

ACTIVITIES REPORT OF ENERGY DEPARTMENT **FOR THE YEAR 2012-13**

The Department of Energy was created on 24th April 1990 consequent upon bifurcation of the then Irrigation & Power Department. Electricity is one of the prime inputs for both the economic development as well as overall well being of the people. Increase in power generation has cascading effect on all sectors leading to increased growth particularly in industry, agriculture and other ancillary trade and business activities. The objective of the Government is to become self sufficient in Power Generation. The State of Odisha has the distinction of being the pioneer in the country in implementing reforms in power sector.

The present generation capacity of the State is:-

(a)	Hydro Generation (OHPC)	-	2085 MW
(b)	Thermal Power Station	-	880 MW
(c)	Central allocation.	-	1084 MW
(d)	Small Hydro Electric Projects (3 nos)-		<u>57 MW</u>
	Total	-	4106 MW

At present the Department of Energy is functioning with 3 Heads of Department i.e :-

- (1) E.IC (Elect)-cum-PCEI, Odisha, Bhubaneswar
- (2) CEI(T&D), Odisha, Bhubaneswar
- (3) CE(P)-cum-CEI(G) , Odisha, Bhubaneswar

As well as four Public Sector Undertakings Viz. Odisha Hydro Power Corporation (OHPC), Odisha Power Generation Corporation (OPGC), Odisha Power Transmission Corporation (OPTCL) & GRIDCO Ltd.

The activities of the Department in respect of different public sector undertakings as well as Heads of Department are presented briefly as under:-

DEVELOPMENT OF SMALL HYDRO ELECTRIC PROJECTS (SHEPS) / MEDIUM HYDRO ELECTRICAL PROJECTS (MHEPS)

The development of Small/Mini /Micro Hydro Electric Project upto 25 MW is one of the important activities of this Department. Private Investors are encouraged to set up small hydro projects to enhance the generation capacity through renewable energy sources.

36 nos of Memorandum of Understanding have been signed with the private developers with installed capacity about 484 MW. Out of 36 nos of MoU signed, 3 Small Hydro Electric Projects (SHEPs), namely Middle Kolab (25 MW), Lower Kolab (12 MW) and Samal Barrage (20 MW) have been commissioned and supplying 57 MW power to the State. The balance 33 nos are under different stages of process.

Department is focusing on facilitating the implementation of MOUs by removing the bottlenecks in the execution of SHEPs. Due to inadequate manpower in DOWR, design & drawing approval process was getting badly delayed. WAPCOS, a Govt. of India agency, has been entrusted for approval of design & drawings. The Terms of Reference (ToR) has already been finalized in a joint meeting between Energy Department, Water Resources Deptt, and WAPCOs. Besides WAPCOS, expression of interest (EoI) has been invited from NITs, IITs & CWC for empanelment to bring in competition and to reduce the cost & time involved in the process. State Technical Committee (STC) has cleared 2 nos. of Detailed Project Report (DPR) & 2 nos. Pre-feasibility Report (PFR) in this year. Govt. has recently constituted a steering committee under the Chairmanship of Chief Secretary to steer and monitor the progress of SHEPs for timely completion and to ensure formulation of a proper policy for SHEPs.

REVENUE COLLECTION, INSPECTION & LICENSING ACTIVITIES

Electricity Duty (ED) constitutes an important source of the Government Revenue. Collection of Revenue from various electricity consumers comes in the form of ED, inspection fees, fees for testing equipments and fees for issuing electrical permit and licenses to both Wireman, Lineman, supervisor and contractors. During the financial year 2011-12, this Department achieved the revenue collection to the tune of Rs. 551.72 Crore against a target of Rs.550.00 Crore.

During the Financial Year 2012-13, an amount of Rs.430.79 crore has been collected by 31.12.2012 as against the target of Rs.700.00 Crore. Steps are being taken to achieve the target fixed for this year.

During this year Chief Engineer (T&D) has issued 789 licenses of different categories viz. HT- 50, MV-47, Temporary Project Licenses (EHT)- 108, Supervisor Competency certificates (EHT- 13 HT-36, MV-535).

During the year 2012-13, 12540 Electrical installations have been inspected by the various Inspectors under Chief Electrical Inspector (T&D).

