Summary of ARR & Tariff Filings

Submitted by

CESU, NESCO UTILITY, WESCO UTILITY & SOUTHCO UTILITY

For

FY 2019-20

DISCOMs

Summary of Annual Revenue Requirement (ARR) & Retail Supply Tariff (RST) Proposal Submitted by Electricity Distribution Companies of Odisha for the FY 2019-20.

1. Energy Sale, Purchase and Loss

A statement of Energy Purchase, Sale and Overall Distribution Loss from FY2012-13 to 2019-20 as submitted by DISCOM of Odisha namely Central Electricity Supply Utility of Odisha (CESU), North Eastern Electricity Supply Company of Odisha Utility (NESCO Utility), Western Electricity Supply Company of Odisha Utility (WESCO Utility) and Southern Electricity Supply Company of Odisha Utility (SOUTHCO Utility) is given below.

DISCOMs	Particulars	2012-13 (Actual)	2013-14 (Actual)	2014-15 (Actual)	2015-16 (Actual)	2016-17 (Actual)	2017-18 (Actual)	2018-19 (RevEst.)	2019-20 (Est.)
	Energy Sale (MU)	4662.96	5211.93	5484.35	5570.77	5488.59	5781.64	6548.96	7291.51
CESU	Energy Purchased (MU)	7398.92	7973.19	8297.32	8367.57	8139.36	8467.09	9196.70	9852.55
	Overall Distribution Loss %	37.00	34.63	33.90	33.42	32.57	31.72	28.79	25.99
	Energy Sale (MU)	3282.86	3337.83	3455.54	3806.68	4077.205	4234.961	4664.972	5127.027
NESCO UTILITY	Energy Purchased (MU)	5045.35	5045.29	5015.30	5195.58	5329.665	5448.992	5831.217	6329.662
UILIII	Overall Distribution Loss %	34.93	33.84	31.10	26.73	23.50	22.28	20.00	19.00
	Energy Sale (MU)	3945.34	4201.07	4552.19	4597.94	4799.00	5378	5570	5920
WESCO UTILITY	Energy Purchased (MU)	6391.26	6634.90	7053.70	6941.62	6969.00	7248	7450	7700
UTILITY	Overall Distribution Loss %	38.27	36.68	35.46	33.76	31.00	25.81	25.23	23.12
	Energy Sale (MU)	1660.67	1720.36	1947.73	2077.871	2141.181	2334.118	2618.935	2982.113
SOUTHCO UTILITY	Energy Purchased(MU)	2929.88	2915.56	3192.83	3192.837	3273.458	3468.182	3720.00	4050.00
	Overall Distribution Loss %	43.32	40.99	39.00	34.92	34.59	32.70	29.60	26.37

 Table1: Energy Sale, Purchase and Loss (Considering railway traction demand)

2. AT&C Losses

The System Loss, Collection Efficiency and target fixed by OERC in reference to AT&C Loss for the four DISCOMs since FY2012-13 onwards are given hereunder.

Table2: AT&CLoss									
DISCOMs	Particulars	2012-13 (Actual)	2013-14 (Actual)	2014-15 (Actual)	2015-16 (Actual)	2016-17 (Actual)	2017-18 (Actual)	2018-19 (Rev Est.)	2019-20 (Est.)
	Dist. Loss (%)	37.00	34.63	33.90	33.42	32.57	31.72	28.79	25.99
	Collection Efficiency (%)	93.41	93.69	94.30	94.20	96.56	96.6	99.00	99.00
CESU	AT&C Loss (%)	41.16	38.75	37.67	37.29	34.89	34.04	29.50	26.73
	OERC Approved (AT&C Loss %)	23.77	23.77	23.77	23.77	23.77	23.77	23.77	
	Dist. Loss (%)	34.93	33.84	31.10	26.73	23.50	22.28	20.00	19.00
	Collection Efficiency (%)	91.63	95.93	96.96	95.72	96.25	93.38	96.00	97.00
NESCO Utility	AT&C Loss (%)	40.38	35.93	33.19	29.87	26.37	27.43	23.20	21.43
Utility	OERC Approved (AT&C Loss %)	19.17	19.17	19.17	19.17	19.17	19.17	19.17	
	Dist. Loss (%)	38.27	36.68	35.46	33.76	31.22	25.81%	25.23%	23.12%
	Collection Efficiency (%)	92.79	94.35	95.37	95.00	88.00	88%	94%	96%
WESCO Utility	AT&C Loss (%)	42.72	39.66	38.94	37.38	39.38	34.80%	29.72%	26.19%
Cunty	OERC Approved (AT&C Loss %)	20.40	20.40	20.40	20.40	20.40	20.40	20.40	
	Dist. Loss (%)	43.32	40.99	39.00	36.70	34.59	32.70	29.60	26.37
	Collection Efficiency (%)	93.88	92.39	90.75	88.60	89.90	91.44	93.00	96.00
SOUTHCO Utility	AT&C Loss (%)	47.13	45.49	44.64	43.92	41.20	38.46	34.53	29.31
	OERC Approved (AT&C Loss %)	26.25	26.25	26.25	26.25	26.25	26.25	26.25	

Table2: AT&CLoss

3. Data Sources

NESCO Utility, WESCO Utility, SOUTHCO Utility and CESU have scrupulously complied with the information requested by the Commission for submitting the ARR and tariff for the year 2019-20. The accounts upto March 2018 have been prepared as per the Companies act as well as financial formats prescribed by the Commission. While for compilation of data and preparation of ARR the licensee have relied upon the provisional accounts upto March 2018 and actual data upto Sep 2018. 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 into account while compilation of data and preparation of ARR.

