

ACTIVITIES REPORT OF ENERGY DEPARTMENT FOR THE YEAR 2017-18

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 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 provide 24x7 quality power supply to all. It is also contemplated to develop an integrated energy management system with robust generation, transmission and distribution network. 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)	-	1924 MW
(b)	Thermal Power Generation	-	2266 MW
(c)	Central allocation.	-	1392MW
(d)	New & Renewable Energy	-	<u>215 MW</u>
Total -			5,797 MW

At present the Department of Energy is functioning with 5 Heads of Department i.e.:-

- (1) E.IC (Elect)-cum-PCEI, Odisha, Bhubaneswar
- (2) C.E-cum-CEI (Central Zone), Odisha,
- (3) C.E-cum-CEI (South Zone), Odisha,
- (4) C.E-cum-CEI (North Eastern Zone), Odisha,
- (5) C.E-cum-CEI (Western Zone), Odisha,

The Department has got seven Public Sector Undertakings Viz. Odisha Hydro Power Corporation (OHPC), Odisha Power Generation Corporation (OPGC), Odisha Power Transmission Corporation Ltd (OPTCL), GRIDCO Ltd (GRIDCO), Odisha Thermal Power Corporation (OTPC), Green Energy Development Corporation (GEDCOL) and Odisha Coal and Power Ltd (OCPL)

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

REVENUE COLLECTION, INSPECTION & LICENSING ACTIVITIES

The EIC (Electricity)-cum-PCEI (O), Bhubaneswar has been delegated with the powers to look in to the matters regarding Collection of Revenue, Electrical Accident Enquiry, Issue of Electrical License, Offence relating to Electricity Theft etc.

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 equipment/standard and fees for issuing electrical permit and licenses to the Electrical wireman, Lineman, supervisor and contractor.

Highlight of the last eight years achievement on revenue receipt against the target fixed is given below:

During 2010-11 to 2017-18

Sl. No.	Year	Target fixed (Rs. In Cr.)	Achievement (Rs. In Cr.)	Remarks
1	2010-11	600.00	458.06	Revenue Receipt in respect of non-captive, captive ED and inspection fees. * - Arrear ED.
2	2011-12	550.00	551.72	
3	2012-13	700.00	591.16	
4	2013-14	710.00	670.11	
5	2014-15	800.00	850.00 & * 872.00	
6	2015-16	1200.00	1212.94	
7	2016-17	1500.00	1638.16	
8	2017-18	1900.00	1367.81 (upto December, 2017)	

The above figure shows a rising trend of revenue collection.

Target fixed for the current financial year is Rs. 1900.00 Cr.

During the Financial Year 2017-18, an amount of Rs. 1367.81 crore of revenue (ED) has been collected by 31.12.2017 against the annual target of Rs.1900.00 Crore. Steps are being taken to achieve the target fixed for this year.

Regular monitoring is being done for recovery of Government dues (Arrear ED) locked up in Court Cases. Initiation has been taken up and

is under process for out of court settlement of arrear ED with M/S RSP, Rourkela.

The Electricity (Duty) amendment Act 2016 has been passed in the assembly and published in Odisha Gazette on 05.11.2016 providing opportunity for aggrieved consumer to appeal before the next higher authority. The maximum ceiling in ED rates has been enhanced to Rs.2.00 per unit for own use & auxiliary consumption in CPP & IPP and upto 15% in other cases i.e. ad valorem basis. The lower limit capacity of the generators has been raised from 10KVA to 50KVA in respect of inspection & levy of Electricity Duty. A three tier redressal system has been introduced for better justice to the consumer in dispute resolution.

RURAL ELECTRIFICATION SCHEMES

- **Biju Gram Jyoti Yojana (BGJY):**

In order to ensure “Electricity to all” the State Government has launched a flagship scheme called Biju Gram Jyoti in 2007-08 for electrification of habitations having less than 100 populations and the BPL Household Electrification in those habitations which are not covered under RGGVY. Initially there was a target to cover 10,000 habitations during the 11th Five Year Plan under the scheme against which 17167 nos. of habitations have been electrified as on 30.11.2016. The State Government, till 30.11.2016 has provided Rs.820 crore to the Districts for implementation of the Scheme against which an expenditure of Rs.510.66 crore has been made for the purpose as on the date. For the Financial Year 2016-17 a plan provision of Rs.255.00 crore has been made under the scheme. During 2017-18, a plan provision of Rs.60.00 Crore has been made and Rs.40.00 Crore has been made in the Supplementary Budget under the Scheme.

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

This flagship programme of Government of India launched in April, 2005 aims at providing access to electricity to villages having population of 100 or more envisaging 90% capital subsidy and 10% as loan component for the State.

There was a target to electrify 14856 un-electrified/ de-electrified villages, 29351 partially electrified villages and 3257471 BPL

households in all 30 districts during the RGGVY-X & XI Plan Period. Against this 14402 nos. of Un-Electrified villages have been electrified and in 26353 Nos. of Partially-Electrified villages, electrification have been completed. Moreover, 2876149 nos. of BPL kits have also been installed and 2315605 nos. of BPL houses electrified.

In the RGGVY-XII Plan Period, Work is under progress to electrify 3144 un-electrified villages and 16533 un-electrified habitations for which Government of India have sanctioned Rs.3550.75 crore.

During the Financial Year 2016-17 plan provision of Rs.100.00 crore has been made in the State budget for this purpose. During the Financial Year 2017-18, a plan provision of Rs.125.00 Crore has been made in the State budget for this purpose.

BIJU SAHARANCHALA VIDYUTIKARAN YOJANA(BSVY)

For providing access to electricity to the people living in un-electrified 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 population of less than hundred along with BPL household electrification and system improvement are being taken up. Five (5) Municipal Corporations, 45 Municipalities and 61 NACs of the State have been covered under the Scheme.

For the Financial Year 2016-17 a provision of Rs.12.00 crore has been made under the scheme. During 2017-18, a plan provision of Rs.5.00 Crore has been made and Rs.5.00 Crore has been made in the Supplementary Budget under the Scheme.

CONSTRUCTION OF NEW 33/11 KV SUB-STATIONS UNDER ODSSP

For giving uninterrupted reliable and quality supply with proper voltage to consumers of the State even in remote areas, a project to construct 473 nos. of 33/11 KV Substations at a cost of Rs.3843.00 crore is being executed by OPTCL as Nodal Agency. After construction and charging of the Substations, the same will be handed over to respective DISCOMs for operation and future maintenance. This will help in reduction of T & D loss of DISCOMs so that their financial condition will improve and reduce their financial burden.

This scheme envisages investment of Rs.3843.00 crore to be executed over a period 4 years by OPTCL. A budget provision of Rs.179.00 crore during the financial year 2013-14, Rs.150.00 crore in the financial year 2014-15, Rs.890.00 crore in the Financial Year 2015-16 and Rs.900.00 Crore in the Financial Year 2016-17 were made to continue the project work. In the Financial Year 2017-18 a provision of Rs.481.00 crore has been made and Rs.300.00 Crore has been made in Supplementary Budget under the scheme. The funds are being released in favour of OPTCL, the Nodal Agency for implementation of the project. The work is in progress.

ENERGY CONSERVATION

Each unit of energy saved is energy generated. 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 Stakeholders. Odisha Energy Conservation 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.

- As part of Energy Conservation action plan, recommendations of the Investment Grade Energy Audit (IGEA) are being implemented in four Drinking Water Pumping Stations (DWPS) in phase-I and in nine major drinking water pumping stations in phase-II with the support of respective Public Health Divisions, under Housing and Urban Development Department, Government of Odisha. IGEAs of 137 nos. of DWPS are also being undertaken to widen the opportunity for energy savings in the next phase.
- Energy efficiency implementation in 4316 Lift Irrigation (LI) systems under the Pani Panchayats are being implemented through the Odisha Lift Irrigation Corporation in two phases. The project is estimated to contribute towards substantial reduction of grid demand as a demand side initiative besides benefiting the farmers of the state by reducing their operating energy expenses. A total of 2848 nos. of pumps have already been replaced out of 4316 nos. proposed.

- IGEA of 136 nos. of establishments which include Government buildings, District Collectorate Office, Medical Colleges and District Headquarter hospitals, Agricultural farms and Universities have been taken up since 2008. The recommendations of the IGEA study have been subsequently implemented in 18 important buildings to improve energy efficiency in the building sector of the State. Several workshops have been conducted to spread awareness. Around 2.4 M.W capacity avoidance has been achieved. Energy Audit was once again conducted in Raj Bhawan on their request and final report of audit has been submitted to Works Department for implementation. Works Department has been requested for preparation of estimate as per audit recommendation and speedy implementation.
- Proposal for carrying out IGEA of 149 nos. of Prisons and Correctional Institutions is being pursued and preliminary data collection of these buildings is being undertaken for improvement of energy efficiency under building category.
- (a) Implementation of UJALA (Unnat Jyoti by Affordable LEDs for All) previously known as DELP has been launched on 18.4.2016. Under this Programme upto 10 LED bulbs of 9 W is being provided to domestic consumers, upto 20 such bulbs to commercial consumers and required no. of bulbs to public institutions. About 1 crore bulbs has been initially proposed to be provided at a cost of Rs.85/- per bulb to about 60 lakh domestic consumers in Odisha. The price of the bulbs has been reduced to Rs.70/- with effect from 1.12.2016. The total number of LED bulbs sold since 18.4.2016 till 14.11.2017 is 1,08,56,796 nos.. This programme targets complete replacement of ordinary bulbs and CFLs with LED bulbs which are not only energy efficient but also long lasting. After replacement, it is expected to result in 185 MW capacity avoidance in the generation front, besides contributing towards climate change mitigation.
- Under UJALA scheme, 20 Watt LED tube light and 50 Watt Bureau of Energy Efficiency (BEE) 5 star labeled fans have been launched in the State on 19.9.2016. The sale through EESI's Channel Partners have commenced from 9.1.2017. The price of

each energy efficient fan is Rs.1200/- and the price of each LED tube light is Rs.220/-. The SDA and DISCOMs have extended all support to EESL for meeting the objective of the energy efficiency improvement scheme. Till 14.11.2017, 86,948 nos. of Tube light and 21,128 nos. of fans have been sold.