Likewise, under the generation wing, 612 generating units have been inspected during the year.

RURAL ELECTRIFICATION SCHEMES

(a) Biju Gram Jyoti (BGJ):

In order to ensure "Electricity to all" the State Government has launched a flagship scheme called Biju Gram Jyoti in the mid of 2007-08 for electrification of habitations having less than 100 population and the BPL Household Electrification in those habitations which are not covered under RGGVY. There is a target to cover 10,000 habitations during the 11th Five Year Plan under the scheme against

which 10778 nos. of habitations have been electrified so far and the works in 2752 habitations are in progress. The State Government has provided Rs. 497.08 crore under this schemes till the year 2012-13 to the districts for implementation of the Scheme against which expenditure of Rs. 302.22 crore has been made for the purpose as on 31.12.2012.

(b) Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY):

This flagship programme of Govt. of India launched in April,2005 to provide access to electricity to villages having population of 100 or more envisages 90% capital subsidy and 10% as loan component for the State. The scheme is executed through CPSUs viz NTPC,NHPC & PGCIL. Financial assistance to the tune of Rs.3308.64 Crore has been released by Govt. of India as on 31.12.2012 through REC in favour of CPSUs. An amount of Rs.2934.59 Crore has been utilised for electrification works by the CPSUs.

There is a target to electrify 14697 un-electrified/ de-electrified villages, 29420 partially electrified villages and 3227152 BPL house holds in all 30 districts. Against this 38692 nos of villages have been completed, 2802007 nos of BPL kits have been installed and 1659823 nos of BPL houses have been electrified. Budget provision of Rs.39.20 Cr. has been provided during 2012-13 for payment of loan component under the scheme, out of which Rs.37.14 crore is contra credited till 31.12.2012.

DEVELOPMENT PROGRAMME FOR ELECTRICAL SYSTEM IMPROVEMENT (DESI)

Government have recently launched a new initiative known as ‘**Development Programme for Electrical System Improvement**’ (DESI) as a crucial supplement of Rural electrification schemes like BGJ and RGGVY aiming at dovetailing funding support for replacement/additional transformer in place of burnt/overloaded transformers and associated conductors and other system

improvements from various development schemes like Integrated Action Plan (IAP), Backward Region Grant Fund (BRGF), Gopabandhu Grameen Yojana (GGY), BIju KBK Plan, Biju Kandhamal “O” Gajapati Yojana, Western Odisha Development Council (WODC) fund etc. The requirements for system improvements are estimated by DISCOMs and placed before District Electrical Committee (DEC) for approval and before Collector for sanction of funds under various schemes. Through this initiative, funding support of Rs.200 cr. is likely to be mobilized every year for system improvement. This initiative is expected to provide much relief in addressing the gaps in the RE Schemes & in the distribution network. During the current financial year, till December-2012 Rs.75.00 crore has been released by different districts for this programme and 37 Distribution Transformers have been replaced.

BIJU SAHARANCHALA VIDYUTIKARAN YOJANA(BSVY)

For providing access to electricity to the people living in unelectrified areas of urban local bodies, the State Government has launched a flagship programme namely, Biju Saharanchala Vidyutikarana Yojana (BSVY) during the year 2010-11. Under the scheme un-electrified habitations with minimum population of 100 along with BPL household electrification and system improvement will be taken up. Three (3) Municipal Corporations, 37 Municipalities and 63 NACs of the State have been covered under the Scheme. During the year 2010-11, Rs.40.40 crore, during 2011-12 Rs, 20.00 Crore and 2012-13 Rs. 20.00 crore have been provided to the districts @ of Rs.1.00 crore per Municipal Corporation, Rs.50.00 lakh per Municipality and Rs.30.00 lakh per NAC. The maximum cost of electrification per habitations is Rs.3.50 lakh and Rs.2000/- for a BPL household connection. During Financial Year 2012-13 the following progress has been made so far under the scheme.

