Date of Review	: 26.05.2012 at 11.00 AM

Period of Review : From April, 2011 to March, 2012

Representative of NESCO, GRIDCO and OPTCL present during the review is attached as annexure -1

1. Shri Sandesh Rane, MD, NESCO made a presentation before the Commission about the performance of NESCO during the period from April, 2011 to March., 2012 as per the agenda items indicated by the Commission. Commission's Observations on Licensee's Performance in brief are as follows:

Revenue and Loss Performance of NESCO

2. The Commission noted that during the period under review the energy purchased by the licensee was found to be 5023.40 MU compared to the energy input of 5108.93 MU during the FY 2010-11 resulting a reduction of 85.53 MU compared to the previous year. During the period under review the revenue generated by the licensee was Rs. 1457.71 Crore against Rs. 1182.95 Crore generated during FY 2010-11. During the period under review the AT& C loss has decreased by 2.65% compared to the previous year despite a decrease of overall billing efficiency by 1.52% and overall increase of distribution loss by 1.52%. This is because of the excess collection of Rs. 274.76 Crore due to increased collection under one time settlement (OTS) Scheme. It has also resulted an increased overall and LT Collection Per Input by 58.64 p/u and 36.38 P/U respectively. A brief overview of the revenue and loss parameters of NESCO is as given below:

Revenue Performance Of NESCO						
	Actual	Actual	Improvement	Approval		
	2010-11	for FY	over Previous	for 2011-		
		11-12	Year	12		
Energy input (MU)	5108.93	5023.40	-85.53	5323.00		
SA	LE TO CO	NSUMERS	5 (MU)			
EHT	1777.48	1672.56	-104.92	1891.96		
HT	523.53	467.75	-55.78	550.08		
LT	1134.58	1161.22	26.64	1901.53		
TOTAL	3435.59	3301.53	-134.06	4343.57		
LOSS (%)			0.00			
LT	55.36%	55.59%	0.24%			
HT & LT	50.23%	51.39%	1.16%			
OVERALL	32.75%	34.28%	1.52%	18.40%		
BI	LLING EF	FECIENC	Y (%)			
HT	92.00%	92.00%	0.00%			
LT	44.64%	44.41%	-0.24%			
HT & LT	49.77%	48.61%	-1.16%			
OVERALL	67.25%	65.72%	-1.52%			
COLLECTION RECEIVED (CR.)						
EHT	692.38	842.76	150.38	917.30		
HT	238.79	260.73	21.94	298.55		
LT	251.78	354.22	102.44	592.84		
TOTAL	1182.95	1457.71	274.76	1808.68		

AT & C LOSS (%)				
LT	66.25%	55.67%	-10.58%	
HT & LT	57.33%	51.72%	-5.61%	
OVERALL	36.56%	33.91%	-2.65%	19.22%
Collection Per Input-LT	99.07	135.46	36.38	227.45
Collection Per Input-	231.55	290.18	58.64	339.79
Overall				

BILLING Analysis of NESCO

While analyzing the billing pattern of NESCO it is observed that the EHT 3. consumption has decreased from 51.74% to 50.7% and HT consumption has decreased from 15.24% to 14.2% during the FY 2011-12 compared to the previous year i.e. FY 2010-11. But in case of LT consumption there is a marginal increase in consumption from 33% to 35% during the same period. NESCO stated that due to decrease in EHT and HT consumption there is shortfall in revenue in flow. The Commission expressed concern for the low billing from BPL consumers at Rs. 10.25 only per month during the current financial year. This is guite inadequate compared to the minimum billing per month of Rs.30 from BPL consumers. The Commission reiterated its earlier direction to bill the BPL consumers at the rate of an ordinary domestic consumer once they exceed consumption from 30 units per unit. Considering the economy of NESCO region of the state the LT general consumption which is only 15.04% of the total consumption seems to be doubtfull. The Commission insisted for street vigilance measures to analyze the consumption pattern of LT general and high end consumers of the licensees. A brief over view of the consumption of NESCO is as given below:-