- Two villages of Odisha i.e. Satyabhamapur (Cuttack District) and Raghurajpur (Puri District) were covered under the LED Village Campaign in the first phase during 2010-14. The project have been implemented with the support of CESU where in 3 nos. of 10W LED bulbs have been given to each family and 20W LED street lights have been installed in these two villages. In the second phase of the project 4 Villages (Sarei, Barun in Keonjhar District, Sasad, Khandahata in Jajpur District) under NESCO and one village (Badribandh Hamlet of Bargaon village in Sundargarh District) under WESCO have been completed in 2016. 3 nos. of 12 Watt LED bulbs were distributed among consumer's alongwith streetlights of 20 Watt LED lamps to demonstrate and promote the use of LEDs among general public in rural areas.
- **Compliance Monitoring of Perform, Achieve and Trade (PAT) Scheme:** PAT Scheme is a "Cap and Trade" incentive based mechanism launched under the programme "National Action Plan for Climate Change". The Scheme aims at improving energy performance of energy intensive industries in sector such as Iron and Steel, Aluminum, Cement, Pulp and Paper, Thermal Power Plants, Textile etc. Energy intensive industries who are notified as Designated Consumers (DC) are given Specific Energy Consumption reduction targets and have three years for compliance. DCs exceeding the target will be awarded Energy Savings Certificates (EScert) and DCs unable to meet the target have to buy the shortfall amount from the EScert trading exchange. O/o EIC(E)-cum-PCEI as the State Designated Agency acts as an interface between BEE and Designated Consumers for PAT scheme/ provisions of EC Act 2001 by seeking Energy Returns, Energy audit reports and compliance checks etc. 27 energy intensive industries were notified as Designated Consumers in Odisha in PAT Cycle I (2012-2015). PAT Cycle II has commenced from 2016 and a total of 34 DCs were

notified in the state of Odisha. PAT Cycle-III has been notified in 2017 and an additional 17 DCs have been declared.

- To promote energy conservation in the dairy sector, the energy efficiency implementation in OMFED Bhubaneswar Plant has been taken up as a unique project through investment from 'Revolving Investment Fund' to facilitate improvement of energy performance as per the recommendations of the IGEA. Out of the approved project cost of Rs.3.4 Crore, Rs.138.27 lakh has already been placed before OMFED to improve their energy performance. Implementation is in progress.
- Implementation of energy efficient street lighting projects in 108 (Urban Local Bodies) ULBs of the State by undertaking retrofitting of existing inefficient streetlights with LED with associated control systems to demonstrate and showcase benefits of energy efficiency is being undertaken. EESL, Government of India has evolved a business model to facilitate investment in the ULBs/ DISCOMs and the consequent reduction in energy and maintenance cost of ULBs/ DISCOMs shall be used to repay the investment over a period of time. This Street Light National Programme (SLNP) will be taken up by EESL for the ULBs and ESCO Mode. EESL has recently signed Agreement with H & U.D to implement the SLNP in 108 ULBs. Presently, SDA is considering to undertake retrofitting of LED street lights of some of the hydro power stations and the colonies and OMFED premises. Estimate has been received.
- Odisha Energy Conservation Building Code (OECBC) was notified by the Government of Odisha in 2011 to implement the provisions of the Energy Conservation Act, 2001 in the building sector of the State. The code envisages potential energy savings from new commercial buildings with contract demand of 100 KW or more or conditioned area of 500 sq meters and above. Formulation of a state level road map and various capacity building programme and stakeholder meets have been taken up to facilitate implementation of OECBC. In 2013, an Apex Committee and an Expert Group have been constituted for the smooth enforcement of the code in the State.

- Block, District and State level quiz competitions have been organized with the support of Centre for Environmental Studies (CES), Forest and Environment Department, Government of Odisha for creating awareness among school students and general public. Energy Conservation awareness programmes have been organized in 120 schools by inaugurating Energy Clubs. As part of the National awareness campaign for Energy Conservation, State Level function is being organized each year on the occasion of Energy Conservation Day on 14th December at Bhubaneswar.
- The Odisha State Energy Conservation Award (OSECA) has been instituted in 2015 to promote state level recognition of entities every year across six sectors that have made systematic and continued attempts for efficient utilization and conservation of energy in the State. The sectors are MSME, IT Industries, Hospitals, Educational Institutions, Commercial Buildings and Hotels.
- Theory cum practice workshops, hands on training programs for the Boiler Operators have been facilitated through National Productivity Council to improve the skills of the State's boiler workforce.
- An energy efficiency and energy conservation promotion stall has been regularly organized during Baliyatra. Daily quiz, painting competition, slogan competition etc. on energy conservation was conducted in the stall. Short awareness video, demonstration of energy audit instruments was also being conducted in the stall to encourage visitors, particularly school children and spread awareness.
- Awareness programs and dissemination of energy conservation messages in different print and electronic media are being taken up to spread the message of energy conservation among all the stakeholders.
- In Financial Year 2016-17 a budget provision of Rs.5.00 crore has been made to carry out the energy conservation activities and awareness campaign in the State.
- In Financial Year 2017-18 a budget provision of Rs.2.96 crore has been made to carry out the energy conservation activities and awareness campaign in the State

SYSTEM STRENGTHENING FOR ELEPHANT CORRIDOR

In order to strengthen the Electrical Infrastructure along the Elephant Corridor and thereby to provide safety to the elephants and other wild animals, Government of Odisha has taken up a special scheme called System Strengthening for Elephant Corridor. In the Phase-I, the work in 9 corridors has been completed out of the 11 corridors taken up. In the Phase-II, work in 9 corridors has been completed out of the 12 and works in rest of the corridors are in full swing. In the Phase-II, work in all the 14 corridors is in progress.

A plan provision of Rs.27.17 Crore was provided under the scheme during the Financial Year 2015-16. Keeping in view its importance Rs.20.00 Crore has been made provision for the Financial Year 2016-17. During the Financial Year 2017-18, a plan provision of Rs.20.00 Crore has been made under the Scheme.

SHIFTING OF TRANSFORMERS LOCATED IN GOVERNMENT SCHOOLS & ANGANWADI CENTRES

Shifting of electrical infrastructure located in Government Schools and Anganwadi Centres in the State was felt necessary on safety point of view. In the Financial Year 2016-17, Rs.50.00 lakh have been provided like the same in the previous Financial Year. During the Financial Year 2017-18, a plan provision of Rs.10.03 Crore has been made under the Scheme.

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 Financial Year 2011-12, Rs.43.00 Crore was provided in the State Budget. During Financial Year 2012-13, 2013-14 & 2014-15 funds to the tune of Rs.50.00 Crore each were provided to OPTCL for this purpose. In the Financial Year 2015-16 a plan provision of Rs.57.00 Crore was kept. In the Financial Year 2016-17 a provision of Rs.50.00 Crore has been kept under the scheme. During the Financial Year 2017-18, a plan provision of Rs.50.00 Crore has been made under the Scheme.

EQUITY INFUSION TO OHPC:

The State Government has decided to provide financial assistance to OHPC through equity infusion. The scheme is intended for development of Solar Power Project at Manamunda in Boudh District through Green Energy Development Corporation of Odisha Ltd. (GEDCOL) which is a 100% of subsidiary company of OHPC.

It aims at promoting investment in renewable energy projects and various green energy sources, to develop and execute special renewable energy project on commercial and/ or demonstration basis and to plan, organize, implement, maintain and operate renewable energy projects to generate and sell electric power anywhere in India.

Ministry of New & Renewable Energy, Government of India through SECI (Solar Energy Corporation of India) has issued allocation proposal for development of 750 MW of Solar PV Power (each 375 MW in DCR & Non-DCR category) with VGF (Viability Gap Funding) support. SECI has allotted 20 MW Solar PV Project at Manamunda through VGF support of Rs.48 Crore (@ of 30% of project cost) with an agreement for procurement of generated power by SECI @ Rs.5.45/ unit. The state Government has decided to contribute 50% of the total equity capital required for the above project of GEDCOL.