No of Habitations taken up	-	1968
No of Habitations Electrified	-	1121
No of Works under progress	-	847
No of BPL household energized	-	10186

SELF HELP GROUP IN ENERGY FRANCHISE ARRANGEMENT (SEFA):-

Government has launched a new initiative known as SEFA to entrust the responsibility of energy revenue collection and facilitating theft control and grievance redressal to the women SHGs with a view to enhancing the overall improvement of the distribution sector and reduction of AT & C Loss. The scheme is devised with attractive performance linked incentive package for the SHGs. This is implemented in association with the district administration & mission shakti. One women SHG is selected to perform the tasks of meter reading, billing, Revenue collection, facilitating new connection, arrear collection etc in a Grampanchayat. So far, SHGs are selected & imparted training in all the 30 districts. Many groups have started functioning.

STANDARD TESTING LABORATORY

Standard Testing Laboratory functions as a third party Laboratory for testing and calibration of electrical equipments. All vital testing are being carried out in STL. For procurement of materials for this Laboratory, a budget provision of Rs.1.50 crore has been made for the year 2012-13 for procurement of different equipments is under progress. A separate building is under construction for functioning of STL in Bhubaneswar with budgetary support of state Govt.

EQUITY SHARE INVESTMENT IN OPTCL.

State Government has decided to infuse additional equity of Rs. 300 Crore in a period of 5 years to support OPTCL in taking up transmission Projects in the financially unviable areas such as KBK, Western Odisha. During the year 2011-12, 2012-13 funds to the tune of Rs. 43 Crore and Rs. 50 crore has been provided to OPTCL for this purpose.

CAPEX PROGRAMME FOR IMPROVEMENT OF DISTRIBUTION SYSTEM

CAPEX programme with an investment of Rs. 2400 Crore over a period of 4 years with an objective to improve Distribution system, quality of power to the consumers & to reduce AT& C loss. State Govt. is to provide Rs.1200 Crore (including 13th Finance Commission Grant) to DISCOMs as loan through GRIDCO with counterpart funding of Rs. 1200 Crore from DISCOMs. During 2010-11, Rs.205 Crore have been released to GRIDCO and budget provision of Rs.215 Crore have been made during 2011-12 inclusive of 13th Finance Commission grant of Rs.125 crore for the project. The first phase work is going on.

STRENGTHENING OF ELECTRIC SUPPLY IN KBK DISTRICT.

During the current financial year 2012-13 Rs.33 crore have been allocated at supplementary stage for strengthening of electric supply in KBK district. The projects have been identified and the works will begin soon.

SHAMUKA BEACH PROJECT

In order to promote tourism in the State, the Government of Odisha have launched a mega project named Samuka Beach Project in Puri. Electrification component of the project has been entrusted to OPTCL and CESU. The tentative estimate of the electrification work is at Rs.44.61 crore. State Government have made budgetary provision of Rs3.30 crore and Rs 5.00 crore during the financial year 2010-11

and 2011-12 respectively which has been provided to OPTCL and CESU for execution of the works. The project work is in progress.

UNDERGROUND CABLING OF GRAND ROAD & TEMPLE AREA IN PURI AND IMPROVEMENT OF POWER SUPPLY TO KONARK AREA

During the year 2011-12, Govt. has decided for under ground cabling of Grand road and Temple Area, Puri to be implemented by CESU. Accordingly budget provision of Rs 9.00 Crore has been made during financial year 2011-12 out of which funds amounting to Rs. 8.17 Crore have been provided to CESU for this purpose. The work is in progress and scheduled to be completed by August 2013.

Similarly, for improvement of power supply system in Konark Area, budget provision of Rs.8.00 crore has been made during the financial year 2011-12 and the entire fund is released to the executing agency i.e. OPTCL for execution of the work. The work is in progress.

ELECTRIFICATION OF IIT AT ARGUL, BHUBANESWAR

Department of Energy have been entrusted with the task of electrification by IIT, Argul, Bhubaneswar for which budget provisions of Rs.8 crore and Rs.8 crore have been provided during the financial years 2010-11 and 2011-12 and released in favour of OPTCL for execution of the work. Substantial progress has been made in the works and the work is expected to be completed during 2012-13.

ENERGY CONSERVATION

Energy conservation is Energy generation. To Co-ordinate, Regulate and enforce provisions of the Energy Conservation Act,2001 , EIC (Electricity) functions as State Designated Agency (SDA) for Odisha, and coordinates with Bureau of Energy Efficiency (BEE), Government of India, Government of Odisha, Private Organizations

and other Stake-holders. Odisha Energy Conversation Building Code (ECBC) has been notified for adoption in the State and Odisha has become the first state to frame such code in the country.

