OERC fixed Electricity Tariff for FY 2012-13
No tariff change in Irrigation, Pumping, Agriculture and Allied Agriculture Activities
Reduction of tariff in case of Bulk Domestic Supply

As per the Electricity Act, 2003, Section 61, 62, 65, 68, National Tariff Policy, 2006 (para8.3.2), National Electricity Policy, 2005 (Para 5.5.2), the Annual Electricity Tariff for the state is determined by Orissa Electricity Regulatory Commission for generation, transmission supply and distribution utilities of the state taking into account their commercial viability & operational efficiency. The OERC balances the interest of all stake holders, while determining the tariff. The OERC, taking into account the proposal filed by the utilities, advice of the State Advisory Committee, opinion of the State govt. and conducting a Public Hearing has passed the Annual Revenue Requirement and Tariff Order for the FY 2012-13 on 23.0312 which will be effective from 1st April, 2012.

2. Highlights of Tariff:-

- No rise in tariff for irrigation, pumping and agriculture and allied agricultural activities, from the present level of 110 paise and 120 paise respectively for the consumers availing such power supply in LT. Marginal rise from 320 paise to 380 paise for allied agro industrial activities.

- Similarly no rise for irrigation, pumping & agriculture and allied agricultural activities, from the present level of 100 paise and 110 paise respectively for the consumers availing such power supply in HT. Marginal rise from 310 paise to 370 paise in case allied agro industrial activities.

- Reduction of tariff from 420 paise to 400 paise for the consumers Bulk Domestic availing power supply at HT voltage.

- Ice factories depending upon marine fishing has to pay their electricity bill on the maximum demand achieved instead of contract demand during the banned period imposed by Fishery Department of GoO.

- Relaxation of 50 paise per unit for the EHT and HT industrial consumers committed in writing to pay energy bills at 70% load factor irrespective of their consumption below 70% load factor.

- Any LT consumer who wants to avail quality power by installing own transformers either in single phase or in three phase and pay the monthly bills regularly within the rebate time shall get additional rebate/concession of 5% of energy charges in addition to normal rebate. If energy bills are not paid within the rebate period no rebate shall be allowed.

- While approving the average cost of supply as Rs.460.51 for the FY 2012-13, the Commission has fixed 220 paise upto 50 units, 390 pasie for the consumption above 50 units & upto 200 units, 490 paise for the consumption above 200 units & upto 400 units and 530 paise for the consumption above 400 units for the domestic category. The tariff approved by the Commission for the above slab in domestic category during FY 2011-

12 was 140 paise (upto 50 units), 350 paise (above 50 units less than 200 units), 430 paise (above 200 units less upto 400 units) and 480 paise (above 400 units)

- Average tariff for consumption of 50 units, 100 units, 200 units, 300 units, 400 units, 500 units and 600 units is Rs.2.20 kwh, Rs.3.05 kwh, Rs.3.48 kwh, Rs.3.95 kwh, Rs.4.19 kwh and Rs.4.41 kwh and Rs.4.56 respectively, which is around 52%, 34%,25%, 14%, 9%, 4% and 1.02% **less than average** cost of supply of Rs.4.61 approved by the Commission. A consumer is required to pay an average tariff of Rs.4.66 for the consumption of 700 units which is 1.29% higher than the average cost of supply.