	CONSU	MPTION OF N	ESCO -As on Ma	rch 2012		
Category	% Consumption for 2010-11	No. of Consumer	Consumption (MU)	Realization Paise/KWH	Billing Per Consumer Rs Per Month	% Consumption for 2011-12
Domestic	68.29%	629788	812.72	229.3	246.57	70%
Kutir Jyoti	0.00%	107593	18.05		10.25	
L.T. General (Com)	16.38%	48791	187.32	582.4	1863.47	16%
Agriculture	6.16%	9715	44.14	79.6	301.32	4%
Agro Industries	0.14%	66	1.74	182.9	4027.66	0%
Allied Agro	0.02%	10	0.45	275.0	10220.15	0%
Street Lighting	0.71%	128	8.77	299.6	17105.85	1%
PWW	1.50%	1586	18.00	464.6	4393.57	2%
Small Industry	2.02%	3992	21.97	584.0	2678.06	2%
Medium Industry	3.74%	711	35.84	655.7	27541.38	3%
Specified Pub. Purpose<100KW	1.05%	4359	12.22	505.7	1181.33	1%
Specified Pub. Purpose >100KW	0.00%		-			0%
Large Industry	0.00%					0%
TOTAL L.T.	100.00%	806,739	1,161.22	305.0	365.90	100%
SUMMARY						
ЕНТ	51.74%	31	1,672.56			50.7%
HT	15.24%	386	467.75			14.2%
LT	33.02%	806,739	1,161.22			35.2%
NESCO TOTAL	100.00%	807,156	3,302			100.0%

Arrear Analysis of NESCO

4. NESCO has an arrear of Rs 933.65 Cr as on 31st March 2012 against Rs 941.76 Cr on 31st March 2011. The licensee has collected Rs 116.26 Cr only against the target of the Commission for collection of arrear by Rs 250 Cr while approving the ARR of NESCO for FY 2011-12 vide para 640 of the RST order. Thus the reduction of net arrear is quite negligible compared to the target of the Commission. More over the arrear added during the period is Rs 108.15 Cr against the collection of arrear of 116.26 Cr. The decrease of arrear is due to reduction of EHT arrear from Rs 90.80 Cr to Rs 78.43 Cr as on 31st March 2012.The Commission emphasized to focus on LT ghost consumers where a substantial amount of arrear has to be collected. A brief overview of the arrear position of the licensee is as given below:

	Status of Arrear-NESCO (Rs-Cr)						
Category	Arrears as on 31.03.2011 (Including the arrears as on 31.03.1999)	Billing for the 2011- 12(Rs. Cr.)	Collection against current dues for the fy 2011-12	Collection against arrear for the fy - 2011-12	Total Collection for fy 2011-12	Arrear for the period (Rs. Cr.)	Arrear as on 31.03.2012
1	2	3	4	5	6=4+5	7=3-4	8=2-5+7
EHT	90.80	830.39	830.39	12.37	842.76	0.00	78.43
HT	18.88	224.64	217.65	2.67	220.32	6.99	23.20
LT	757.56	334.69	236.91	100.54	337.45	97.78	754.80
Govt & PSU	11.94	39.72	39.72	0.68	40.41	0.00	11.26
Govt-HT	62.58	20.15	16.77	0.00	16.77	3.38	65.95
Total of above	941.76	1449.60	1341.45	116.26	1457.71	108.15	933.65

Performance of NESCO in Upgradation of System

5. Regarding the performance of NESCO in improving the network system, it is observed that through all the 33 KV feeder meters are having metering facility energy audit of only 23 No of feeders have been possible by the licensee so far. Despite several instructions in the past the licensee is not showing seriousness to take up energy audits of its feeders. Similarly in 11 KV feeders only 104 No of feeders are metered and the licensee is able to audit 11 no of feeders only. The licensee is directed to submit the energy audit report of those 11 No of feeders before the Commission by end of June 2012. The no of 33 KV and 11 KV breakers available with the licensee is only 23 and 49 against the requirement of 323 and 430 respectively. Similarly so far Distribution Transformer system of the licensee is concerned out of 41805 no of DTRs only 569 nos are metered and Energy audit for only 104 nos. are so far possible by the licensee. The Commission insisted to speed up the energy audit process for quicker turn around of the industry. Regarding the status of metering as submitted by the licensee the Commission is of opinion that the licensee should carefully assess the metering statistics provided to the Commission. Further the Commission vide para 6 of its letter no Dir(T)-336/08/2544 dated 13.01.2012 has insisted to install AMR with all high valued consumers in steps starting from 20 KW initially. As per the submission of the licensee out of 5327 nos of consumers with 10 KW load, only 1648 nos. are provided with AMR reading facility. The Commission directed to complete the 100% AMR metering for all high

