff order in the ensuing year for better impact on the consumers and compliance on KYC.
- Mandate for e-payment for monthly energy bill greater than Rs. 10,000/-:- Many high
 value consumer under the licensee are using e-payment mode while paying the monthly
 energy bill like RTGS/NEFT, Net banking and Debit/Credit Cards. Considering the
 security aspects in cash handing, CESU proposed that necessary regulatory mandate
 may be issued in the tariff order covering all consumers with monthly bill of Rs 10000/or above.
- Adjustment against defaulting consumers bills:- Around 40% single phase consumers
 are defaulter in paying their regular energy bills. Disconnection of these entire
 consumer following regulatory provisions is a difficult process for the Licensee. This
 consumer enjoys the interest on security deposit without paying their energy bills. It is
 proposed not to extend the interest facility against their Security Deposit in respect of
 the defaulting consumers.

Proposal of NESCO, WESCO and SOUTHCO

a. Levy of Meter Rent on Smart, Prepaid Meters

In view of the above revenue deficit in the Utility & for smooth operation of prepaid metering system following suggestions are submitted for kind consideration of Hon, ble Commission.

- 1. The meter rent fixed for the LT single phase and three phase AMR / AMI compliant meters needs to be reviewed by the Commission. The utilities proposed that meter rent for the AMR / AMI based meters and pre-paid type single phase meters should be Rs 300/- per month and for three phase meters it should be Rs 500/- per month. Or
- 2. The existing meter rent recovered by the Utility from the consumers is negligible and the leasing as well as vending service charges are high enough, as a result there is a huge difference. Accordingly, Commission may kindly allow difference in such recoveries and recurring costs
- 3. It is suggested that the present slab wise rate tariff, is simplified for the ease of consumers opting out for the same. The additional rebate of Rs 0.25 per unit allowed in smart metering scheme may be withdrawn

4. A principle may be approved by Commission for adjustment of outstanding arrears along with its part payment before implementation of prepaid metering system.

b. Introduction of KVAH Billing or Power Factor Penalty to HT & LT Consumers above 20 KW

- The Commission in its RST Order dtd 22.03.2014 for FY-2014-2015 had given the following directions to the DISCOMs vide Para-246.
 - "The Commission directs the Distribution Licensees to prepare a detailed sales containing category wise and consumer wise contracted load / connected load and their month wise consumption for the latest three years ending 31st March, 2014 showing the consumer wise and month wise amount billed under Demand Charge/ MMFC, energy charge and power factor penalty of such consumers (for whom the Licensees intend to introduce kVAh billing) including information on types of meters fitted against each consumer showing the capability of each meter for kVAh billing and the software developed by the Licensees for such billing. They are required to submit the complete information in this regard latest by 30th September, 2014."
- In compliance to the above direction of the Commission the utilities have submitted the above required data of 20 KW and above consumers before the Commission in the month of Nov'2014.
- This has been verified that all the 3-phase meters, especially those installed for consumers having contract demand 20KW and above in the DISCOMs are enabled with all the energy parameters and storing dump record of 35 days. All such meters show instantaneous power factor and monthly average power factor can be computed as ratio of active power and apparent power drawn by consumers like in case of existing large and medium industrial consumers as presently being billed. Hence DISCOMs are fully equipped to implement KVAH billing in respect of all those consumers in place of existing KWh Billing.
- DISCOMs further submitted that if the above proposals of DISCOMs are not considered by the Commission for implementation due to any reason DISCOMs pray for applicability of power factor penalty for the following category of consumers in order to bring more efficiency in power system operation till the KVAH billing is made applicable.
 - o HT Category
 - Specified Public Purpose
 - General Purpose < 110 KVA
 - HT Industries (M) Supply
 - o LT Category
 - LT industries Medium Supply
 - Public Water Works and Swerage Pumping > 22 KVA

c. Applicability of Power Factor Penalty

The Commission in its RST order for FY 2015-16 orders for continuance of the power factor penalty as a percentage (%) of monthly demand charge and energy charges on the

HT & EHT consumers. Till such time KVAH billing approach is adopted the utility proposed the applicability of power factor penalty and incentive for the following category of consumers in order to bring more efficiency in Power System Operation.