Table-1

Consumption in Units	2010-11				2011-12				2012-13				Increase over 2011-12	Avg. cost per unit for all Consumers (Rs)	Comparison of tariff with Avg. Cost of Supply (%)
	Tariif Schedule		Total Billed Amount (Rs)	Avg. rate per unit in Rs.	Tariif Schedule		Total Billed Amount (Rs)	Avg. rate per unit in Rs.	Tariif Schedule		Total Billed Amount (Rs)	Avg. rate per unit in Rs.			
	Consumption (units)/ Month	Rate per unit in Paise			Consumption(units)/ Month	Rate per unit in Paise			Consumption (units)/ Month	Rate per unit in Paise					
50	<=100	140	70.0	**1.40**	<=50	140.00	70.0	**1.40**	<=50	220.00	110.0	**2.20**	0.80	4.61	**-52.2%**
100	>100,<=200	310	140.0	**1.40**	>50,<=200	350.00	245.0	**2.45**	>50,<=200	390.00	305.0	**3.05**	0.60	4.61	**-33.8%**
200	>200	410	450.0	**2.25**	>200	430.00	595.0	**2.98**	>200	490.00	695.0	**3.48**	0.50	4.61	**-24.5%**
300	>400	410	860.0	**2.87**	>400	480.00	1,025.0	**3.42**	>400	530.00	1,185.0	**3.95**	0.53	4.61	**-14.2%**
400			1,270.0	**3.18**			1,455.0	**3.64**			1,675.0	**4.19**	0.55	4.61	**-9.1%**
500			1,680.0	**3.36**			1,935.0	**3.87**			2,205.0	**4.41**	0.54	4.61	**-4.2%**
600			2,090.0	**3.48**			2,415.0	**4.03**			2,735.0	**4.56**	0.53	4.61	**-1.0%**
700			2,500.0	**3.57**			2,895.0	**4.14**			3,265.0	**4.66**	0.53	4.61	**1.3%**

- Industries having captive generating plants, availing power in EHT or HT shall have to pay 690 paise and 700 paise respectively instead of 640 paise and 650 paise fixed during 2011-12.

- Taking into all categories of consumers, there is a average tariff rise from 404.01 paise in 2011-12 to 451.84 paise in 2012-13, shows in average tariff rise of 47.83 paise from last year. (Increase in 11.8%)

- Average tariff rise from Rs.506.98 paise to Rs.551.04 (44.06 paise increase) in case of EHT consumers, Rs.524.92 paise to Rs.552.09 paise (27.17 paise increase) in case of HT consumers and Rs.300.34 paise to 368.52 paise (68.18 paise increase) in case of LT consumers.

- It is worthwhile to mention here that the **Hon'ble Appellate Tribunal of Electricity**, New Delhi has set aside the ARR & tariff orders of DISCOMs for the FY 2010-11 and 2011-12 as the cross subsidy is not within ± 20%. Taking into account observations of Hon'ble ATE, tariff has been approved for the FY 2012-13, where in the average tariff for EHT (551.041), HT (532.09) and LT (368.52) within ± 20% of average cost of supply (460.51) paise for the state as whole.

3. **LT Domestic-0-50 Units:-**

- All India Consumer Price Index for industrial worker, has increased by 6.4% in 2007-08, 9.02% in 2008-09, 12.41% in 2009-10, 10.43% in 2010-11 and 10% upto January of 2011-12. Taking the said index into account, it has been seen that taking 100 points in 2000-01 as basis has been increased to 198 in Jan, 2012 and assuming 10% rise in the said Index for 2012-13 it would be 218 points in 2012-13. Considering the rise in Consumer Price Index, 140 paise in 2000-01 will be 277.20 in Jan, 2012 and 305 paise point in 2012-13. Similarly, if we consider the Consumer Price Index of Rourkela, 140 paise in 2000-01 will be 287 paise in 2012 and 316 paise in 2012-13. However, keeping the honest paying consumers in mind, the Commission has approved 220 paise for domestic consumer having consumption upto 50 units even though as per para 5.5.2 of National Electricity Policy should not be less than 50% of the average cost of supply and 460.51 paise i.e. 230.25 paise.

