



**OUTCOME BUDGET:**  
**Department of Energy**  
**Government of Odisha**  
**2019-20**

**ABBREVIATION CHART**  
**(ABBREVIATIONS USED IN OUTCOME BUDGET, 2019-20)**

B.E	Budget Estimate
R.E	Revised Estimate
BEE	Bureau of energy Efficiency
T&D	Transmission and Distribution
T&C	Technical and Commercial
AT&C	Aggregate of Technical and Commercial
BGJY	Biju Gramya Jyoti Yojana
BSVY	Biju Saharanchal Vidyutikaran Yojana
CAPEX	Capital Expenditure project
CESU	Central Electricity Supply Utilities
DPR	Detail Project Report
ECBC	Energy Conservation Building Code
EIC (Elect)-cum-PCEI	Engineer in Chief, Electrical-cum-Principal Chief Electrical Inspector
SDA	State Designated Authority
IGEA	Investment Grade Energy Audit
KWH	Kilo Watt (Hour)
LED	Light Emitting Diodes
MW	Mega Watt
MVA	Mega Volt Ampere
NCMP	National Common Minimum Programme
NIT	National Institute of Technology
OERC	Odisha Electricity Regulatory Commission
OHPC	Odisha Hydro power Corporation
OPGC	Odisha Power Generation Corporation
OPTCL	Odisha Power Transmission Corporation Ltd.
DISCOM	Distribution Company
A.O	Authorised Officer
RGVY	Rajiv Gandhi Grameen Vidyutikaran yojana
NABL	National Accreditation Board for testing & Calibration Laboratory
R&M	Renovation & Modernization
RM&U	Repair Maintenance & Up-gradation
HE	Hydro Electric
PPP	Public Private Partnership
PSU	Public Sector Undertaking
PFC	Power Finance Corporation
SEB	State Electricity Board
SCRIPS	State Capital Region Improvement of Power System
OPSIP	Odisha Power Sector Improvement Projects
OTSIP	Odisha Transmission System Improvement Project
GEDCOL	Green Energy Development Corporation Ltd
UMPP	Ultra Mega Power Plant
FCG	Financial Commission Grant
SGP	Smart Grid Project
DRC	Disaster Response Centre
ADB	Asian Development Bank
EAP	Externally Aided Projects
IPDS	Integrated Power Development Scheme
DDUGJY	Deendayal Upadhyaya Gram Jyoti Yojana
UJALA	Unnat Jyoti by Affordable LEDs for All
UDAY	Ujwal DISCOM Assurance Yojana
IEC Activities	Information, Education and Communication System Activities

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## *Executive Summary*

Outcome Budget of the Department of Energy is the mirror which reflects the real picture of activities in various fields as per the Plan outlays for a specific period (financial year 2019-20). The document also highlights the objective along with financial and physical targets, various milestones and risk factors in a nutshell, the overall activities of Government in Energy Department are reflected through this document passing information to the people for their general awareness.

### OUTCOME BUDGET 2019-20 CONSISTS OF THE FOLLOWING CHAPTERS

**Chapter-I (Introduction):** This Chapter contains brief introduction about the structure and functions of the Department, important Schemes administered by the Department, Outlay, Objective & Target Group, Implementation monitoring and evaluation mechanism for such schemes and fund flow mechanism.

**Chapter-II (Outcome Budget, 2019-20 in tabular form):** This Chapter contains the Statement of Budget including the outlays/projected outlays, physical outputs, projected outcome etc. Under Programme Expenditure and Administrative & EOM Expenditure for the year 2019-20, 2020-21 & 2021-22 in the prescribed tabular format.

**Chapter-III (Reforms Measures & Policy initiatives):** Chapter on Reform Measures and Policy Initiatives contains change in design & delivery mechanism of existing schemes, new schemes, introduced if any, policy reforms if any, change in the composition of beneficiaries if any and 5T initiative for schemes (Newly introduced by Government of Odisha).

**Chapter-IV (Past Performance):** Chapter on Past Performance highlights achievements in terms of the financial and physical targets fixed in 2017-18 and 2018-19 with reference to Programme Expenditure and Administrative & EOM Expenditure to be provided in tabular form detailed at Annexure-IV.

**Chapter-V (Financial Review):** Chapter on Financial Review covers trends in expenditure shown in a statement containing actual for the year 2017-18, Budget Estimate for the year 2018-19, Revised Estimate for the year 2018-19 & Budget Estimate for the year 2019-20.

**Chapter-VI (Gender & SC/ST component):** This Chapter highlights financial outlays and projected outputs of the schemes benefiting the Women and ST & SC population.

### IMPLEMENTATION, MONITORING AND EVALUATION MECHANISM:

The Department of Energy lays considerable emphasis on systematic monitoring of Projects executed under various schemes. At the level of Government, Monitoring Units operate under the Chairmanship of Principal Secretary, Energy Department and other members are Special Secretary, Additional Secretary, Financial Advisor-cum-Additional Secretary, Deputy Secretaries, Assistant Financial Advisor-cum-Under Secretary, Under Secretaries, Engineer-in-Chief and Chief Engineers of Department of Energy. The field level Monitoring Units operate either under the Chairmanship of District Collector or by the Head of the field establishment.

Each project has its internal monitoring unit headed by an officer or the Engineer-in-Charge, who reviews the progress of the work on regular basis and keeps informed the Heads of the Department through the monthly progress report.

**The process followed is given below:**

**1. Data compilation and transmission:**

The data or information from field level are collected and sent to the monitoring unit either at the Government level or at the district level, as the case may be, at periodic intervals or as and when required.

**2. Review Meetings:**

The State level Plan review meetings with Project Executing Officials and officials otherwise related with the projects are being held regularly under the Chairmanship of Principal Secretary, Energy Department in which various problems / obstacles / issues relating to progress of the projects are discussed and important decisions are taken. Besides, the progress of projects is also reviewed by Hon'ble Chief Minister and other senior officials of State and Central Government. Similarly, project level review meetings are also held at regular intervals by the project heads.

**3. Field Visits:**

Senior Officers of the Department including Principal Secretary, Engineer-in-Chief of Energy Department make field visits to monitor the progress of the work. In these visits, they meet the field officials, review their works and discuss about the project. They issue necessary instruction to the field officials for smooth implementation of the projects.

The funding Agencies and Government of India officials also at times make field visits and review the progress of work.

4. Inbuilt monitoring mechanism contained in the guidelines of each scheme ensures achievement of the objectives of the scheme.

5. The Department of Energy is committed to introduce e-Governance System in phased manner in order to improve efficiency in office.

**6. Public Information System:**

(i) Creating awareness about the programmes of the Department.

- Annual Report and Annual Activity Report containing physical and financial achievements of schemes are being published each year for wide circulation for information of general public and people's representatives. Public Sector Undertakings of the State Government involved in generation, distribution and transmission of electricity such as O.H.P.C, O.P.G.C, GRIDCO, OPTCL and the Autonomous Authority OERC publish their annual report for general information.

(ii) Ensuring transparency in the implementation of the programme in the field level.

- The Department has developed its website with [url//http://energy.odisha.gov.in/](http://energy.odisha.gov.in/) for display of information useful to public.
- To bring about reform in the procurement process, an “e-procurement Mission” has been formed in Works Department by bringing in officers from all the engineering departments. The website with the URL <https://www.tendersodisha.gov.in> has been launched containing activities ranging from invitation of N.I.T. / I.F.B. to award contract. This will help in cutting down the processing timeline, eliminate the possibility of tampering and introduce uniform evaluation.

Since the schemes of the Energy Department are implemented at various levels such as District level, Block level and village level through various executing agencies; while floating tender those executing agencies float tender by publishing in news papers and through the process of e-procurement.

Various schemes implemented in this department are either executed by the Public Sector Undertaking like Odisha Power Transmission Corporation Ltd. / GRIDCO or by the Distribution Companies operating in the State. The executing agencies are to perform this works as per the scheme guidelines and guidelines framed by Government or by the Odisha Electricity Regulatory Commission.

(iii) Encouraging participation of the people in the development process and promoting the social audit and accountability.

People’s participation being the bed rock of democracy, the participation of public in the sector of Energy has much relevance in the present context. Since energy is the basic need of modern society in all sphere of development, the active participation of people in the system of Energy administration denotes to a policy of good governance and transparency in administration. Keeping this in view, the Electricity Act, 2003 incorporates many of the principles of good governance initiated by Government of Odisha. The main objective of the Act includes protecting interest of consumers, ensuring transparency and decentralizing management of distribution through local self Government bodies and user associations. Section 13 of the Act provides for franchise operation in distribution to encourage public participation in power distribution and as per Section 14 they are exempted from having license for distribution.

*Section 42 (5, 6, 7 and 8) and 181* provide for establishment of *Grievances Redressal Forum* by the Distribution licences and appointment of Ombudsman by the State Electricity Regulatory Commission to redress consumer grievances.

*Section 57 of the Act* provides a *minimum standard of performance for the licences* to be specified in consultation with licensee and persons likely to be affected and compensation to be paid for violation of the same to the customer.

The Electricity Act, 2003 also provides for appointment of Central and State Level Advisory Committee which comprises of representative of consumers and N.G.O who advise Centre and State Electricity Regulatory Commission on sensitive issues.

Besides, various coordination Committees, Advisory Committees as per the provisions of the Electricity Act in vogue are working at state level and district level adding to improvement in power sector of the State. The OERC is also committed to encouraging and fostering people's participation in the regulatory process. This is the need of the hour and for bright future of power sector in the State.



## Chapter I

### 1.0 Introduction

#### 1.1 Overview of the Energy Sector in the State

The Department of Energy was created on the 24th April, 1990 consequent upon bifurcation of the then Irrigation and Power Department. Electricity is one of the prime needs for both the economic development as well as for the overall well-being of the people. Increase in power generation has cascading effect in 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 first State in the country for ushering in sweeping reforms in power sector. The objective of the power sector reforms is to provide consumers with reasonable, reliable and quality supply of power.

The subject assigned to the Department as per Odisha Government Rules of Business (corrected up to 01.01.1993) is as follows.

1. Administration of the Indian Electricity Act, 1910 and the Rules made there-under, i.e. grant of licence for electricity supply and inspection of electrical installations.
2. Administration of the Electricity (Supply) Act, 1948
3. Water (Hydro) Power
4. State Electricity Boards
5. Preparation, construction, maintenance and operation of Government Electrical Schemes, Hydro or Thermal Stations and construction of such transmission lines and distribution systems, sub-stations etc., connected therewith as are not transferred to the State Electricity Board.
6. Fixing rate for sale of power generated by Government installations.
7. All matters relating to energy oriented works of the Dam Projects after the point of generation in-coordination with Irrigation Department.
8. Thermal Power Projects.
9. All matters relating to land acquisition, land reclamation, re-settlement in connection with the Projects pertaining to the Department.
10. All matters relating to Upper Indravati Hydro Electric Project.

<i>Total Geographical area:</i>	<i>155,707 sq km</i>
<i>Total Population (2011):</i>	<i>4.19 crores</i>
<i>Total No of Villages:</i>	<i>51583</i>
<i>Un-inhabitant Village:</i>	<i>3940</i>
<i>Rural Electrification (Villages):</i>	<i>100%</i>
<i>Total Consumers (2017-18):</i>	<i>75,01,008</i>
<i>Per Capita Consumption of electricity:</i>	
<i>Odisha (2018-19) (as on 31.3.2019):</i>	<i>1,428 Kwh</i>
<i>India (2018-19) (as on 31.3.2019):</i>	<i>1 181 Kwh</i>
<i>Total Available Generation (2018-19):</i>	<i>5487 MW</i>

year	Average power Availability (MW)	Average Power Supply (MW)
2006-07	2154	1727
2008-09	2289	2161
2009-10	2392	2265
2010-11	2555	2444
2011-12	2598	2449
2012-13	2776	2508
2013-14	3189	2900
2014-15	3019	2696
2015-16	2887	2709
2016-17	2959	2709
2017-18	2989	2805
2018-19	3133	2970

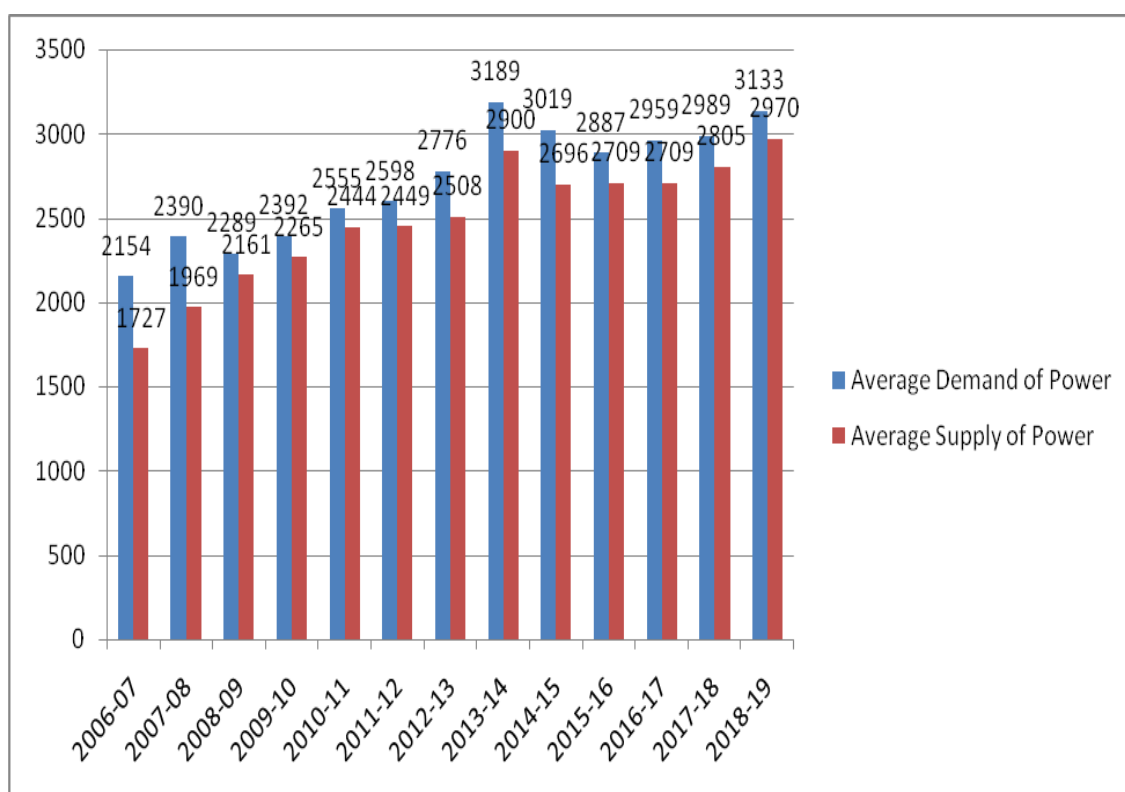
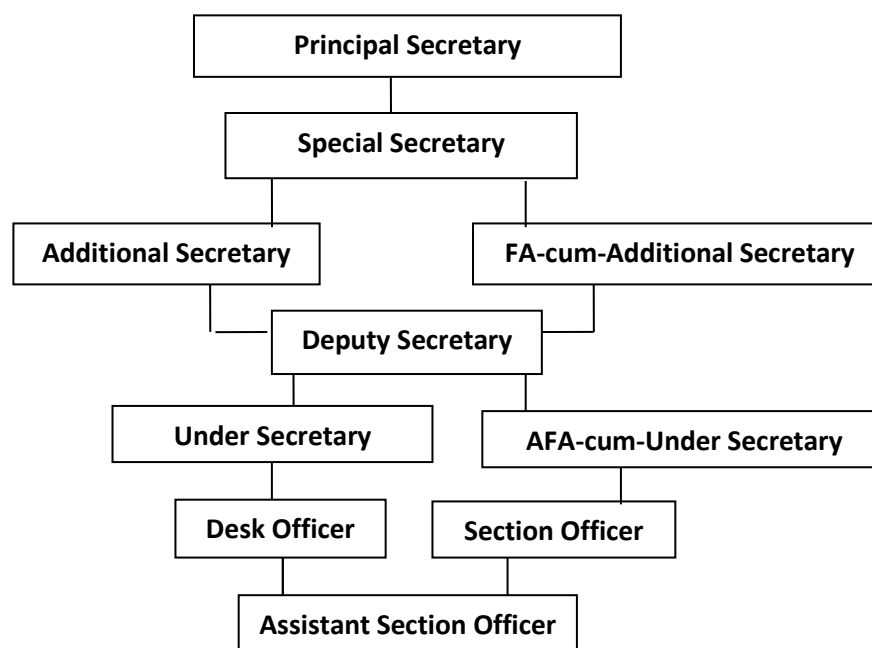


Figure 1 Demand supply situation in power sector in Odisha

## 1.2 Entity Diagram

The Department is headed by the Principal Secretary and assisted by the Special Secretary, Additional Secretary, Financial Advisor-cum-Additional Secretary, Deputy Secretaries, Assistant Financial Advisor-cum-Under Secretary, Under Secretaries and other officials.