4. Revenue Requirement for FY 2019-20 Sales Forecast

For projecting the energy sale to different consumer categories, WESCO Utility & SOUTHCO Utility had analysed the past trends of consumption pattern for last seventeen years i.e. FY 2001-2002 to FY 2017-18 and actual sales data for the first six months of FY 2018-19. NESCO Utility analysed and relied on past trends of consumption pattern for last twelve years i.e. from FY 2006-07 to FY 2017-18 and actual sales data for the first six months of FY 2018-19. CESU has projected Energy Sale for FY 2019-20 based on the actual Sales of first six month of FY 2018-19. With this, the four distribution utilities have forecasted their sales figures for the year 2019-20 as detailed below with reasons for sales growth.

Licensee/	Table 3 Sales Forecast (Considering railway traction demand)LT Sales for 2019-HT Sales for 2019-20EHT Sales for 2019-20					Total	
Utility		(Est.)	(Es			Lst.)	Sales
	(MU)	% Rise over FY18-19	(MU)	% Rise over FY18-19	(MU)	% Rise over FY18-19	2019-20 (Est.) MU
CESU	4591.29	16.10	1529.10	7.17	1171.12	0.32	7291.51
Remarks	Substantial increase in domestic and irrigation consumption		Substantial increase in Irrigation and Allied Agriculture and agro- industrial activity.		Flat sales forecast due to economic stagnancy. Also include energy demand by railway traction (342.95 MU)		
NESCO Utility	2568.31 1	20.19%	424.36	-0.52%	2134.356	1.56%	5127.027
Remarks	Increase in demand is due to electrification under DDUGJY, RGGVY, BSVY & BGJY and growth in domestic category consumers		Due to recession in steel and mining there is no increase in load further one of the HT consumer is shifting to EHT category		Considering growth of railway traction, BRPL, Joda, Dhamara Port Company Ltd, and change of supply system of M/s Joda East Iron and Mines Ltd from 33kV (HT) to 220 kV(EHT) and M/s B.C Mohanty & Sons Pvt. Ltd. From 33kV(HT) to 132kV(EHT). This Also includes railway traction demand – 375.740 MU		
WESCO Utility	2940.00	12.20%	1730.00	4.85%	1250	- 3.85%	5920.00
Remarks	Impact of electrification of new villages under DDUGJY & SAUBHAGYA, growth in domestic category and irrigation consumption		HT Industries who regularly opted to draw power under Open Access in the past has preferred WESCO Utility power due to high prices in IEX.		Reduction in EHT sales because industries are setting their own CPP and purchasing through open access.EHT sales forecast also includes 294.420MU for railway traction		
SOUTHCO Utility	2268.41 8	18.14%	307.446	3.67%	406.249	0.98%	2982.113
Remarks	Im	pact of	Nominal ad	ddition in	Marginal incr	rease as there is	

 Table 3 Sales Forecast (Considering railway traction demand)

electrification of new	consumption	neither any proposal of	
villages under	considered due drawl of	enhancement of load from	
DDUGJY &	power by TATA	existing consumers nor any	
SAUBHAGYA	STEEL GOPALPUR	new industry is materialised.	
Schemes. Around	Project.	Consumption may decrease	
92000 nos of BPL &		if EHT consumer draws	
395000 nos of APL		power from open access.	
to be added by March		Also considers 139.38 MU	
2019.		towards railway traction.	

5. Inputs in Revenue Requirement for FY 2019-20

5.1. Power Purchase Expenses

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 2018-19 and additional coming in the FY 2019-20 which is as shown in table given below.

DISCOMs	Est. Power Purchase in(MU)	Estimated Sales (MU)	Distrib ution Loss (%)	Current BSP (Paise/Uni t)	Estimated Power Purchase Cost (Rs in Cr.) (Including Transmission and SLDC Charges)	SMD proposed MVA
CESU	9852.55	7291.51	25.99%	299	2946.10	2040
NESCO	6329.662	5127.027	19.00%	301	2064.43	1020
Utility						
WESCO	7700.00	5920.00	23.12%	300	2497.58	1300
Utility						
SOUTHCO	4050.00	2982.113	26.37%	197	899.67	680
Utility						

Table 4 - Proposed SMD and Power Purchase Cost

5.2. Employees Expenses

CESU, NESCO Utility, WESCO Utility and SOUTHCO Utility have projected the employee expenses of Rs 677.50 Cr, Rs 373.12 Cr, Rs 393.24 Cr and Rs 398.31 Cr respectively for FY 2019-20. Out of these proposed employee expenses, Rs 261.39 Cr, Rs. 112.20 Cr, Rs 124.36 Cr and Rs 174.02 Cr respectively are proposed for employee terminal benefit trust requirement for FY 2019-20. All the licensees have included the impact of 7th pay commission by multiplying 2.57 factor to (basic pay + Grade Pay) of 2015-16 and considered the 50% of arrear salary for 7th pay, from 1.4.2015 to 31.7.2018 (non-executive) and 1.1.2016 to 31.07.2018 (executive), and included those arrears in the ensuing years salary cost.

5.3. Administrative and General Expenses

CESU, NESCO Utility, WESCO Utility and SOUTHCO Utility have estimated the A&G expenses of Rs 224.52 Cr, Rs 58.86 Cr, Rs 97.94 Cr and Rs 76.72 Cr respectively based on actual expenses till September 2018. The 7% increase is taken on account of inflation and increase in the growth of consumer and exponential growth of customer service activity on the

normal A&G expenses. Apart from this, all the licensees have proposed additional A&G expenses for some of the activities as customer care / call centre, energy audit, IT related expenses / expenditure on SCADA & STPI, compensation for accidents, rooftop solar, DSM & PAT cycle activities etc. CESU has proposed to include distribution franchisees sharing of IBF-IRS model. Additional A&G expenses projected by licensees are Rs. 128.20 Cr., NESCO Utility – Rs. 18.51 Cr., WESCO Utility – Rs. 25.63 Cr., SOUTHCO Utility – Rs. 33.23 Cr.