Implementation of Energy efficiency in the 3510 lift irrigation (LI) system under the Pani Panchayat is being taken up with OLIC. It is estimated that more than 15 million of units of energy can be saved and approximately 17 MW of capacity avoidance can be achieved out of the project.

During 2012-13, budget provision of Rs 15.00 crore has been made to carry out the energy conservation activities and awareness campaign in the State.

ODISHA HYDRO POWER CORPORATION LTD. (OHPC)

Odisha Hydro Power Corporation (OHPC) Ltd. was set up on 21st April 1995 consequent to the reform and restructuring of Power Sector in Odisha. Thereafter, all the Hydro Units of erstwhile OSEB & Govt. of Odisha were transferred to OHPC on 01.04.1996. At present, OHPC has following six ongoing Hydro Electric Projects and one Joint Hydro Electric Project having total installed capacity of 2062 MW which is a distinct improvement over its initial capacity of 1272 MW at the time of incorporation.

The Capacity augmentation is due to –

- (1) Operation of Upper Indravati Hydro Electric Project (600 MW), at Mukhiguda in 2001.
- (2) Renovation, Modernization & Up-rating of units – 1,2,3 & 4 of HHEP, Burla and thereby raising installed capacity by 40 MW.
- (3) Installation of two units of BHPP, Balimela of 150 MW (2 x 75) in January 2009.

OHPC provides the cheapest power and contributing to the State Grid. The present power generation, Sale of Power, Design energy and design energy for sale are given below :

(i) **Power Generation**

Sl. No.	Name of the Units	Installed Capacity (MW)	Design Energy (MU)	Design Energy for Sale (MU)	Generation for the FY 2012-13 (upto Jan'2013) (MU)
	Hirakud	275.50	684	677	635.24
	Chiplima	72	490	485	228.35
	Balimela	510	1183	1171	382.57
	Rengali	250	525	520	639.62
	Upper Kolab	320	832	824	335.56
	Upper Indravati	600	1962	1942	1347.99
	Sub-Total	2027.50	5676	5619	3569.33
	Machkund (Odisha Share)	34.50			191.51
	TOTAL	2062			3760.84

Activities to be undertaken in the year 2012-13**(Rupees in lakhs)**

a)	R/M of Unit-III of Chiplitma	36.00
b)	Bhimkund, Baigundi & other project	155.00
c)	R/M of 6 (six) Units of BHEP, Balimela	84.00
d)	Office Building (Corporate Office)	35.00
e)	P.S.P.	92.00
f)	Renovation of RHEP	2500.00
	TOTAL	2902.00 (i.e. 29.02 Crore)

Important technical activities undertaken for the year 2012-13.

- i) Final DPR for PV based grid connected Solar Power Plants in the unutilized lands around OHPC's existing three power stations i.e. HHEP, Burla, RHEP, Rengali & UIHEP, Mukhiguda was submitted by M/s WISE, Pune on 28.07.2012. Above DPR is submitted to OREDA for STC clearance.
- ii) Final PFR of Pump Storage scheme of Upper Kolab, Balimela & Upper Indravati is submitted by the consultant. Tendering process of Pump Storage scheme for UIHEP, Mukhiguda is under progress.

- iii) Final PFR of Bhimkund H.E. Project (39 MW) and Baigundi H.E. Project (27 MW) submitted by M/s WAPCOS. Work order issued in favour of WAPCOS to prepare the DPR.
- iv) The price bid for R, M & U works of Unit -5 & 6 of HHEP, Burla was opened & the acceptance of the tendering process was filed before Hon'ble OERC for approval. Hon'ble OERC in its order dtd.26.12.2012 viewed that the proposal for R, M & U of unit-5 & 6 of Burla power station shall be postponed for the present. However, OHPC filed a petition to review the order of Hon'ble Commission.
- v) Tender will be floated for R & M of Unit-3 of CHEP, Chiplima and Unit-1 to 6 (six units) of BHEP, Balimela after approval of eligibility criteria and terms & conditions of tender document by OHPC Board in the Month of February'2013.