Performance of NESCO S	ystem Upgrada	ntion As on Ma	rch-2012	
	As on 31st March 2010 (FY-09-10)	As on 31st March 2011(FY 10-11)	As on 30 th Sept 2011	As on 31st March 2012(FY11- 12)
No. of 33 KV feeders (excluding GRIDCO interface)	60	64	64	69
No. of 33 KV feeder metering	57	63	64	69
No. of 33 KV Group & Feeder Breakers Required	-	-	-	323
No. of 33 KV Group & Feeder Breakers Installed	-	-	-	23
Energy Audit Carried Out-33 KV	5	8	13	13
No. of 11 KV feeders	428	428	430	430
No. of 11 KV feeder metering	93	83	95	104
No. of 11 KV Group & Feeder Breakers Required	0	0	0	399
No. of 11 KV Group & Feeder Breakers Installed	0	0	0	49
Energy Audit Carried Out-11 KV	10	12	11	11
No. of distribution transformers (11/0.4 & 33/ 0.4 kv)	22647	22879	33225	41805
No. of distribution transformer metering position	372	569	569	569
Energy Audit Carried out- No of DTRs covered	0	66	93	104
Total number of meters	557832	635840	721294	764153
No. of working meters	399311	483548	561047	590156
Percentage of working meters	71.58%	76.05%	77.78%	77.23%
No of 3 Phase Consumers	20965	21373	22021	22484
No of Conumers with TOD benefit	839	910	914	970
No of Consumers above 10 KW load	4127	4794	5152	5327
No of Consumer AMR metering	1156	1446	1622	1648

value consumers above 10 KW by end of this Financial year. A brief overview of the network system of the licensee is as given below:

Performance of NESCO Vis-Vis the Sector as a whole

6. An insight to the performance of the all distribution companies in the state shows that the overall loss in the sector is found to be 38.55% for the FY 2011-12 against the OERC approval of 21.71%. The loss is highest in SOUTHCO at 46.42% and lowest at NESCO at 34.28%. The input to the energy sector has remained at 21242.59 MU for the period under review against the OERC approval of 22477 MU. The drawal of energy in all DISCOMs except SOUTHCO has remained less compared to the approval of the Commission. This proves that all the companies had tried to reduce loss by reducing the energy input to the system. The revenue generated in the system has remained at Rs.5564.74 cr, against the OERC approval of Rs.7109.57 cr. A brief overview of the overall performance of Odisha is as given below:

Performance of DISCOMs (All Odisha)-Sales-As on March-2012							
	CESU	NESCO	WESCO	SOUTHCO	FY 2011-12		
BULK SUPPLY							
Energy input (MU)							
Annual/ Half Yearly	7,791.00	5,323.00	6,630.00	2,733.00	22,477.00		
OERC APPROVAL							
Energy input (MU)	7,232.60	5,023.40	6,172.46	2,814.13	21,242.59		
SALE (MU)							

11.32 58.67 84.02 54.01 97.38 4.71% .55% .71%
84.02 54.01 97.38 4.71% .55%
54.01 97.38 4.71% .55%
97.38 4.71% .55%
4.71% .55%
.55%
.55%
71%
•/1/0
15.74
22.92
26.08
64.74
7.23%
.08%
.73%
37.54
61.96
/

COMPLIANCE TO THE DIRECTIVES OF THE COMMISSION

Reduction of Theft

- 7. The Commission vide para 14 of the minutes of meeting held during the month of December, 2011 had directed to take following measures to reduce theft of electricity
 - i. Verification of load and contract demand of all high valued consumers with CD > 20 KW.
 - ii. Regular cross checking of meter readings to be carried out and penalty should imposed on billing agencies.
 - The target for the number of raids to be carried out by DISCOMs was 720, 540 for CESU and NESCO and 180 each for WESCO and SOUTHCO respectively.
 - iv. The revenue generated by conducting raids etc. with help of Energy Police Stations should be 10 times the expenditure incurred towards the same.