Thus, a plan provision of Rs.25.00 Crore in the Financial Year 2015-16 was made under the scheme and a plan provision of Rs.30.00 Crore has been made by the State Government in the Financial Year 2016-17 to extend equity support to GEDCOL through OHPC. During the Financial Year 2017-18, a plan provision of Rs.19.00 Crore has been made under the Scheme

INFRASTRUCTURE ASSISTANCE TO GEDCOL

In order to promote Green Energy in the State, Government of Odisha has established Green Energy Development Corporation Ltd. (GEDCOL), as a 100% subsidiary of OHPC, which has started its operation from the Financial Year 2013-14. For developing different projects in its own domain, financial assistance is being provided by the State Government. A budget provision of Rs.10.00 Crore each was made under this scheme in the Financial Year 2014-15 & 2015-16. In the Financial Year 2016-17 plan provision of another Rs.10.00 Crore has been made under the project. GEDCOL, through an allotment of SECI,

has developed a 20 MW solar power generating system at Manmunda in Boudh District and is developing 4 MW Cuttack-Bhubaneswar Roof-Top Solar Power Project, for which work order has already been placed. Further, it is also replicating the Roof Top Solar Projects in 15 other towns in the state viz. Balasore, Bhadrak, Baripada, Burla, Hirkud, Sambalpur, Rourkela, Puri, Khurda, Berhampur, Chhatrapur, Jeypore, Koraput, Sunabeda and Nabarangpur. During the Financial Year 2017-18, a plan provision of Rs.10.00 Crore has been made under the Scheme

STANDARD TESTING LABORATORY

Standard Testing Laboratory functions as an electrical laboratory at Bhubaneswar for testing the standard & calibration of different electrical equipment, particularly energy meters. In case of challenge between supplier and consumers, the energy meters are tested in the Standard Testing Laboratory by regulation as a statutory authority and as a practice of standard acceptance to the public.

New STL buildings have been constructed in the same compound with more space than earlier. This building will help us to accommodate more & more testing facilities required by the different electrical equipment and installation in the power sector. Neighbouring states like Jharkhand, Chhatisgarh are depending on our STL. Since technology is fast changing, more and more advanced energy meters and other equipment are coming into the power sectors. The STL requires continuous up-gradation of its strength and support together with skill development of technicians as well as engineers which have become the need of the hour to cope up with the advancement.

In the Financial Year 2016-17 a plan provision of Rs.50.99 lakh has been kept under the scheme. During the Financial Year 2017-18, a plan provision of Rs.1.00 Crore has been made under the Scheme.

ODISHA TRANSMISSION SYSTEM IMPROVEMENT PROJECT (JICA)

This is a JICA assisted project to be implemented in the State for the project period from 2016-20 with a total project cost of Rs.1289.08 Crore including State counterpart funding of Rs.142.32 Crore. The project will be implemented through OPTCL, Bhubaneswar a wholly owned Government company with an objective address the issue of increased load demand of the State through creation of adequate

transmission infrastructure which will enhance the capacity and reduce the transmission loss. The project aims at augmentation of transmission network to be taken up in 400 KV (2 project in Ganjam & Bhadrak), 200 KV (8 project in Dhenkanal, Gajapati, Mayurbhanj, Angul, Nayagarh, Deogarh & Malkangiri) and 132 KV (9 project in Phulbani, Cuttack, Balasore, Dhenkanal, Jharsuguda, Sundargarh, Kendrapara, Kalahandi & Bargarh) levels. A budget provision of Rs.100.00 crore has been made for implementation of the project for the Financial Year 2016-17 under the scheme. During the Financial Year 2017-18, a plan provision of Rs.20.00 Crore has been made under the Scheme

DEENDAYAL UPADHYAYA GRAM JYOTI YOJANA(DDUGJY)

Deendayal Upadhyaya Gram Jyoti Yojana is a Government of India scheme which aims at strengthening the Sub-Transmission and Distribution Infrastructure in the rural areas with separation of agriculture and non-agricultural feeders to regulate power supply to the agricultural consumers as and when needed for effective Demand Side Management (DSM) and proper energy accounting by means of metering arrangement at Distribution Transformers, Feeders and Consumer end. The scheme subsumes the RGGVY as a rural electrification component and the Outlay under the RGGVY is carried forward to the DDUGJY with its (DDUGJY) original Outlay made by Govt. of India. Under this Scheme, the detail survey of the un-electrified villages has been completed and LOA issued. In the Financial Year 2015-16 a provision of Rs. 20 Crore was kept under this scheme. In the Financial Year 2016-17 a plan provision of Rs.100.00 Crore has been made as State share. During the Financial Year 2017-18, a plan provision of Rs.200.00 Crore has been made under the Scheme.

INTEGRATED POWER DEVELOPMENT SCHEME (IPDS)

Integrated Power Development Scheme is a Ministry of Power, Government of India scheme introduced in 2015-16 in order to create a strong infrastructure for strengthening the Sub-Transmission and Distribution Network with IT enabled Smart Metering of Distribution Transformers, Feeders and Consumers vis-a-vis reduction of losses in the urban and semi-urban areas by means of supplementing financial assistance to the DISCOMs. The Rooftop Solar Project, Installation of solar panels as well as smart and net metering are mandatory

components under the scheme. The scheme subsumed the RAPDRP scheme and keeps it as a separate scheme under it. For the Financial Year 2015-16 a provision of Rs.10 Crore was kept under this scheme. In the Financial Year 2016-17 a plan provision of Rs.50.00 Crore has been made as State share. During the Financial Year 2017-18, a plan provision of Rs.100.00 Crore has been made under the Scheme

STATE CAPITAL REGION IMPROVEMENT OF POWER SYSTEM (SCRIPS)

The Comprehensive Development Plan (CDP) for Bhubaneswar Cuttack Urban Complex has made to think of the infrastructural expansion and renovation of energy sector looking at tremendous infrastructural growth in all fronts across Bhubaneswar city and nearby area during the recent days. Taking these into consideration, Government of Odisha has adopted the concept of **State Capital Region Improvement of Power System (SCRIPS)** which is visualized with an objective of 24X7 uninterrupted stable power supply to all classes of consumers including public services. Underground cabling work alongside 4 major roads i.e. Cuttack Road, Janpath, Sachivalay Marg & Bidyut Marg has been taken up where LOAs have been issued in Nov, 2016. 132 KVA UG cabling line from Chandaka –B GIS Grid to Mancheswar-B GIS Grid is to be taken up with issue of LOA in Nov, 2016. LOAs have been issued on August, 2016 for UG cabling work at Cuttack. In the Financial Year 2015-16 a provision of Rs.70.00 crore was made under the scheme. In the Financial Year 2016-17 a plan provision of Rs.180.00 crore has been made under the scheme.. During the Financial Year 2017-18, a plan provision of Rs.150.00 Crore has been made under the Scheme and Rs.80.00 Crore has been made in Supplementary Budget under the Scheme. The work is under progress.

Smart Grid

The Smart Grid is a progress from the present state of grid towards adding a set of smarter system or applications in a phased manner according to the priorities of each constituent utility. Indian Smart Grid Task Force (ISGTF), with close association with Indian Smart Grid Forum, develops the norms from Smart Grid adaption which has been approved by MOP as the Smart Grid vision and road map for India. The Government of Odisha has taken initiatives for adaption of

Smart Grid Technology in power sector (Transmission and Distribution Sector) having the component name v.i.z. GIS, SCADA, OPGW and AMI for un-interrupted and reliable power supply to the consumers of the State. In the Financial Year 2015-16 a budget provision of Rs.30.00 Crore was kept under the scheme. In the Financial Year 2016-17 a plan provision of Rs.80.00 Crore has been made under the scheme. During the Financial Year 2017-18, a plan provision of Rs.20.00 Crore has been made and Rs.50.00 Crore has been made in Supplementary Budget under the Scheme.

RADIAL TO RING CONVERSION PROJECT

The Radial to Ring Conversion Project is conceptualized in transmission and distribution sector to meet the current as well as anticipated demand of power in the State in coming years. In this system, one Substation can be fed from two sources of power which is capable of supplying power at the time of need from other sources. Thus the system will ensure uninterrupted power supply. Keeping in view the supply of quality and un-interrupted power to the consumers, Energy Department has launched a project called 'Radial to Ring Conversion Project'. For this purpose a plan provision of Rs.34.99 Crore was made in the Financial Year 2015-16 under the scheme. In the Financial Year 2016-17 a plan provision of Rs.40.00 Crore has been made under the scheme. During the Financial Year 2017-18, a plan provision of Rs.40.00 Crore has been made under the Scheme. The project work is continuing.

DISASTER RESPONSE CENTRE

Since there is no Disaster Response Centre or Wing in power sector either in distribution or in transmission sector to combat the disaster and to restore the power supply with minimum time span, it became a herculean task to meet the requirement at the time of natural calamities. The last experience in Phailin and Flood has made to think for a Response Centre which will be built up with minimum man power and technical capability to meet the challenge. Energy Department has launched this project named as 'Disaster Response Centre' for this purpose. A budget provision of Rs.10.00 Crore has been made in the Financial Year 2016-17 under the scheme like that in the previous year. During the Financial Year 2017-18, a plan provision of Rs.10.00 Crore

has been made and Rs.20.00 Crore has been made in Supplementary Budget under the Scheme.

DISASTER RESILIENT POWER SYSTEM

The massive devastation of transmission and distribution infrastructure of the energy sector in last Phailin and Flood played the major role to think for a 'Disaster Resilient Power System' in the State. So the scheme conceptualized for creation of energy infrastructure having capability to combat the natural calamities like Cyclone and Flood. A budget provision of Rs.20.01 Crore was made under the scheme in the Financial Year 2015-16. In the Financial Year 2016-17 a plan provision of Rs.30.00 crore has been made. During the Financial Year 2017-18, a plan provision of Rs.40.00 Crore has been made under the Scheme.