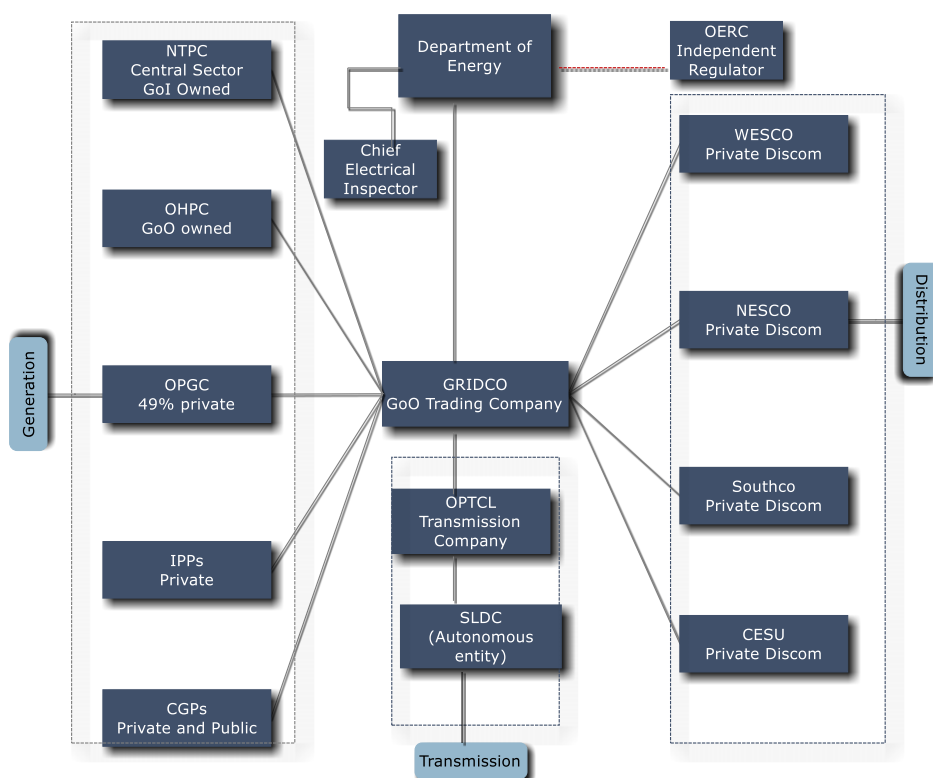
- The Department of Energy is functioning with 5 Heads of Department i.e.:
  - (i) EIC (Elect)-cum-PCEI, Odisha, Bhubaneswar
  - (ii) CE-cum-CEI (Central Zone)-Odisha,
  - (iii) CE-cum-CEI (South Zone)-Odisha,
  - (iv) CE-cum-CEI (North Eastern Zone)-Odisha,
  - (v) CE-cum-CEI (Western Zone)-Odisha,
- The functions of the Department are carried out through following Organisations / Wings, Public Sector Undertakings:
  - Odisha Power Generation Corporation (OPGC)
  - Odisha Hydro Power Corporation (OHPC)
  - GRID Corporation of Odisha (GRIDCO)
  - Odisha Power Transmission Corporation Ltd. (OPTCL)
  - Odisha Thermal Power Corporation Ltd. (OTPCL)
- Distribution Companies (Utilities) engaged in electricity distribution system are-
  - Central Electricity Supply Utilities (CESU)
  - Western Electricity Supply Company (WESCO)
  - Northern Electricity Supply Company (NESCO)
  - Southern Electricity Supply Company (SOUTHCO)

Besides, with enactment of Odisha Electricity Reform Act, 1995, an independent Electricity Regulatory Commission has been established with an objective to create conducive atmosphere for development in power industry in the State. OERC works as facilitator among the producer, distributor and consumer of energy in the State and also act as a regulator in the

field of energy administration by issuing license for transmission and distribution by fixing and regulating tariff, encouraging private and public participation in the system.

The organizational chart of Energy Department, Odisha, Bhubaneswar and structural electricity sector in Odisha after reforms re-structuring and privatization is depicted in a diagram form in Figure-2

Odisha Power Sector-Entity Relationship Diagram.



**Figure 2 Odisha Power Sector: Entity Relationship Diagram**

### 1.2.1 Central PSUs in the State and Linkages

The state public sector undertakings (SPSUs) in the power sector such as GRIDCO Ltd. Odisha Power Transmission Corporation Ltd. (OPTCL), Odisha Hydro Power Corporation Ltd. (OHPC), and Odisha Thermal Power Corporation Ltd (OTPC) are actively developing linkages with the respective Central Public Sector Undertakings such as Power Grid Corporation of India Ltd. (PGCIL), NTPC Ltd., NHPC Ltd., BHEL, Power Finance Corporation Ltd. (PFC), Rural Electrification Corporation Ltd. (REC) and PTC India Ltd. However, there is no budgetary linkage with central PSU in the state as on date.

### 1.2.2 Department and Various Wings

The Department of Energy, Government of Odisha, which is entrusted with the work of administration of all Act and Rules pertaining to Power Sector, implementation of Policy decisions of Government of Odisha, Government of India and the rulings of Electricity Regulatory Commission functions of State and National level is headed by the Commissioner-

cum-Secretary, assisted by Special Secretary, Additional Secretary, Financial Advisor, Deputy Secretaries, Under Secretaries and other ministerial staff.

### 1.2.2.1 Electrical Inspectorate

Besides, the Engineer-in-Chief (Electricity)-Cum-Principal Chief Electrical Inspector, Odisha, Bhubaneswar is the administrative head of Electrical inspectorate and project wings of Energy Department. The Chief Electrical Inspector, Transmission and Distribution (T&D) and Chief Engineer (Projects)-Cum-Chief Electrical Inspection (Generation) are under the administrative control of E.I.C. (Electricity). The total strength of Electrical Engineers under the administrative control of E.I.C. (Electricity) is as follows:

#### Vision

- To be one of the best and reliable power utilities of India.
- To make every work place a safe work place.
- To keep the environment clean.
- To be socially responsible for employees and society.

EIC (Electricity)-cum-PCEI	- 01
Chief Engineers -	06
Superintending Engineers -	09 (Level-I)
Superintending Engineers-	06 (Level-II)
Executive Engineers -	49
Deputy Executive Engineers-	17
Asst. Executive Engineers-	127
Asst. Engineers -	61

**Functions of the Inspectorate:** The office of the E.I.C. (Elec.)-Cum-PCEI, Odisha, Bhubaneswar has the responsibilities to plan and develop the safety procedures, manage safety of electrical installations of the state and collection of revenue on electricity duty, electrical inspection, monitoring and implementation of Small Hydro Projects, Rural Electrification etc. It has also been declared as State Designated Agency (SDA) by the State Government to coordinate, Regulate and Enforce Provision of Energy Conservation Act, 2001 in the State.

In order to improve the Electricity supply condition and to reduce the Technical and Commercial loss in Power Sector and to punish the people as per the prevailing law involved in the electricity theft, the State Government have till date established 34 Electricity Police Station.

### 1.2.3 State Public Sector Undertakings

The Odisha Electricity Reform Act, 1995 has resulted in unbundling and corporatisation of the State Electricity Board and Odisha has been the first state in the country to undertake such reform measure to enhance the transparency and accountability, enhance quality and reliability and attempt to increase generation capacity, distribution out-reach through private sector participation.

**1.2.3.1 Odisha Power Generation Corporation**

Odisha Power Generation Corporation Limited (OPGC) was incorporated on November 14, 1984. OPGC started as a wholly owned Government Company of the State of Odisha with the main objective of establishing, operating & maintaining Thermal power generating station.

In the pursuit of its objective, OPGC established IB Thermal Power Station having two units of 210 MW each in the Ib valley area of Jharsuguda District in the State of Odisha. These Units have become operational since 1994 (1st Unit) and 1996 (2nd Unit) respectively. The entire generation from these units are committed to GRIDCO – the state owned Power Trading Company on the basis of a long-term power purchase agreement. As a part of the reform in the energy sector of the state, 49% of the equity was divested in favour of a Private investor USA (American Company) i.e. AES Corporation, in early 1999. OPGC with its present ownership structure is unique of its kind in the country and has excellent track record of plant performance and earnings. The Company has owned many state level as well as national level awards and recognition. Today OPGC is a world class power utility committed to generate safe, clean & reliable power and has firmly established its credentials as a successful power generating company both technically & commercially.

**1.2.3.2 Odisha Hydro-Power Corporation**

Consequent to the reform in power sector in Odisha, Odisha Hydro Power Corporation Ltd. (OHPC) was incorporated on 21st April 1995 under the companies Act 1956.

Its objectives are as follows:

- To acquire, establish, operate, maintain, renovate, modernise hydro-electric generating stations, thermal and nuclear electric generating stations and any other electric generating stations based on any non-conventional sources of energy in the State of Odisha.
- To carry on the business of purchasing, selling, importing, exporting, producing, trading, manufacturing or otherwise dealing in hydro-electric power, thermal and nuclear electric power based on any non-conventional sources of energy.
- To study, investigate, collect information and data, review operations, plan, research, design, prepare feasibility reports, prepare project reports, diagnose operational difficulties and weaknesses and advise on the remedial measures to improve and modernize existing stations and facilitate and to undertake for and on behalf of others the setting up of hydroelectric power plants, thermal and nuclear electric power plants and any other power plants based on any non-conventional source of energy.
- The objectives incidental or ancillary to the attainment of the main objectives are to acquire business / companies for carrying on business of electric power, to acquire know-how, to carry on consultancy services in any field of activity in which it is engaged, to act as an entrepreneur on behalf of the Central or any State Government.

- To build Solar Power Station in un-utilized land and existing power plant's sites of OHPC and any other suitable place.

#### **1.2.3.3 Grid Corporation of Odisha**

Grid Corporation of Odisha Limited (GRIDCO) was incorporated on 20th April 1995 under the Companies Act, 1956 as a wholly owned Government of Odisha Undertaking. The Company obtained the Certificate of Commencement of Business on 6th July 1995.

GRIDCO carried on the business of transmission and bulk supply of electricity and other related activities under an exclusive license issued by Odisha Electricity Regulatory Commission. Consequent upon enactment of Electricity Act, 2003, the transmission related activities of the Company were transferred and vested with Odisha Power Transmission Corporation Limited, a wholly owned undertaking of the State Government through Odisha Electricity Reforms (Transfer of Transmission and Related Activities) Scheme, 2005 with effect from 09.06.2005. After separation, GRIDCO is presently engaged in business of bulk purchase and bulk sale of power to the four Distribution Companies inside the State and trading of surplus power through traders to promote exchange of power with neighbouring States in the country.

The registered office of the Company is situated at Janpath, Bhubaneswar. The day-to-day affairs of the Company are being managed by Chairman-cum-Managing Director who is assisted by Whole-time Directors under overall supervision of the Board of Directors. They are, in turn, assisted by a team of dedicated and experienced professionals in various fields.

At present, the corporate commercial identity of the DISCOMs has become Utility in pursuant to the Hon'ble OERC Order dated 04.03.2015 in Case No.55/2013 by revoking the License of the erstwhile RIL (Reliance Industries Limited) DISCOMs namely, WESCO, NESCO & SOUTHCO and appointment of Chairman-cum-Managing Director, GRIDCO as Administrator of the said DISCOM Utilities whereby, the DISCOMs are now known as WESCO Utility, NESCO Utility & SOUTHCO Utility. These Utilities have since been headed by the Authorised Officers deputed from GRIDCO/ OPTCL and are functioning smoothly under one roof along with GRIDCO under the overall guidance and control of the Administrator.

#### **1.2.3.4 Odisha Power Transmission Corporation Ltd. (OPTCL)**

OPTCL one of the largest Transmission Utility in the country was incorporated in March 2004 under the Companies Act, 1956 as a company wholly owned by the Government of Odisha to undertake the business of transmission and wheeling of electricity in the State. The registered office of the Company is situated at Bhubaneswar, the capital of the State of Odisha. Its projects and field units are spread all over the State.

OPTCL became fully operational with effect from 9th June 2005 consequent upon issue of Odisha Electricity Reform (Transfer of Transmission and Related Activities) Scheme, 2005 under the provisions of Electricity Act, 2003 and the Odisha Reforms Act, 1995 by the State Government for transfer and vesting of transmission related activities of GRIDCO with



OPTCL. The Company has been designated as the State Transmission Utility in terms of Section 39 of the Electricity Act, 2003.

### **1.2.3.5 Odisha Electricity Regulatory Commission**

The Odisha Electricity Reform Act, 1995 (Odisha Act 2 of 1996) was enacted for the purpose of restructuring the Electricity industry, for taking measures conducive to rationalized generation, transmission and supply system, for opening avenue for participation of private sector entrepreneurs and for establishment of a Regulatory Commission independent of State Government and Power utilities.

Establishment of Odisha Electricity Regulatory Commission as per OER Act, 1995 is a mile stone in the path of reform in Power Sector which has been further strengthened and diversified after enactment of Electricity Act, 2003 by Government of India. The Commission started its functions as per Section 86 of the Electricity Act, 2003.

#### **Powers/Functions of OERC**

- (i) As per section 86(1), the OERC shall discharge the following functions, namely:-
  - (a) Determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the state.
  - (b) Regulate electricity purchase and procurement process of distribution licenses including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
  - (c) Facilitate intra-State transmission and wheeling of electricity.
  - (d) Issue licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
  - (e) Promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
  - (f) Adjudicate upon the disputes between the licensees and generating companies and to refer any dispute for arbitration;
  - (g) Levy fee for the purpose of this Act;
  - (h) Specify State Grid Code consistent with the Grid Code specified under clause (h) of sub-section (1) of Section 79 of the Electricity Act, 2003.
  - (i) Specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
  - (j) Fix the trading margin in the intra-state trading of electricity; if considered, necessary; and
  - (k) Discharge such other functions as may be assigned to it under the Electricity Act, 2003.



- (ii) As per Section 86(2) of the Electricity Act, 2003, the State Commission shall advise the State Government on all or any of the following matters, namely:-
  - (a) Promotion of competition, efficiency and economy in activities of the electricity industry;
  - (b) Promotion of investment in electricity industry;
  - (c) Reorganization and restructuring of electricity industry in the State;
  - (d) Matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.
- (iii) As per Section 86(3) The State Commission shall ensure transparency while exercising its powers and discharging its functions.
- (iv) As per the Section 86(4) in discharge of its functions, the State Commission shall be guided by the National Electricity Policy, 2005, National Electricity Plan and Tariff Policy, 2006 published under sub-section (2) of section 3 of the Electricity Act, 2003.

### 1.3. Schemes/Programmes

#### 1.3.1 Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)

**Implementation status:** The RGGVY scheme is a flagship programme of Government of India for providing electricity facilities to the rural people & people under Below Poverty Line. The scheme is implemented by a Central Government organization i.e. by Rural Electrification Corporation (REC) in whose favour the total fund required for the scheme is released and 90% of the same is provided to Central Public Sector Undertakings viz; NTPC, NHPC and PGCIL for execution of the scheme under the XI plan.

**Objective:** This scheme is being implemented with the assistance of Government of India since April, 2005 for the attainment of National Common Minimum Programme (NCMP). The primary objective of the scheme RGGVY is to provide electricity to un-electrified villages/yards having population of 100 and above along with the BPL households; thus to provide assistance in development of rural India. At present, the scheme is subsumed under the Central Government Scheme, "Deendayal Upadhyaya Gram Jyoti Yojana".

**Fund flow arrangement:** RGGVY envisages 90% capital subsidy and 10% loans to State Government. The loan component is notionally passed on to the Distribution Companies (DISCOMs) through contra-credit to the State Government Account. The total project cost under the Scheme is estimated at Rs.3797.42 crore and the schedule time fixed for the project is five years. Rs.3331.44 crore has been released by the Government of India under the scheme, out of which 10% of the released amount i.e. Rs.329.88 crore is received as 10% loan component to the State. The State Government by March, 2013 has brought to its book Rs.329.88 crore towards 10% loan to its account.

**Project Monitoring Mechanism:** A comprehensive physical and financial periodical monitoring of the project is carried out by the REC, the nodal agency appointed for the scheme. The Department of Energy, Government of Odisha also simultaneously monitors the progress of the scheme in the State by organizing review meeting at the government level. The progress

of the work is also inspected at the site by the senior officers of the Energy Department. The Hon'ble Chief Minister of Odisha reviews the progress of the scheme implemented in the State.

In the RGGVY-X & XI plan period as on 31.03.2016, 14402 numbers of un-electrified villages have been electrified under the scheme out of the targeted 14856. Similarly, out of the targeted 29351 Partially Electrified villages, 26353 villages have been completed and charged. Further, out of the 2876149 BPL kits installed, 2315605 BPL households have been energised. At present closure proposal of 16 projects have been accepted by the State Government.

In the RGGVY-XII Plan Period, there was a target to electrify 3144 un-electrified villages and 16533 un-electrified habitations for which Government of India have sanctioned Rs.3550.75 Crore. As on 31.03.2018, all the inhabited 47,677 census villages have been electrified under the scheme.