Against the above directives the no. of cases finalized under Section 126 and 135 by NESCO was 1642 nos. and the amount finalized was Rs.0.52 crore during the current financial year. The amount collected by the licensee by regularizing 2392 nos. of connection was Rs.0.24 cr. during the period under review. Similarly the revenue realized by the licensee by disconnecting unauthorized supplies was Rs.14.32 crore during period under review. A brief overview of the anti-theft activities undertaken by the licensee is given below:

Anti Theft Measures	As on 31 st March 2010 (FY- 09-10)	As on 31 st March 2011 (FY 10-11)	As on 30 th Sept 2011	As on 31 st March 2012 (FY 11-12)
No of cases Finalized under Section 126 & 135	1084	1706	930	1642
Amount Finalized (Rs. Cr.)	1.15	0.59	1.23	0.52
Amount Accessed during filing of case (Rs. Cr.)	0.24	0.23	0.19	1.97
No of new connections given	36344	70555	105251	150983
No of Connection Regularized	4451	5744	1754	2392
Amount Collected (Cr.)	1.51	0.39	0.16	0.24
NO. of FIR Lodged	65	125	55	87
No. of illegal consumers prosecuted/Initiated in Court	15	12	14	55
Number of Disconnection made	10531	21154	6399	9127
Revenue realized (Rs. Cr.)	6.52	12.03	8.46	14.32

IMPLEMENTATION OF FRANCHISEE

8. While approving the ARR of DISCOMs for FY 2011-12 the DISCOMs were directed vide para 642 of RST order to spread franchisee activities by at least setting up of 3 nos. of Micro Franchisees per section by the end of the FY 2011-12. Thus the target for FY 201-12 was to cover at least 3,75,500 consumers of CESU, 187,500 consumers for WESCO and NESCO and 2,02,500 consumers for SOUTHCO by the end of the FY 2011-12. Against this the total no. of Micro Franchisees, Macro franchisees and Input base Franchisee as on 31.03.2012 in respect of NESCO are given in the table below.

Franchisee Activity	As on 31 st March 2010 (FY- 09-10)	As on 31 st March 2011 (FY 10-11)	As on 30 th Sept 2011	As on 31 st March 2012 (FY 11-12)
No of Micro-Franchisees	0	10	23	36
No of Consumers Covered	0	23387	35979	56464
No of Macro-Franchisees	0	0	4	8
No of Consumers Covered	0	0	44084	63611
No of Input Based-Franchisees	2	3	3	3
No of Consumers Covered	40153	60809	63474	70367
Total no of consumers covered under Franchisee	40153	84196	143537	190442

CONSUMER SERVICE

9. While analyzing the service provided by the licensee to the consumers, it is observed that the nos. of interruptions in 33 KV and 11 KV feeders are consistently going up. During the period of review the no. of power transformers, nos. of distribution transformers failed are found to be 14 and 1692 nos. respectively against 284 nos. of power transformers and 41805 nos. of DTRs. The performance of NESCO in compliance of GRF orders is found to be poor. It has only complied 417 nos. of cases so far against 748 nos. of orders received. The MD, NESCO stated that they have taken several measures to improve quality of supply to the consumers. With their intense effort the no. of transformers brunt has remained same during last three years despite a significant increase in the number of distribution transformers. A brief overview of the consumers services provided by NESCO is as given below:

QUALITY OF SUPPLY	As on 31 st March 2010 (FY-09-10)	As on 31 st March 2011 (FY 10-11)	As on 30 th Sept 2011	As on 31 st March 2012 (FY 11-12)
No. of 33 / 11 kv transformers	261	267	274	284
No. of Distribution transformers $(11/0.4 \& 33/0.4 \text{ kv})$	22647	27879	33225	41805
Failure of Power Transformers	14	14	10	14
No. of distribution transformers burnt	1673	1716	1006	1692
Cost involved (Cr.)	2.48	3.16	1.57	2.97
No of Interruptions in 33 KV Feeders	10863	9817	5609	8121
No of Interruptions in 11 KV Feeders	30631	29832	17238	28786
No. of Grievances received through CHP	584	696	425	772
Disposed through CHP including Bijuli Adalat	576	690	406	748
No. of GRF Orders received	576	690	406	748
No. of GRF Orders Complied	325	454	139	417

SYSTEM IMPROVEMENT

10. While approving the ARR of NESCO for FY 2011-12 the Commission had given following targets vide para 634 of the RST Order.

1) Upgradation and installtion of new transformers	-	800 nos.
2) Load balancing in three phases of DTR	-	1500 nos.
3) Conversion of single phase to three phase line	-	100 KMs.
4) Strengthening of AB cables	-	250 KMs.