ODISHA POWER GENERATION CORPORATION (OPGC)

Existing units ITPS (UNIT 1&2)

OPGC has set up 2 thermal power plants with a capacity of 210 MW each in the Ib Thermal Power Station, Banharpali in the District Jharsuguda (Odisha) at a cost of Rs.1135Crore. The entire generation from the existing two units of 210 MW each, of Ib Thermal Power station is sold to GRIDCO Ltd on the basis of a long term PPA. The current average per-unit price at which power is sold to GRIDCO is Rs.1.84.

OPGC's units 2x210 MW at Ib Thermal Power Station (ITPS) registered a PLF of 96.07% in the month of April and May 2012 which was the **highest among the state-run generating stations of the country** and the **second highest in the eastern region as reported by CEA**.

OPGC units were the only thermal power unit in the state which continued to operate and provide uninterrupted power to the state during the recent country wide grid failure in the month of August 2012. During the current financial year, 2630.696 MUs have been generated from these units till 31st Jan 2013.

Expansion Project ITPS (Unit 3&4) and Captive coal mine

OPGC is implementing expansion plan of adding two more units with a combined capacity of 1320 MW during the 12th plan period with an estimated cost of about Rs.11547 crore. The expansion also includes the development of captive coal mine at Manoharpur. Financing agreement for the project has been entered with PFC and REC. Tendering process for the construction of the power plant is at the final stage.

ODISHA POWER TRANSMISSION CORPORATION LTD.(OPTCL)

Odisha Power Transmission Corporation Limited (OPTCL) ensures development of an effective and economical system of Intra-state and Inter-state transmission lines for smooth flow of electricity from generating station to load center.

The infrastructure of OPTCL network is as follows:-

101 nos. of Grid Sub-Stations including Switching Station with transformation capacity of 11,070 MVA and 11,350 Ckt.Kms.of Transmission lines of 400KV, 220KV and 132KV rating.

The present peak demand of the state is around 3500MW , Which is handled by the existing network and equipment of the system. To improve the low voltage problem in 20nos. Grid Sub-Stations action has already been taken to install 275MVAR shunt capacitor with an estimated cost of Rs.12.71 Crores.

CAPACITY AUGMENTATION EXECUTED DURING THE YEAR 2012-13					
Sl.No.	Name of the Grid S/s	Voltage Category(kV)	Type of Transformer	Capacity Addition (MVA)	Date of Commissioning
1	Aska	132/33 kV	POWER	20	07.04.12
2	Digapahandi	132/33 kV	POWER	12.5	09.05.12
3	Kamakshya Nagar	132/33 kV	POWER	7.5	10.05.12
4	Balasore	220/132 kV	AUTO	60	23.05.12
5	Paradeep	220/132 kV	AUTO	50	24.06.12
6	Berhampur	132/33 kV	POWER	40	08.07.12
7	Katapalli	132/33 kV	POWER	40	18.07.12
8	Phulbani	132/33kV	POWER	32.5	22.07.12
9	Sambalpur	132/33kV	POWER	20	08.08.12
10	Salipur	132/33 kV	POWER	7.5	22.08.12
11	Chhatrapur	132/33 kV	POWER	20	07.09.12
12	Balasore	132/33 kV	POWER	27.5	19.09.12
13	Bolangir	132/33 kV	POWER	12.5	11.11.12
14	Dhenkanal	132/33 kV	POWER	40	12.11.12
15	Bhubaneswar	132/33 kV	POWER	23	19.11.12
16	Narendrapur	220/132 kV	AUTO	100	27.11.12
17	Mohana	132/33kV	POWER	7.5	12.12.12
18	Bhubaneswar	132/33 kV	POWER	23	12.12.12
19	Phulnakhara	132/33kV	POWER	20	19.12.12
20	Chandaka	132/33kV	POWER	23	21.12.12
21	Balasore	132/33kV	POWER	23	04.01.13
22	Bhadrak	132/33kV	POWER	23	04.01.13
23	Bhubaneswar	132/33kV	POWER	23	18.01.13
24	Bidanasi	132/33kV	POWER	23	20.01.13
25	Ransinghpur	132/33kV	POWER	23	29.01.13
26	Bhadrak	132/33kV	POWER	23	05.02.13
27	Chandaka	132/33kV	POWER	23	09.02.13
TRANSMISSION LINE COMMISSIONED DURING THE YEAR 2012-13					
28	Stringing of 2 nd ckt. from Loc 116 to Loc 202 at Nimapara Grid S/s of the 132kv SC line on DC tower from Chandaka to Nimapara(26.087km)				07.07.2012
NEW GRID S/S COMMISSIONED DURING 2012-13					
29	2 x 12.5 MVA,132/33 kv Grid S/s at Bhawanipatna, with LILO arrangement of Kesinga-Jaynagar 132kv line.				10.02.2013