EQUITY INFUSION TO OPGC

The State Government has decided to provide financial assistance through equity infusion to OPGC. For this purpose plan provision of Rs.247.35 Crore has been kept under the scheme in the plan budget for Financial Year 2016-17. During the Financial Year 2017-18, a plan provision of Rs.120.00 Crore has been made and Rs.187.98 Crore has been made in Supplementary Budget under the Scheme.

POWER SUPPLY TO NEW BANK BRANCHES OF UNBANKED G.P.s

In order to provide Power Supply to the New Bank Branches of unbanked GPs the State Government has initiated this scheme. In the Financial Year 2016-17 a plan provision of Rs.2.50 crore has been made under the scheme. During the Financial Year 2017-18, a plan provision of Rs.3.89 lakh has been made under the Scheme.

NEW SCHEMES/PROJECTS & INITIATIVES

IEC ACTIVITIES

In order to improve information, education and communication systems a plan provision of Rs.0.30 Crore has been kept under the scheme for the Financial Year 2017-18 and Rs.0.05 Crore has been made in Supplementary Budget under the Scheme.

ODISHA RENEWABLE ENERGY DEVELOPMENT FUND (OREDF)

State Government in Department of Energy have constituted a new fund named as Odisha Renewable Energy Development Fund (OREDF) in the year 2016 for the purpose of promotion and accelerated

development of renewable energy. GEDCOL is the implementing agency for OREDF. For this purpose funds to the tune of Rs.40.00 crore has been provided under the scheme for the Financial Year 2017-18.

ACTIVITIES OF STATE PUBLIC SECTOR UNDERTAKINGS (PSUs):

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 & Government of Odisha were transferred to OHPC on 01.04.1996.

At present, OHPC has six Hydro Electric Projects in operation alongwith one Joint Hydro Electric Project with APGENCO having total installed capacity of 2063.50 MW.

The detailed unit wise installed capacity and design energy are given below.

Sl. No.	Name of the Units	Installed Capacity (MW)	Design Energy (MU)		Design Energy for Sale (MU)
1	Hirakud	275.50	684		677.16
2	Chiplima	72	490		485.10
3	Balimela	510	1183		1171.17
4	Rengali	250	525		519.75
5	Upper Kolab	320	832		823.68
6	Upper Indravati	600	1962		1942.38
	Sub-Total	2027.50	5676		5619.24
7	Machkund (Odisha share 30%)	36.00	50% Odisha Share as per 1978 Agreement	262.50	259.87
	TOTAL	2063.50	5938.50		5878.87

Power Generation

OHPC generates hydro power and supplies the same to the State of Odisha at cheapest rate. The average tariff approved by OERC for the financial year 2017-18 is 85.13 Paise/ Kwh. The Power generation from different power stations for the Year 2017-18 up to 31st December'17 is 4683.75 MU (excluding Machhakund) and 4865.47 MU (including

Machhakund). It is programmed to generate 5526 MU of electricity in the current financial year.

Power Generation from different power stations of OHPC for 2017-18 up to the end of December'17 in MU:

Year 2017-18	Hirakud	Chiplima	Balimela	Rengali	Upper Kolab	Upper Indravati	Sub Total	Machhakund	Total
Upto 31st December'17	557.43	183.23	1325.00	668.44	526.57	1423.08	4683.75	181.82	4865.47

RESERVOIR LEVEL:

The water level in all the reservoirs is in comfortable position to generate adequate electricity to meet State demand in the coming months. As on 27.1.2018, the reservoir level in different reservoirs in comparison to the previous years is given below:

Sl. No	Name of the Power Stations	FRL / MDDL	RL as on Dated 27.1.17	RL as on Dated 27.1.18	% filled up
1	Hirakud	630 ft. / 590 ft.	625.97 ft.	624.41 ft.	78.01 %
2	Balimela	1516 ft. / 1440 ft.	1501.20 ft.	1470.10 ft.	28.48 %
3	Rengali	123.5 m / 109.72 m	122.19 m	122.32 m	88.74 %
4	Upper Kolab	858 m / 844 m	855.93 m	853.19 m	54.86 %
5	Upper Indravati	642 m / 625 m	638.41 m	635.37 m	54.01 %
6	Machhakund (JT)	2750 ft. / 2685 ft.	2735.85 ft	2746.10 ft	-

The important activities undertaken by OHPC for 2017-18 are as follows:

- DPR for a 600 MW capacity Pumped Storage Power Plant of Upper Indravati, Mukhiguda is under preparation. The conceptual layout plan for the proposed plant has been approved by the Department of Water Resources, Government of Odisha. Topological survey has been completed and as per

advice of CWC and GSI Geo-technical investigation are under progress.

- ii) Contract Agreement for R&M work of Unit#3 of CHEP, Chiplima signed on dtd.15.10.2015 with M/s Voith Hydro Private Limited, Noida at a project cost of Rs.65.67 crore. R&M work of the unit is in progress. The refurbishment work of Intake Gate and Draft tube gate along with associated concrete structures has been completed. Dismantling of old Generator, Turbine and its auxiliaries have also been completed. The erection of Turbine, Generator and its auxiliaries are under progress.
- iii) Contract Agreement for R&M work of Unit #5 & 6 of HHEP, Burla signed on dtd.16.10.2015 with M/s Voith Hydro Private Limited, Noida at a project cost of Rs.158.77 crore. Refurbishment works of Intake gate and draft tube gate is being carried out at present. Dismantling of Generator, turbine and auxiliaries of Unit #6 completed and dismantling Generator of Unit #5 completed. At present stator erection work of Unit#6 started.
- iv) Contract Agreement for R&M of Unit #1 to 6 (six units) of BHEP, Balimela signed on 21.09.2016 with M/s BHEL at a project cost of Rs.382.91 crore. As per the schedule design and drawing approval is under progress.
- v) Capital maintenance of Unit #2 HHEP, Burla which has been undertaken with a capital out lay of Rs.17.84 crore. It was successfully synchronized to the grid after completion of Capital maintenance work on 1.7.2017.
- vi) Capital maintenance works of Unit #4 of Upper Kolab Power House shall be taken up in the current financial year with a capital outlay of Rs.4.30 crore.
- vii) OHPC have signed MOU with Department of Energy, Government of Odisha on 30.05.2017 for Financial Year 2017-18.
- viii) Annual/ Quarterly/ Monthly maintenance of generating units in different power stations are being carried out regularly as per for the maintenance schedule. Annual maintenance of 22

nos. of generating units has been programmed in the current financial year, of which annual maintenance in five nos. of generating units has been completed.

The important activities undertaken by Green Energy Development Corporation Ltd (GEDCOL) for 2017-18 are as follows:

A. Small Hydro Electric Projects:

- i. PFRs of 13 (thirteen) nos. SHEPs (approx.168 MW) have been prepared. Out of these 13 (thirteen) SHEPs, request has been made to State Technical Committee (STC) for allotment of 4 (four) nos. of SHEPs in favour of GEDCOL i.e. Kharag-I, II, IIA & III (approx. 96 MW) in Kandhmal District for development.
- ii. Preparation of PFR for Garjan Khol (approx.10 MW) in Anugul District and Cheligarh #3 & 4 in Gajapati District are under progress.
- iii. DPRs have been prepared for 2 (two) nos. SHEPs i.e. Kanpur (4.2 MW) in Keonjhar & Jambhira (3 MW) in Mayurbhanj District. Tender document is under preparation for implementation of these projects by M/s. WAPCOS.
- iv. GEDCOL & SAIL have agreed to develop Mandira SHEP (10 MW) in JV mode. Preparation of DPR for the same project is completed by M/s. MECON. SAIL has given in principle approval for formation of a JV company for implementation of the project. JV term agreement sheet has been approved by Government of Odisha 19.12.2017. The JV agreement will be signed in the month of February' 2018.

B. Solar Power Projects:

- i. GEDCOL has successfully completed commissioning of 20 MW Solar Power Plant at Manamunda in Boudh District under JNNSM Phase-II, Batch-I in the month of June-2016 through M/s BHEL under an EPC contract.
- ii. Project Implementation Agreement (PIA) has been signed in July-2016 with M/s. AZURE POWER for implementation of minimum 4 MW Rooftop Solar Project in PPP mode utilizing Rooftops of Government buildings in Cuttack and Bhubaneswar. 186 nos. of buildings selected in Bhubaneswar

(126) & Cuttack (60) for installation of Roof Top Solar Systems. Already 1 MW Roof Top Systems has been installed and the remaining is scheduled to be completed by March, 2018.

- iii. GEDCOL is taking up replication of BBSR-CTC Solar Roof Top Project in 15 other cities of the State i.e. Sambalpur, Burla, Hirakud, Rourkela, Balasore, Bhadrak, Baripada, Berhampur, Chhatrapur, Sunabeda, Koraput, Jeypore, Nawarangpur, Puri and Khordha. International Finance Corporation (IFC) has been engaged as Transaction Advisor for the Project. Survey has been completed and IFC has submitted the due diligence report for implementation of the same.
- iv. Identification of land for the allotted 1000 MW capacity Ultra Mega Solar Power Project (UMSPP) under MNRE, Government of India scheme is under progress. International Finance Corporation (IFC) has been engaged as Transaction Advisor for the project in March, 2017. IFC has submitted DPR for 275 MW Solar Park to be established in the district of Boudh.