5.4. Repair and Maintenance (R&M) expenses

All the DISCOMs have calculated R&M expenses as 5.4% of GFA including the RGGVY, BGJY assets and future assets to be created under SAUBHAGYA scheme 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 387 the RST order for FY 2017-18 had allowed an additional sum of Rs. 8.00 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. Licensees have also 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 2019-20 are given below:

DISCOMs	GFA as at 1 st April of Ensuing FY2019- 20 (Rs. Crore)	R&M (5.4% of GFA) (Rs. Crore)	Additional R&M Requested for RGGVY and BGJY assets	Total R&M Requested (Rs. Crore)
CESU	2474.60	124.81	10.00	134.81
NESCO	1835.33	99.11	*	99.11
UTILITY				
WESCO	1840.42	99.38	*	99.38
UTILITY				
SOUTHCO	1136.48	61.37	12.51	73.88
UTILITY				

Table5 - R&M Costs (Rs in Cr)

(*Additional R&M for RGGVY and BGJY assets is included in R&M (5.4% of GFA))

5.5. Provision for Bad and Doubtful Debts

CESU has considered 1% each of LT and HT billing of FY 2019-20 as provision against bad and doubtful debts. While NESCO Utility, WESCO Utility and SOUTHCO Utility 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 in efficiency, therefore they have considered the amount equivalent to the collection inefficiency as bad and doubtful debts while estimating the ARR for FY 2019-20. NESCO Utility, WESCO Utility and SOUTHCO Utility has requested the Commission to consider the mentioned amounts to enable the petitioner to recover its entire costs after duly considering the performance levels.

DISCOMS	Collection Efficiency (%)	Proposed Bad Debts(Rs in Cr)
CESU	99%	28.87
NESCO	97%	37.70
Utility		

Table 6 - Provision for Bad and Doubtful Debt

WESCO	97%	80.00
Utility		
SOUTHCO	96%	27.37
Utility		

5.6. Depreciation

All the DISCOMs have adopted straight line method for computation of depreciation at pre 92 rate. CESU has considered the rate of depreciation as per Companies Act. No depreciation has been provided for the asset creation during ensuing year. Depreciation for FY 2019-20 is projected at Rs 139.26 Cr for CESU, Rs 66.24 Cr for NESCO Utility, Rs 66.06 Cr for WESCO Utility and Rs 36.49 Cr for SOUTHCO Utility.

5.7. Interest Expenses

CESU, NESCO Utility, WESCO Utility & SOUTHCO Utility have submitted the interest expenses and the interest income for the FY 2019-20. The net total interest expenses proposed by these licensees are Rs 97.95 Cr, Rs 81.24 Cr, Rs 90.31 Cr and Rs 46.15 Cr respectively. The major components of the interest expenses of these licensees are as follows:

5.7.1. 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. SOUTHCO Utility and WESCO Utility do not have any outstanding payable to GRIDCO towards New Loan with regard to NTPC power bond while NESCO Utility has liability of Rs. 48.91 Cr payable to GRIDCO. For CESU, no interest has been calculated on Rs.174 Cr cash support provided by GRIDCO.

5.7.2. World Bank Loan Liabilities

The Distribution licensees NESCO Utility, WESCO Utility & SOUTHCO Utility have calculated the interest liability of Rs 11.87 Cr, Rs 11.82 Cr and Rs 9.44 Cr respectively against the loan amount at an interest rate of 13% and repayment liability of Rs 9.10 Cr and Rs 7.26 Cr respectively for WESCO Utility & SOUTHCO Utility.

5.7.3. World Bank (IBRD) Loan

CESU has submitted that the interest on World Bank Loan has been calculated as Rs 26.59 Cr @ 13% as per the subsidiary loan & project implementation agreement with Government of Odisha.

5.7.4. Interest on CAPEX Loan from Govt. Of Odisha

WESCO Utility & SOUTHCO Utility have estimated the interest at the rate of 4% p.a. on the Capex loan issued by the GoO which amounts to Rs 2.89 Cr and Rs 1.92 Cr respectively for the ensuring year. NESCO Utility has also estimated amount of Rs. 1.73 Cr towards interest on Government of Odisha capex plan loan.

CESU has submitted one revised DPR for Rs 17.58 Cr, before The Commission for approval, for taking up balance works with utilisation of left out OSM Materials. The total capex programme is implemented of Rs 406.49 Cr. CESU proposed the interest expenses in this regard as Rs 7.73 Cr for FY 2019-20.

5.7.5. Interest on APDRP Loan Assistance

CESU has submitted that they have availed APDRP assistance of Rs 37.09 Cr from GOI through Govt of Odisha and borrowed counterpart funding from PFC. At current rate of interest applicable to GoO loan of 13%, the interest component is projected as Rs 4.451 Cr.

In the ensuing year, NESCO Utility, WESCO Utility & SOUTHCO Utility 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 Utility, WESCO Utility and SOUTHCO Utility have estimated an interest of Rs 0.76 Cr, Rs 0.65 Cr and Rs 0.76 Cr, respectively on this account.

5.7.6. Interest on R-APDRP Loan

The sanctioned project cost under R-APDRP was Rs 133.17 Cr for Part-A IT, Rs 26.57 Cr for Part-A SCADA and Rs 248.12 Cr for Part B. CESU projected the interest on the R-APDRP loan as Rs 53.63 Cr for FY 2019-20.

5.7.7. Interest on SI scheme Counterpart funding from REC for GoO CAPEX

SOUTHCO Utility has existing balance of loan of Rs 1.50 Cr taken from REC for system improvement and counterpart funding against APDRP and the interest on such loan for FY 2019-20 is estimated as Rs 0.88 Cr.

5.7.8. Interest on Security Deposit

CESU, NESCO Utility, WESCO Utility and SOUTHCO Utility have submitted that the interest on security deposits for FY 2019-20 have been worked out at 6.75% on the closing balance for FY2018-19 based on the existing approval of the Commission for FY2018-19. This interest on security deposit proposed as Rs 48.80 Cr, Rs 38.01 Cr, Rs.47.60 Cr and Rs 12.92 Cr respectively. However, due to fall in Bank Rate SOUTHCO Utility has proposed to reduce the rate of interest of security deposit as per prevailing Bank rate declared by RBI for FY 2019-20.