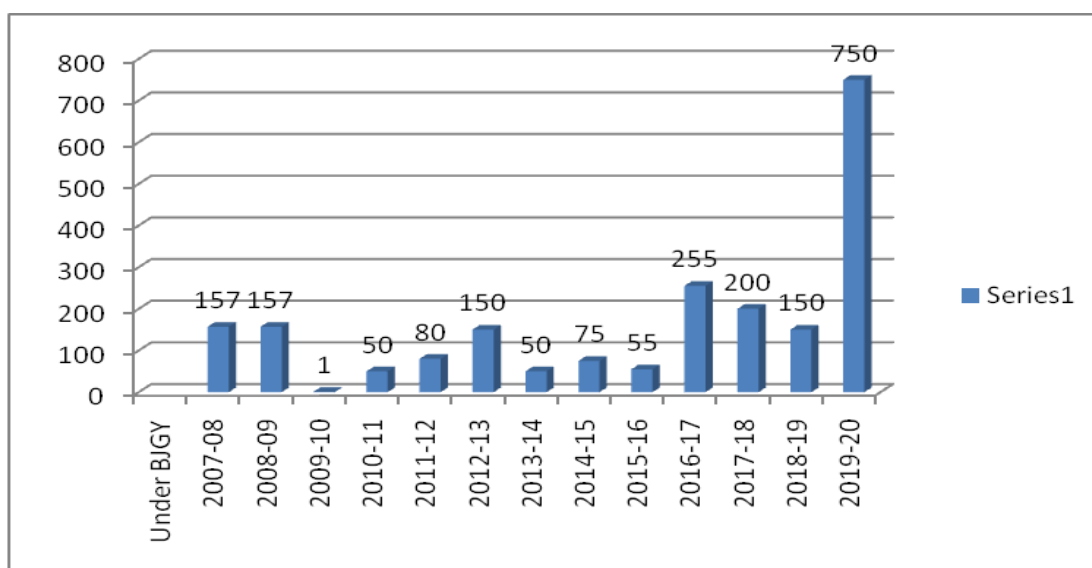
There is a budget provision of Rs.212.50 crore under the scheme during financial year 2019-20 to meet the 10% loan component. The details of works/activities to be executed during the Financial Year 2019-20 has been enumerated in detail in Chapter-II.

### 1.3.2 Biju Gram Jyoti Yojana (BGJY)

**Objective:** In order to ensure “Electricity to all”, the State Government have launched a scheme in the year 2007-08 namely, “Biju Gram Jyoti Yojana” to electrify villages/habitation having less than 100 population those are not covered under RGGVY. There was a target for electrification of 10,000 villages/ habitations during the 11<sup>th</sup> Five Year Plan under the scheme, which have already been achieved. The target for the 12<sup>th</sup> Plan Period has not been fixed yet.

**Fund flow arrangement:** The Government of Odisha provides 100% budgetary support for implementation of this people's welfare scheme. So far, the Government of Odisha has provided Rs.1301.00 crore for this programme. The year-wise allocation of funds is given in the figure below:

Figure 3 Allocation under BGJY



For electrification of remaining un-electrified villages/ habitations and BPL households under the scheme, a provision of Rs.75.00 crore is provided in the State Sector Scheme for the Financial Year 2019-20.

**Implementation Status:** The amount allotted under the scheme in each year is released in favour of the District Collectors for execution of work. 17972 nos. villages and 218399 BPL Households have been electrified till 31.03.2018 under the scheme. The work is implemented through the electricity distribution Companies or by the authorized licensee as the case may be under the direct supervision of district administration. 15000 nos. of transformers are being installed in distribution sector through the help of OPTCL in order to replace the burnt and theft transformers.

**Project Monitoring Mechanism:** The Government of Odisha in Energy Department lays considerable emphasis on sustained monitoring of the projects. Though the schemes are being implemented by the district administration, the Energy Department conducts regular review and project evaluation meeting under the Chairmanship of Principal Secretary by convening meeting of District Collectors and the officials of the Executing Agencies. The Hon'ble Chief Minister, Odisha also undertake the review meeting from time to time for success of the scheme. The senior officers of the Department make field visits to review the progress of work at field level.

There is a budget provision of Rs.75.00 Crore under the scheme during financial year 2019-20. The details of works/activities to be executed during the Financial Year 2019-20 has been enumerated in Chapter-II.

### 1.3.3 Biju Saharanchala Vidyutikaran Yojana (BSVY)

**Objective:** 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 Vidyutikaran Yojana (BSVY) during the year 2010-11. Under the scheme, unelectrified villages/ yards with population of less than 100 along with BPL household electrification and system improvement are taken up. 5 Municipal Corporations, 45 Municipalities and 61 NACs of the State have been covered under the Scheme.

**Fund flow arrangement:** The Government of Odisha is providing 100% budgetary support for implementation of the scheme which started since the year 2010-11. During the year 2010-11, a provision of Rs.40.40 crore was made available and the same has been disbursed to the District Collectors to provide funds @ Rs.1.00 crore for Municipal Corporation, Rs.50.00 lakh per Municipality and Rs.30.00 lakh per NAC. The maximum cost of electrification of an un-electrified village is estimated at Rs.3.50 lakh and a BPL house electrification is estimated at Rs.2000/-. In the Financial Year 2017-18, 2018-19 & 2019-20 there were a State Sector Scheme provision of Rs.10.00 crore, Rs.10.00 crore & Rs.10.00 Crore respectively under the scheme. As on 31.03.2019, Rs.138.15 crore has been allotted under the scheme out of which

Rs.73.57 crore has been expended. Under the scheme, 2734 nos. of habitations have been electrified and 31284 nos. of BPL House-holds charged as on 31<sup>st</sup> March 2018.

**Implementation Status:** The District Collectors are the Nodal Officers for implementation of this scheme. At the district level, District Electrical Committee represented by the Government nominated Members, M.P, M.L.A / Mayor/ Chairperson of the Municipal Corporation/ Municipality / NAC, Superintending Engineer / Executive Engineer (Elec.) in charge of distribution will act as the Monitoring Committee. The work under the scheme will be implemented by the Electrical Contractors who have valid license granted by the ELBO, Odisha duly authorized by the Government to execute electrical works. Where such licensed contractors are not available and no such contractor participates in the tender the Collector may entrust the work to the concerned DISCOM/ OSIC /IDCO on a turn key basis. All the works executed under the scheme is subject to measurement by the Junior Engineers (Electrical) which will be reflected in the M.B. Book and same will be super checked by the SDO and Executive Engineer of the DISCOMs.

50% of the electrification work will be inspected by Deputy Electrical Inspector, Asst. Electrical Inspector on sample basis. The completion certificate of work will be issued by the concerned Local Bodies which will be communicated to all concerned.

**Project Monitoring Mechanism:** The Government of Odisha in Energy Department regularly monitors the implementation of the scheme by convening the periodical review meetings to evaluate the progress of work. The District Collectors at district level review the progress of work under the scheme. The Executing Agencies entrusted with the work at their administrative level also review the progress of work. The achievement of the scheme is being informed by the district administration to the Government in Energy Department. The Hon'ble Chief Minister, Odisha also undertake the review meeting from time to time for success of the scheme. The senior officers of the Department make field visit to review the progress of work at field level.

There is a budget provision of Rs.10.00 crore under the scheme during financial year 2019-20. The details of works/activities to be executed during the Financial Year 2019-20 have been enumerated in Chapter-II.

#### 1.3.4 Energy Conservation Measures

**Objective:** Energy conserved is energy generated. The objective of this scheme is to co-ordinate, regulate and enforce provisions of the Energy Conservation Act, 2001. Engineer-in-Chief (Electricity) as State Designated Agency (SDA) for Odisha, works as facilitator by coordinating with Bureau of Energy Efficiency (BEE), Government of India, Government of Odisha, Private organizations and other stakeholders and enforce provision of the Energy Conservation Act, 2001 within the State.

The energy conservation measure is a long term action plan to identify high energy consumption areas / sectors both in government and private. With the increased aspirations and phenomena of enhanced energy consumption, the necessity of energy conservation is felt which aims at proper use of electricity in industrial sector/ domestic sector and for use in other purposes. With implementation of Energy Conservation Act, 2001 in the state, the Government of Odisha, in Energy Department is taking necessary measures by conducting investment grade audit in various office buildings, schools, colleges and other public and private undertakings.

Besides, general awareness is created among the people by floating banners, organizing workshops, conducting debate and essay competitions among school and college students. People are also encouraged through various forums to use electrical equipment efficient at energy conservation as certified by the Bureau of Energy Efficiency (BEE). For energy conservation, stress is given for use of energy efficient devices.

**Funds flow arrangement:** For successful implementation of Energy Conservation measures in the State of Odisha, the Government has been providing budgetary support since 2009-10 which are being placed under the disposal of the EIC-cum-PCEI who is the State Designated Agency to conduct the work. In the Financial Year 2018-19 & 2019-20, there was a plan provision of Rs.1.00 Crore & Rs.3.00 Crore under the scheme respectively, which is to be supplemented by the Bureau of Energy Efficiency through direct transfer of funds to the accounts of EIC (Ele.)-cum-PCEI (O).

**Implementation Status:** In order to implement Energy Conservation Act, 2001 in its real term Odisha Energy Conservation Building Code (OECBC) has been framed for execution in the State. Odisha Energy Conservation Fund Rule has been framed for promoting energy conservation in the State. The new Rules and Codes based on ECBC 2017 have been adopted to suit the State's climatic conditions are in the process of being notified. An ECBC Cell has been made operational at the SDA. A state level fund for promoting energy efficiency in the government sector in participatory mode has been created.

Accordingly, from the last few years, some activities indicated below have been taken up in the Energy efficiency improvement programme.

- (i) Energy efficiency in the drinking water pumping systems.
- (ii) Energy efficiency in buildings.
- (iii) Energy efficiency in Agriculture demand side management.
- (iv) Energy efficiency in Lift Irrigation systems.
- (v) Energy efficiency in the ULBs.
- (vi) Energy efficiency in Industries, Domestic, Dairy Sector, SME Clusters etc.
- (vii) Energy efficiency in Thermal & Hydro Power Stations, Transmission & Distribution Systems.
- (viii) Stall to promote energy efficiency during Baliyatra.
- (ix) Awareness and outreach programmes such as Observation of National Energy Conservation Day annually, Energy Conversation quiz contest among school children etc, "SURAVI", annual children function, support for awareness is extended to School & Mass Education (OPEPA).

On the above activities, the following sub-activities are taken up which needs funds to implement energy efficiency programme and thereby to ensure energy savings after implementation.

- Assessment of energy saving potential.
- Investment Grade Energy Audit of Government buildings and such other establishments.
- Implementation of Energy efficiency measures.
- Monitoring & verification.
- Capacity Building.
- Awareness on Energy Efficiency and Energy Conservation.

In the above requirement, emphasis has been given to the ongoing projects like drinking water pumping systems and energy efficiency in buildings to derive the proposed results from the system improvement. In these two systems implementation measures, actions have been taken up as per recommendations of Investment Grade Energy Audit. After implementation, substantial energy saving is possible which would help us to some extent in mitigating the current power crises. Implementation of energy efficiency measures are continuing in PHEO and OLIC with the support of funding by the Government in Department of Energy. It is now pertinent to mention that energy efficiency has been considered to be the immediate and least cost option for capacity avoidance in the generation front.

The LED (Light Emitting Diodes) village campaign has been launched by Bureau of Energy Efficiency (BEE) and Government of India. Two villages under CESU viz; Raghurajpur (craft village) and Satyabhamapur (birth place of Utkal Gourav Madhusudan Das), four villages under NESCO viz; Sarei & Baruan village under AED, Anadapur of Keonjhar District and Sasada under JTED, Jajpur Town and Khandahata village under JRED, Jajpur Road of Jajpur District and one village under WESCO viz; Badribandh Hamlet of Badgaon village have been made LED village as a part of nationwide LED village campaign.

Guided by the Central Government Scheme, the State Government has launched the UJALA (Unnat Jyoti by Affordable LEDs for All) Scheme in the state for promoting efficiency lighting, enhancement of awareness for use of efficient equipment (LED Bulbs) to reduce electricity bills and help preserve environment. This scheme will result in energy saving as well as reduce consumer's electricity bill to a great extent.

**Project Monitoring Mechanism:** The Engineer-in-Chief (Electricity)-cum-Principal Chief Electrical Inspector is the administrative head of the electrical inspectorate and project wings of Energy Department. The implementation of the Energy Conservation Scheme is made under the supervision of the EIC (Electricity)-cum-PCEI, Odisha being the State Designated Agency. He coordinates, regulates and takes action for enforcement of provision of Energy Conservation Act, 2001 within the State. The Principal Secretary reviews the implementation and progress of the scheme in the State periodically. The EIC-Cum-PCEI also reviews the progress of the scheme from time to time.



There is a budget provision of Rs.3.00 crore under the scheme during the financial year 2019-20. Besides, some funds are expected to be received from the Bureau of Energy Efficiency, Government of India during the current financial year. The details of works/activities to be executed during the year 2019-20 have been enumerated in Chapter-II.

### 1.3.5 Construction of Shakti Bhawan & STL Building

For administrative convenience and to provide required space to different Organizations under administrative control of Energy Department the need for a common office building was felt necessary for construction of Shakti Bhawan and for the same funds have been released in favour of OPTCL, the Nodal Agency. For the Financial Year 2017-18 provision of Rs.40.01 lakh has been kept under the scheme. Further, an amount of Rs.10.12 lakh has been re-appropriated which is aggregated of Rs.50.13 lakh during 2017-18 under the scheme.

There is a budget provision of Rs.1000/- as token under the scheme during financial year 2018-19 & 2019-20 respectively. The details of works/activities to be executed during the Financial Year 2018-19 have been enumerated in Chapter-II.

### 1.3.6 Procurement of equipment for Standard Testing Laboratory

**Objective:** In order to ensure the quality i.e. NABL standard in electrical equipment used in various industries, transmission and distribution system and electrification work in the state, Standard Testing Laboratory is established. All vital testing of electrical equipment are being carried out in Standard Testing Laboratory, Bhubaneswar.

**Funds flow arrangement:** In order to well equip and strengthen the Laboratory with ultra modern and highly precise testing equipment with latest technology, the Government of Odisha has been providing budgetary support. During the year 2017-18, a plan provision of Rs.1.00 crore was made for procurement with following new testing equipment.

1. Decade Resistance Box (10 KV) with all accessories for calibration of insulation
2. Current Injection Kit suitable for injection current up to 8000A with all accessories
3. CT/PT analyzer with all accessories
4. Remote Display Multi-meter with all accessories
5. Portable Current Injection Kit suitable for injection of current up to 600A with all accessories
6. UPS 10KVA, 415V, 3-Phase, 50 HZ for uninterrupted power supply to energy meter test bench with all accessories
7. Digital Insulation Tester (10 KV) with all accessories
8. Tan delta Kit for measurement of tan delta, specific resistance of transformer oil with all accessories
9. Leakage Current Monitor with all accessories

Tender floated through e-portal of Government of Odisha for procurement of the above items successively two times, but due to non-response/ single response/ invalid tender, procurement could not be made.

A budget provision of Rs.40.00 lakh was made in the financial year 2017-18 for STL Building. Chief Engineer (Building), Works Department was appraised regarding furnishing of Conference Hall, Reception Counter and Laboratory Rooms etc. On receiving the required

estimates, necessary approval and transfer of funds (Rs 50.1 lakh) was made from the budget to the Works Department to complete the work in the last financial year.

In the Financial Year 2018-19, there is a budgetary provision of Rs.50.00 lakh to furnish and strengthen the Standard Testing Laboratory, Bhubaneswar with new electrical testing equipment as per the requirements of NABL accreditation. As per exigencies, Multifunction Calibrating Insulation Tester and one 0.01 class reference standard for energy meter were procured costing Rs.46,51,560/- in the Financial Year 2018-19.

Out of Budgetary provision of Rs.15.00 lakh for accreditation of Standard Testing Laboratory, Rs.8.97 lakh was incurred for obtaining accreditation of the laboratory. The energy meter testing laboratory got accreditation on dated.01.02.2019 as per scope provided to NABL.

In this Financial Year 2019-20, there is a budget provision of Rs.1.50 Crore towards procurement of one 20 position three phases energy meter test bench, one 10 kv Digital Insulation Tester, one CT & PT analyser estimated at the cost Rs.1.72 Crore and proposed for provision of fund. However Primary injection Kit capable of injecting load more than 6000A is preferred to CT & PT analyser to be procured in this financial year. It is in the proposal since Financial Year 2017-18 budgetary provision. Tender process is under progress for procurement of the equipment through E-portal of Government of Odisha.

### **1.3.7 Restructured Accelerated Power Development & Reform Programme (R- APDRP)**

**Objective:** R-APDRP programme was introduced by Government of India to strengthen the distribution system, improve voltage profile of 12 towns in CESU area, reduce AT & C loss of CESU and to provide better customer satisfaction. Government of Odisha has been extending financial support to CESU as loan component to further the reform process.

**Funds flow arrangement:** 100 % of project cost in Part- A and up to 25 % in Part-B will be provided by Government of India on loan. The balance fund will be arranged by Government of Odisha/ CESU with applicable terms & conditions. At present, the scheme has been subsumed under the Central Government scheme, "Integrated Power Development Scheme". Government of Odisha had provided Rs.70.00 crore as counterpart funding of loan in the Financial Year 2015-16. Work under the scheme is under progress.

There is a budget provision of Rs.105.47 crore under the scheme during financial year 2017-18 & Rs.1000/- as token has been provided during financial year 2018-19 & 2019-20 respectively in anticipation of receipt of funds from Government of India.