- o HT Category
- Specified Public Purpose
- General Purpose < 110 KVA
- HT Industries (M) Supply.
- o LT Category
- LT industries Medium Supply
- Public Water Works and Swerage Pumping > 22 KVA

d. Verification of CGP Status of Power Plants

All the three utilities submitted that, as per the relevant provisions of the Electricity Act, 2003 read with Indian Electricity Rules, 1956, the CGPs are mandated to maintain utilization of at least 51% of power for self consumption on annual basis. Thus there should be annual verification of the status of the industries operating as CGPs. Because if in any year an industry having the CGP status fails to utilize minimum 51% of the power generated from the CGP, then that industry would lose the status of CGP for that particular year, thereby attracting levy of cross subsidy surcharge by the Utility. This being the well settled principle of law, the Utility draws the attention of the Commission to the fact that till date the status of the industries owning CGP is not being verified annually, for which a reasonable apprehension would occur about the real status of the CGPs.

In this context, the Commission vide its Order dtd.03.01.2014 passed in Case No.129 of 2010, while adjudicating upon the said issue of determination of CGP status of the industries vis-à-vis the invocation of provisions of Sec.11 by the Govt. of Odisha, directed all the stake holders, to verify the exact status of the industries on yearly basis and subsequently a Committee was formed by the Commission, to implement the above direction which is however deferred due to an interim stay granted by the Hon'ble High Court of Orissa vide Order dtd.05.09.2013, in W.P.(C) No.18481 of 2013. Meanwhile the CCPO also filed a petition before the Commission for review of the said Order dtd.03.01.2014. Recently the Hon'ble High Court vide its Order dtd.06.08.2014 passed in the said case has made it clear that the notwithstanding the pendency of the writ petition the present review proceeding would continue. Thus, the Commission is at liberty to re-constitute the Committee for verification of the CGP status of the industries by which the scenario would be clear and the Licnesee would be in a position to determine and fix the liability of cross subsidy surcharge upon those industries losing the status of CGP for any particular period.

e. Emergency power supply to Captive Power Plants (CPP)

Licensee mentioned that normally the Emergency/Startup power requirement of captive generators is very less but as per OERC Distribution (Condition of Supply) Code Regulations-2004 Chapter – VIII, Para-15 the emergency assistance shall be limited to 100% of the rated

capacity of the largest unit in the captive power plant of generating stations. But as per retail supply tariff for FY-2015-16, no demand charges are payable by industrial consumers availing emergency power supply having contract demand of 100% of the rated capacity of largest Unit.

In case of failure of the captive units, those industries draw power from the grid for their industrial consumption in the name of start-up/emergency power requirement of their CGP. As a result utilities are drawing more than their schedule during certain periods in a day resulting over drawl from State / Central grid with financial burden to the utility in intra-state ABT mode of operation. Utility also proposes for amendment of Para-15 of OERC Distribution (condition of supply) Code.

The licensee's requested the Commission to frame norms/ guidelines for estimation of startup load requirement. Utilities suggested that for consumption in excess of 10 % load factor, the demand charge should be charged at double the normal rate and that the industries should execute agreement with distribution utilities. In light with the 'emergency' nature of the supply they suggested that there should be provisions for disconnection of supply in case the consumption is in excess of 10% of the load factor for two consecutive months. The Utility suggests the introduction of demand charges of Rs 250 / KVA in addition to energy charges for start-up power.