6. Revenue and Truing up ARR

6.1. Non-Tariff Income

NESCO Utility, WESCO Utility and SOUTHCO Utility have proposed non tariff income for FY 2019-20 to the tune of Rs 77.28 Cr, Rs 172.74 Cr and Rs 18.14 Cr respectively. However, NESCO Utility and WESCO Utility 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 miscellaneous income of Rs.109.49 crore.

6.2. Provision for contingency Reserve

NESCO Utility, WESCO Utility and SOUTHCO Utility have proposed provision for contingency at 0.375% of Gross Fixed Assets at the beginning of the year for FY 2019-20. The exposure towards contingency provisions is to the tune of Rs 6.88 Cr, Rs 6.90 Cr and Rs 4.20 Cr respectively.

6.3. 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 Utility, WESCO Utility, SOUTHCO Utility have assumed reasonable return amounting to Rs. 10.55 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.

6.4. Truing Up for FY 2018-19

Based on the actual sales, revenue and expenses for the first half of the current year 2018-19 and based on estimates for next half of current year, the uncovered gap for FY 2018-19 for NESCO Utility, WESCO Utility and SOUTHCO Utility is Rs 85.78 Cr, Rs 46.08 Cr and Rs 190.32 Cr as against the approved surplus of Rs. 16.34 Cr, Rs 0.21 Cr and Rs 0.12 Cr respectively.

6.5. Revenue at Existing Tariff

The Licensees have estimated the revenue from sale of power by considering the sales projected for FY 2019-20 and by applying various components of existing tariffs. The total revenue based on the existing tariffs applicable for the projected sales is estimated at Rs 3593.52 Cr, Rs 2513.30 Cr, Rs 2999.84 Cr and Rs 1368.30 Cr by CESU, NESCO Utility, WESCO Utility and SOUTHCO Utility respectively.

7. Summary of Annual Revenue Requirement and Revenue Gap

The proposed revenue requirement of DISCOMs have been summarised below:

to consume	r and conside		Í		
	CESU	NESCO	WESCO	SOUTHCO	Total
	CESU	Utility	Utility	Utility	DISCOMs
Total Power Purchase,	2946.07	2064.43	2497.58	899.67	8308.67
Transmission & SLDC					
Total Operation &	1378.13	716.26	826.92	658.93	3580.24
Maintenance and Other Cost					
Return on Equity	11.64	10.55	7.78	6.03	36
Total Distribution Cost (A)	4335.84	2797.724	3332.288	1564.63	12030.48
Total Special Appropriation	0	6.88	6.90	4.20	17.98
(B)					
Total expenditure including					
special appropriation	4335.84	2798.127	3339.189	1568.83	12041.99
(A+B)					
Less: Miscellaneous Receipt	109.49	77.28	172.74	18.14	377.65
Total Revenue Requirement	4226.35	2720.84	3166.45	1550.69	11664.33
Expected Revenue(Full year	3593.52	2513.30	2999.84	1368.30	10474.96
)					
GAP at existing(+/-)	(632.84)	(207.54)	(166.60)	(182.39)	(1189.38)

Table7 Proposed Revenue Requirement of DISCOMs for the FY2019-20 (Rs in Cr) (after discount to consumer and considering railway traction demand)

7.1 Revenue GAP if Railway would avail power supply from other source:

Utilities have also project revenue gap if railway starts completely availing power supply from other source other than the Distribution Company. Revenue gap analysis of licenses is as presented below in table 8.

Table 8 Revenue Gap without Railway (Rs.Crore)							
	CESU	NESCO	WESCO	SOUTHCO			
		Utility	Utility	Utility			
Present traction contract demand (kVA)		142000	105500	78000			
Projected railway traction energy consumption for FY 2019-20 (MU)	342.95	375.740	313.920	139.380			
Expenditure including	4221 (5	2665.00	2226.86	1531.86			
Special Appropriation	4221.65	2665.09	3236.86	1551.00			
Reasonable return	11.64	10.55	7.78	6.03			
Sub Total	4233.69	2675.64	3244.64	1537.89			
Revenue from sale of power at existing tariffs	3387.88	2282.41	2806.19	1274.50			
Non-Tariff Income	109.49	77.28	172.74	18.14			
Total revenue gap without railway	(735.93)	(315.95)	(265.71)	(245.25)			

Table 8 Revenue Gap without Railway (Rs.Crore)

8. Tariff Proposal

CESU has proposed the change in distribution wheeling tariff from 53.98 Paisa/Unit to 91.38 Paisa/Unit to meet the wheeling business revenue gap of Rs 324.69 Cr. Apart from this CESU has made some proposals on retail tariff. NESCO Utility, WESCO Utility and SOUTHCO Utility 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.

Table9
Revenue Gap for Ensuing Year 2019-20 (in Rs. Crore)
(Considering railway traction demand)

(Considering funway fraction actually)							
	CESU	NESCO Utility	WESCO Utility	SOUTHCO Utility			
Revenue Gap with existing Tariff	632.84	207.54	166.60	182.39			
Excess Revenue with Proposed Tariff	523.36	0	0	0			
Proposed Revenue Gap	109.48	207.54	166.60	182.39			

9. Allocation of Wheeling and Retail Supply Cost

All the licensees have submitted the allocation of wheeling and retail supply cost of their total ARR based on the Hon. Commissions Regulations on bifurcation of Wheeling and Retail Supply Business.