ODISHA POWER GENERATION CORPORATION (OPGC)

OPGC a Gold category state PSU has been incorporated in the year 1984 under the Companies Act 1956 and engaged to establish, operate and maintain electric power generating station, tie lines, sub-stations and transmission lines & connection therewith.

The authorized Share Capital is Rs.3000 crore and the paid up Share Capital is Rs.1210.50 Crore. The share holding pattern is as below:

Share holders	Percentage	No. of Shares	Amount (Rs.)
Government of Odisha	51	61,73,537	617,35,37,000
AES	49	59,31,437	593,14,37,000
Total	100	1,21,04,974	12,10,49,74,000

FUNCTIONS & ACTIVITIES DURING FINANCIAL YEAR 2016-17

1. Unit 1 & 2 of 420 MW (2 X 210 MW)

The present Installed Capacity of OPGCL is:

SI. No	Particulars	Capacity
1.	Thermal	420 MW

OPGC has set up 2 Thermal Power Plants with a capacity of 210 MW each in the IB Thermal Power Station, Banharpalli in the District Jharsuguda (Odisha) at a cost of Rs.1135 Crore and commercially generated in December, 1994 and June, 1996 respectively. The entire generation from the existing two units of 210 MW each of IB Thermal Power Station is committed to GRIDCO Ltd on the basis of a long term PPA. Details of generation, turnover, net profit and dividend declared etc. are given below for last seven years.

Year	Units of Power generated (in MU)	PLF%	Turnover Crore	Net Profit after Tax in Crore	Dividend paid to Government of Odisha in Crore
2010-11	3184.70	86.56	504.14	115.04	nil
2011-12	2950.15	79.97	572.78	137.08	nil
2012-13	3181.59	86.47	636.03	167.43	63.76
2013-14	2855.902	77.62	622.64	127.57	16.25
2014-15	2798.92	76.07	630.00	150.57	18.75
2015-16	3117.316	84.50	705.95	114.83	15.00
2016-17	3234.88	87.92	758.09	67.92	8.66

2. Unit-3 & 4 Expansion Project of 1320 MW (2 X 660 MW)

OPGC is pursuing expansion project comprising of (2x660 MW) Thermal Power Plants in the same location i.e. IB Thermal Power Station (ITPS) in the District of Jharsuguda at an estimated cost of Rs.10,165/- Crore. The detailed position of expansion project is noted below:

Expansion Project Unit 3 & 4 and Coal Supply

i. Power Plant construction update:

NTP was issued in March, 2014. Construction of Power Plant under OPGC's expansion project of 2 X 660 MW is in progress, through EPC contractors BHEL and BGR Energy. About 90.3% of the work scope of BGRE and 93.8% of the work scope of BHEL has been completed as on date (overall 90.82%). The commissioning of the 1st Unit is expected to be delayed by about 8 months from original schedule on account of delay by the contractor. Accordingly, commissioning is now expected to be achieved in 3rd/4th quarter of calendar year 2018 as against original schedule of 4th quarter of calendar year 2017.

ii. Railway line construction under:

NTP was issued in October, 2015 Larsen & Toubro is the EPC contractor for construction of the dedicated railway line (MGR). The project involves construction of 47 KM of railway line with two major bridges over Indian Railways and National Highway and number of minor road over and under bridges. Construction is in progress on multiple work fronts with overall 61.4% work completion on entire line. Major delays have been on account of hand over of land on time for construction. As on date, almost all the land required for the project has been handed over for construction, barring small patches of left out land, which is expected to be processed by early 2018. Other infringements like houses, civil structures, burials, EHT transmission lines etc on the alignment, including obstruction of work by locals are being progressively addressed. The initial 10 KM of the railway line required for transporting linkage coal for power plant commissioning and initial years operation, is in advanced stage of construction and will be ready as per schedule.

iii. Ash Pond construction update:

Land measuring 357 acres has been handed over for construction in April, 2017 after initial delays in taking over physical possession. Phased ash pond construction will be completed to meet initial requirement for ash disposal.

iv. Power evacuation:

PGCIL transmission line required for connecting to the CTU network has been completed. OPTCL is making progress on the transmission/ evacuation facility for the State Share of power. Availability of transmission facility of OPTCL for back charging during commissioning has been delayed. However, OPGC has drawing commissioning power from January, 2018 through the completed PGCIL line and working with OPTCL for early completion of their line.

v. Project funding (excludes coal mine):

The estimated project cost is Rs.10,165/- Crore. As on 31st December, 2017, about Rs.6,879 Crore has been spent on the project of

which about Rs.5,163 Crore has been met through debt drawn down from PFC and REC and Rs.1,761 Crore met from equity.

vi. Coal Supply:

Long term coal requirement for the power plant is proposed to be supplied from captive coal mines. Manoharpur and Dip Side Manoharpur, allocated to OCPL. Due to the delay in receiving various clearances from the Central and State Governments and also de-allocation of coal blocks, development and operation of the coal blocks is delayed by 2 years. It is now estimated to commence coal production in 4th quarter of 2019 and reach full capacity production of 8 MMT, in 2021-22. In order to meet the coal requirement for commissioning of the power plant and also initial years of commercial operation, Bridge Linkage has been allotted to OPGC by Ministry of Coal (MoC), as per the latest Bridge Linkage Policy of MoC. However, the quantity and duration of allocation is inadequate to meet the coal requirement for power plant operation, which is being pursued with MoC for appropriate amendment of allocation conditions. Further, OPGC is also pursuing with MoC and MCL for supply of the coal from Lakhanpur Mines of MCL so that coal can be transported through its dedicated railway line.

IMPORTANT ACTIVITIES OF OPTCL DURING THE YEAR 2017-18

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

The infrastructure of OPTCL network:

At present there are 136 nos. of Grid Sub-Stations including Switching Station with transformation capacity of 17,100MVA and 13,360 Ckt. Kms of Transmission lines of 400 KV, 220 KV and 132 KV rating are in use in OPTCL network. The present peak demand of the State is around 4300 MW, which is handled by the existing network.

(A) Important Operation & Maintenance activities (2017-18-From 04/2017 to 01/2018):

(a) Completed Works:

- i. 409 MVA Transformation capacities added in 10 nos. of Grid Sub-Stations.
- ii. Old conductors are replaced in 132 kV Burla PH-Sambalpur, 132 kV Jajpur Road – Bhadrak, 132 kV Khurda – Puri, 132 KV Budhipadar – Rajgangpur Ckt-II and 220 KV Joda – TTPS-I Line.
- iii. Capacitor Bank 10 MVAR at Kendrapara added.
- iv. Pollution Mapping done as per guidelines of ERPC at 102 locations.
- v. Renovation of 132/ 33 KV Ganjam Grid Substation.
- vi. 132 kV feeder bays at Balasore, Saintala added.

(b) On-going Works :

- i. Augmentation of 340mVA Transformation capacity addition in 12 nos. of Grid S/s.
- ii. Conversion of S/C (Single Circuit) to D/C (Double Circuit) of 132kV Jayanagar – Sunabeda, 132kV Jayanagar – Tentulikhunti, 132 KV Paradeep-Jagatsinghpur line, New Bolangir-Patnagarh line, New Bolangir-Sonepur line, Akhusingh-Paralakhemundi line.
- iii. Up gradation of 132 KV Joda-Barbil line and Mendhasal-Khurda line.
- iv. Addition of transformer bays at Budhipadar, New Bolangir, Padmapur, Rairakhol, Sambalpur, Basta, Phulnakhara, Therubali, Rayagada, Purushottampur, Narendrapur, Jayanagar, Balasore, Mendhasal and Chandpur.
- v. Replacement of old conductor with new in Berhampur - Digapahandi, Kendrapara – Paradeep - I & II, TTPS - Duburi-II, Jajpur Road – Bhadrak 132 KV Burla PH – Budhipadar, 132 KV Chainpal – Choudwar Ckt-I, 132 KV Digapahandi – Mohana and Meramundali - Bhanjanagar-I.
- vi. A protection up-gradation and Substation Automation System (SAS) is in progress for 132/33 KV Grid Substation Jajpur Road and Kendrapara. The Substation will be equipped with IEC 61850 complied IED and distributed architecture with Bay Control Units.

- vii. Substation Automation System in 13 nos. of substations having IEC 61850 complied protection relays adopting distributed architecture with retrofitting Bay Control Units.
- viii. Installation of Capacitor Banks at Sonapur.
- ix. Replacement of old & obsolete breakers, CT, PT, LA, isolators etc. and relays. Renovation of Earthing System at selected Grid Sub-Stations.

(B) Important Construction Activities (2017-18-From 03/2017 to 01/2018):

(a) Projects completed during Financial Year 2016-17 & 2017-18

i. 220 KV Sub-station & line:

Atri (2nd Auto & Power Tfr.), Puri (Samangara) (2nd Auto & Power Tfr.), Cuttack (Nuapada), Infocity-II, Chandaka-B, Malkangiri, 220 KV Bidanasi – Cuttack line, Bonei, 220 KV LILO line from Atri – Puri to Pandiabil in MC tower.

ii. 132 KV S/S & line:

Bangiriposi, Olavar, Bhograi, Khjuriakata, Tusura, Salipur – Kendrapara line, Sarasmal (2nd Power Tfr.), Kuchei – Jaleswar line, 2nd circuit Dhenkanal – Nuapatna line.