### **1.3.8 Equity Support to OPTCL (share capital investment)**

**Objective:** In order to improve power supply in the un-served areas of KBK / Tribal districts of the State by taking up new transmission project, Government have decided to provide budgetary assistance to OPTCL beginning from the Financial Year 2011-12.

**Funds flow arrangement:** For implementation of the project, Government of Odisha will provide financial support of Rs.300.00 crore @ Rs.60.00 crore per year to OPTCL.



There was budget provision of Rs.50.00 crore under the scheme during financial year 2017-18. Budget provision of Rs.45.00 crore was made in the financial year 2018-19 & Rs.55.00 crore in the Financial Year 2019-20 for the completion of the scheme.

**Project Monitoring Mechanism:** The scheme is in implementation by OPTCL as the Nodal Agency. The Energy Department is to monitor the scheme as per the guidelines.

For the Financial Year 2019-20 a provision of another Rs.55.00 crore has been made under the scheme. The details of works/ activities to be executed during the year 2019-20 have been enumerated in Chapter-II.

### 1.3.9 Underground Cabling of Important Sites

**Objective:** In order to provide quality power supply and ensure safety in important sites of Grand road, Puri temple area, Ratha Danda, Lingaraja Temple area (Bhubaneswar), Maa Samaleswari Temple area (Sambalpur) and Ratha danda, (Baripada), Government have provided financial assistance to CESU/ WESCO/NESCO.

**Funds flow arrangement:** For implementation of the project, Government of Odisha has provided financial support in the Financial Year 2011-12 for underground cabling of different important sites like Grand road and Temple area, Puri, Konark area, Maa Samaleswari temple area and Ratha danda, Baripada. During the Financial Year 2016-17 budget provision of Rs.2.00 crore was made under the scheme.

**Implementation Status:** The work order has been issued and work is under progress for underground cabling work at Ratha Danda, Baripada which is expected to be completed by March, 2020. The underground cabling work of Maa Samaleswari Temple has been completed and charged. The underground cabling work of Lingaraj Ratha Danda, Bhubaneswar and that of Puri and Konark area has already been completed.

**Project Monitoring Mechanism:** The scheme is under implementation. Energy Department is monitoring the scheme as per guidelines.

There was a budget provision of Rs.1000/- as a token under the scheme during financial year 2017-18 & 2018-19 each and further, a sum of Rs.4.50 Crore is provided in Supplementary Budget during 2018-19. There is a budget provision of Rs.4.00 Crore during the Financial Year 2019-20. The details of works/activities to be executed during the Financial Year 2019-20 have been enumerated in Chapter-II.

### 1.3.10 System Strengthening for Elephant Corridor

**Objective:** Considering the frequent electrocution of Elephants in recent times, Infrastructure Strengthening work in Elephant Corridor is felt necessary to avoid or minimize the occurrence. The scheme was launched during the Financial Year 2012-13 for which a provision of Rs.1.00 lakh was made. In the Financial Year 2017-18, 2018-19, a budget provision of Rs.20.00 crore each respectively were made under the scheme. In the Financial Year 2019-20, provision of another Rs.100.00 crore has been made. The works under the Scheme is being implemented by the Distribution Companies.

**Implementation Status:** In the Phase-I, 11 corridors have been completed at expenditure of Rs.32.63 crore by 31.03.2018. In Phase-II, out of 15 corridors work in 9 corridors has been completed at an expenditure of Rs.19.13 crore by 31.03.2017. In phase-III, work is in full swing in 15 nos. of corridors with an expenditure of Rs.7.07 crore by 31.03.2017.

**Project Monitoring Mechanism:** The scheme is under implementation by the DISCOMs. Energy Department is monitoring the scheme as per guidelines.

There is a budget provision of Rs.100.00 Crore under the scheme during financial year 2019-20. The details of works/activities to be executed during the Financial Year 2019-20 have been enumerated in Chapter-II.

### 1.3.11 Shifting of Transformers located in Government Schools & Anganwadi Centres

**Objective:** In order to ensure safety inside the premises of Government Schools and Anganwadi Centres in the state, Government is making budgetary provision since the Financial Year 2013-14 for shifting of the Electrical Infrastructure. In the Financial Year 2017-18, a budget provision of Rs.11.82 Crore was made under the scheme. A budget provision of Rs.12.20 crore has been made under the scheme for the Financial Year 2018-19.

**Implementation Status:** The shifting work in 4816 nos. of Government Schools & Anganwadi centres have been completed by the DISCOMs out of the 5162 centers taken up at an expenditure of Rs.42.48 crore till 31.03.2018

There is a budget provision of Rs.10.00 Crore under the scheme during financial year 2019-20. The details of works/activities to be executed during the Financial Year 2019-20 have been enumerated in Chapter-II.

### 1.3.12 “Ama Ghare LED Light” Karyakrama

**Objective:** To distribute 4 nos. of 9 watt LED bulbs to each NFSA/ SFSS beneficiary identified by the FSCW Department, Government of Odisha free of cost through Public Distribution System network.

**Funds flow arrangement:** For implementation of the project, Government of Odisha has provided financial support in the Financial Year 2018-19. Total number of 9 watt LED bulbs to be distributed to all the eligible beneficiaries (95 lakh approximately) will be around 3.50 Crore nos. of bulbs and the tentative cost of the Scheme is Rs.237.00 Crore.

**Implementation Status:** To enable the Economically Weaker Sections of the population of the State to reduce their monthly energy bill and to help the DISCOMs to manage efficiently the peak demand of power.

**Project Monitoring Mechanism:** The scheme is under implementation through public distribution system network. Energy Department is monitoring the scheme as per guidelines. During the Financial Year 2018-19, a budget provision of Rs.225.00 Crore was made under the scheme.

In order to provide LED bulb to all, new Scheme has been launched named as “Ama Ghare LED Light” Karyakrama. A sum of Rs.10.00 Crore is provided for the Financial Year 2019-20.

### **1.3.13 Construction of 33/11 KV Sub-Stations (Odisha Distribution System Strengthening Programme)**

For quality supply of power to the consumers and to address the low voltage problem in rural area, Government of Odisha in Energy Department have decided to construct 520 nos. of New 33/11 KV Substations in the State with an aim to reduce the high technical loss arising due to the length of 11 KV & 33 KV lines and to supply uninterrupted power at appropriate voltage to the consumers by increasing the number of 33/11 KV Sub-stations.

The main objectives of the project are (i) to reduce high technical loss (ii) to reduce the length of 11 KV & 33 KV lines by increasing the number of 33/11 KV primary Sub-stations (iii) to supply stable power at appropriate voltage to the consumers and (iv) to cater the present and future load in view of increasing consumer due to implementation of various electrification programmes.

For successful implementation of the project, a tentative investment cost is estimated at Rs.2600.00 crore which was meant to be spent over a period of 3 years starting from 2013-14 to 2015-16. In first phase, a budgetary allocation of Rs.200.00 crore, Rs.150.00 crore & Rs.890.00 crore were made in the Financial Year 2013-14, 2014-15 & 2015-16 respectively under the scheme. As the work under the scheme has been continuing budget provision of Rs.781.00 crore were made for the Financial Year 2017-18. In the Financial Year 2018-19 a provision of Rs.500.00 crore has been made under the scheme.

There is a budget provision of Rs.443.00 Crore under the scheme during financial year 2019-20. The details of works/activities to be executed during the Financial Year 2019-20 have been enumerated in Chapter-II

### **1.3.14 State Capital Region Improvement of Power System (SCRIPS)**

Looking at the tremendous infrastructural growth in all fronts across Bhubaneswar city and nearby areas during the recent days, it is felt that there is immediate and immense need to expand and strengthen the existing power infrastructure in the region.

The Comprehensive Development Plan (CDP) for Bhubaneswar and Cuttack Urban Complex has also been made to think of the infrastructure expansion and renovation of energy sector. Taking these facts into consideration, the concept of State Capital Region Improvement of Power System (SCRIPS) is visualized with an objective of 24X7 uninterrupted stable power supplies to all classes of consumers including public services. To kick start the project, a provision of Rs.230.00 Crore, Rs.150.00 Crore & Rs.350.00 Crore were made in the Budget for the Financial Year 2017-18, 2018-19 & 2019-20 respectively.

A budget provision of Rs.350.00 Crore has been kept under the scheme for the Financial Year 2019-20.

### 1.3.15 Odisha Power Sector Improvement Projects (OPSIP)

The occurrence of super cyclone Phailin in Oct, 2013 caused a massive devastation to distribution and transmission network of Energy Sector. Southern part of Odisha experienced the deficiency of energy infrastructure in the State. There was a damage of energy infrastructure to the tune of Rs.1000.00 Crore. The existing infrastructure is not capable of bearing threat of eventualities supra. Keeping in view, the State Government evolved new schemes and projects for reliable and un-interrupted power supply to the consumers by adopting ultra-modern technology, creating new and renovating the existing infrastructure. Under this programme/ schemes the following are the major projects for which the State Government makes budgetary provisions.

This being the umbrella scheme, having proper objective to build up a robust energy infrastructure to combat the natural calamities, a number of projects/ sub-projects and flexibilities in fund allocation under different projects and sub-projects is anticipated.

#### a. 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 Sub-station can be fed from two sources of power which is capable of supplying power at the time of need from other sources. In view of the need to supply qualitative and un-interrupted power to the consumers, Energy Department has proposed to launch a new project called "Radial to Ring Conversion Project". For this purpose, budget provision of Rs.30.01 Crore in the Financial Year 2014-15. In the Financial Year 2016-17 a budget provision of Rs.30.00 Crore, Rs.40.00 Crore each in the Financial Year 2017-18 and 2018-19 respectively were kept under the scheme.

For the Financial Year 2019-20 a budget provision of Rs.54.95 Crore has been made for continuance of the scheme.

#### b. 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, 2013 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 is launching this new project named as "Disaster Response Centre" for this purpose. Budget provision of Rs.5.00 Crore each was made under the scheme for the Financial Year 2014-15 & 2015-16. For the Financial Year 2016-17, 2017-18 & 2018-19 a budget provision of Rs.10.00 Crore, Rs.30.00 Crore & Rs.40.00 Crore respectively were made under the scheme.

A budget provision of another Rs.61.33 Crore has been made under the scheme for the Financial Year 2019-20.

### c. **Disaster Resilient Power System**

The massive devastation of transmission and distribution infrastructure of the energy sector in last Phailin and Flood, 2013 played the major role for determining the necessity of a Disaster Resilient Power System in the State. So a new scheme is conceptualised for creation of energy infrastructure having capability to combat the natural calamities like Cyclone and Flood. A budget provision of Rs.20.01 Crore, Rs.20.00 Crore, Rs.40.00 Crore & Rs.35.00 Crore during the Financial Year 2015-16, 2016-17, 2017-18 & 2018-19 respectively were made under the scheme.

In the Financial Year 2019-20 a budget provision of Rs.106.43 Crore has been made under the scheme taking the importance of the scheme.

#### **1.3.16 Smart Grid**

For reliable power supply to the consumers, being the priority of the Government there is need for adoption of new technology in transmission and distribution sector. In order to achieve the objective, adoption of Smart Grid concept in India has got its mandate. The Smart Grid is a progress, from the present state of grid, towards adding a set of smarter system or applications in phased manner according to the priorities of each constituent utility. The Smart Metering initiative in transmission network is a part of the Smart Grid Project. Indian Smart Grid Task Force (ISGTF), in close association with Indian Smart Grid Forum (ISGF) develop the norms for Smart Grid adoption which has been approved by Ministry Of Power as the Smart Grid vision and road map for India. The main objectives of the Scheme are:

- i. To establish energy dash board for Power Transmission Utility.
- ii. To time-synchronize the energy meters
- iii. To enable energy audit in Power Transmission Utility.
- iv. To help in handling detailed energy data repository for conducting analytics.
- v. To support MOBILITY options in future on energy dash boards.

The Government of Odisha has taken initiatives for adoption of Smart Grid Technology in power sector (Transmission and Distribution Sector) having the component name viz. GIS, SCADA, OPGW and AMI with budgetary support of Rs.15.00 Crore in the Financial Year 2014-15. A budget provision was made under the scheme of Rs.20.00 Crore, Rs.70.00 Crore & Rs.55.00 Crore for the Financial Year 2016-17, 2017-18 & 2018-19 respectively.

A budget provision of another Rs.14.70 Crore has also been made under the scheme for the Financial Year 2019-20.

#### **1.3.17 Infrastructure Assistance to GEDCOL**

In order to promote Green Energy in the State, Government of Odisha has established Green Energy Development Corporation Ltd. (GEDCOL), a subsidiary of OHPC, which has started its operation from the Financial Year 2013-14. A budget provision of

Rs.10.00 Crore each was made under this scheme for the Financial Year 2016-17, 2017-18 & 2018-19 respectively under the scheme.

In the Financial Year 2019-20 another Rs.10.00 Crore has been made under this scheme.

#### **1.3.18 Equity infusion to OHPC:**

The State Government has decided to provide financial assistance through equity infusion to OHPC. For this purpose a budget provision of Rs.25.00 Crore, Rs.30.00 Crore, Rs.19.00 Crore & Rs.49.00 Crore were made for the Financial Year 2015-16, 2016-17, 2017-18 & 2018-19 respectively under the scheme.

For the Financial Year 2019-20 plan provision of Rs.49.00 Crore has been kept under the scheme for providing equity capital support to Odisha Coal & Power Ltd. (OCPL).

#### **1.3.19 Odisha Transmission System Improvement Project (EAP) (JICA)**

This is a JICA assisted project to be implemented in the State for the project period from 2016 to 2020 with a total project cost of Rs.1289.08 Crore including State counterpart funding of Rs.142.32 Crore. The project is being implemented through OPTCL, Bhubaneswar a wholly owned Government company with an objective to 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. Budget provision of Rs.100.00 Crore was made for implementation of the project for the Financial Year 2016-17 under the scheme. A budget provision of Rs.20.00 Crore & Rs.44.00 Crore was made under the scheme for the Financial Year 2017-18 & 2018-19 respectively under the scheme.

There is a budget provision of Rs.50.00 Crore in the Financial Year 2019-20 under the Scheme.

#### **1.3.20 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 and smart and net metering are mandatory components under the scheme. The scheme subsumed the R-APDRP scheme and keeps it as a separate scheme under it. For the Financial Year 2015-16 a provision of Rs.10.00 Crore was made under this scheme. During the Financial Year 2016-17, 2017-18 & 2018-19 a provision of Rs.50.00 Crore & Rs.100.00 Crore each respectively were made under this scheme.



There is a budget provision of Rs.100.00 Crore in the Financial Year 2019-20 under the Scheme.

### **1.3.21 Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)**

Deen Dayal 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 rural electrification component and the Outlay under the RGGVY is carried forward to the DDUGJY with its (DDUGJY) original Outlay made by Government of India. For the Financial Year 2015-16 a provision of Rs.20.00 Crore was made under the scheme. During the Financial Year 2016-17, 2017-18 & 2018-19 a provision of Rs.100.00 Crore & Rs.200.00 Crore each were made under this scheme respectively.

There is a budget provision of Rs.240.00 Crore in the Financial Year 2019-20 under the Scheme.

### **1.3.22 Equity Infusion to OPGC**

The State Government has decided to provide financial assistance through equity infusion to OPGC. For this purpose a provision of Rs.247.35 Crore was made under the scheme in the plan budget for Financial Year 2016-17. In the Financial Year 2017-18 & 2018-19 a budget provision of Rs.308.69 Crore & Rs.191.68 Crore has been made under the scheme.

There is a budget provision of Rs.1000/- as token in the Financial Year 2019-20 is provided in under the Scheme.

### **1.3.23 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 there was a plan provision of Rs.2.50 Crore under the scheme. For the Financial Year 2017-18 & 2018-19 an amount of Rs.3.90 lakh & Rs.20.00 lakh were made under the scheme.

There is a budget provision of Rs.1000/- as token in the Financial Year 2019-20 under the Scheme.

### **1.3.24 Sahaj Bijli Har Ghar Yojana (Rural) – Soubhagya**

In order to provide electricity to all rural houses, Government of India has launched in October, 2018 a new Scheme named as “Sahaj Bijli Har Ghar Yojana (Rural) – Soubhagya” to achieve universal household electrification. An anticipation availing of funds from Government of India, State Government has been kept of Rs.274.03 Crore (as State Matching Share) is provided for the Financial Year 2018-19.

#### **Scope of Work:**

- Providing last mile connectivity and electricity connection to all un-electrified households in rural areas

- Providing Solar Photo Voltaic (SPV) based standalone systems for un-electrified households located in remote and inaccessible villages/habitations, where grid extension is not feasible or cost effective.
- Providing last mile connectivity and electricity connections to all remaining economically poor un-electrified households in urban areas, Non-poor urban households are excluded of this scheme.

The scheme envisages 60% capital subsidy, 10% minimum contribution of DISCOMs and 30% loan from Financial Institutions / Banks.

Government of India has approved Rs.524.76 Crore under the scheme for electrification of un-electrified rural households in the State.

There is a budget provision of Rs.150.00 Crore in the Financial Year 2019-20 under the Scheme.