Against this target the achievement of NESCO is very poor. A brief overview of the system improvement provided by NESCO is as given below:

System Improvement Works During Review Period	As on 31 st March 2010 (FY- 09-10)	As on 31 st March 2011 (FY 10-11)	As on 30 th Sept 2011	As on 31 st March 2012 (FY 11-12)
Installation of New Transformers (DTR)	269	168	20	29
Upgradation of Transformers (DTR)	258	69	8	18
Installation of Pillar Box	0	0	0	0
Length of AB Cable Laid (KM)	74.00	81.90	7.40	18.20
Conversion of Single Phase to Three Phase Lines	38	21	6	51

DIRECTIVES OF THE COMMISSION IN THE PRESENT REVIEW

Installation of pre-paid meters

11. The Commission while approving the ARR of the DISCOMs for FY 2012-13 has categorically emphasized installation of pre-paid meters vide para 527 of the RST Order. In case a consumer defaults in payment of electricity bills in a year, the said consumer has to install pre-paid meters at its own costs and power supply should not be restored unless pre-paid meters are put in place. However, prior to the installation of pre-paid meters the licensee must adopt all necessary software, hardware and billing measures etc. to cope of with the requirement for installation of pre-paid meters. Apart from that there are many consumers like retired officials those may show interest for installation of pre-paid meters to get benefit of hassle free payment

of electricity dues. In order to achieve the same Commission directed NESCO to put place an appropriate advertisement in the Newspapers to get necessary feedback from such consumers.

Implementation of Smart Grid Solution (AMR/AMI) in DISCOMs under Boot Model

12. Adoption of technology is the best solution to avoid theft of electricity. While the franchisee root is adopted in the rural areas to achieve pre-defined targeted Collection Per Input by reducing AT&C loss, Boot model in revenue sharing basis should be extended in semi-urban areas of the State to achieve the same. The Commission has categorically directed to all the DISCOMs vide para 532 of ARR Order of the DISCOMs for FY 2012-13 to handover at least three divisions under their control to be managed by BOOT operators in accordance with the broad principles issued by the Commission in their Lr. No. DIR(T)-390/11/2457 dtd. 30.12.2011. The response by the licensee so far is not encouraging. Except CESU no other DISCOMs has come up with some sort of concrete proposals on progress on this issue. The Commission reemphasized its decision on wide spread adoption of Smart Grid operation under boot model in the State for reduction of theft and turn around of the power sector within three month. Further, the Commission directed that the dump terminals of AMR should be installed from the Office of the Executive Engineer to the Head Office of DISCOMs by the end of June, 2012.

Self Assessment of consumption

- 13. In view of the growing nos. of consumers in urban and semi-urban areas it may not be possible to take meter reading regularly in every month. To cope up with such a situation the distribution companies may initiate billing on the basis of self declaration on consumption of electricity by honest consumers. In such a situation the differential billing between the actual reading on the meter and declared reading by the consumer can be additional billed even once in a year. This will reduce the billing and collection problem of the licensee.
- 14. The Commission directed that the meter rent should be utilized for purchase of meter only. In case it is not sufficient the balance amount should be invested from the own source of NESCO.
- 15. The Commission directed that the revenue collection figure from 20th May to 31st May may be submitted day-wise with corresponding figure from last year i.e. 2011-12.
- 16. Report of progress on installation of meters and smart grid operation should be submitted fortnightly by all DISCOMs.
- 17. The DISCOMs should identify the name of the sub-stations where excess var is drawn and take remedial measures.
- 18. The Commission directed NESCO to adopt punitive action against non-performing employees of the licensee by fixing responsibility starting from Section level to Circle heads.

ODISHA ELECTRICITY REGULATORY COMMISSION BIDYUT NIYAMAK BHAVAN UNIT - VIII, BHUBANESWAR - 751 012 PBX : (0674) 2393097, 2396117 FAX : (0674) 2395781, 2393306 E-mail : <u>orierc@rediffmail.com</u> Website : <u>www.orierc.org</u> ********

No.DIR (T)-369/09/ Dated- .06.2012

From

Shri K L Panda Secretary I/c.

То

The Managing Director, NESCO, Januganj, Balasore.

Sub: Review of Performance of NESCO for April, 11 to March, 2012 held in OERC on 26.05.2012.

Sir,

In inviting a reference to the subject cited above, I am directed to send herewith the aforesaid report for your information and necessary action.

Yours faithfully,

Encl : As above. Attendance Sheet

SECRETARY

Copy to:

- i) The Principal Secretary, Department of Energy, Govt. of Orissa along with copy of the enclosure for favour of information.
- ii) The CMD, GRIDCO, Janpath, Bhubaneswar along with copy of the enclosure for favour of information.
- iii) The CMD, OPTCL, Janpath, Bhubaneswar along with copy of the enclosure for favour of information.