4. **Cross Subsidy:-**

- Section 61(g) Electricity Act, 2003 read with para 8.3.2 of Tariff Policy, 2006 stipulates that the tariff should be within ±20% of the average cost of supply. Hence, average tariff of any consumer should not be more than 552.61 paise and less than 368.41 paise. With this mandate, the Commission has fixed 368.52 paise in case of LT (-19.98% of average cost of supply of 460.51 paise), 552.09 paise for HT(+19.89% of average cost of supply of 460.51 paise) and 551.04 paise for EHT (+19.66% of average cost of supply of 460.51 paise)

Table-2

Cross-subsidy 2012-13

Year	Level of Voltage	Average cost of supply for the State as a whole (P/U)	Average Tariff P/U	Cross-Subsidy in P/U	Percentage of Cross-subsidy above/below or cost of supply
1	2	3	4	5= (4) – (3)	6= (5 / 3)
2010-11	EHT	327.37	416.61	89.24	27.26%
	HT		423.59	96.22	29.39%
	LT		219.21	-108.16	-33.04%
2011-12	EHT	408.87	506.98	98.11	24.00%
	HT		524.92	116.05	28.38%
	LT		300.34	-108.53	-26.54%
2012-13	EHT	460.51	551.04	90.53	19.66%
	HT		552.09	91.58	19.89%
	LT		368.52	-91.99	-19.98%

5. **Kutir Jyoti:-**

- As enshrined in clause 5.5.2 of National Electricity Policy 2005, tariff of very poor category of consumers will be at least 50% of average (overall) cost of supply hence it should not be below 230.25 paise as approved average cost of supply is 460.51 paise and as per rise in consumer price index it would have been 218 paise (based on all India

Consumer price index and 226 paise based on the consumer price index for Rourkela). OERC has decided 200 paise per unit for BPL consumers although NEP stipulates for 230.25 paise.

- Average Retail tariff of Rs.451.84 paise includes, 270.74 paise towards average bulk supply price of GRIDCO, 25 paise towards transmission charges, 0.18 paise towards SLDC charges and the rest Rs.155.92 paise towards the distribution cost.

6. <u>Break-upof Average Tariff</u>:-

- Out of average bulk supply price of 270.74 paise of GRIDCO, CESU is required to pay 261 piase, NESCO 301 paise, WESCO 300 paise and SOUTHCO 182 paise. All the distribution companies have to pay 25 paise/unit as transmission cost.

- Average tariff for hydro generators run by Orissa Hydro Power Corporation has been increased from 65.96 paise in 2011-12 to 68.83 paise for 2012-13.(4.35% rise)

- No change in transmission charges during 2012-13, remained same as 25 paise per unit as in 2011-12.

- OERC has approved Rs.236.17 paise for average cost of power purchase by GRIDCO from different generators for the FY 2012-13, which is 12.29% higher than that approved during FY 2011-12 i.e. 210.32 paise. Out of average bulk supply rate of 231.65 paise during FY 2011-12, CESU was paying 219 paise, NESCO 262 paise, WESCO 262 paise, SOUTHCO 135 paise. Out of average bulk supply rate of Rs.270.74 approved for the FY 2012-13, CESU is required to pay 261 paise, NESCO 301 paise, WESCO 300 paise and SOUTHCO 182 paise. Hence, there is a average BST rate increase of 39.09 paise (16.87% increase).

- Out of total average tariff increase of 47.83 paise (451.84 – 404.01), it is estimated that GRIDCO will get 39.09 paise (270.74-231.65) (16.87% rise compared to last year) and distribution companies will be 8.74 paise (153.92 – 147.18) (5.94% rise compared to last year)

- Average cost of supply has been approved as 460.51 paise during FY 2012-13 in place of 408.87 paise during FY 2011-12, thus there is an increase of 12.63%. Considering the receivables from different sources. Overall average tariff of 451.84 has been approved during FY 2012-13 as against 404.01 during FY 2011-12. Average tariff rise of 47.83 paise (11.84%) compared to last year.