Annual Cost:	Approved for FY (2018-19)	Estimated for FY (2018-19)	% of Total Expenditure considered for segregation against Wheeling & Retail Business		Wheeling Cost	Retail Cost	Total cost
			Wheeling	Retail			
BSP	2,713.35	2,749.97	0%	100%	-	2,946.07	2,946.07
Employee Cost	367.14	665.67	60%	40%	406.50	271.00	677.50
A&G Cost	63.87	193.33	40%	60%	41.53	182.99	224.52
R&M Cost	116.78	117.76	90%	10%	121.33	13.48	134.81
Depreciation	78.48	123.67	90%	10%	125.33	13.93	139.26
Interest & Finance Cost including carrying cost	78.04	262.22	90%	10%	88.15	9.79	97.95
Bad Debt provision	27.64	26.06	0%	100%	-	28.87	28.87
Discount to Consumer	-	69.66	0%	100%	-	75.24	75.24
Reasonable Return	11.64	11.64	90%	10%	10.47	1.16	11.64
Total Revenue Required:	3,456.94	4,219.98			793.31	3542.53	4335.84
<u>Revenue</u> <u>Generated:</u>							
Revenue From Sale of Power	3,304.52	3,310.96	0%	100%	-	3,593.51	3,593.52
Misc. Income	152.42	106.29	0%	100%	-	109.49	109.49
Total Income	3,456.94	3,417.26				3,703.00	3,703.00
Gap:(Surplus/ Deficit)(A-B)	-	(802.73)		-	(793.31)	160.44	(632.84)
Proposed Revenue	3,304.52	4,113.69			793.31	3433.07	4226.36

CESU Statement of allocation of Wheeling and Retail supply Cost (Rs. In)Cr.

WESCO UTILITY

Statement of allocation of Wheeling and Retail supply Cost. Rs. lakh

SI No.	Cost/Income Component	ARR for FY 2019-20	Assumption Ratio for consideratio n in Wheeling Business	Assumption Ratio for consideratio n in Retail Supply Business	Wheeling cost for FY 2019- 20	Retail supply Cost for FY 19-20
1	Cost of Power	230459.45	0%	100%	15480.00	214979.45
2	Transmission Charges	19187.50	0%	100%	1290.00	17897.50

3	SLDC Charges	111.48	0%	100%	111.48	0.00
	Total power purchase cost *	249758.43			16881.48	232876.95
	O&M					
4	Employee Cost	39323.34	60%	40%	23594.00	15729.34
5	Repair & Maintenance Cost	9938.30	90%	10%	8944.47	993.83
6	Administrative & General Expenses	9793.83	40%	60%	3917.53	5876.30
7	Bad & Doubtful Debt including Rebate	7999.58	0%	100%	0.00	7999.58
8	Depreciation	6606.34	90%	10%	5945.71	660.63
	Interest on Loans					
9	for Capital loan	1536.70	90%	10%	1383.03	153.67
10	for Working capital	2734.74	10%	90%	273.47	2461.27
11	Interest on Security Deposits	4759.56	0%	100%	0.00	4759.56
12	Return on Equity	778.00	90%	10%	700.20	77.80
	Special Appropriation					
13	Amortization of Regulator Assets	0.00	25%	75%	0.00	0.00
	True Up of Current year GAP	0.00			0.00	0.00
14	1/3rd	0.00	25%	75%	0.00	0.00
15	Other, if any-Contigency Reserve	690.16	90%	10%	621.14	69.02
	Grand Total	333918.99			62261.04	271657.94
	Miscellaneous Receipt					
	Non-Tariff Income -		as per actual	as per actual		
16	Wheeling		assumption	assumption		
	Non-Tariff Income - Retail		as per actual	as per actual		
17	Business	17274.37	assumption	assumption		

* Allocation of power purchase cost towards wheeling has been made considering 8% Loss on input after effecting EHT sale.

SOUTHCO UTILITY

Statement of allocation of Wheeling & Retail Supply Cost

		tion of wheeling a netall supply cost			(Rs. In Crore)	
SI. No	Cost/Income Components	ARR for FY 2019-20	Assumption Ratio for consideration of Wheeling Business	Assumption Ratio for consideration of Retail Supply Business	Wheeling Cost for FY 19-20	Retail Supply Cost for FY 19-20
1	Power Purchase Cost					
	BSP	797.85	0%	100%	58.3	739.55
	Transmission Charges	101.25	0%	100%	7.29	93.96
	SLDC Charges	0.57	0%	100%	0	0.57
	Total Power Purchase cost	899.67			65.59	834.08
2	O & M Expenses					
	Employee Cost	398.31	60%	40%	238.99	159.33
	A&G Expenses	76.72	40%	60%	30.69	46.03
	R & M Expenses	73.88	90%	10%	66.5	7.39
	Bad & Doubtful Debt including Rebate	27.37	0%	100%	0	27.37
	Depreciation	36.49	90%	10%	32.84	3.65
3	Capital Cost					
	Interest on Working Capital	13.65	10%	90%	1.37	12.29
	Interest on Capital Loan	19.58	90%	10%	17.62	1.96
	Interest on Security Deposit	12.92	0%	100%	0	12.92
	ROE	6.03	90%	10%	5.42	0.60
4	Special Appropriation					
	Appropriation of Regulatory Assets	0	25%	75%	0	0
	True up of Current Year GAP 1/3rd	0.00	25%	75%	0	0
	Contingency Reserve	4.20	90%	10%	3.78	0.44
	Grand Total	1568.83			462.80	1106.06
5	Miscellaneous Receipt		As par astur	As per estual		
	Non-Tariff Wheeling Income		As per actual assumption	As per actual assumption		
	Non-Tariff Retail Income	18.14	As per actual assumption	As per actual assumption		

* Allocation of power purchase cost towards wheeling has been made considering 8% loss on input after effecting EHT Sale

NESCO UTILITY

Statement of allocation of Wheeling and Retail supply Cost. Rs. Lakh

Sl No.	Cost/Income Component	ARR for FY 2019-20	Assumption Ratio for consideration in Wheeling Business	Assumption Ratio for consideration in Retail Supply Business	Wheeling cost for FY 19-20	Retail supply Cost for FY 19-20
1	Cost of Power	190522.83	0%	100%	10135.86	180386.97
2	Transmission Charges	15824.16	0%	100%	839.06	14985.09
3	SLDC Charges	96.24	0%	100%		96.24