#### **1.3.25 IEC Activities**

In order to improve Information, Education and Communication systems in the State, the IEC (Information, Education and Communication) Activities Scheme has been initiated. The State Government has made a provision of Rs.35.00 lakh & Rs.3.36 Crore under the scheme for the Financial Year 2017-18 & 2018-19 respectively.

There is a budget provision of Rs.30.00 lakh in the Financial Year 2019-20 under the Scheme.

#### **1.3.26 UMPP Bedabahal**

In order to provide Odisha's Share towards additional land cost for UMPP Bedabahal in Sundargarh District, budget provision of Rs.89.70 Crore has been made for the Financial Year 2019-20.

### **1.4 NEW SCHEMES/ PROJECTS & INITIATIVES**

#### **1.4.1 "Support to GEDCOL for Land Acquisition for Solar Park"**

In order to provide equity support to GEDCOL for land acquisition for setting of a new Solar Park, a token provision of Rs.1000/- is made for the Financial Year 2019-20.

#### **1.4.2 DISCOMs IT System**

It is a new scheme for development of IT System in DISCOMs functioning in the State. Budget provision of Rs.20.00 Crore is made for this purpose in the Financial Year 2019-20.

#### **1.4.3 State Sector Schemes Ceiling Fixed for the State PSUs**

The Planning & Convergence Department has fixed the annual Ceiling for the Financial Year 2018-19 for the State PSUs under this Department viz. OPTCL, OPGC & OHPC at Rs.1000.00 Crore, Rs.3500.00 Crore & Rs.500.00 Crore respectively which is routed through outside the Annual Plan Budget for the Financial Year 2018-19.



## *Chapter II*

### **2.0 Outcome Budget-2019-20**

The exercise is primarily meant at converting financial outlays into measurable and monitorable outcome. It is a performance measurement tool that helps in better service delivery, decision making, evaluating programme performance and results & improving programme effectiveness. The Outcome Budget is also aimed at changing the outlook of the agencies entrusted with the responsibility of programme execution and implementation. The idea is to make the programme implementing agencies more result oriented by shifting the focus from “Outlays” to “Outcomes”. The scheme-wise details, wherever necessary of the Outcome Budget for 2019-20 is indicated in the attached statement.

**CHAPTER-II**  
**2.1- OUTCOME BUDGET- 2019-20**  
**TABLE - 1**  
**(PROGRAMME EXPENDITURE)**

**Name of the Department: Energy Department**

(SSS, CS & CSS)

(Figures in TRS)

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
1	Restructured Accelerated Power Development & Reform Programme (R-APDRP)	Up-gradation of transmission and distribution network in densely electrified zones in the urban and industrial areas	1	Work in Part-A & Part- B component under the project in 12 towns of CESU area is in progress.	Improvement of power supply system and reduction of AT & C Loss in 12 towns under the project areas of CESU.	12 <sup>th</sup> Five Year Plan	Funds to the tune of Rs.70.00 Crore were provided under the scheme in the Financial Year 2015-16 as counterpart loan component. A token provision was made in the State Budget for the Financial Year 2016-17 in anticipation of Financial assistance from Government of India. During 2018-19, a sum of Rs.1000/- is provided. The scheme is subsumed under the IPDS scheme.
2	Rajiv Gandhi Grameen Vidyutikaran Yojana (SS) (RGGVY)	To meet the 10% loan component under the scheme by electrifying the un-electrified villages/ partially electrified villages and BPL Households having population of 100 or	2125000	3144 nos. of un-electrified villages/ partially electrified villages and BPL Households will be taken up for electrification.	Rural Electrification of villages / habitations having population 100 and more for improvement in	12 <sup>th</sup> Five Year Plan Period	Funds are being placed by REC in favour of 3 CPSUs namely NTPC, NHPC & PGCIL for execution of work and 10% loan component is to be contra credited in Government Account. The scheme is subsumed under the DDUGJY scheme and the provision has

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
		more.			quality of life of rural poor.		been made in anticipation of release of fund by GOI for the project work undertaken during the 11 <sup>th</sup> plan period.
3	Biju Gram Jyoti Yojana (BGJY)	Electrification of villages/ habitants having population less than 100 nos. as well as BPL Households which are not covered under RGGVY	750000	Procurement of 15000 distribution transformers at various voltage levels of different capacities for DISCOMs.	Electrification of villages / habitations having population less than 100 and BPL Households for improvement in quality of life of rural poor.	Started from the Year 2007-08 & continues.	The District Collectors are executing the work. The Financial Year 2019-20, OPTCL has not anticipated any further funds for procurement of transformers.
4	Biju Sahranchal Vidyutikaran Yojana (BSVY)	Un-electrified villages/wards/ slums area of Urban Local Bodies will be provided with electricity	100000	861 nos. of slums/wards/hamlets will be taken up for electrification	Provide access to electricity to the people living in the un-electrified areas of urban local bodies	12 <sup>th</sup> Five Year Plan	The Scheme started from the Year 2010-11 & continues
5	Energy Conservation	1. Energy efficiency in the drinking water pumping systems 2. Energy efficiency in buildings 3. Agricultural demand side management. 4. Energy efficiency of lift irrigation systems. 5. Energy efficiency in the ULBs.	30000	Economical use of energy in domestic, industrial, building, housing, agriculture and other sectors through improvement of energy efficiency.	Economical use of power in domestic/industrial sectors and save energy for future generation.	On-going	Strengthening of energy conservation cell for resources and support of Departments, Organisations.

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
		6. Energy efficiency in the industry, domestic, dairy sector, SME clusters. 7. Energy efficiency in Thermal and Hydro Power Stations, Transmission and Distribution System. 8. Capacity Building and policy initiatives. 9. Technical services towards engagement of consultants and service for energy conservation cell. 10. Seminars, awareness programme 11. Any other activities related to Energy conservation.		Creating awareness among general public for efficient use of energy through various programmes/ events/ media campaign.			
6	Construction of Shakti Bhawan & STL Building	For administrative convenience and to provide required space to different Organisations under administrative control of Energy Department.	1	The work, assigned to IDCO Ltd by OPTCL is under progress.	To minimize administrative inconvenience and communication gap between administration and its organisations.	Started from the Financial Year 2013-14	Funding will be made by the beneficiary organisations.

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
7	Procurement of equipment for Standard Testing Laboratory (STL)	(i) To equip the STL with ultra-modern technology as per NABL standard. Procurement of Transformer Oil Testing Equipment for testing and flash point, Viscosity etc. (ii) Obtaining accreditation of STL for Accreditation National Board Laboratories.	15000	Electrical Testing Equipment	Procurement of meter testing.	Started in the Financial Year 2012-13 & continues.	The work is executed by Chief Engineer (Building), Odisha under process.
8	Share Capital Investment in OPTCL	To meet the future load growth, to supply power with adequate voltage, to supply reliable and quality power to all, to supply power to backward areas, for socio-economic growth in the under developed areas, to integrate the Distribution System (ODSSP, DDUGJY, IPDS etc.) with transmission network for effective utilisation of the Distribution infrastructure to supply uninterrupted power to the remotest corner of the state and the urban load centres, to supply the	550000	18 nos. 400/220KV, 220/132/33KV, 220/33KV, 132/33KV grid Sub-stations and associated transmission lines are proposed to be constructed in several districts of Odisha such as Sambalpur, Bargarh, Dhenkanal, Malkangiri, Keonjhar, Cuttack, Puri, Balasore, Sonepur, Ganjam, Jagatsinghpur, Bhadrak, Kandhamal, Mayurbhanja, Jharsuguda etc. . Out of these, 8 nos. Sub-stations & lines have	1. Meeting the future load growth, uninterrupted quality power supply, integration of distribution system with the transmission network in unserved areas. 2. Strengthening of trans-mission network in low voltage pockets. 3. Improvement of reliability of power in	Over a period of 5 years starting from 2017-18 to 2021-22	Total cost of the project estimated at Rs.857 Crore. OPTCL need to arrange Rs.250 Crore as counterpart funding over a period of 5 years for smooth execution of work. 10 nos. projects have been tied up with Bank of India for financing. Negotiation to finance the rest of the projects is under process.

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
		quality power mainly supply with precision voltage range for the growth of precision industries in the state, to meet the commitment of 24x7 power supply.		been charged and balance 10 nos. shall be completed	KBK/Left Wing Extremist affected areas.		
9	System Strengthening for Elephant Corridor	Out of the 27 elephant corridors identified in Phase-III, work in the priority Elephant Corridors will be taken up in consultation with PCCF (Wildlife).	1000000	In the Phase-I out of 11 corridors, work in 10 corridors have been completed at expenditure of Rs.18.93 Crore by 31.03.2017. In Phase-II out of 15 corridors, work in 9 corridors has been completed at an expenditure of Rs.19.13 Crore by 31.03.2017. In phase-III, work is in full swing in 15 nos. of corridors with an expenditure of Rs.7.70 Crore by 31.03.2017.	System Strengthening for Elephant Corridor to arrest death of elephants due to electrocution.	Started in the Financial Year 2013-14 & continues.	Rs.20.00 Crore was provided in the Plan Budget 2018-19 & released a sum of TRs.46232 to the DISCOMs for implementation of the project.
10	Underground Cabling System of Important Sites.	To complete the remaining underground cabling work at Ratha Danda, Baripada.	40000	The work order has been issued and work is under progress for underground cabling work at Ratha Danda, Baripada which is	Quality & reliable power supply and safe distribution system in	Started in Financial Year 2012-2013 & continues	During the year 2011-12, Government has decided for underground cabling. Scheme work has been entrusted to CESU, NESCO and WESCO.

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
				expected to be completed by March, 2018. The underground cabling work of Maa Samaleswari Temple has been completed and charged. The underground cabling work of Lingaraj Ratha Danda, Bhubaneswar and that of Puri and Konark area has already been completed	important sites.		
11	Shifting of Transformer and allied Conductor located in Government schools & Anganwadi centres	Shifting of electrical installations located in 346 Schools and Anganwadi Centres	100000	The shifting work in 4816 nos. of Government Schools/ Anganwadi centres have been completed by the DISCOMs out of the 5162 Centres taken up at an expenditure of Rs.30.66 Crore till 31.03.2017	Safety in the premises of Government Schools and Anganwadi Centres.	2013-14 to 2014-15 (2 years) & continues.	Rs.12.20 Crore was provided in the Financial Year 2018-19 and released for execution of the project work. The balance work of the scheme is under progress by the DISCOMs.
12	"Ama Ghare LED Light" Karyakrma	To distribute 4 nos. of 9 watt LED bulbs to each NFSA/ SFSS beneficiary identified by the FSCW Department, Government of Odisha free of cost	100000	Total number of 9 watt LED bulbs to be distributed to all the eligible beneficiaries (95 lakh approx.) will be amount Rs.3.84	To enable the economically weaker sections of the population of the State to	2018-19 to 2019-20	During the year 2018-19, Government has decided to launch the scheme in the State. EESL, a Government of India enterprise was entrusted to procure Bulbs through open

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
		through Public Distribution System network.		Crоре and the tentative cost of the scheme is Rs.237.00 Crоре.	reduce their monthly energy bill and to help the DISCOMs to manage efficiently the peak demand of power.		tender process. OPTCL is the implementing agency and DISCOMs are the executing agency for this scheme.
13	Construction of new 33/11 KV Sub-stations (Odisha Distribution System Strengthening Project )	For quality supply of power to the consumers and to address the low voltage problem in Rural area, Government of Odisha has planned to Commission 500 nos. 33/11 KV Sub-stations within a period of 3 years	4430000	Construction of 473 nos. of 33/11 KV grid Sub-stations at contract price of Rs.3842.50 Crоре and 6% extra for PMC Charges totalling to Rs.3842.50 Crоре. Out of 473 nos. of Sub-stations, 267 nos. has been charged and 20 nos. Sub-stations are ready to charge.	Quality supply of powers to consumers with improvement in voltage.	2013-14 to 2019-20. Process continues to complete the project work.	Balance 186 nos. Sub-stations to be charged. Delay occurs mainly due to RoW issues. NH clearance, Railway & Forest clearance etc.
14	State Capital Region Improvement of power system (SCRIPS)	To meet the energy needs of the State Capital Region over a period of next decade i.e. from the year 2014-15 to 2022-23 ensuring 24X7 Un-interrupted and Stable Power Supply to all classes of Consumers including Public Services.	3500000	Underground cabling for 132 KV and below voltage level and all grid sub-stations shall be of GIS type and the system shall use Smart Grid technology which will ensure more reliable supply of electricity.	1. To meet the anticipated growth demand over the next decade by providing 24x7 uninterrupted and stable power supply. 2.	2015-16 to 2019-20 (5 Years)	In the Financial Year 2018-19, Rs.150.00 Crоре was made under the scheme & released.



Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
					Underground cabling in CDP area.		
15	Radial to Ring Conversion Projects	To provide alternate source and reduce outage and improve the system availability. To reduce the outage of distribution system and to act as the backbone of distribution network.	549500	Strengthening of infrastructure for smooth and reliable quality power along with reduction in transmission loss and improving the system availability. Ring network system shall facilitate quick restoration of power supply by availing alternate source during break down of lines.	1. One substation will be fed from two sources of power which is capable of supplying power at the time of need from other sources. 2. To meet the transmission planning criteria of n-1-1 contingency credit. 3. Improvement of reliability of power supply.	2015-16 to 2019-20	132 KV SC line from Bhadrak to Anandpur has been charged on 03.07.2019. In the Financial Year 2018-19, Rs.40.00 Crore was kept under the scheme & released.
16	Disaster Response Centre	Quick restoration of power supply disrupted during occurrence of disasters/ calamities.	613300	Procurement of 30 sets of ERS towers, 24 sets of 160 KVA DG set and 63 nos. 82.5 KVA DG sets, 3 nos. 160 MVA, 2 nos. 20 MVA, 5 nos. 40 MVA, 1 no. 315 MVA	To maintain transformer banks at 11 distribution locations having total capacity of 1035 MVA at different voltage levels for	2015-16 to 2019-20	In the Financial Year 2018-19, a budget provision of Rs.40.00 Crore was made under the scheme & released.

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
				transformers. Consumables and spares to be procured for functioning of existing ERS towers.	replacement during any transformer failure.		
17	Disaster Resilient Power System	To increase the Grid efficiency, reliability and resilience making the network less vulnerable to all types of adverse weather conditions so that the outages and damage to the transmission and distribution system caused due to disasters is reduced to a large extent, resulting to restoration of power within a minimum possible time.	1064300	To strengthen the existing as well as build new infra-structures using modern techniques of Disaster Resilience that can combat natural calamities like cyclone, flood etc.	1. To prevent damage of transmission line network within 60 Kms. from the coastal belt. 2. Construction of GIS Sub-stations and underground cabling system. 3. Provision for alternate power supply from 2 <sup>nd</sup> source during any calamity.	2015-16 to 2019-20	In the Financial Year 2018-19, a budget provision of Rs.35.00 Crore was made under the scheme & released.
18	Smart Grid	Availability of entire transmission network digitally, convenient in asset management, outage management, network operation, planning and operation, Smooth grid operation by SLDC, timely flow of	147000	The SCADA helps in Power supply management which ultimately ensures quality power to general public. The AMI project helps in better energy commercials	OPGW, SCADA shall be completed. It will facilitate more efficient and cost effective transmission of electricity	2015-16 to 2019-20	In the Financial Year 2018-19 Rs.55.00 Crore was provided in the State Budget and released.

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
		accurate energy data, time synchronisation of all energy meters, energy accounting and settlement activities, time synchronisation of all Bay Control Units (BCU) with Control Centre, facilitating supervisory Control and availability of quality power supply round the clock.		management. The OPGW & automation project helps in Power system management which ultimately ensures quality power and the same will be completed in the current financial year.	through reduced interruptions as well as quicker restoration after any power disturbance.		
19	Infrastructure Assistance to GEDCOL	Supply of renewable and pollution free energy by installing at least 100 MW Solar and Small Hydro Power Units in the state by exploring the huge renewable energy resources in the State which have otherwise remained untapped for a long.	100000	<ul style="list-style-type: none"> <li>DPR has been prepared for development of 16.4 MW Solar plant on the un-utilized lands of OPTCL</li> <li>Land survey is being carried out to identify suitable land patches of around 6000 Acres for development of 1000 MW Solar Park by GEDCOL.</li> <li>Replication of the Bhubaneswar-Cuttack Rooftop project in 15 other cities in the State. The total Rooftop Project capacity is</li> </ul>	1) 20 MW Grid-connected Solar Power Plant at Manamunda in Boudh has been commissioned to the State Grid (15 MW in Mar, 16 and 5 MW in June, 16). 2) Development of 4 MW Solar Rooftop project on the non-residential Government buildings in Cuttack-	2014-15 onwards	To start the project, provision of Rs.10.00 Crore each were made in the Budget for the Financial Year 2018-19.