Table-3

Break up of the Average Tariff for 2011-12 and 2012-13 (Paise per unit)

Sl. No.		2010-11	2011-12	2012-13	Increase	
					In paise	In %age
1	Average cost of supply	327.37	408.87	460.51	51.64	12.63
	Overall average tariff (paise per unit)	320.58	404.01	451.84	47.83	11.84
2	Break up					
a.	Power Purchase from generators by GRIDCO	174.58	210.32	236.17	25.85	12.29
b.	Debt servicing and other expenditure of GRIDCO	(-) 4.33	21.33	34.57	13.24	62.07
c.	Total Bulk supply price of GRIDCO (a+b) payable by DISCOMs	170.25	231.65	270.74	39.09	16.87
d.	Transmission charges	23.5	25.00	25.00	0	0
e.	SLDC charges	0.18	0.18	0.18		0
F.	Distribution cost borne by the DISCOMs	126.66	147.18	155.92	8.74	5.94

7. <u>Distribution loss not accepted by the Commission- normative performance parameters adopting fixing tariff:-</u>

- The commission allows normative AT&C loss of 22.09% instead of DISCOMs proposal of 36.3%. While rejecting the proposal of DISCOM's proposed AT&C loss, the Commission has approved 22.09% AT&C loss taking into account all efficiency parameters and carrying out the prudent check on the data/information furnished by DISCOMs. The tariff could have been increased manifold, if the loss proposed by DISCOMs have been accepted.

Table-4

<u>OVERALL PERFORMANCE OF DISCOMs</u>

	1999-00	2010-11		2011-12(Provisional)			2012-13	
	Actual (Aud)	OERC Approval	Actual	DISCOMs Proposal	OERC Approval	Actual (upto Sept,11)	DISCOMs Proposal	OERC Approval
A. DISTRIBUTION LOSS (%)								
CESU	44.89%	25.37%	38.30%	34.59%	24.00%	38.26%	35.00%	23.00%
NESCO	43.35%	18.46%	32.75%	27.66%	18.40%	33.29%	29.00%	18.35%
WESCO	44.17%	19.93%	38.89%	31.29%	19.70%	38.28%	34.51%	19.60%
SOUTHCO	41.84%	27.82%	48.22%	42.67%	26.50%	47.52%	43.72%	25.50%
ALL ORISSA	**43.91%**	**22.22%**	**38.34%**	**32.59%**	**21.71%**	**38.28%**	**34.69%**	**21.30%**
B. COLLECTION EFFICIENCY (%)								
CESU	69.72%	98.00%	95.63%	99.00%	99.00%	94.28%	97.00%	99.00%
NESCO	79.37%	98.00%	92.38%	98.00%	99.00%	92.84%	98.00%	99.00%
WESCO	83.36%	98.00%	91.32%	98.00%	99.00%	89.31%	98.00%	99.00%
SOUTHCO	78.75%	98.00%	91.54%	98.00%	99.00%	89.32%	97.00%	99.00%
ALL ORISSA	**77.19%**	**98.00%**	**93.06%**	**98.34%**	**99.00%**	**91.89%**	**97.53%**	**99.00%**
C. AT & C LOSS (%)								
CESU	61.58%	26.86%	41.00%	35.24%	24.76%	41.79%	36.95%	23.77%
NESCO	55.04%	20.09%	37.87%	29.11%	19.22%	38.07%	30.42%	19.17%
WESCO	53.46%	21.53%	44.19%	32.66%	20.50%	44.88%	35.82%	20.40%
SOUTHCO	54.20%	29.27%	52.60%	43.82%	27.24%	53.12%	45.41%	26.25%
ALL ORISSA	**56.71%**	**23.77%**	**42.62%**	**34.06%**	**22.49%**	**43.29%**	**36.30%**	**22.09%**

8. Reasons of Tariff hike:-

- **Less low cosy hydro Power:-** The principal reason for tariff hike in 2012-13 is the increase in number of electricity consumers, inadequate generation of low cost hydro power to meet growing demands & rise in cost of coal and furnace oil, which ultimately lead to increased generation cost. Earlier, during 2004-05 nearly 57% of power requirement of the state was being met from low cost state own hydro power stations. It has gone down to 27% during the FY 2012-13.