	Total power					
	purchase cost *	206443.22			10974.92	195468.30
	O&M					
4	Employee Cost	37311.92	60%	40%	22387.15	14924.77
	Repair &					
5	Maintenance Cost	9910.76	90%	10%	8919.68	991.08
	Administrative &					
6	General Expenses	5885.54	40%	60%	2354.22	3531.33
	Bad & Doubtful Debt					
7	including Rebate	3769.96	0%	100%	0.00	3769.96
8	Depreciation	6624.02	90%	10%	5961.62	662.40
	Interest on Loans					
9	for Capital loan	1436.34	90%	10%	1292.71	143.63
10	for Working capital	2886.79	10%	90%	288.68	2598.11
	Interest on Security					
11	Deposits	3801.33	0%	100%	0.00	3801.33
12	Return on Equity	1054.58	90%	10%	949.12	105.46
	Special					
	Appropriation					
	Amortization of					
13	Regulator Assets	0.00	25%	75%	0.00	0.00
	True Up of Current					
14	year GAP 1/3rd	0.00	25%	75%	0.00	0.00
	Other, if any-					
15	Contigency Reserve	688.25	90%	10%	619.42	68.82
	Grand Total	279812.70			53747.52	226065.18
	Miscellaneous					
	Receipt					
	Non-Tariff Income -		as per actual	as per actual		
16	Wheeling	1267.86	assumption	assumption	1267.86	0.00
10	Non-Tariff Income -	1207100	as per actual	as per actual	1207100	0.00
17	Retail Business	6460.21	assumption	assumption	0.00	6460.21
18	Total Misc. Receipts	7728.07	ussumption	ussumption	1267.86	6460.21
	Total Revenue				1207100	
19	Requirement	272084.63			52479.66	219604.97
-	ocation of power purch		ards wheeling	has been made		
	t after effecting EHT Sal		a us mooning			1055 01
mpu	i alter ellecting EHT Sa	ies				

10. Initiatives by Utility and other performance improvement measures

In compliance with RST order dated 23.03.2017, utilities have undertaken various performance improvement measures and have submitted compliance as well as benefits report in the ARR petition. Some of the initiatives by utilities are as follows.

NESCO Utility, WESCO Utility, SOUTHCO Utility

- Providing various payment options to improve reach
- Development of franchisee/ collection agents in licensee area
- Action plan for Revenue Improvement
- Improve Collection efficiency under LT Category (Single Phase)

- Improve Standards of Performance as per OERC (Licensees Standards of Performance) Regulations 2004 and conduct SoP Audit by 3rd Party.
- Energy audit (details reports are included in ARR petitions)
- Training of Personnel out of normal A&G expenditure
- Asset addition under RGGVY & Biju Gram Jyoti Scheme

WESCO Utility

• Engagement of GPLF/WSHG as micro franchisee

SOUTHCO Utility

- Mobile phone based photo billing
- Focus on business analytic and key consumer cell at field offices
- Intensification of vigilance and enforcement activities at section level
- Prepaid metering
- Consumer Indexing
- Receivables Audit

11. Tariff Proposals and Rationalization Measures:

a. <u>Proposal by CESU</u>

CESU proposed the tariff rationalization measures as per the following proposals:

i. Rebate to consumer

The Para-495 & Para-496 of RST 2018-19, the Hon'ble OERC directed incentive for early and prompt payment and some special rebate to the consumer. In the Para-324 of RST 2018-19, The Commission has observed that the expenditure due to rebate and income due to DPS are considered tariff neutral. However it is apparent that the discount given to the consumer owing to rebate is not at par with the DPS, rather there is a wide and distinct gap between these two and CESU is incurring revenue deficit on account of the same. Hence, CESU has requested the Commission for consideration of rebate as expenditure while fixation of tariff.

ii. Issue of transformer loss

Pursuant to Section 50 of Electricity Act – 2003 the State Commission to frame Electricity Supply Code and Code – 2004, particularly Regulation 54(3) and 93(9), is very specific for metering of the HT consumer and addition of transformer loss in case of LT metering. There is no provision in OERC Code – 2004 for replacement of LTCT meter to HT metering nor has the Commission amended and incorporated the said provision. When there is no Regulation under Section 50 for replacement of LT metering, such provision in RST Order can't be sustainable. Due to lack of statutory favors under Section 50, 181(2)X and 182 and Section 73(2), the order passed in Para No. 328 of RST Order for the Financial Year 2018-19, would be inoperative. Tariff Order can't be a substitute for framing Regulation under 50, 181(2)X and 182of Electricity Act – 2003. Hence they prayed before the Commission to correct the para accordingly.

iii. Interest on working capital

CESU requested to the Commission for consideration (a) Operation and maintenance expenses for one month (b) Receivable for one month (c) Maintenance spares @ 40% of R & M expenses for one month as part of working capital.

iv. Perform Achieve and Trade (PAT) Cycle-II

Clauses (i) and (k) of Section 14 of the Energy Conservation Act, 2001 stipulates that every designated consumer (DCs) shall get energy audit conducted by an accredited energy auditor and furnish the same to the concerned designated agency including the details of information on energy consumed and details of the action taken on the recommendation of accredited energy auditor.

CESU being a Designated Consumer(DC) under PAT Cycle -II vide S. O. No. 1264(E) dated 31/03/2016, CESU will engage an accredited energy auditor following a transparent procedure to conduct energy audit, wherein, the fund of approx. Rs 50 lakh is to be arranged by CESU for taking up such works.

v. Meter Rent

As per clause (bb) of OERC Regulation 2004 as amended upto May'11 "meter means an equipment used for measuring electrical quantities like energy in KWh or KVAh, maximum demand in KW or KVA, reactive energy KVAr hours etc. including accessories like Current Transformers (CT) and Potential Transformer (PT) where used in conjunction with such meter and any enclosure used for housing for fixing such meter or its accessories and any devices testing purposes."