(b) Projects to be completed during Financial Year 2017-18

i. 400KV S/S: Installation of 3rd ICT at Mendhasal, 400/220 KV Lapanga S/S.

ii. 220 KV Sub-Station & line: Keonjhar GIS, Bargarh (New), Kashipur, Jayanagar-Jayanagar PG line, Narasingpur with line.

iii. 132 KV Sub-Station & line: Chikiti, Dhenkikote, Khuntuni (Athagarh) GIS, Nuapatna- Banki DC line, R.Udaygiri, Kantabanjhi, Podagada, Ghense, Bhadrak-Ananadpur line.

(c) Other Ongoing Projects

i. 400KV S/S:

Meramundali-B.

ii. 220 KV S/S & line:

Pratapsasan, Kesinga, Baliguda, Kalimela, Jaipatna, Aska, Deogarh, Lephripada, Goda Chhak.

iii. 132KV S/S & line:

Satasankha, Nuapada – Padampur, Brajabiharipur, Chandbali GIS, Unit-VIII GIS BBSR, Mancheswar GIS, Udala, Phulbani-Boudh, Maneswar, Jayanagar – Tentulikhunti line, Boriguma, G.Udayagiri, Thuapali, Lakhanpur, Agarpada, Betonati, Boriguma, Kesinga-Junagarh line, Jayanagar-Sunabeda line.

(d) Other New Projects (Expected to be awarded in Financial Year 2017-18)

- i. 220 KV S/S & line: Dhamra, Daspalla, Kiakata, Bamra, Telkoi, Kuanramunda.
- ii. 132 KV S/S & line: Digapahandi – Aska DC line, Parlakhemundi - R.Udayagiri DC line, Kuchei-Bangiriposhi SC line.

(e) JICA Funded New Projects (Expected to be Awarded in Financial Year 2017-18)

- i. 400 KV S/S:-Bhadrak (new) GIS:-Consultancy selection under process.
- ii. 220KV GIS S/S:- Dhenkanal (new), Kuakhia-Consultancy selection under process.
- iii. 220 KV S/S & line: Govindpalli- LOA issued.
- iv. 220 KV S/S:- Kiakata, Daspala- IOA to be issued.
- v. 220 KV S/S:- Turumunga-Evaluation under process.
- vi. 220 KV S/S:- Gunupur-Tender to be floated.
- vii. 132 KV S/S & line: Rajnagar, Gondia, Chandipur – Evaluation under process.
- viii. 132 KV S/S:- Thuamulrampur-Tender to be floated.
- ix. 132 KV S/S:- Bahugram-Tender to be floated.

(C) Important Telecom Activities (2017-18):

In addition to the regular maintenance/Repair/Renovation works of existing PLCC/SCADA/OPGW equipment all over the state, the following Ongoing and New Projects are undertaken by the Telecom Wing.

ONGOING PROJECTS:

- i. To extend OPGW connectivity to vital 132 KV Sub-stations by laying 1745 Km (approx) length of cable.

- ii. Provision of Digital Tele Protection Coupler (DTPC) in all 220 KV & above lines through OPGW SDH equipment.

NEW PROJECTS:

- i. Provision of RTU under RTU replacement scheme & for new sub-stations
- ii. Provision of Optical Fiber based communication through OPGW for providing reliable communication to all Grid Sub-Station in OPTCL with PSDF support.
- iii. **Bharat Net phase-II:** Under the project optic Aerial fibre (13,511 km) will be laid on electric poles to 2564 nos. of Gram Panchayats (GP) covering 15 nos. of districts of Odisha at a project cost of Rs 351.60 Cr. MoU has been signed amongst USOF, BBNL, Government of Odisha & OPTCL on 19.01.2018. Tendering process is in progress.

(D) Important IT Activities for Financial Year 2017-18:

- 1. Installation of AMI infrastructure has been completed at 124 Locations of OPTCL. Automatic data collection from 100 plus substations has been completed. The connectivity backbone of the project is served through OGS-WAN as well as back up GPRS links. Once gone live, the project shall enable OPTCL in automatic collection of energy accounting data around 840 metering points and the Energy Accounting Settlement Services can run on weekly basis. The parallel billing with AMI data is currently under progress and the data sanctity is being checked meticulously. Planned Go Live from February, 2018.
- 2. Under GIS project all the engineering assets of OPTCL have already been geo-referenced and Power Atlas has been prepared. Assets like Sub-stations, Lines and EHT towers are now can be rendered over spatial map. The GIS project is also integrated with e-Shakti to retrieve real-time asset information. UAT of the project is under progress and expected to Go Live from March, 2018.
- 3. Video Conferencing facility has been established at 94 Major Grid Substations and locations of OPTCL. The facility is majorly operated over OGS-WAN network and hence is very

successful. Video Conferencing Studio is currently under progress in IT Department Conference Hall for Multipurpose use of the facility.

4. The pilot project for monitoring 24x7 through CCTV has been completed and CCTV surveillance is planned to be extended to further 17 Grid Sub-stations.
5. OPTCL-IT is coming up with a state of the art Primary Data Centre (PDC) which shall serve not only to OPTCL, but also to various state utilities for IT service deployment. The Centre is expected to be ready by March, 2018 for use.

(E) Important Activities of Government Grant Schemes (Financial Year 2017-18):

(a) ODSSP STATUS

- i) Government of Odisha has sanctioned Rs.3843Crore for construction of 473 nos. of 33/11KV Sub-stations in the State of Odisha. OPTCL is the Nodal agency for construction of the above Sub-stations.
- ii) LOA have been issue long since to the EPC Contractors in different Phases for construction of 473nos. 33/11 KV Sub-stations in the State of Odisha at a Contract Price of Rs.3625 Crore.
- iii) 160 nos. 33/11 KV Sub-stations have been Test Charged till date.
- iv) It is expected to charge another 30 nos. 33/11 KV Sub-stations during Financial Year 2017-18 and the balance 283 nos. 33/11 KV Sub-stations during Financial Year 2018-19.

(b) ODAFFP STATUS:

- i) Government of Odisha has sanctioned Rs.1000 Crore as Grant for construction of 11KV dedicated Agriculture & Fishery feeders in the State. OPTCL is the Nodal agency for construction of the above dedicated feeders.
- ii) LOA for construction of 19 nos. of 11 KV dedicated Fishery feeder was issued on 10.06.2015 at the Contract Price of Rs.128.93 Crore out of which the following Feeders have been charged:
 - i) 11 KV Konark – Chandrabhaga Feeder

- ii) 11 KV Sutan – Tikina Feeder.
- iii) 11 KV Jagapur – Sonepur Feeder.
- iv) 11 KV Langaleswar – Kasafal – Bahabalpur – Sartha Feeder.
- v) 11 KV Srijang – Inchudi Feeder.

It is expected that balance 14 nos. Feeder will be charged by March'2018.

(c) SCRIPS (State Capital Region Improvement of Power System):

SCRIPS UG Cabling Work		
Sl. No	Name of the Schemes	Achievement made
1	Bhubaneswar UG Cabling Work (Sachivalaya Marg, Bidyut Marg, Cuttack Road, Janpath (plus linking roads as necessary) with 132 KV UG Cabling from Chandaka B GIS Grid to Unit-VIII GIS Grid	43.44 Km of Trench Route completed
2	Cuttack UG Cabling alongside some major roads like Link Road, Buxi Bazar, Road connecting College Square to Medical Square, Cuttack Grid to OGP, OGP to Kalayannagar S/s. Badambadi to Ranihat, Ranihat to Stadium, Stadium to Baliyatra Ground etc. (plus linking roads as necessary)	16 Km of Trench Route completed
3	132 KV UG Cabling from Chandaka B GIS Grid to Mancheswar B GIS Grid	4.836 Km of Trench Route completed

(d) Radial to Ring Conversion Project (RRCP) :

Keeping in view to supply quality and un-interrupted power to the consumers, out of the proposed 11 different line works in “Radial to Ring Conversion Projects”, 3 nos. have been completed, 5 nos. under progress, 2 nos. to be tendered and for the rest one survey work is in progress. In this system, one Sub-station can be fed from two sources of power which is capable of supplying power at the time of need from other sources.

(f) Disaster Resilient Power System (DRPS) :

This Scheme conceptualized for creation of energy infrastructure having capability to combat the natural calamities like Cyclone and Flood. Out of the proposed total 7-projects, 1-project is completed; 4-projects under progress and rest 2-projects are to be tendered.

(g) Disaster Response Centre (DRC):

From the experiences learnt from in order to restore power supply within minimum possible time, the organization started maintaining “Transformer Banks” at 9 (nine) at distributed locations having total capacity of 875 MVA at different voltage levels which will come in handy for replacement during any transformer failure. Already 12 sets of ERS (Emergency Restoration System) towers suitable for 400 KV have been received. Training & demo has been conducted.