Achievement during the year 2012-13:-

CAPACITY AUGMENTATION TO BE EXECUTED DURING THE YEAR 2012-13				
Sl.No.	Name of the Grid S/s	Voltage Category(kV)	Type of Transformer	Capacity Addition (MVA)
1	Angul	132/33	POWER	20
2	Bhubaneswar	132/33	POWER	23
3	Meramundali	400/220/132/33	POWER	7.5
4	Ranasinghpur	132/33	POWER	46
5	Bidanasi	220/132/33	AUTO	160
			POWER	46
6	Cuttack	132/33	POWER	40
7	Nimapara	132/33	POWER	27.5
8	Mendhasal	400/220/33	POWER	20
9	Chainpal	132/33	POWER	20
10	Badagada	132/33	POWER	20
11	Balasore	220/132/33	POWER	46
12	Chandikhole	132/33	POWER	20
13	Joda	220/132/33	AUTO	100
14	Jajpur Road	132/33	POWER	20
15	Baripada	132/33	POWER	17
16	Bhanjanagar	220/132/33	POWER	40
17	Narendrapur	220/132/33	POWER	40
18	Aska	132/33	POWER	20
19	Brajrajnagar	132/33/11	POWER	40
20	Sonepur	132/33	POWER	7.5
21	Rajgangpur	132/33	POWER	40

OPTCL has also taken up the construction work of the Grid Sub-Stations at Barbil, Bonai, Kalunga, Gopinathpur, Kuanrmunda, Lapanga, Purushottampur, Chandpur, Banki including transmission

lines of Bidanasi – Cuttack, Paradeep-Jagatsingpur, Chandaka-Nimapara with its own funding.

OPTCL has already signed agreement with PGCIL and placed order for construction of Grid Sub-Stations at Dabugaon, Nuapada, Padmapur, Kuchinda & Boudh and 400KV transmission line from Meramundali to Duburi.

OPTCL has taken up the construction work of different Grid Sub-Stations at Kardagadia, Dhamara, Marshghai(Luna), Olaver along with associated line for which tendering work have been entrusted .

IPP Evacuation & PPP Project

Twenty-nine(29) Nos. of Independent Power Producer(IPPs) have signed MOUs with Govt. of Odisha to set up power plants with a total generating capacity of 40620MW, out of which Odisha State share is 7259MW. Besides, there will be share of 4,860 MW from NTPC-Gajamara, NTPC-Darlipalli, NTPC – TTPS expansion and Odisha UMPP projects. In order to carry out the detail evacuation / absorption of state share of power from the upcoming generating stations, OPTCL has been working out a strategic Evacuation Plan agreeable to associated generating stations.

OPTCL Board has decided to execute some of the Transmission projects through Public Private Partnership(PPP) mode.

Different activities of Telecom wing of OPTCL for the year 2012-13 are as follows:-

Provision of SCADA interface point at all 220KV Grid Sub-Stations of OPTCL:-

As per the amendment of OGC Regulations, 2006 dated 29.08.08, it has become mandatory to provide SCADA interface point at all 220 kV Grid S/s of OPTCL. The investment proposal has been approved by Hon'ble OERC on dated 02.11.2010 in case no.20/2010. Accordingly, the BoD of OPTCL has approved the scheme and the

work is presently under progress through M/s PGCIL and scheduled to be completed by the end of 2013.