Table-5

Declination of Hydro generation in over all Power Pool

	FY 2004-05	FY 2008-09	FY 2009-10	FY 2010-11 (Provisional)	FY 2011-12 (Provisional upto 2/2012)	FY 12-13 (Approved)
State Demand (in MU)	12,499.45	18,771.82	19,524.80	21,244.79	19,395.00	23,085.00
State Hydro Generation for Sale (incl. small Hydro) (in MU)	7,087.82	5,835.72	4,211.75	5,124.46	5,114.61	6,181.74
% of state hydro to total state demand	**56.7%**	**31.1%**	**21.6%**	**24.1%**	**26.4%**	**26.8%**

- **Rising in Coal Price**:- Due to rise in cost of coal and furnace oil, the Central Thermal Generating Stations have increased their cost of sale of power to GRIDCO. There has also been 30% increase in energy charge of thermal generations due to excessive rise in cost of coal, e-auction of coal, collection of 5% excise duty on imported coal and calculation of coal value on Cross Calorific Value other than Useful Heat Value. Comparative position of power purchase rate approved vis-a-vis actual energy in MU, rate per unit and cost in Rs. Crores is shown below along with the table on the price rise of coal in case of Central Thermal Generators.

Table-6

COMPARATIVE POSITION OF POWER PURCHASE RATE APPROVED VIS-À-VIS THE ACTUAL ENERGY IN MU, RATE IN PAISE PER UNIT AND COST OF RS. CRORE		
Sources of Generation	Central Thermal	
	Commission Approval	Actual
FY 2009-10		
Energy	5905.22	5819.62
Total Rate	197.31	221.58
Total Cost	1165.18	1289.51
FY 2010-11		
Energy	5860.77	6172.72
Total Rate	243.54	268.48
Total Cost	1427.31	1657.28
FY 2011-12		
Energy	6056.42	3453.66
Total Rate	331.05	357.86
Total Cost	2004.97	1235.93
FY 2012-13		
Energy	6052.08	
Total Rate	376.32	
Total Cost	2277.53	

Table-7

Price of Coal & GCV value of CGSs

	FSTPS			KSTPS-I			KSTPS-II	TSTPS-I			TSTPS-II
MONTH	**Price of Coal Rs/MT**	**GCV of Coal KCAL/ Kg**	**ECR P/U**	**Price of Coal Rs/MT**	**GCV of Coal KCAL/ Kg**	**ECR P/U**	**ECR P/U**	**Price of Coal Rs/ MT**	**GCV of Coal KCAL/ Kg**	**ECR P/U**	**ECR P/U**
Apr-11	4,604.98	3,943.0	306.64	2,602.96	2,782.0	256.00	241.68	2,033.30	3,199.2	164.19	164.19
May-11	5,007.44	3,606.0	364.60	2,407.54	2,801.0	235.20	222.00	2,257.65	3,046.5	191.40	191.40
Jun-11	5,422.42	3,697.0	385.10	2,956.87	2,625.0	308.20	290.95	2,661.05	2,980.7	230.60	230.60
Jul-11	5,126.72	3,606.0	373.28	2,768.62	2,638.0	287.19	271.10	3,089.99	3,054.9	261.30	261.30
Aug-11	5,163.89	3,460.0	391.85	3,224.31	2,885.0	305.80	288.60	3,165.22	2,964.4	275.80	275.80
Sep-11	5,226.87	3,490.0	393.20	3,737.38	2,980.0	343.20	323.90	3,023.10	3,127.1	249.75	249.75
Oct-11	4,309.53	3,591.0	315.10	3,477.11	3,050.0	311.95	294.47	3,134.59	2,963.4	273.27	273.27
Nov-11	3,865.72	3,338.0	304.07	2,428.61	2,777.0	239.31	225.89	2,331.97	2,943.6	204.66	204.66
Dec-11	3,402.86	3,332.0	268.10	2,178.60	2,651.0	224.90	212.30	1,902.70	2,906.2	169.10	169.10
Jan-12	3,993.88	3,359.0	312.20	2,566.40	2,742.0	256.10	241.80	1,781.40	3,020.5	152.40	152.40
Avg. from 4/11 to 01/12	4,612.43	3,542.2	341.40	2,834.83	2,793.1	276.80	261.30	2,538.10	3,020.7	217.20	217.20