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
				expected to be around 10 MW. • DPR has been prepared for 3 MW Jambhira SHEP in Mayurbhanj and 4.2 MW Kanupur SHEP in Keonjhar District. DPR has been prepared for 10 MW Mandira Dam SHEP in Sundargarh. The Project will be executed through a JV Company of GEDCOL & SAIL, RSP.	Bhubaneswar is under progress. Already 225 K.W capacities have been installed inside Utkal University campus. Project is scheduled to be completed by September, 2017.		
20	Equity Infusion to OHPC	Provide financial assistance to OHPC for payment to Odisha Coal & Power Ltd. (OCPL).	490000	Work is under execution by OCPL. OHPC has to pay Rs.49.00 Crore to OCPL towards equity share as per agreement with OPGC at the ratio of 49:51.	Utilize the fund for exploration of Manoharpur and DIP side Manoharpur Coal blocks allotted in favour of OCPL through Government route.	2014-15 onwards	In the Financial Year 2014-15 there was an amount of Rs.1.00 lakh under the scheme. Budget provision of Rs.25.00 Crore was made in the Financial Year 2015-16 for restructuring and renovation of different projects. In the Financial Year 2018-19, a budget provision of Rs.49.00 Crore was made for extending support to OCPL.
21	Odisha Transmission System	Strengthening of existing transmission system of OPTCL to meet the future	500000	The existing transmission system of OPTCL has to be	1. Improvement of power supply.	2017-18 to 2021-22.	Six packages consisting of 13 nos. projects have been awarded to the successful bidders.

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
	Improvement Project (JICA)	need.		strengthened to meet the electricity demand during the 13th plan period when generation capacity is expected to increase from the existing 5000 MW to 10900 MW (state share).	2. Implementation of open GIS Substation.		In the Financial Year 2018-19, a budget provision of Rs.44.00 Crore was made under the scheme.
22	Integrated Power Development Scheme (IPDS)	Central Government scheme for strengthening of the Sub-stations and distribution network and reduction of losses in urban and semi-urban areas.	1000000	To strengthen the Sub-stations and distribution network and reduction of losses in urban and semi-urban areas. 60% of the approved scheme amount will be financed by the Central Govt. through PFC Ltd. and the balance 40% will be funded by the State Govt. at the initial stage. Besides, Government of Odisha shall provide the expenses towards PMA charges beyond 0.5% of the project cost (funded by Government of India).	1. 24x7 power supply to consumers in urban areas. 2. Reduction in AT&C losses of DISCOMs. 3. IT enabled metering system. 4. Implementation of solar energy system in Government buildings. 5. Laying of underground cabling in municipal/ urban areas.	2016-17 to 2019-20	RoW issues, Non availability of shut down in time. The Funding Agency has allowed the time extension up to 31.12.2019. There was a budget provision of Rs.106.17 Crore under the scheme for Financial Year 2018-19.
23	Deen Dayal	Central Government scheme for ensuring	2400000	To ensure round the clock power supply to	1. 24x7 power supply to non-	2016-17 to	RoW issues, Non availability of

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
	Upadhyaya Gram Jyoti Yojana (DDUGJY)	round the clock power supply to rural households and agricultural consumers.		rural households and agricultural consumers through feeder separation between agricultural and non-agricultural consumers, metering 60% of the approved scheme amount will be financed by the Central Govt. through REC Ltd. and the balance 40% will be funded by the State Government. Besides, Govt. of Odisha shall provide the expenses towards PMA charges beyond 0.5% of the project cost (funded by Government of India).	agricultural consumers and adequate power supply to agricultural consumers. 2. Reduction in AT&C losses. 3. Providing electricity infrastructure for all rural households. 4. Separation of agricultural and non-agricultural feeders. 5. Strengthening of sub-transmission and distribution infrastructure in rural areas. 6. Metering for all types of consumers, feeders and distribution transformers.	2019-20	shut down in time. The Funding Agency has allowed the time extension upto 30.9.2019. There was a budget provision of Rs.155.08 Crore under the scheme for Financial Year 2018-19.

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
24	Equity infusion to OPGC	Provide financial assistance to OPGC through Equity Infusion.	1	To extend financial support to OPGC in carrying out works for Infrastructure development.	---	Started in the Financial Year 2016-17	-----
25	Power supply to the new Bank Branches of unbanked G.Ps	Provide Power supply to the new Bank Branches of unbanked G.Ps	1	Funds released to CESU, NESCO & WESCO. Work on progress.	Provide Power supply to the new Bank Branches of unbanked G.Ps as per arriving demand.	Started in the Financial Year 2016-17	In the Financial Year 2016-17 Rs.25.00 lakh was provided in the State budget.
26	Sahaj Bijli Har Ghar Yojana (Rural) - Soubhagya	Government of India has launched to provide funds under the scheme & State Government has kept funds as State Matching Share to Provide electricity to all Economically Backward un-electrified households.	1500000	This scheme has been formulated to ensure last mile connectivity and electricity connection to all the remaining un-electrified households in the country and also to achieve universal household electrification by financing the DISCOMs.	Electrification of all the un-electrified villages/ households in the country.	2017-18 to 2019-20	In the Financial Year 2018-19 Rs.274.03 lakh was provided in the State budget
27	Information, Education, Communication (IEC) Activities	To create awareness among the consumers & public. The process of implementation of schemes are being produced the form of video, audio & text materials, which are	3000	Information development for online monitoring of different schemes and programmes operating in the State for Sensitisation to the consumers and	Help to consumer for safety of human and animals in the State.	2017-18 onwards	The fund is required for Sensitisation to the consumers and public for awareness



Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
		being advertised/ telecasted in the different print and electronic media for wide publicity in the State.		public for awareness			
28	Odisha Share for UMPP Bedabahal	UMPP is one of the flagship projects of Government of India as a primary procurer of power. In order to provide Odisha's Share towards additional land cost for UNPP (Bedabahal) in Sundargarh District	897000	The work has been entrusted to Odisha Integrated Power Ltd (OIPL) a wholly owned subsidiary of Power Finance Corporation (PFC) Ltd.	The work process is going on with Land Acquisition, Forest Clearance and other subsidiary works	Started in the year 2013-14	To start the Project a provision of Rs.47.50 Crore was made in the Budget for the Financial Year 2014-15.
<b>NEW SCHEMES IN PIPELINE</b>							
29	DISCOMs IT System	For development of IT System in DISCOMs functioning in the State. Which will to a long way in bringing down the AT & C loss and improving service delivery to the consumer of the State. GRIDCO will act as the nodal implementing agency on behalf of three DISCOM Utilities such as NESCO, WESCO & SOUTHCO in procurement & installation of hardware,	200000	New Scheme	Which will to a long way in bringing down the AT & C loss and improving service delivery to the consumer of the State.	Started in the year 2019-20 i.e. for a period of 3 years	For development of IT System in DISCOMs functioning in the State. The MBC Scheme will have Central level Server, storage and networking and security facilities for MBC Application. MDAS & MDM facility and helpdesk support. The communication back bone shall be assortment of GPRS/GSM/CDMA/ OPGW/ MPLS/ IoBB facilities through secure VPN Channel. The system shall work online in a Data-Push technology.

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable/ Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
		software and for appointment of system integrator. The total project is Rs.52.00 Crore. A bare minimum scheme has been worked out to provide the Metering, Billing and Collection (MBC) Solution to the above three DISCOM Utilities.					
30	Land Acquisition for Solar Park Project	In order to provide equity support to GEDCOL for land acquisition for setting of a new Solar Park in the State.	1	New Scheme	To improve electricity in the State through Solar	Started in the year 2019-20.	To provide solar in different office building and private building in the State.

**TABLE - 2**  
**(PROGRAMME EXPENDITURE)**

SI No	Name of Schemes / Programme	Objective	Projected Outlay		Projected Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks/Risk Factors
			2020-21	2021-22				
1	2	3	4	5	6	7	8	9
1	Implementation of Non-remunerative transmission projects in backward districts (Funded through Equity.)	To meet the future load growth, to supply power with adequate voltage, to supply reliable and quality power to all, to supply power to backward areas, for socio-economic growth in the under developed areas, to integrate the Distribution System (ODSSP, DDUGJY, IPDS etc.) with transmission network for effective utilisation of the Distribution infrastructure to supply uninterrupted power to the remotest corner of the state and the urban load centres, to supply the quality power mainly supply with precision voltage range for the growth of precision industries in the state, to meet the commitment of 24x7 power supply.	586900	673100	18 nos. 400/ 220 KV, 220/ 132/ 33 KV, 220/ 33 KV, 132/33 KV Grid Sub-stations and associated transmission lines are proposed to be constructed in several districts of Odisha such as Sambalpur, Bargarh, Dhenkanal, Malkanagari, Keonjhar, Cuttack, Puri, Balasore, Sonepur, Ganjam, Jagatsinghpur, Bhadrak, Kandhamal, Mayurbhanja, Jharsuguda etc.. Out of these 4 nos. Sub-stations & lines have been charged and balance 14 nos. shall be completed.	Meeting the future load growth, uninterrupted quality power supply, integration of distribution system with the transmission network in un-served areas. Strengthening of transmission network in low voltage pockets. Improvement of reliability of power in KBK/ Left Wing Extremist affected areas.	Over a period of 5 years starting from 2017-18 to 2021-22	
2	Ama Ghare LED Light	To distribute 4 nos. of 9 watt LED bulbs to each NFSA/SFSS beneficiary identified by the FSCW Department, Government of Odisha free of cost through Public Distribution System network.	105700	117200	Total number of 9 watt LED bulbs to be distributed to all the eligible beneficiaries (95 lakh approx.) will be amount of Rs.3.84 Crore	To enable the economically weaker sections of the population of the State to reduce their monthly energy bill	2018-19 to 2019-20	

SI No	Name of Schemes / Programme	Objective	Projected Outlay		Projected Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks/Risk Factors
			2020-21	2021-22				
					and the tentative cost of the scheme is Rs.237.00 Crore.	and to help the DISCOMs to manage efficiently the peak demand of power.		
3	ODSSP (Construction of 33/11 KV substations)	For quality supply of power to the consumer and to address the low voltage problem in rural area, Government of Odisha has planned to commission 500 nos. 33/11 KV substations within a period of 3 years.	4726800	5421700	Construction of 473 nos. of 33/11 KV grid substations at contract price of Rs.3625.00 Crore and 6% extra for PMC charges totaling to Rs.3842.50 Crore.	To provided better voltage with quality power supply to consumers.	2013-14 to 2018-19	Payments to EPC contractors will continue.
4	Sahaj Bijli Har Ghar Yojana (Rural)-SAUBHA GYA	To provide electricity connection to all economically backward un-electrified households	1600500	1836800	This scheme has been formulated to ensure last mile connectivity and electricity connection to all the remaining un-electrified households in the country and also to achieve universal household electrification by financing the DISCOMs.	Electrification of all the un-electrified villages/ households in the country.	2017-18 to 2019-20	
5	SCRIPS (State Capital Region improvement of Power system)	To meet the energy needs of the State Capital Region over a period of next decade i.e. from the year 2014-15 to 2022-23 ensuring 24X7 Un-interrupted and Stable Power Supply to all classes of Consumers including Public Services.	3734500	4283500	Underground Cabling for 132 KV and below Voltage Level and all Grid Sub-Stations shall be of GIS Type and the system shall use Smart Grid technology which will ensure more reliable supply of electricity.	To meet the anticipated growth demand over the next decade by providing 24X7 un-interrupted and stable power supplies. Underground cabling in CDP area.	2015-16 to 2019-20 (5 Years)	
6	Construction of	Availability of entire transmission network digitally, convenient in	156800	179900	The SCADA helps in Power supply management which	Facilitation of more efficient and cost	2015-16 to	

SI No	Name of Schemes / Programme	Objective	Projected Outlay		Projected Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks/Risk Factors
			2020-21	2021-22				
	Smart Grid in OPTCL (Equity Funding)	asset management, outage management, network operation, planning and operation, Smooth grid operation by SLDC, Timely flow of accurate energy data, time synchronisation of all energy meters, energy accounting and settlement activities, Time synchronisation of all Bay Control Units (BCU) with Control Centre, facilitate supervisory Control and availability of quality power supply round the clock.			ultimately ensures quality power to general public. The AMI project helps in better energy commercials management. The OPGW & automation project helps in Power system management which ultimately ensures quality power.	effective transmission of electricity through reduced interruptions as well as quicker restoration after any power disturbance.	2019-20	
7	OPSIP (Odisha Power Sector Improvement Programme)							
a)	RRCP (Radial to Ring Conversion Project)	To provide alternate source and reduce outage and improve the system availability. To reduce the outage of Distribution system and to act as the back bone of Distribution network	2376300	2725600	Strengthening of infrastructure for smooth and reliable quality power along with reduction in transmission loss and improving the system availability. Ring network system shall facilitate quick restoration of power supply by availing alternate source during break down of lines.	1. One substation will be fed from two sources of power which is capable of supplying power at the time of need from other sources. 2. To meet the transmission planning criteria of n-1-1 contingency credit. 3. Improvement of reliability of power supply.	2015-16 to 2019-20	
b)	Disaster Response System	Quick restoration of power supply disrupted during occurrence of disasters / calamities.			Procurement of 30 sets of ERS towers, 24 sets of 160 KVA DG set and 63 nos.	To maintain transformer banks at 11 distribution		

SI No	Name of Schemes / Programme	Objective	Projected Outlay		Projected Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timeline s	Remarks/Risk Factors
			2020-21	2021-22				
					82.5 KVA DG sets, 3 nos. 160 MVA, 2 nos. 20 MVA, 5 nos. 40MVA, 1 no. 315 MVA transformers. Consumables and spares to be procured for functioning of existing ERS towers.	locations having total capacity of 1035 MVA at different voltage levels for replacement during any transformer failure.		
c)	Disaster Resilient Power System	To increase the Grid efficiency, reliability and resilience making the network less vulnerable to all types of adverse weather conditions so that the outages and damage to the transmission and distribution system is reduced to a large extent, resulting to restoration of power within a minimum possible time.			To strengthen the existing as well as build new infra-structures using modern techniques of Disaster Resilience that can combat natural calamities like cyclone, flood etc.	1. To prevent damage of transmission line network within 60 Kms. from the coastal belt. 2. Construction of GIS Sub-stations and underground cabling system. 3. Provision for alternate power supply from 2 <sup>nd</sup> source during any calamity.	2015-16 to 2017-18	
8	DDUGJY (Deen Dayal Upadhyaya Gram Jyoti Yojana)	Central Government scheme for ensuring round the clock power supply to rural households and agricultural consumers	2560800	2937200	To ensure round the clock power supply to rural households and agricultural consumers through feeder separation between agricultural and non-agricultural consumers, metering, strengthening of sub-transmission and distribution infrastructure.	1. 24x7 power supply to non-agricultural consumers and adequate power supply to agricultural consumers. 2. Reduction in AT&C losses. 3. Providing electricity infrastructure for all rural households.	2016-17 to 2019-20	RoW issues. Non availability of shut down in time.

SI No	Name of Schemes / Programme	Objective	Projected Outlay		Projected Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks/Risk Factors
			2020-21	2021-22				
					60% of the approved scheme amount will be financed by the Central Government through REC Ltd. and the balance 40% will be funded by the State Government.	4. Separation of agricultural and non-agricultural feeders. 5. Strengthening of sub-transmission and distribution infrastructure in rural areas. 6. Metering for all types of consumers, feeders and distribution transformers.		
9	IPDS (Integrated Power Development Scheme)	Central Government Scheme for strengthening of the Sub-stations and distribution network and reduction of losses in Urban and semi-urban areas.	1057000	1172200	To ensure round the clock power supply to rural households and agricultural consumers through feeder separation between agricultural and non-agricultural consumers, metering, strengthening of sub-transmission and distribution infrastructure. 60% of the approved scheme amount will be financed by the Central Govt. through REC Ltd. and the balance 40% will be funded by the State Government.	1. 24x7 power supply to consumers in urban areas. 2. Reduction in AT&C losses of DISCOMs. 3. IT enabled metering system. 4. Implementation of solar energy system in Government buildings. 5. Laying of underground cabling in municipal/ urban areas.	2016-17 to 2019-20	RoW issues. Non availability of shut down in time.



SI No	Name of Schemes / Programme	Objective	Projected Outlay		Projected Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks/Risk Factors
			2020-21	2021-22				
10	JICA (Odisha Power Sector Externally Aided Project)	Strengthening of existing transmission system of OPTCL to meet the future need.	528500	586100	To strengthen the sub-stations and distribution network and reduction of losses in urban and semi-urban areas. 60% of the approved scheme amount will be financed by the Central Government through PFC Ltd. and the balance 40% will be funded by the State Government at the initial stage.	1. Improvement of power supply. 2. Implementation of open GIS Substation.	2017-18 to 2021-22	
11	Biju Gramya Jyoti Yojana	Electrification of villages / habitations having population of less than 100 nos. as well as BPL households which are not covered under RGGVY.	800300	917900	Procurement of 15000 nos. distribution transformers of different capacities for DISCOMs	To strengthen the electrical infrastructure in order to cope with additional load, up-gradation of 11KV & 33KV lines etc.		
12	Energy Conservation	To meet expenses under Energy Conservation activities as given below: Energy Efficiency improvement through interventions as proposed below: 1. Energy Efficiency in the Drinking Water Pumping Systems. 2. Energy Efficiency in Buildings. 3. Agricultural Demand Side Management. 4. Energy Efficiency of lift irrigation systems. 5. Energy Efficiency in the ULBs.	30,000	30,000	Assessment of energy saving potential, Investment Grade Energy Audit of Government buildings and such other establishment, Implementation of Energy efficiency measures, Monitoring & verification, Capacity Building, Awareness on Energy Efficiency and Energy Conservation.	Guided by the Central Government Scheme, the State Government has launched the UJALA (Unnat Jyoti by Affordable LEDs for All) Scheme in the State for promoting efficiency lighting, enhancement of awareness for use of efficient equipment LED Bulbs to reduce electricity bills and		

SI No	Name of Schemes / Programme	Objective	Projected Outlay		Projected Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timeline	Remarks/Risk Factors
			2020-21	2021-22				
		6. Energy Efficiency in the industry, domestic, dairy sector, SME clusters. 7. Energy Efficiency in Thermal and Hydro Power Stations, Transmission and Distribution System. 8. Capacity Building & Policy initiatives. 9. Technical services towards engagement of consultants and services for energy conservation cell. 10. Seminars, awareness programme. 11. Any other activities related to Energy Conservation.				help preserve environment. This scheme will result in energy saving as well as reduce consumers electricity bill to a great extent.		