The utilities humbly submitted the Commission to consider tariff for start-up power for IPP/CGPs. The proposal of the Utility is as under;

1. **Proposed Tariff:** Although all three DISCOMs have asked for tariff applicable for start up power only NESCO and WESCO have proposed rate charge as under:

Category of Consumers	Demand Charges Rs/KVA/Month	Energy Charges (Rs per KWh)
EHT Consumers	250	7.10
HT Consumers	250	7.20

2. Proposed Condition for Start-up Power supply to CGP:

- **a.** Industries having CGPs to avail start-up power their contract demand should not exceed 12 % of the capacity of the highest capacity generating units of the CGP. Consumers have to enter into an agreement with the concerned DISCOMs subject to technical feasibility and availability of required quantum of power/energy.
- **b.** Drawal of power shall be restricted to within 10 % of load factor based on the contract demand and actual power factor in each month. If the load factor in a month is recorded beyond 10 % the demand charge shall be charged at double the normal rate. Supply can also be disconnected if the monthly load factor exceeds 10% in any two consecutive months.
- **c.** This tariff shall also be applicable to such generator(s) for start-up purpose prior to their COD.
- **d.** Start-up power shall also be made available to the generator connected to CTU grid with proper accounting done in monthly Regional Energy Accounting prepared by ERPC. (New IPPS are coming in future, which may also be connected to CTU grid directly.)

f. MMFC for Consumers with Contract Demand <110 KVA

As per the current tariff structure, the Monthly Minimum Fixed Charges are to be levied to consumers with contract demand less than 110 KVA on the recorded demand rounded to nearest 0.5 KW requiring no verification irrespective of the agreement. For billing purposes this adversely affects the Utility in case of the recorded demand is lower than the contract demand/connected load. As the Utility is reserving the contracted capacity for the consumers at the same time they are also liable to pay the MMFC/Demand charges on the basis of CD or MD whichever is higher as like of consumers with CD of >110 KVA. The Utility proposes that the Monthly Minimum Fixed Charges for such consumers shall be levied at contract demand or maximum demand whichever is higher.

g. Demand Charges for GP>70 KVA<110 KVA and HT Industrial (M) Supply

As per current tariff structures the consumers in the above category who are availing power supply in HT are required to pay demand charges of Rs.250 and Rs.150 per KVA. In para 494 of RST order (FY 2015-16) Demand charges are meant for consumers with contract demand of 110 KVA and above.

In the absence of clear cut guidelines for billing of demand charges to the above two category availing power supply in HT supply are raising disputes in various forums and demanding that they are required to be billed as per para 498 of RST order FY 2015-16. Utilities mentioned that the consumers with CD more than 110 KVA are paying demand charges on the basis para 495 and para 496 of RST order FY 2015-16, as the utility is reserving capacity for them to the extent of their CD. On similar lines the consumers with CD of <110KVA are also liable to pay the demand charges on the basis of CD or MD whichever is higher.

Therefore, the utilities have submitted that these two categories of consumers availing power supply in HT category and liable to pay demand charges in KVA should also be billed on the basis of CD or MD whichever is higher irrespective of their connected load.

h. Demand charges to be in KVA only instead of KVA/KW

In the prevailing tariff some of the HT consumers are paying their demand charges in KW and some are on the basis of KVA. Therefore it is creating disparity among the consumers as well as affecting revenue of the utilities. The BST of the utilities is the composites of energy and demand charges. The component of demand charges is on the basis of KVA only. The proposed SMD for the utility is also considering the demands in KVA of consumers in its license area. The Commissions regulations as well as retail supply tariff order also prescribes demand charges to be paid on demand recorded in KVA only.

In view of the same the utilities submitted that the demand charges for all the three phase consumers having static meters may be levied on the basis of KVA basis.

i. Demand Charges and Monthly Minimum Fixed Charges

The utility submitted that 90% of the distribution costs are fixed cost in nature. The distribution cost of the license which is a fixed cost has increased many folds during the recent years. The said cost is normally required to be recovered from the demand charges. The fixed cost of the power procurement by way of payment towards capacity charges has also increased during last few years. The revenue recovery on account of the demand charges and monthly minimum fixed charges is approximately Rs 312 Cr, for the ensuing year at the existing tariff whereas the fixed distribution cost is around Rs 532 Cr (Employee cost, R&M, A&G and Interest cost) which is more than half of the amount of recovery for NESCO and WESCO.