(h) Deen Dayal Upadhaya Gram Jyoti Yojana (DDUGJY, New Scheme):

1. Status of UE Village:

Package	Scope	Works completed	Works in progress
WESCO	95	93	2
SOUTHCO	122	117	05
CESU	42	42	Nil
TOTAL	259	252	07

2. Status of SAGY villages:

Package	Scope	Works completed	Works in progress
NESCO	07	06	01
WESCO	07	04	03
SOUTHCO	05	--	04
CESU	16	--	09
TOTAL	35	10	17

3. PE village – 2307 nos. proposed by DISCOMs. Works completed in 333 villages (Bhadrak – 74 nos. , Balasore – 226 nos., Nawarangpur – 10 nos. , Rayagada – 2 no., Malkangiri-1 no, Nuapada-03nos, Sonapur-16 & Nayagarh-01).

4. Status of Feeder Separation (Dedicated Agriculture Feeder)

Package	Scope	Works completed	Works in progress
NESCO	25	07	13
WESCO	09	--	02
SOUTHCO	17	--	08
CESU	26	--	06
TOTAL	77	07	29

5. Status of New 33/ 11 KV Sub-stations:

Package	Scope	Site Handled over	Boundary wall work started
WESCO	07	All sites handover	Boundary wall completed -5 nos. Control Room – WIP – 3 nos. Roof casting completed-02 nos.
CESU	06	All sites handover	Boundary wall completed – 3 nos. Boundary wall WIP – 2 nos. Control Room – WIP – 3 nos. Roof casting completed-01 no.
TOTAL	13		

(i) Integrated Power Development Scheme (IPDS) :

Status of towns:

Package	Scope in no. of Town	Works started in no. of Towns	Works status
CESU	28	27	In 27 towns Pole erection in 11 KV & L.T line is in progress. Poles erected -4493 nos. 11 KV line stringing completed – 20.48 KM L.T Line Stringing completed – 14.459 Km Total DTR installed -58 nos.
NESCO	19	19	In 19 towns Pole erection work in 11 KV & L.T Line is in progress. Poles -5955 L.T Line Stringing completed – 8.7 Km DTR installed- 01 no.
SOUTHCO	35	26	In 26 towns Pole erection work in 11 KV & L.T line works is in progress. Poles erected – 7633 nos. 33 KV line stringing completed – 9.70 Km

			11 KV line stringing completed – 13.34 Km L.T line stringing completed – 94.51 Km DTR installed against augmentation – 55 nos.
WESCO	30	26	In 26 towns Pole erection work in 11 KV & L.T line works is in progress. Poles erected – 5779 nos. 33 KV line stringing completed – 11.5 Km 11 KV line (New & augmentation) stringing completed – 30 Km L.T line augmentation stringing completed – 80 Km DTR installed – 14 nos.
Total	112	98	

Status of New 33/ 11 KV substations:

Package	Scope	Site handed over	Works status
CESU	4	4	Boundary wall completed – 3 nos. Control Room Building – WIP – 3 nos.
NESCO	7	7	Boundary wall completed – 1 no., WIP – 3 nos. Control Room Building Foundation work in progress – 3 nos.
SOUTHCO	1	Not handed over	Go ahead letter provided. Demarcation completed.
WESCO	2	2	Boundary wall completed – 2 nos. Control Room Foundation completed – 2 nos.
Total	14	13	

Important Activities of GRIDCO during FY 2016-17 and for the period up to Sept'17 of FY 2017-18

Pursuant to the implementation of Orissa Electricity Reform Act (OERA), 1995, GRIDCO was incorporated as a State owned Corporation of the Government of Odisha on 20th April, 1995 under the Companies Act, 1956 as the successor Organization to the erstwhile Orissa State Electricity Board (OSEB). Following implementation of the Electricity Act, 2003, the transmission activities was hived off from GRIDCO whereby GRIDCO presently carries out its bulk supply function as a Deemed Trading Licensee. Being designated by the State Government as the State Designated Entity for procurement & sale of power in bulk to meet the State demand, GRIDCO procures the State share of power from inside and outside the State and supplies the same in bulk to the Electricity Distribution Companies (DISCOMs) in the state for onward retail sale to the consumers of the State. Surplus Power, if any is traded to maximise the revenue.

1. Power Procurement:

Source-wise actual power procurement during the Financial Year 2016-17 and approval of OERC for 2017-18 & actual up to Sept-2017, by GRIDCO is furnished in the Table below:

Generator (Source)	FY 2016-17		FY 2017-18		FY 2017-18	
	Actual		As approved by OERC		Actual drawl up to Sept-2017	
	(MU)	(Rs. Crore)	(MU)	(Rs. Crore)	MU	(Rs. Crore)
State Hydro	4,623.53	474.63	5,881.74	492.81	3,796.77	288.22
State Thermal incl IPPs.	11,189.58	2,683.31	13,084.92	3,210.73	4,358.33	1,150.99
Non-Solar	1,038.64	133.66	400.00	167.34	487.73	76.99
Solar	321.27	197.66	363.00	223.25	66.95	48.95
Total State	17,173.02	3,489.26	19,729.66	4,094.13	8,709.78	1,565.15
Total Central Hydro	1,004.20	233.34	909.14	210.34	698.32	150.30
Total Central Thermal	7,191.03	2,368.43	5,412.84	1,696.62	3,650.63	1,222.36
Others	427.65	450.86		418.49	511.24	323.32
Total	25,795.90	6541.89	26051.64	6419.58	13569.97	3261.13

Per Unit Ch. (Rs./kWh)		2.54		2.46		2.40
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2. Power Scenario:

- i. Details of Installed Capacity / entitlement of availability of power by GRIDCO from various sources:

<u>Sources of Power</u>	<u>Allocation (MW)</u>
State hydro	: 1,924
OPGC	: 420
TTPS	: 460
IPP (Vedanta, GMR, JITPL & NBVL	: 1,386
New & Renewable sources	: 215
Sub-total (State)	: 4,404
Central allocation (Hydro)	: 189
Central allocation (Thermal)	: 1,203
Sub-total (Central Allocation)	: 1,392
Total	: 5,797

- ii. The present availability (November'17) of peak and average power is as furnished below:

Source of power	Average Power Availability In MW	Peak Power Availability In MW
State Hydro	645	1450
State Thermal (OPGC + TTPS)	555	555
IPP (VEDANTA, GMR, JITPL)	315	465
Renewables	70	50
Sub-total (State)	1585	2520
ISGS Share	1100	1150
Total Availability	2685	3670

Above availability is against peak demand of **3,635 MW** and average demand of **2,685 MW**.

3. Commissioning of IPPs:

Keeping in view of the growing power demand in the State and in the country Government had executed MoUs with 27 nos. of IPPs for setting up of coal based thermal power stations in the State and GRIDCO has signed PPAs for procurement of state's entitlement of a total of about 7,000 MW.

Out of the above IPPs, M/s. Vedanta Ltd. (VL), M/s. GMR Kamalanga Energy Ltd. (GKEL) and M/s. Jindal India Thermal

Power Ltd. (JITPL) have already started commercial operation of their thermal power plants of 2,400 MW, 1,050 MW and 1,200 MW capacities respectively. Odisha has shares of 720 MW, 472.50 MW and 144 MW respectively from these aforesaid power plants.

4. Capacity addition programme up to 2020-21:

Following generating units are likely to be commissioned during Financial Year 2018-19 & 2019-20:

Sl. No	Name of IPPs	Location	Capacity (MW)	Odisha Share (MW)	Expected date of commissioning
1.	M/s. Ind-Barath Energy (Utkal) Ltd.	Sahajbahal, Dist. Jharsuguda	350	42.0	# 2: Aprl, 2018
2.	M/s. MaaDurga Thermal Power Co. Ltd.	Tangi, Cuttack	60	7.2	# 1: Aprl, 2018 # 2: Jul, 2018
3.	M/s. LANCO Babandh Power Ltd.	Khurunti, Dhenkanal	1,320	594.0	# 1 : Sep, 2018 # 2: Mar, 2019
4.	Integrate Thermal Power Station, NTPC	Darlipalli, Sundargarh	1,600	800.0	# 1 : Nov, 2018 # 2: May, 2019
5.	OPGC Expansion Project (Unit 3 & 4)	Brajarajnagar, Jharsuguda	1,320	660.0	# 1 : Dec, 2018 # 2: Jun, 2019
6.	North Karanpura STPS, NTPC	Hazaribag& Chhatra, Bihar	1,980	396.0	# 1 : Mar, 2020 # 2: Sep, 2020 # 3: Mar, 2021
7.	M/s. GEDCOL (Solar Rooftop Projects)	Bhubaneswar - Cuttack	4	4.0	FY 2017-18
	Total		6,634	2,503.2	

5. Proposal for surrender of high cost NTPC power:

In view of comparatively high cost of power of NTPC stations and surplus power situation in the State, GRIDCO has requested for

surrender of capacities allocated to the State from proposed stations of NTPC & its JV Companies, including costly Barh STPS, but, excluding share from the proposed 3x660 MW North Karanpura STPS, tariff for which is comparatively cheaper and affordable.

6. Procurement of Power from New & Renewable Sources and meeting RPO:

At present GRIDCO has 215 MW to its credit from different New & Renewable sources of Energy, out of which 57 MW is from Small Hydro Electric Projects, 138 MW from Solar PV Projects and 20 MW from Bio-mass Power Project.