GCV = Gross Calorific Value CGSs = Central Generating Stations ECR = Energy Charge Rate

- The Commission had approved the energy charge for Central Thermal Power Stations for FY 2011-12 considering 20% rise in fuel price of Jan, 2011. But actual energy rate has been increased beyond the approved rate primarily due to rise in coal cost. Comparison of increase in energy charge rate in different central thermal power stations is given below. OERC has approved 10% rise on actual energy charge rate achieved for Jan, 12 for the FY 2012-13 against the 30% rise proposed by GRIDCO.

Table-8

Energy Charge Rate for Central sector Generating Stations (P/U)

	Approval for 2010-11			Actual for Jan.'11			Approval for 2011-12			Actual for 2011-12 (Avr. upto 1/12)	GRIDCO Proposal for 2012-13	% Rise of GRIDCO proposal over 2011-12 actual	Commis sion's approval for 2012-13 (10% rise on Avg. upto Jan.'12
	VCP/U	FPAP/U	ECR P/U	VCP/U	FPAP/U	ECR P/U	VCP/U	Escalatin g 20% over actual Jan.'11	ECR P/U	ECR P/U	ECR P/U		
TSTPS-I	41.10	71.88	112.98	41.10	**129.70**	170.80	41.10	**155.65**	**196.75**	217.25	**292.0**	34.41%	**238.97**
TSTPS-II	58.73	52.59	111.32	58.73	**112.08**	170.81	58.73	**134.50**	**193.23**	217.25	**291.0**	33.95%	**238.97**
FSTPS	98.57	121.95	220.52	98.57	**195.28**	293.85	98.57	**234.34**	**332.91**	341.41	**480.0**	40.59%	**375.56**
KHSTPS-I	108.50	76.42	184.92	108.50	**98.56**	207.06	108.50	**118.27**	**226.77**	276.79	**378.0**	36.57%	**304.46**
KHSTPS-II	125.37	51.96	177.33	125.37	**74.58**	199.95	125.37	**89.49**	**214.86**	261.27	**350.0**	33.96%	**287.40**

N.B. - Power purchase cost from thermal station consists of fixed cost and variable cost (coal)

9. Tariff kept low keeping gap in the GRIDCO Account:-

- Earlier, GRIDCO was extending power to DISCOMs at a lower rate than its purchase cost and could able to compensate the loss from sale of available surplus power, which is not now possible due to rise in state's demand.

- Further, always tariff has been kept low by keeping Revenue Gap in ARR of GRIDCO. The Commission has approved bulk supply price as 270 .74 paise and average tariff as 451.84 paise keeping 700.58 Cr. Gap in the GRIDCO's account. Without such gap, BSP and average tariff could have been 301.09 paise (in place of 270.74 paise) and 490.13 (in place of 270.74 paise) paise, respectively.

- Due to the social welfare programmes of the state govt. and central govt., such as RGGVY & BGJY, there has been an increase in demand for power but production has not gone up in the same proportion, as a result GRIDCO has to purchase expensive power. It may be noted here that while GRIDCO was purchasing power at higher rate, the same was being sold to the DISCOMs at a lower rate thus incurring loss and this loss was being met from the profit from the from export of surplus power which is not possible at present.

- Increased requirement to need the growing distribution network. There is an added cost due to installation of new lines and substations to meet demand of new consumers as well cost of operation and maintenance of the existing lines and substation. Employee cost of the utilities including salary, pension and administrative are also on the rise.

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