For SOUTHCO, the revenue recovery on account of the demand charges and monthly minimum fixed charges is approximately Rs 294 Cr, for the ensuing year at the existing tariff whereas the fixed distribution cost is around Rs 514 Cr (Employee cost, R&M, A&G and Interest cost) which is more than double of the amount of recovery.

j. Rate of Tariff for HT Medium and LT Medium Industries

SOUTHCO his observed that due to the tariff anomalies between LT and HT connection consumers prefer to keep their loads below 70 KVA and take LT supply even by handing over of substations constructed by them to get long term benefit to compensate the cost of taking initial HT Supply. The Commission is encouraging use of HT Supply to reduce the distribution losses whereas in real scenario at field it is not the case.

Hence SOUTHCO has proposed to raise the demand charges to Rs 125/- per KVA from present Rs 80/- per KW to attract more of HT category of consumers.

k. Introduction of Monthly Minimum Billing Commensurate with Connected Load

Utilities observed that most of the consumers are being billed less than 30 units per month even though their connected load is more than 2 KW, which is equivalent to consumption specified for kutir jyoti category of consumers. Presently, tariff for kutir jyoti category is Rs.80 per month. When a consumer whose connected load is more than 1 KW and consuming less than 30 KWh per month and some times less than 20 KWh per month citing actual consumption as per meter reading are being billed less than that of kutir jyoti category. As a result revenue of the Utility is badly affected. Further, in absence of any fixed monthly units to be billed, consumers are trying to consume with less units for few months and subsequently enjoying the status of average billing by making the meter forced defective. On many occasions meter readers are taking suppress readings months together and on scrutiny when it is found that proper reading has not been taken, with dishonest activity, meter is being made defective. As a result the Utility is sustaining huge financial loss. Due to shortage of man power as well as meters it is becoming difficult to replace the meter immediately. To arrest such activity it is humbly submitted that Commission may kindly fix monthly minimum KWh consumption commensurate with connected load even if when meter is working. Introduction of minimum billing will also

discourage many consumers to pilferage electricity as they have to go for minimum guaranteed consumption.

l. Continuation of Bi-monthly Billing

Presently monthly billing in rural areas is not cost effective considering the rate being charged by billing agency per bill vis-à-vis the amount billed to such subsidized category of consumers. Sometimes meter readers are trying to generate bills without moving to the consumer premises which is also not solving the basic purpose of monthly billing. Therefore to avoid such practices the utility may be permitted to adopt bi-monthly billing system to save extra A&G cost as well as to ensure effectiveness of billing and serving the same to consumer at least where the billing amount as well as consumer coverage is low. OERC (conditions of supply code),Regulations 2004 also permits the utility to make bi-monthly billing.

m. Introduction of Amnesty Arrear Clearance Scheme for LT non Industrial Category of Consumer

As on 30th Sep-2015, the utilities were having outstanding of more than Rs 1300 Cr for NESCO, WESCO and Rs 850 Cr for SOUTHCO under LT non industrial category consumers. Out of the same more than Rs 500 Cr and Rs 200 Cr are under disconnected category for NESCO, WESCO and SOUTHCO respectively. Most of the consumers, after accumulation of huge outstanding are trying to get another connection and putting the other one under permanently disconnected consumers (PDC). The utilities are also suffering from huge financial loss on account of low collection efficiency and coverage in domestic and commercial category of consumers. The Commission has also directed to conduct receivable audit of the outstanding amount as on 31.03.2015 of the utilities through Charted Accountant and Cost Accountants. Accordingly, appointment letter has already been issued and audit work is under progress. Considering the same, the utilities submitted the Commission to approve an arrear collection scheme for LT non industrial category of consumers in line with OTS scheme as approved earlier in FY 2011-12. Depending upon the outstanding and paying ability of the consumer's 6 to 12 monthly instalments may be fixed to clear the outstanding and avail benefit of withdrawal of DPS and certain percentage of waiver on outstanding amount. As a result cash flow of the utility will improve and able to clear its outstanding dues to GRIDCO as well as employees terminal liabilities.

n. Special Rebate for Consumers Availing Monthly Rebate under LT Category of Consumers

To improve collection efficiency under LT category the utilities submitted the Commission to approve a special rebate to those LT categories of consumers who are availing monthly rebate on prompt payment of monthly energy bills may also be permitted to avail a special rebate equivalent to the highest rebate availed during the financial year. The special rebate shall be credited after the end of the financial year if the consumer has availed rebate during last one year without fail.