Extension of ULDC SCADA system to all existing Grid Sub-Stations of OPTCL:-

As per the amendment of OGC Regulations, 2006, all Grid S/s of OPTCL are required to be integrated under ULDC expansion scheme with SCADA connectivity to SLDC. Accordingly, 30 Grid S/s have been identified for integration with OPTCL network. The scheme has been approved by BoD of OPTCL. The investment proposal has been approved by Hon'ble OERC on dated 16.07.2010 in case no. 124/2009. The work is presently under progress through M/s PGCIL and scheduled to be completed by the end of 2013.

Reframing of Microwave network in OPTCL under ULDC scheme:-

As per the decision of WPC Wing, Ministry of Communication, Govt. of India, Microwave links operating in frequency band (2.3GHz to 2.4GHz) are to be vacated for use by Broadband Operators. M/s PGCIL is taking up the job for switching over from Microwave to Optical fiber communication. The work is under progress by PGCIL.

Provision of PLCC & SCADA facility for 19 Nos. new Grid S/s under OPTCL:-

PLCC & SCADA equipments shall be provided at all 19 Nos. upcoming Grid S/s under OPTCL as Owner's supply item. BoD has approved an investment proposal of Rs.16.40 crore towards procurement of digital version PLCC terminals and Data transmission equipments. The work is under progress and the above shall be used for establishment of new communication and data links.

Different activities of IT wing of OPTCL:-

- GRIDCO and SLDC Data Centers are running successfully.
- OGS-WAN is accomplished for 125 locations. Rest of the locations which are technically infeasible shall be connected through VSAT by March-2013.

- Successfully implemented Energy track of eShakti ERP project for SLDC, GRIDCO and OPTCL. Invoicing work is expected to be rolled out by March-2013 for energy track for complete roll out. This meets OERC directions in this regard.
- HR-Core, Payroll & Employee Self Service rolled out for 600 employees. Rest of the employees shall be implemented in next phase.
- Implementation of Accounts Payable, Taxation , General ledger, fixed assets, Accounts Receivables & cash management modules of eShakti-Finance are being run parallelly until March 2013. Finance shall go-live for OPTCL w.e.f. 01.04.2013.
- E-Tendering for civil works already implemented & Electrical procurement works are being covered under e-Tendering during this month.

Reliability and Quality of power supply will be ensured with completion of the above said projects as per planning.

Public Private Partnership Projects:-

For evacuation of state share of power from the up coming IPPs, Six numbers of 400 KV Substation at Kuanarmunda, Joda, Dhamra, Paradeep, Khuntani and Nisha with interlinked lines at an estimated cost of Rs.1,297/- crores are planned to be taken up under PPP mode on Design- Build-Finance-Operate-Transfer (DBFOT) basis.

Different activities of Telecom wing of OPTCL for the year 2011-12 are as follows:-

As per the amendment of OGC Regulations, 2006 dated 29.08.08, it has become mandatory to provide SCADA interface point at all 220 KV Grid SUB-STATION of OPTCL. The investment proposal has been approved by OERC. Accordingly, the BOD of OPTCL has approved the scheme and work is presently under progress through PGCIL and scheduled to be completed by the end of 2012.

The extension of ULDC SCADA system to all Grid Sub-Stations of OPTCL:-

As per the amendment of OGC Regulations, 2006 all Grid SUB-STATION of OPTCL are required to be integrated under ULDC expansion scheme with SCADA connectivity to SLDC. Accordingly, 30

Grid SUB-STATION have been identified for integration with OPTCL network. The scheme has been approved by Board of Directors (BOD) of OPTCL. The investment proposal has been approved by OERC. The work is presently under progress through M/s PGCIL and scheduled to be completed by 2012.

GRIDCO

Power is one of the prime movers of economic development. The level of availability and accessibility of affordable and quality power is also one of the main determinants of the quality of life. Leading the country Odisha pioneered Power Sector Reform in the State during 1995. The Power Sector Reform also aims encouraging private players for investment in generation and distribution of power to increase un-interrupted clean power to the people.

GRIDCO Limited, the leading player assigned to act as State designated agency to procure power on behalf of State in case of IPPs, Private Developers and UMPPs. It is engaged in bulk purchase of power from generators through long term power purchase agreement and mandated to sale power in bulk to the DISCOMs.

The existing generation capacity which is available for Odisha is 4845 MW comprising State hydel 2085 MW, State thermal 1486 MW and Central allocation of 1184 MW.