Hence, CESU prays the Commission to consider the Meter Cost along with its accessories and amount invested for fixation of meter rent. CESU has proposed increased meter rent for some category of meter.

vi. Distribution Franchisees BOT sharing of Model

The Clause No-7.25 of Odisha Electricity Regulatory Commission (Terms and Condition for Determination of Wheeling Tariff and Retail Supply Tariff) Regulation, 2014 stipulates that, while finalizing the employee cost, the Commission shall take into consideration the distribution franchisee expenses. CESU projected the franchisee expenses for FY 2017-18 as Rs 89.48 Cr. Hence, CESU request to the Commission for consideration of distribution franchisee expenses as expenditure and same may be considered for fixation of tariff.

b. <u>Proposal by NESCO Utility, WESCO Utility and SOUTHCO Utility</u>

i. MMFC compensation for Roof Top solar to LT category of consumers

To promote generation of more solar energy in the area of Utility, licenses have submitted that compensation in the shape of Monthly Minimum Fixed Charges (MMFC) to the extent of installation of solar generation capacity out of total connected load may be permitted for LT category of consumers who are willing to install roof top solar as per guidelines of the Commission vide order dated 19.08.2016.

ii. Withdrawal of power factor incentives

Presently all the machines used by the industries are BSI or ISO certified, similarly pumps or motors used are energy efficient along with capacitor banks, which are the contributor of higher power factor. Hence, licensees submitted that present scenario continuance of PF incentives is no longer necessary and may kindly be abolished.

iii. Withdrawal of TOD benefits

As per RST order TOD benefit is being extended to Three phase consumers except public lighting and Emergency Supply category of consumers having own CGP for the consumption during off peak hour. Off peak hour for this purpose is from night 12.00 PM to morning 6 AM of next day. Now with the introduction of frequency based tariff significance of Off peak hour(TOD) consumption has been lost.

Consumers are reaping the benefit of frequency based tariff and intends to use accordingly as a result the load curve of most of the industries are almost flat. In such scenario continuance of TOD benefit is no more required. If continuance of TOD benefit is being permitted to the consumers, similarly the Utility's BSP may also be permitted to reduce for TOD consumption during off peak hour. Further, consumers having contract demand more than 110Kva and above are also availing off peak hour benefit towards drawl to the extent of 120% of their contract demand without levy of penalty. So, further continuance of TOD benefit would be a double benefit for the same cause hence licensees have requested to withdraw TOD benefits.

iv. Demand charges to HT medium category consumers

Due to wide gap in the demand charges, consumers under HT medium category just below 110kVA are always trying to avail demand benefit even though their load is more than 110 kVA. To curb such disparity NESCO Utility and WESCO Utility have submitted to fix demand charges for HT medium consumer category @Rs. 250 per kVA.

v. MMFC for LT category of consumers

In case of Domestic, General purpose, Specified Public Purpose & PWWS the rate is same as for 1^{st} kw as well as additional Kw. However, in case of other category the rate for additional Kw and part thereof is very much lower for which the revenue of the Utility is highly affected as well as creating discrimination among LT category of consumers. In this view, Licensees have submitted to rationalized LT consumers with single rate for 1^{st} kW or part thereof as well as additional kw or part thereof

vi. Billing to Irrigation and Agriculture Category of Consumers

Presently due to difficulty in putting meters in case of irrigation category of consumers billing is not possible in most of the cases. Replacement of defective meters is also not possible due to inaccessibility. In view of the same, the licensee NESCO Utility and WESCO Utility requested permission to bill such category of consumers on L.F. basis with L.F. of 30% considering their pump capacity.

vii. Levy of Demand Charges

Consumers with contract demand 110 kVA and above are billed on two-part tariff on the basis of actual demand and energy consumed. The Demand Charge reflects the recovery of fixed cost payable by the consumers for the reservation of the capacity made by the licensee for them. Presently the recovery of fixed cost of the Utility with 80% of CD is inadequate. In view of the same the licensee has proposed to recover the monthly demand charges on the basis of 85% of the CD or MD whichever is higher instead of 80%.

viii. Additional Rebate of 1% to LT category of Consumers

The Commission has allowed rebate of 1% additional rebate towards digital payment for LT category of consumers. The intention was to promote cash less transaction to avoid pressure on currency notes which is also saving the time of the consumers for depositing cash in various cash collection centres. So, the licensee is intended to continue with the same for the ensuing year. Therefore, the additional rebate of 1% in addition to normal rebate as applicable may be considered for LT Domestic & Kutirjyoti category of consumers who shall make payment through digital mode only. WESCO Utility has suggested for additional 2% instead of presently applicable rebate of 1% in addition to the normal rebate as applicable may be considered by the Commission for LT Domestic & Kutirjyoti category of consumers who shall make payment through digital mode only.

ix. Levy of meter rent on smart, prepaid meters

In view of the revenue deficit of the Utility & for smooth operation of prepaid metering system utilities proposes as follows:

- The Meter Rent need to be reviewed and proposed the new rent of Rs 300/- Per Month and Rs 500/- per Month for AMR / AMI Based /Pre-paid type single Phase Meters and three Phase meters respectively.
- The existing meter rent recovered by the Licensee from the consumers are negligible and the leasing as well as vending service charges are high enough as a result, there is a huge difference. Accordingly, the licensees may be allowed to recover difference in such recoveries and recurring costs.
- A principle may be approved by the commission for adjustment and outstanding arrears along with its part payment before implementation of prepaid metering system.
- SOUTHCO Utility has also requested to withdraw additional rebate of Rs. 0.25 per unit allowed in smart metering scheme.