It is expected that 10 MW of Biomass Energy from M/s. Octant Industries Ltd. to be available by the end of 2016-17. Also 6 MW Biomass Power Project by M/s. Kratos Infrastructure Pvt. Ltd. is under implementation in Navarangpur district. For future requirements GRIDCO has executed PPAs with 5 nos. of SHEPs for total installed capacity of 71 MW and with a MSW Waste to Energy project developer with an installed capacity of 11.5 MW.

Further, GRIDCO has signed PSA with PTC India Ltd. on 20-07-2017 to avail 50 MW wind power under MNRE Scheme. The wind project will be implemented by M/s. Ostro Kutch Power Ltd. in the Kutch district of Gujarat during Financial Year 2018-19.

7. Power Sales to DISCOM Utilities & Power Trading:

The actual quantum of sale of power to DISCOMs and trading of power during Financial Year 2016-17 & half year ending Financial Year 2017-18 are furnished in the Table below:

Name of Utility	FY 2016-17	(Supply in MU) FY 2017-18
		(Aprl'17 to Sept'17)
DISCOMs	23537.014	12827.205
IMFA & NALCO	5.997	8.057
CGPs	33.128	28.603
Trading of power	1445.517	302.400
Total	25021.656	13166.265

The total amount of sales registered by GRIDCO in Financial Year 2016-17 is around Rs.6,594 Crore and Rs.3,609.53 Crore during first half year of Financial Year 2017-18.

8. Facilitating smooth Grid Management:

GRIDCO being one of the major entities drawing power from the Eastern Region Pool follows grid stipulations strictly, especially with regard to schedule and drawl of power. GRIDCO's scheduling and drawal of power in the past has in fact helped in smooth and prudent management of the grid operation. This has helped grid management by SLDC easy.

9. Finance:

During Financial Year 2016-17, GRIDCO has witnessed a turnover of Rs.6,739 Crore but suffered losses of about Rs.378 Crore (Un-audited) especially due to reduction of Bulk Supply Tariff by about 11 Paise/Unit, imposition of Green Cess and low hydel conditions during the year. It is expected that financial position of GRIDCO is likely to improve during the current financial year due to overall reduction of cost of power and likely improvement in performance of DISCOMs

10. Subsequent Development:

During March, 2015, the Retail Supply Licence of the erstwhile RIL Managed 3 DISCOMs namely, Western Electricity Supply Company of Odisha Limited (WESCO), North Eastern Electricity Supply Company of Odisha Limited (NESCO) & Southern Electricity Supply Company of Odisha Limited (SOUTHCO) were revoked and the management and control of the 3 DISCOM Utilities were vested with the Chairman-cum-Managing Director, GRIDCO as the Administrator of the said Utilities.

The DISCOMs (REL) immediately moved an Appeal before the Hon'ble Appellate Tribunal for Electricity, New Delhi against the above OERC Order. However, Hon'ble Tribunal in their Judgement dated 21.07.2017 dismissed the Appeal and allowed the DISCOM Utilities to be managed by the CMD, GRIDCO-cum-Administrator as approved by the Hon'ble OERC. Subsequently the DISCOMs moved to Hon'ble Supreme Court of India against the judgement of Hon'ble Tribunal but the same was dismissed by Hon'ble Supreme Court of India at the time of admission. The state of affairs in the 3 DISCOM Utilities is showing improvement with increased operational performance since

the management of these Utilities has been brought under the aegis of the Administrator during March, 2015.

ODISHA THERMAL POWER CORPORATION (OTPC)

Pursuant to the decision of the State Government of Odisha, the Odisha Thermal Power Corporation Limited (OTPC) was established on 29th Jan'2007, as a joint venture company of two State Public Sector Undertakings namely, the Odisha Mining Corporation Ltd (OMC) and The Odisha Hydro Power Corporation Ltd (OHPC) having equal share. OTPC is setting up a coal based super critical thermal power plant of 3200 MW (3x800 MW + 1x800 MW Future) capacity in Kamakhyanagar Tahasil of Dhenkanal district.

- The total land for the project including the railway corridor after deliberation & visit of CEA is finalized at 1833.927 acres.
- Payment of compensation in respect of all the 7 (seven) villages for the project area has already been paid to the land losers. The Tahasildar-cum-Land Acquisition Officer, Kamakhyanagar has handed over physical possession of all private land. Alienation of non-forest Government land is under process by the Tahasildar-cum-Land Acquisition Officer, Kamakhyanagar.
- The cost of the project estimated at Rs.18, 218 Crore i.e. Rs.7.59 Crore per MW. The levelised tariff for 25 years with discount factor 10% is estimated at Rs.4.04 per kwh. An expenditure of Rs.242 crore has been incurred on the project till date.
- Power Purchase Agreement (PPA) for the sale of entire power of OTPC has been executed with GRIDCO.
- Site specific studies like soil investigation, ground water survey, socio economic study, geological study, contour survey, area drainage study, hydrological study etc have been completed. DoWR have allocated 80 Cusecs water for the project.
- Forest diversion proposal having State Sl.No.OR-062/2017, dated.24.10.2017 has been forwarded by PCCF to DFO, Dhenkanal on 9.11.2017. The DFO, Dhenkanal have sought some additional information which are under process to submit by the Agency.

- Wildlife Management Plan has been done and approved by DFO, Dhenkanal and RCCF vide letter No.1063, dated.1.3.2014.
- Peripheral developmental activities have been going on in project affected areas.
- The Environment Clearance proposal was submitted on 1.3.2017 and MoEF & CC have sought certain additional information which have been uploaded to MoEF & CC's website on 31.10.2017. Hearing regarding additional information by 14th EAC was held on 12.1.2018, the Committee expressed their satisfaction for the compliances against seven points out of nine points. MoEF & CC have again sought some additional information's which are under process to submit.
- Coal for the project shall be conveyed by a Captive Rail System from Sadashibapur Railway station of East Coast Railway and to the project site. M/s RITES are consultant of the project. Detailed survey of the Railway Corridor has been completed. Detailed Project Report (DPR) have been submitted to East Coast Railway for approval which is expected shortly.
- The Coal requirement for the above Thermal Power Plant at 85% PLF is 12.07 million tone per annum. Tentuloi coal block was allocated to OTPC by the Ministry of Coal, Government of India. The request for an open cast coal block in lieu of Tentuloi underground coal block is under active consideration of MoC, Government of India.

ODISHA COAL AND POWER LIMITED (OCPL)

Odisha Coal and Power Limited (OCPL) is a joint Venture Company of Odisha Power Generation Corporation Ltd (OPGC) & Odisha Hydro Power Corporation Ltd (OHPC) with a shareholding pattern of 51:49. The Manoharpur & Dip-side Manoharpur coal blocks have been allotted to OCPL by the Nominated Authority, Ministry of Coal (MoC), Government of India on 31st August, 2015 to supply coal exclusively to OPGC expansion power plant (4X660 MW). These coal blocks are situated in IB-Valley coalfields in the district of Sundargarh.

Project Activities:

A. Manoharpur Coal block

1. R & R

- Construction of R & R colony at Sukhabandh for resettlement of Project Displaced Families (PDFs) of Manoharpur village completed in all respects.
- 91 PDFs shifted to the R & R colony and 6 PDFs self-relocated till December, 2017.
- Process initiated for construction of R & R colony Ph-II for the PDFs of Sanghumuda village.

2. Permits/ Clearances/ Compliances:

- The major permits and clearances including forest clearance, environment clearance, consent to establish, road diversion permission, nalla diversion permission, environment clearance for R & R colony, consent to establish & consent to Operate for R & R colony are in place.
- Mining lease executed between Government of Odisha and OCPL on 17.5.2017.
- Approved Mine Plan & Mine Closure Plan (Rev-I) is in place and Mine Closure Plan (Rev-II) has been submitted with MoC for its approval.

3. Land:

- 874.47 Ac out of 1041 Ac of Government land allotted in favour of OCPL.
- 1035.70 out of 1040 Ac of Private land allotted in favour of OCPL.
- 491 Ac out of 495 Ac of Forest land handed over to OCPL.
- In addition to above, 141.04 Ac of forest land and 50.98 Ac of private land has been transferred from OPGC to OCPL.

4. Financing:

- The estimated project cost of Manoharpur coal mine project is Rs.1382 Crore.

- Term Loan of Rs.500 Crore sanctioned by Union Bank of India, drawal started.
- Term Loan of Rs.536 Crore sanctioned by Punjab National Bank and drawal started.
- Equity invested by the Share holders to the tune of Rs.300 Crore.

5. Coal Production Schedule:

- As per the Allotment Agreement signed with the Nominated Authority, MoC, the production of coal will start by May, 2019 and reach the full production (8 Million ton) by the end of year 2022.

6. Selection of Mine Operator:

- RFQ floated through ICB route. Qualification proposal received from 7 firms.
- RFP issued to the 5 Qualified Bidders.

7. Coal Handling Plant (CHP):

- Contract has been awarded for construction of CHP and other allied infrastructures. Work at site has been commenced.

B. Dip-side Manoharpur coal block

Exploratory Drilling & Preparation of GR of Dip-side coal block:

- Drilling in Dip-side Manoharpur coal block completed. CMPDI has been appointed for preparation of Integrated Geological Report (IGR) of Manoharpur & Dip-side Manoharpur. The IGR has been prepared and submitted by CMPDI.

C. Manpower

A dedicated team of 82 people, including deputation from OPGC are working for development of the coal blocks.