GRIDCO has already executed power purchase agreement with 29 nos. of IPP, NTPC, OPGC for procuring additional 11,370 Mw power. It is expected that Odisha will turn into a surplus State by 2015-16.

GRIDCO has always endeavored to meet the energy demand of the State and has explored to tap all available sources including power banking, procurement through power exchanges in order to ensure un-interrupted power supply to the consumers of the State.

The quantum of power estimated & approved by OERC for meeting the power demand and the actual power procured by GRIDCO to meet the increasing demand of the State is as under:

Financial year	Requirement estimated by OERC (MU)	Actual Requirement (MU)	Average Rate per Unit
2007-08	17,539	20,934.39	1.20
2008-09	18,460	20,049.27	1.51
2009-10	19,719	20,956.17	1.97
2010-11	21,004	22,868.96	1.98
2011-12	23,489	22,828	2.28
2012-13	24,097		2.36

Considering the increasing trend in power requirement of the State, GRIDCO expects the demand for the financial year 2013-14 will be around 26,221 MU and the expenditure on this account will be approximately Rs.6,837 crore. GRIDCO proposes to source the power from the following generators as under:

State Hydro	5,843 MU
State thermal, CGPs/IPPs	11,932 MU
Renewable Sources	486 MU
Central generating stations	<u>7961 MU</u>
Total	26,222 MU

During F.Y 2003-04 through 2008-09, GRIDCO explored trading of power after meeting the State demand and had earned substantial revenue that helped to maintain retail tariff at the lowest in the country. In spite of non-availability of surplus power, through system management, GRIDCO have added Rs.93.38 crore, Rs.281.97 croe and Rs.177.76 croe revenue from UI activity during 2009-10 through 2011-12.

In order to soften tariff shock on ultimate consumers of the State, OERC while approved tariff left revenue gaps, to be bridged from trading/UI and subvention from Government. In absence of

trading/UI, GRIDCO resorted for borrowing Rs.4000 crore term loans with variable repayment periods to stretch impact on retail tariff.

During the current fiscal OERC approved purchase of 24,097 MU @2.36 per unit aggregating Annual Revenue Requirement to Rs.7,019 crore. However, the revenue is fixed at Rs.6,319 crore leaving a revenue gap of Rs.700 crore. Though like previous years the deficit continues, GRIDCO have taken all out measures including inter corporate borrowings and rising of funds through bond issue to meet the cash deficit for providing un-interrupted power to the State.

In adequate tariff coupled with increase in fuel price resulted loss to the organization. The financial results of previous years are as under:

(Rs. In crore)

Financial year	Total Income	Profit / (Loss) for the year	Accumulated Profit / (Loss)
2007-08	3,348.25	566.05	(199.40)
2008-09	2,825.95	98.14	(101.27)
2009-10	4,248.54	(146.52)	(247.79)
2010-11	4,264.02	(587.86)	(835.65)
2011-12	5,336.79	(936.81)	(1772.46)

GRIDCO is assigned to carry out and monitor Govt.'s most ambitious Rs.2,400 crore CAPEX program for development of infrastructure in distribution sector. It is expected the investment would result in reduction of T&D loss.

It is expected after generation of power from up-coming IPPS, Odisha will be a surplus State and GRIDCO will be able to generate substantial revenue from trading and UI activity like earlier years after meeting the State demand for power. The surplus revenue generated will be utilized for repayment of loans availed by GRIDCO to meet the cash deficits of earlier years.

CAPACITY ADDITION THROUGH 29 IPPS, UMPPS & NTPC

In order to make the State self-sufficient in Generation of electricity, State Govt. has signed 29 MoUs with IPPs for total capacity about 37440 MW and State share of 6141 MW .Two IPPs namely Sterlite & Arati have already started generation of 2450 MW of power and supplying state share of power to GRIDCO. GMR Kamalanga Energy Ltd has also test synchronized one unit of 350 MW in Jan,2013. Apart from these projects, three UMPPs would be set up in the State with 4000 MW capacity each. The State would get 1300 MW from the 1st UMPP at Bedabahal and 2000 MW each from two UMPP. NTPC is setting up a Power Plant at Darlipalli in Sundargarh district with 3200 MW.