x. Introduction of kVAh Billing

The Commission in its RST Order dtd. 22.03.2014 for FY-2014-2015 had given the directions to the DISCOMs vide Para-246. As per this para the implementation of kVAh billing was declined due no non readiness of the licensees to implement the kVAh based meter readings. Further, the licensees have submitted that all the 3-phase meters, especially those installed for consumers having Contract Demand 20kW and above 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 Industries Consumers presently being

billed. Hence DISCOMs are fully equipped to implement kVAh billing in respect of all those consumers in place of existing kWh Billing. Hence licensees requested to allow kVAh billing from ensuing year.

xi. Applicability of Power Factor Penalty

Licensees submitted that if the kVAh based billing proposal is not accepted by Hon Commission by any reason, then the licensees has requested continuance of power factor penalty as RST order of 2018-19 for Large Industries, Public Water Works (110 KVA and Above), Railway Traction, Power Intensive Industries, Heavy Industries, General Purpose Supply, Specific Public Purpose (110 KVA and above), Mini Steel Plant, Emergency Power Supply to CGP.

Till such time KVAH billing approach is adopted the Utility proposes for applicability of Power Factor Penalty for the following category of Consumers in order to bring more efficiency in Power System Operation.

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

xii. MMFC/Demand charges to be in kVA only instead of kVA/kW

The HT consumers and LT 3 Phase consumers are paying their demand charges/MMFC in kW and some consumers in other category in kVA. The Regulation also specifies for entering into agreement in kVA. Further, it is the responsibility of the consumers to maintain the p.f. The regulation also provides for levy of power factor penalty to these category of consumers or alternatively to bill the consumers at kVA demand. In view of this, the licensee (SOUTHCO Utility) have submitted that they may be allowed to bill the demand charges on the basis of kVA for all the three phase consumers with static meters to avoid disparity among the consumers.

xiii. Demand Charges and Monthly Minimum Fixed Charges

The Licensees have submitted that 90 % of the distribution costs is 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 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. In view of this, the Licensees proposed to recover the full fixed distribution costs by suitably revising the Demand charges and monthly minimum fixed charges as proposed in earlier section, as applicable to the respectively category during the ensuing year.

xiv. Introduction of Amnesty Arrear Clearance Scheme for LT Non Industrial category of consumers.

The utilities are having huge outstanding under LT non industrial category consumers. 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 Utility is also suffering from huge financial loss on account of low collection efficiency and coverage in Domestic and Commercial category of consumers. With this the licensees requested the Commission to approve an arrear collection scheme for LT non industrial category of consumers

in line with OTS scheme earlier approved for 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.

xv. Rebate on prompt payment

In the BSP Order for the financial year 2018-19, the Commission directed that the Utility is entitled to avail a rebate of 2% for prompt payment of BST bill on payment of current BST in full within two working days of presentation of BST Bills and 1% is paid within 30 days. Further, the Commission had directed to pay the rebate to all consumers except domestic, general purpose, irrigation and small industry category, if payment is made within three days of presentation of bill and fifteen days in case of others.

Considering the above, it is prayed before the Commission to approve the rebate of 2% to the Utility for prompt payment towards BST bills including part payments within 3 (three) working days from the date of presentation of the BST bill and in case the BST bill is paid after 3 (three) days the rebate should be proportionately allowed to the extent of payment made within 30th day @1% akin to Rebate Policy on Rebate is provided to GRIDCO by NTPC.

Licensees have further submitted that the above rebate may kindly be also permitted in case of part payment so that cash flow of the Bulk Supplier will improve and at the same time the Utility would be tempted to remit the amount collected to GRIDCO to avail such benefit.

xvi. Overdrawal beyond contract demand and charges thereof

The Utilities (NESCO Utility & WESCO Utility) in its ARR for the FY-2016-2017, had placed proposal for approval of its action initiated against those consumers indulging in overdrawal of energy in excess of their contracted load and also sought clarification with regards to such assessment in addition to payment of overdrawal charges by such consumers in terms of the RST Orders of the Commission for FY 2015-16 vide para 335. The Commission had advised the DISCOMs to exercise due diligence while using penal provision like use of Section 126 or Section 135 of the Act. Subsequent to aforesaid observation of the Commission, the Utilities have initiated such assessment proceeding in strict adherence to the parameter set by the Commission.

However these things are creating complicacy in revenue collection. The Utilities have submitted that, many consumers are penalized under Section 126 or 135 due to their overdrawal beyond Contract demand for which rather than paying the penalty they used to approach higher forums. For non clearance of their arrear their application for enhancement of Contract Demand remains pending before the Utility. However with direction from appellate authority the utilities are forced to enhance the Contract demand even with pending arrear. Utilities submitted that in case Commission allows overdrawal penalty both on Fixed Charges and on Energy Charges by suitable direction in the tariff order they would not be prompted to apply Section 126 and 135 on such consumers for a smaller period of overdrawal which will also ease the collection of revenue.

12. Prayer

- a. CESU has following prayers to the Commission:
- Admit the accompanying Aggregate Revenue Requirement and Retail business for 2019-20.
- 2. Approve the Aggregate Revenue Requirement (ARR) for Retail business of the Utility for the Financial Year 2019-20 as proposed by the Utility.
- 3. To consider the tariff related proposals submitted along with the application and approve the same.
- To consider actual distribution and AT&C loss while approving the ARR application for FY 2019-20.
- 5. Consider the projected T&D loss of 25.99% for the FY2019-20
- 6. Grant any other relief as deemed fit & proper in the facts and circumstances of the case.

b. NESCO Utility, WESCO Utility & SOUTHCO Utility has following prayers to the Commission:

- 1. Take the ARR application and Tariff Petition on Record
- 2. Approve the Annual Revenue Requirement for FY 2019-20
- 3. Bridge the Revenue Gap for the FY 2019-20 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.
- To consider the AT&C Loss Trajectory accepted by Ministry of Power, GoI (SOUTHCO Utility)
- 5. To do away with Intra State ABT till generators are involved (SOUTHCO Utility)