**CHAPTER-II****TABLE – 3****(ADMINISTRATIVE & EOM EXPENDITURE)****Name of the Department: Energy Department****(Figures in TRs)**

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable / Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
			(Non-Salary Deliverable output)				
1	2	3	4	5	6	7	8
1	2577-EIC (Elec.)-cum-PCEI (O)	Non-salary	6488	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone, Motor Vehicle, Training Expenses, Library, Material & Equipment, Organisation of Seminars and Workshops, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges etc.	To ensure smooth functioning of office	Each year	Office Establishment
2	3004-CE-cum-Chief Electrical Inspector	Non-salary	5063	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone,, Motor Vehicle, Training Expenses, Library, Material & Equipment, RRT, Organisation of Seminars and Workshops, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges etc.	To ensure smooth functioning of office	Each year	Office Establishment
3	3005-SE-cum-Electrical Inspector Establishment	Non-salary	11165	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone,, Motor Vehicle, Training Expenses, Library, Material & Equipment, RRT, Organisation of Seminars and Workshops, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges, Payment for Professional and Training Expenses etc.	To ensure smooth functioning of office	Each year	Office Establishment
4	3006-EE-cum-Deputy Electrical Inspector	Non-salary	10144	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone,, Motor Vehicle, Training Expenses, Library, Material	To ensure smooth functioning	Each year	Office Establishment

Sl. No	Name of the Schemes/ Programme	Objective	Outlay for 2019-20	Quantifiable / Deliverable Physical Outputs	Project Outcome	Processes/ Timelines	Remarks / Risk Factors
			(Non-Salary Deliverable output)				
	Establishment			& Equipment, RRT, Organisation of Seminars and Workshops, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges, Payment for Professional and Training Expenses etc.	of office		
5	1336-Standard Testing Laboratory	Non-salary	2922	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone,, Motor Vehicle, Training Expenses, Library, Material & Equipment, RRT, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges, Contribution towards NABL Accreditation.	To ensure smooth functioning of office	Each year	Office Establishment
6	0254-Department of Energy	Non-salary	5700	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone, Motor Vehicle, Training Expenses, RRT, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges etc.	To ensure smooth functioning of office	Each year	Office Establishment

**CHAPTER-II****TABLE – 4****(ADMINISTRATIVE & EOM EXPENDITURE)****Name of the Department: Energy Department****(Figures in TRs)**

Sl. No	Name of the Schemes/ Programme	Objective	Projected Outlay ( Non-Salary Deliverable Output)		Projected Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks / Risk factors
			2020-21	2021-22				
1	2	3	4	5	6	7	8	9
1	2577-EIC (Elec.)-cum-PCEI (O)	Non-salary	6812	7153	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone,, Motor Vehicle, Training Expenses, Library, Material & Equipment, Organisation of Seminars and Workshops, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges etc.	To ensure smooth functioning of office	Each year	Office Establishment
2	3004-CE-cum-Chief Electrical Inspector	Non-salary	5316	5581	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone,, Motor Vehicle, Training Expenses, Library, Material & Equipment, RRT, Organisation of Seminars and Workshops, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges etc.	To ensure smooth functioning of office	Each year	Office Establishment
3	3005-SE-cum-Electrical Inspector Establishment	Non-salary	11723	12309	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone,, Motor Vehicle, Training Expenses, Library, Material & Equipment, RRT, Organisation of Seminars and Workshops, Up-gradation of Computer Facilities, Computer Consumables Spare Services,	To ensure smooth functioning of office	Each year	Office Establishment

Sl. No	Name of the Schemes/ Programme	Objective	Projected Outlay ( Non-Salary Deliverable Output)		Projected Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks / Risk factors
					Consulting Charges, Payment for Professional and Training Expenses etc.			
4	3006-EE-cum-Deputy Electrical Inspector Establishment	Non-salary	10651	11184	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone,, Motor Vehicle, Training Expenses, Library, Material & Equipment, RRT, Organisation of Seminars and Workshops, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges, Payment for Professional and Training Expenses etc.	To ensure smooth functioning of office	Each year	Office Establishment
5	1336-Standard Testing Laboratory	Non-salary	3068	3221	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone,, Motor Vehicle, Training Expenses, Library, Material & Equipment, RRT, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges, Contribution towards NABL Accreditation.	To ensure smooth functioning of office	Each year	Office Establishment
6	0254-Department of Energy	Non-salary	5985	6284	Expenditure on TE, LTC, O.C, Electricity Dues, Water Charges, Telephone, Motor Vehicle, Training Expenses, RRT, Up-gradation of Computer Facilities, Computer Consumables Spare Services, Consulting Charges etc.	To ensure smooth functioning of office	Each year	Office Establishment

**TABLE - 5**  
**PSU SCHEMES ( NOT ROUTED THROUGH THIS DEPARTMENT BUDGET )**

**CHAPTER-II**  
**(Rupees in TRs)**

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
			Complementary extra-budgetary resources				
<b>1</b>	<b>OPGC</b>						
<b>1</b>	Ib Thermal Power Station at Banarpalli, (2x660) MW Thermal Power Plant	Commercial Generation of Power	17063900	Not applicable	Construction of 2x660 MW Thermal Power Plant	Attached as Annexure-A	The progress status of construction activity is enclosed in Annexure-A
<b>2</b>	<b>OHPC (Own source)</b>						
1	(i) Hirakud Hydro Electric Project, Hirakud (ii) R, M & U of unit V & VI	R, M & U of old unit to upgrade the capacity of units with extension of life periods upto 30 years	516026	R, M & U of unit-V & VI of 37.5 X 2 MW installed capacity with complete replacement of Units and Up rating of the Units.	Peak demand support and increase in reliability and availability period	LOA issued on 17.08.2015 and contract agreement signed on 16.10.2015. Date of completion of R, M & U of #5 & #6 are 23.06.202	Dismantling of generator, turbine and auxiliaries, Refurbishment of draft tube gates & Intake Gates., Stator Building, D & D installation, Bus duct & GT installation of # 5 & # 6 completed. Rotor Building, Refurbishment of Spiral Casing and Discharge Ring of # 6 completed. Piping work of cooling water system and compressed air system, Cable tray installation of # 5 & # 6 are under progress.
				i) Original installed Capacity = 37.5 X 2 MW ii) Capacity after R, M & U of Unit-V & VI = 43.6 X 2 = 87.2 MW	Increase in installed capacity		



Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
						0 and 28.03.2020 respectively.	Refurbishment of Spiral casing of # 5 is under progress. Penstock Repair Work of # 6 is under progress.
	(iii) Office Building		14604				Work Completion
	(iv) Plant & Machinery (Gen)		74900				As per enclosed "Annexure-A"
	(v) Other Misc. cap. Exp.		8560				
	<b>Sub-Total</b>		<b>614090</b>				
2	CHEP, Chiplima (i) R & M of Unit-III	R & M of old unit to maintain the rated capacity of unit with extension of life period upto 30 years	220937	R & M of unit-III of 24 MW installed capacity with complete replacement of Units and Uprating of the Units.	Peak demand support and increase in reliability and availability period.	LOA issued on 17.08.2015 and contract agreement signed on 15.10.2015. Expected date of completion of R & M 30.9.2019.	Dismantling, Refurbishment of Intake Gate and draft tube gate, Discharge ring replacement, Refurbishment Works of Pit, Stator Building & Rotor Building, Erection of Turbine and associated components, Erection of Generator and Associated components, Erection of Auxiliaries. Generator Transformer erection, Spiral Case repairing, Installation of Shaft seal and maintenance seal have been completed. Commissioning of generator and its auxiliaries, Commissioning of turbine and its auxiliaries, Commissioning Checks and tests of control, protection and different other circuits, Programming of logic for turbine governor and unit control board is

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
							in progress, Termination of cables at excitation panel end is in progress.
	(ii) Office Building		5000				
	(iii) Plant & machinery (Gen)		13000				As per enclosed "Annexure-A"
	(iv) Sub-Station Equipment		23900				As per enclosed "Annexure-A"
	(v) Other Misc. Cap. Exp		9100				
	<b>Sub-Total</b>		<b>271937</b>				
3	BHEP, Balimela (i) R & M of unit I to VI (6 units)	R & M of old unit (Unit No.1 to 6) to maintain the rated capacity of units with extension of life period upto 30 years	969116	R & M of units (Unit No.1 to 6) of 60 MW each with total installed capacity of 360 MW with complete replacement of Units and Uprating of the Units.	Peak demand support and increase in reliability and availability period.	Contract agreement signed on 21.9.2016 . Effective date of Contract 5.8.2016. Expected date of completion of R & M of Unit-1 & 2 are 31.12. 2019.	<b>Completed works:</b> <ul style="list-style-type: none"> <li>• The dismantling of Unit 1 &amp; 2 completed.</li> <li>• Refurbishment work of Spiral case, stay ring &amp; stay vanes of Unit 1 &amp; 2 completed.</li> <li>• Assembly of Guide Apparatus of Unit No.1.</li> </ul> <b>On Going Work:</b> <ul style="list-style-type: none"> <li>• Refurbishment of SRV &amp; BFV of Unit 1 &amp; 2.</li> <li>• Trial assembly of Guide Apparatus of Unit No.2.</li> <li>• Refurbishment of penstocks of Unit 1 &amp; 2.</li> <li>• Civil work of Extension Bay of 220 KV switchyard.</li> <li>• Generator Stator and Rotor</li> </ul>

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
							Building.
	(ii) Office Building		3000				As per enclosed "Annexure-A"
	(iii) Plant & machinery (Gen)		3000				As per enclosed "Annexure-A"
	(iv) Sub-Station Equipment		28508				
	(v) Other Misc. Cap. Exp.		8950				
	<b>Sub-Total</b>		<b>1012574</b>				
4	UKHEP, Bariniput		13000				
	(i) Building & Civil works						
	(ii) Plant & Machinery (Gen)		103340				As per enclosed "Annexure-A"
	(iii) Other Misc. Cap. Exp.		2445				
	<b>Sub-Total</b>		<b>118785</b>				
5	RHEP, Rengali		4620				
	(i) Building & Civil works						
	(ii) Plant & machinery (Gen)	Replacement of damaged thrust collar of unit-II by new one.	47830			Work started on 10.12.2018 expected date	Work is under progress. Expected to be completed by 28.9.2019
	(iii) Sub-Station Equipment		2000				As per enclosed "Annexure-A"
	(iv) Other Misc. Cap. Exp.		5800				
	<b>Sub-Total</b>		<b>60250</b>				
6	UIHEP, Mukhiguda		2800				Under Tendering Stage
	(i) Office Building						

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
	(ii) Plant & machinery (Gen)		27040				As per enclosed "Annexure-A"
	(iii) Electrical Installation		4160				As per enclosed "Annexure-A"
	(iv) Other Misc.cap. Exp.		4170				
	<b>Sub-Total</b>		<b>38170</b>				
7	UIHEP, Khatiguda		49850				Under Tendering Stage
	(i) Civil works						
	(ii) Other Misc. Capital Exp.		4980				
	<b>Sub-Total</b>		<b>54830</b>				
8	KHARAG H.E Project	Preparation of DPR	46217	Preparation and approval of DPR	Development of new Hydro Electric Project		<p>DPR preparation is under progress.</p> <p><b>Progress</b></p> <ul style="list-style-type: none"> <li>• Work Order for Preparation of DPR was placed in favour of M/s. WAPCOS Limited on 24.02.2018. The DPR cost is Rs.5.00 Crore.</li> <li>• WAPCOS submitted inception report on 27.03.2018. OHPC accorded approval of inception report on 19.05.2018.</li> <li>• OHPC requested Water Resources Department, Government of Odisha to submit views on inception report on 09.05.2018. Again the reminder submitted to DoWR 19.05.18 &amp; 12.04.2019.</li> <li>• M/s. WAPCOS submitted Topographical Survey report and draft DPR on 23.03.2019 without</li> </ul>

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
							<p>carrying out Geotechnical investigation.</p> <ul style="list-style-type: none"> <li>• The cost of the project is Rs.741.00 Crore as per Draft DPR.</li> <li>• Chief Engg (PPF &amp; I) soughted some additional information regarding Kharag HEP on 02.05.2019 and the data are submitted by OHPC on 18.05.2019.</li> <li>• Chief Engg (PPF &amp; I) submitted their observations on conceptual layout of Kharag HEP on 11.07.2019.</li> <li>• The draft DPR was submitted to Chief Engineer (PPF &amp; I), Department of Water Resources, Government of Odisha on 12.07.2019 for their views and comments after presentation given by M/s WAPCOS on 11.07.2019.</li> <li>• CMD, OHPC requested Principal Secretary, Department of Water Resource, Government of Odisha to accord approval of Conceptual Layout Report on 11.07.2019.</li> <li>• A presentation was held on 30.08.2019 By M/s WAPCOS on Conceptual Layout at Conference Hall, Secha Sadan under the Chairman ship of EIC (Water Resource) in presence of Director</li> </ul>

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
							(Operation), OHPC Ltd.
9	SALKI H.E Project	Preparation of DPR	47200	Preparation and approval of DPR	Development of new Hydro Electric Project		<p>DPR preparation is under progress.</p> <p><b>Progress</b></p> <ul style="list-style-type: none"> <li>• Work Order for Preparation of Draft DPR was placed in favour of M/s WAPCOS Limited on 29.01.2018. The DPR cost is Rs.5.00 Crore.</li> <li>• WAPCOS submitted the conceptual layout report on 12.03.2019.</li> <li>• To configure the project as Multipurpose Project the conceptual layout submitted to Water Resource Department, Government of Odisha on 05.04.2019 for their views and comments.</li> <li>• CMD, OHPC requested Principal Secretary, DoWR, Government of Odisha for approval of the Project Layout on 11.07.2019.</li> <li>• Chief Engg. (PPF &amp; I) submitted their views on Conceptual Layout.</li> <li>• A presentation was held on 30.08.2019 By M/s WAPCOS on Conceptual Layout at Conference Hall, Secha Sadan under the Chairmanship of EIC (Water Resource) in presence of Director (Operation), OHPC Ltd.</li> </ul>

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
10	Pumped Storage Scheme, UPPER INDRAVATI	Preparation of DPR	73466	Preparation and approval of DPR	To take suitable decision on Construction of Upper Indravati Pumped Storage Scheme		<p>DPR preparation is under progress.</p> <p><b>Progress</b></p> <ul style="list-style-type: none"> <li>• Work Order for Preparation of DPR was placed in favour of M/s. WAPCOS Limited on 15.01.2014. The cost of DPR is Rs.9.74 Crore</li> <li>• M/s WAPCOS submitted the draft DPR of UIPSP in May 2018. The total Project cost is Rs.2978.00 Crore as per the 2018 Price.</li> <li>• IFC is engaged as Transaction advisor of Implementation of Project</li> <li>• The draft DPR is under scrutiny at various departments of CEA and CWC for clearances.</li> <li>• As requested by OHPC the meeting with all the stake holders for taking decisions regarding sale of power to GRIDCO was held by Department of Energy on 04.06.2019.</li> <li>• CMD, OHPC requested Principal Secretary, DoWR, Government of Odisha to intervene into the matter to sort out the interstate issues on 22.06.2019.</li> <li>• Chief Engg.( PPF &amp; I) submitted the compliance on Interstate issue to Director, Interstate on 17.07.2019 and 28.08.2019.</li> </ul>



Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
11	Pumped Storage Scheme, UPPER KOLAB	Preparation of DPR	91570	Preparation and approval of DPR	To take suitable decision on Construction of Upper Kolab Pumped Storage Scheme		<p>DPR preparation is under progress.</p> <p><b>Progress</b></p> <ul style="list-style-type: none"> <li>• Work order issued in favour of WAPCOS for preparation of DPR on 29.03.2018. The DPR cost is Rs.9.70 Crore.</li> <li>• WAPCOS submitted the conceptual layout report in 27.10.2018. The conceptual layout report Forwarded to Water resource Department, Govt. of Odisha for their views and comments on 8.11.2018, 12.04.2019 and 25.04.2019.</li> <li>• OHPC submitted their comments on Conceptual layout on 15.01.2019. Which was compiled by WAPCOS on 23.04.2019 and WAPCOS further requested approval for conceptual layout so that they can carry out further study.</li> <li>• Chief Engg. (PPF &amp; I) has already been submitted their views / comments on the Conceptual Report on 17.05.2019.</li> <li>• CMD, OHPC requested Principal Secretary, Department of Water Resource, Government of Odisha to accord approval of Conceptual Layout Report on 04.06.2019.</li> <li>• A presentation was held on 30.08.2019 By M/s WAPCOS on</li> </ul>