Prayer

CESU has following prayers to the Commission:

- 1) Admit the accompanying Revenue Requirement and Tariff Proposal for Wheeling business and Retail Business for 2016–17
- 2) Approve the aggregate Revenue Requirement (ARR) for Wheeling business and Retail Business of the Utility for the Financial Year 2016–17
- 3) Approve the open access charges for the Financial year 2016–17
- 4) To consider the tariff related proposals submitted along with the application and approve the same
- 5) To consider actual distribution and AT & C loss while approving the ARR application for FY 2016–17
- 6) To direct Government to provide subsidy because of lower tariff in case of BPL customers, as nos. of BPL customer will be substantially high by the end of 2016-17
- 7) Consider the projected T&D loss of 31.66 % for the FY 2016–17
- 8) Grant any other relief as deemed fit and proper in the facts and circumstances of the case.

Prayer of NESCO, WESCO & SOUTHCO Orissa

Reliance managed three licensees requested the Commission to:

- (a) Take the ARR application and Tariff Petition on Record
- (b) Approve the Annual Revenue Requirement for FY 2016–17 truing up of $1/3^{rd}$ of the revenue gap for FY 2015–16
- (c) Bridge the Revenue Gap for the FY 2016–17 through increase in Retail Supply Tariff, reduction in Bulk Supply Tariff (BST) wherever possible; grant of subsidy from the Government of Odisha as per Section 65 of the electricity act 2003.
- (d) To consider the AT & C Loss Trajectory accepted by Ministry of Power, Govt. of India
- (e) To do away with Intra State ABT till generators are involved

Allow the following Tariff rationalization measures as proposed

- 1) Levy of meter rent for Smart and Prepaid meters
- 2) Introduction to KVAH billing
- 3) Applicability of Power Factor Penalty
- 4) Two part tariff be made applicable in respect of Emergency power supply category to Captive Power Plants
- 5) Extending of Levy of penalty on energy charges when a consumer draws power more than its contract demands
- 6) Introduction of MMFC for Consumers with Contract Demand<110 KVA on the basis of MD recorded or connected load whichever is higher.
- 7) Rate of Tariff for LT Medium Industry and HT Medium Industry
- 8) Demand Charges to be in KVA only instead of KVA/KW

- 9) Applicability of Demand Charges for GP> 70 KVA and <110 KVA and HT Industrial(M) supply
- 10) 2% rebate be allowed on **payment of current monthly BST bills (excluding all arrears) within 3 days time instead of 2 working days** and also allow rebate on part payment of BST bills.
- 11) Introduction of Amnesty arrear clearance scheme for LT non industrial category of consumer.
- 12) Introduction of minimum billing mechanism, commensurate with connected load of the consumer
- 13) Continuation of bi-monthly billing I case of rural consumers where the billing and collection coverage is very low
- 14) To consider the consumers like NALCO as the consumer of the Utility being situated in the Utility area
- 15) The expenditure burden of energy police station may be borned by the GoO
- 16) Looking to the geographical area and the consumer mix, the cheap cost of power may be allocated to the SOUTHCO Utility while finalizing the BSP.
- 17) Allow the Utility to submit additional documents, modify the present petition, if so required, during the proceeding of this application.
- 18) Special rebate for consumers availing monthly rebate LT category of Consumers
- 19) Applicability of Reliability Surcharge in case of Railway Traction consumers.
- 20) Addressing of negative cash flow of Utility by giving special relief towards reduction of BST
- 21) Other Tariff rationalization measures as proposed in this application
- 22) Revision of interest on Security Deposit
- 23) Allow the Utility to submit additional documents, modify the present petition, if so required, during the proceeding of this application.
- 24) Any other relief, order or direction which the Commission deems fit.