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
							Conceptual Layout at Conference Hall, Secha Sadan under the Chairmanship of EIC (Water Resource) in presence of Director (Operation), OHPC Ltd.
12	Pumped Storage Scheme, Balimela	Preparation of DPR	62720	Preparation and approval of DPR	To take suitable decision on Construction of Upper Balimela Pumped Storage Scheme		<p>DPR preparation is under progress.</p> <p><b>Progress</b></p> <ul style="list-style-type: none"> <li>• Work Order for Preparation of DPR was placed in favour of M/s. WAPCOS Limited on 09.10.2018. The DPR cost is Rs.9.67 Crore.</li> <li>• WAPCOS has been submitted the Topographical and Geological Survey Reports on 26.03.2019.</li> <li>• A presentation was held at OHPC Conference Hall by WAPCOS on geological &amp; topographical report of Balimela PSP in presence of R C Tripathy, OHPC officials &amp; DoWR officials on 27.04.2019.</li> <li>• WAPCOS has already been submitted the Inception Report and Revised PFR on 11.06.2019.</li> <li>• The Inception report was forwarded to Chief Engg. (PPF &amp; I), DoWR, Government of Odisha for their views / comments on 24.06.2019.</li> <li>• CMD, OHPC requested Principal Secretary, DoWR, Government of Odisha for approval of the Project</li> </ul>

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
							<p>Layout on 11.07.2019.</p> <ul style="list-style-type: none"> <li>M/s WAPCOS Ltd. submitted the PFR basing on Installed capacity of 500 MW on 14.08.2019, as per the discussion held on 27.04.2019. Same was under scrutiny by OHPC.</li> <li>A presentation was held on 30.08.2019 By M/s WAPCOS on Conceptual Layout at Conference Hall, Secha Sadan under the Chairmanship of EIC (Water Resource) in presence of Director (Operation), OHPC Ltd.</li> </ul>
13	Machkund Joint Project (i) R, M & U of Units	To start the R & M works so as to maintain existing capacity		Award of R & M Contract	To increase availability and reliability of Units	Not yet decided	Starting of R & M work depends on signing of interstate agreement between Government of Odisha and Government of Andhra Pradesh.
14	Corporate Office (i) Office Building (Shakti Bhawan)	To have own office building	400000	As per the work order issued by M/s IDCO stipulated date of commencement and completion of the building were 23.08.2016 and 22.02.2019 respectively	M/s IDCO has started that they will complete the structural work by December, 2019	M/s IDCO has been requested to give consent for interior work of the building (OHPC portion). M/s IDCO has floated	The actual occupation will depend on the handover of the building by IDCO and completion of interior works either by M/s IDCO or any other agency.

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
						EOI in this regard, though their offer has not been accepted by OHPC so far.	
	(ii) Training Centre Building.		315800	The work order issued to M/s WAPCOS on dated. 25.01.2019. As per the work order time period for DPR and tendering was 225 days. Execution time was 2 years from award of work to the contractor.	M/s WAPCOS has submitted revised preliminary estimates of Rs.133.44 Crore and Rs.136.03 Crore for non-green and green building concepts respectively.	The proposal of the revised preliminary estimates have been sent to BoD for appraisal	After due approval by the BoD, WAPCOS will be intimated to submit the Detailed Estimates, drawings, designs etc.
	(iii) ERP		60000				For selection of Agency for implementation Partner & ERP product is under finalisation. The target date is 15.10.2019.
	(iv) Other Misc. Cap. Exp.		94250				
	<b>Sub-Total</b>		<b>870050</b>				

Sl. No	Name of the Schemes/ Programmes	Objective	Financial Outlay 2019-20	Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes / Timelines	Remarks / Risk Factors
1	2	3	4	5	6	7	8
15	Odisha Coal & Power Ltd.(OCPL)		1140000				<p><b>Manoharpur Coal Mines</b></p> <ul style="list-style-type: none"> <li>• Mining Lease - Executed</li> <li>• Mining Plan and Mine Closure Plan (MP &amp; MCP) transferred in favour of OCPL.</li> <li>• Previous Approval, Forest Clearance, Environment Clearance, Environment Clearance, Consent to Establish for coal mine, Electrical Connectivity for Manoharpur Coal Block, Nilla diversion, Road Diversion, Site Specific Wildlife Conservation Plan, Environment Clearance for R &amp; R Colony, consent to Establish for R &amp; R colony, Non Mineralization Certificate for Mine Colony land, Consent to Operate for Manoharpur coal mine project, Possession of Explosives, Surface Right Permission, NoC for Ground Water Abstraction &amp; Dewatering from CGWA, Mine Opening Permission from CCO - Obtained.</li> </ul> <p><b>Dip-side Manoharpur Coal Mine</b></p> <ul style="list-style-type: none"> <li>• Previous Approval, Prospecting License (PL) - Obtained</li> <li>• Execution of PL - Executed.</li> </ul>

**CHAPTER-II****2.2- PSU SCHEMES (NOT ROUTED THROUGH THIS DEPARTMENT BUDGET)****TABLE - 6  
(PROGRAMAME EXPENDITURE)****Name of the Department: Energy Department****(Figures in TRs)**

Sl. No	Name of the Schemes/ Programme	Objective	Projected Outlay		Projected Quantifiable / Deliverable Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks / Risk factors
			2020-21	2021-22				
1	2	3	4		5	6	7	8
1	Ib Thermal Power Station, Banherpalli – 2 X 660 MW Thermal Power Plant	Commercial Generation of Power	Not Applicable	Not Applicable	Not Applicable	Construction of 2 X 660 MW Thermal Power Plant.	Attached as Annexure-A	The progress status of construction activity is enclosed in annexure-A

Note: The Company has successfully achieved its commercial operation in respect of Unit-3 & 4 of Ib Thermal Power Station on 3.7.2019 and 21.8.2019 respectively.

**Annexure-A****Odisha Power Generation Corporation Ltd****A. General Information:****1. Year of Registration of the Company:**

OPGC has registered in the year of 1984 under Company Act, 1956

**2. Status of the Company:**

This is a Government of Odisha Company under Gold category

**Objectives –**

- Establish, operate and maintain electric power generating station tie lines Sub-stations and transmission line connection therewith.
- Develop and deal in fuel i.e. coal, lignite, coke-bed methane etc.

**3. Share Capital:**

Authorised – Rs.3000 Crore

Paid up – Rs.1,822.4974 Crore (31.3.2019)

Reserve & Surplus – Rs.1133 Crore

Net Worth – Rs.2714 Crore (Provisional)

Fixed asset – Rs.10389 Crore (Provisional)

Share Holdings:

Share holders	% of Share holdings	Numbers of Shares	Amount in Rs.
Government of Odisha	51	92,94,737	929,47,37,000
AES	49	89,30,237	893,02,37,000
<b>Total</b>	<b>100</b>	<b>182,24,974</b>	<b>1822,49,74,000</b>

**4. Dividend declared as on today: (Till Financial Year 2016-17 declared in 2017-18)**

Total Dividend paid – Rs.1411.08 Crore

Government of Odisha (51%) – Rs.736.16 Crore

AES (49%) – Rs.674.92 Crore

**5. Investment Vs. Return to the State from OPGC**

Initial Investment – Rs.450 Crore Share Capital

Disinvestment of 49% made in the year 1998 (Realised amount – Rs.603 Crore)

Subsequently the position of Share Capital is as above at Sl.No.3.

Dividend paid by the Company till 2017-18 – Rs.736.16 Crore

**B. Performance Highlights – Unit 1 & 2:**

OPGC has set up two 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. 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/ OERC Tariff.

**Units Commissioning dates:**

Unit-I of ITPS (210 MW) – 21.12.1994

Unit-II of ITPS (210 MW) – 1.7.1996

The present Installed Capacity of OPGC is :

Sl. No	Particulars	Capacity
1	Thermal	420 MW

**Generation and Profitability (last seven years)**

Year	Units of Power generated (in MU)	PLF%	Turnover Rs in Crore (Incl. Other income)	Net Profit after Tax Rs. In Crore
2012-13	3181.59	86.47	636.03	167.43
2013-14	2855.90	77.62	622.64	127.43
2014-15	2798.92	76.07	630.00	150.57
2015-16	3117.32	84.73	705.94	114.83
2016-17	3234.88	87.92	758.09	67.92
2017-18	2842.35	77.25	607.19	5.72
2018-19	3085.45	83.86	897.86 (Provisional)	166.88 (Provisional)

**C. EXPANSION PROJECT STATUS – (UNIT – 3 & 4)**

O.P.G.C is now pursuing its expansion project comprising of 2 X 660 MW power plants in the same location i.e. ITPS and its own MGR system at an estimated project cost of Rs.10,165 Crore. The agencies like BHEL for BTG package, BGRE for BOP package, L & T for MGR, Shree Balajee Engicons Pvt. Ltd for Ash Pond and NCC for Township development etc have been engaged for construction of power plant. Both units have achieved its commercial operation. Status of both units are given below.

**Construction update (upto June, 2019):**

Major Package	Percentage of Construction
BTG	99.8%
BOP	98.3%
MGR	87.7%
ASH POND (Phase-I)	94%

**Major Milestone:**

Events	Boiler Light Up	Synchronization	COD
Unit # 3	November, 2018	March, 2019	3 <sup>rd</sup> July, 2019
Unit # 4	August, 2018	January, 2019	21 <sup>st</sup> August, 2019



**Project Expenditure (Provisional Upto July, 2019):**

<b>Approved Project Cost Rs.10165 Crore</b>		
Debt	75% (Rs.7624.00 Crore)	• Loan from PFC & REC equally
Equity	25% (Rs.2541.00 Crore)	• OPGC internal reserve • Government of Odisha Contribution • AES Contribution
<b>Expenditure upto July, 2019 (Rs.9,653.55 Crore)</b>		
Debt	Rs.7268.34 Crore	• Loan from PFC & REC
Equity	Rs.2385.21 Crore	• Government of Odisha Contribution • AES Contribution Rs.534.23 Crore • Balance from OPGC internal accruals

<b>Amount to be expended</b>	Rs.511.45 Crore
Debt	Rs.355.66 Crore
Equity	Rs.155.79 Crore

**Corporate Social Responsibility – Updates:**

In last 5 years OPGC – I expenditure is as follows:

- Financial Year 2014-15: INR 1.17 Crore
- Financial Year 2015-16: INR 2.68 Crore
- Financial Year 2016-17: INR 3.24 Crore
- Financial Year 2017-18: INR 1.42 Crore
- Financial Year 2018-19: INR 1.55 Crore

Amount to be spent on CSR activities through OPGC – II is Rs.24.36 Crore during construction period. Out of which Rs.14.50 Crore has already been spent and work order of balance amount has been placed.

**The major targeted areas under CSR are:** Preventive Health, Safe Drinking Water, Sanitation, Livelihood enhancement, Vocational Skill Development, Education, Rural Sports Training, Rural Development etc.

**2.3 ABSTRACTS SHOWING SCHEMES, OUTLAY & QUANTIFIABLE DELIVERABLES / PHYSICAL OUTPUT – 2019-20****(Rs. In TRs)**

Sl. No	Name of the Schemes/ Programme	Financial Outlay (Plan Budget)	Quantifiable Deliverables / Physical Outputs
1	2	3	4
1	Restructured Accelerated Power Development & Reform Programme ( <b>R-APDRP</b> )	1	Improvement of power supply system in Urban and Industrial areas and reduction of Transmission & Distribution (T & D) Loss.
2	Rajiv Gandhi Grameen Vidyutikaran Yojana (SS) ( <b>RGGVY</b> )	2125000	3144 nos. of un-electrified villages/ partially electrified villages and BPL Households will be taken up for electrification.
3	Biju Gram Jyoti Yojana ( <b>BGJY</b> )	750000	2877 nos. 100 KVA DTRs delivered to the DISCOMs.
4	Biju Sahranchal Vidyutikaran Yojana ( <b>BSVY</b> )	100000	861 nos. of slums/wards/hamlets have been taken up for electrification
5	Energy Conservation	30000	Successfully conducted EC Day with participation from School students from all the 314 blocks and 30 districts of Odisha. Winners of quiz competition among students were awarded.
6	Construction of Shakti Bhawan (Building for Energy Department)	1	The work, assigned to IDCO Ltd by OPTCL is under progress.
7	Procurement of equipment for Standard Testing Laboratory (STL)	15000	For procurement of Reference Standard & Phantom Load Kit, new CT & PT analyzer & decode resistance box
8	Share Capital Investment to OPTCL	550000	8 nos. projects namely Lapanga, Baragarh new, Ghens, Bhograi, Narasinghpur, Tirtol, Kuchei - Jaleswar line & Ib-Lapanga line works have been completed. Other works have been completed partially.
9	System Strengthening for Elephant Corridor	1000000	In the Phase-I out of 11 corridors, work in 10 corridors have been completed at expenditure of Rs.8.93 Crore by 31.03.2017. In Phase-II out of 15 corridors, work in 9 corridors has been completed at an expenditure of Rs.19.13 Crore by 31.03.2017. In phase-III, work is in full swing in 15 nos. of corridors with an expenditure of Rs.7.70 Crore by 31.03.2017.
10	Underground cabling system	40000	The work Order has been issued and work is under progress for underground cabling work at Ratha Danda, Baripada which is expected to be completed by March, 2020. The underground cabling work of Maa Samaleswari Temple has been completed and charged. The underground cabling work of Lingaraj Ratha Danda, Bhubaneswar and that of Puri and Konark area has already been completed.

Sl. No	Name of the Schemes/ Programme	Financial Outlay (Plan Budget)	Quantifiable Deliverables / Physical Outputs
1	2	3	4
11	Shifting of Transformer and allied Conductor located in Government Schools Colleges & Anganwadi Centres	100000	The shifting work in 4816 nos. of Government Schools/ Anganwadi Centres have been completed by the DISCOMs out of the 5162 Centers taken up at an expenditure of Rs.30.66 Crore till 31.03.2017.
12	"Ama Ghare LED Light" Karyakrma	100000	3.50 Crore 9 watt LED bulbs out of the total ordered quantity have been delivered for distribution to the consumers.
13	Construction of new 33/11 KV Sub-stations (Odisha Distribution System Strengthening Project )	4430000	93 nos. of 33/11 KV Sub-stations Charged.
14	State Capital Region Improvement of Power System (SCRIPS)	3500000	132 KV underground cable connectivity from 220/132/33 KV GIS grid Chandaka-B to 132/33 KV GIS Grid Unit-8 completed and charged. Major works of the 132 KV underground cable connectivity from 220/132/33 KV GIS grid Chandaka-B & 132 /33 KV AIS grid Mancheswar-A to 132/33 KV GIS Grid Mancheswar completed. Almost 95% scope of 33 KV, 11 KV & LT underground cables has been laid down in dedicated trenches in Bhubaneswar and Cuttack cities. In Cuttack & Bhubaneswar 6 nos. 33 KV circuits & 10 nos. 11 KV circuits have been completed and charged.
15	Radial to Ring Conversion Projects	549500	132 KV line from Nuapatna to Banki completed on 28.08.2018
16	Disaster Response Centre	613300	One no. 40 MVA spare transformer charged at New Bolangir.
17	Disaster Resilient Power System	1064300	132/ 33 KV Sub-station at Khuntuni charged on 31.5.2018 and another 132/33 KV Sub-station at Chandbali charged on 20.2.2019.
18	Smart Grid	147000	AMI work completed, SCADA, OPGW works going on.
19	Infrastructure Assistance to GEDCOL	100000	<ul style="list-style-type: none"> <li>DPR has been prepared for development of 16.4 MW Solar plant on the un-utilized lands of OPTCL</li> <li>Land survey is being carried out to identify suitable land patches of around 6000 Acres for development of 1000 MW Solar Park by GEDCOL.</li> <li>Replication of the Bhubaneswar - Cuttack Rooftop project in 15 other cities in the State. The total Rooftop Project capacity is expected to be around 10 MW.</li> </ul> <p>DPR has been prepared for 3 M.W Jambhira SHEP in Mayurbhanj and 4.2 MW Kanupur SHEP in Keonjhar District.</p> <p>DPR has been prepared for 10 MW Mandira Dam SHEP in Sundargarh. The Project will be executed through a JV Company of GEDCOL &amp; SAIL, RSP.</p>

Sl. No	Name of the Schemes/ Programme	Financial Outlay (Plan Budget)	Quantifiable Deliverables / Physical Outputs
1	2	3	4
20	Budgetary Support to OHPC for providing equity capital to OCPL	490000	Work is under execution by OCPL. OHPC has to pay Rs.49.00 Crore to OCPL towards equity share as per agreement with OPGC at the ratio of 49:51.
21	Odisha Transmission System Improvement Project (EAP) (JICA)	500000	Work orders have been issued and the projects have been started.
22	Integrated Power Development Scheme (IPDS)	1000000	2 nos. new Sub-stations commissioned, capacity enhancement of 44 nos. 33/11 KV PTR & 375 nos. distribution transformers, reconductoring of 48 nos. 33 KV feeders, commissioning of 139 nos. of 11 KV new feeders, installation of 772 nos. new distribution transformers, 49728 nos. consumer meter installed, solar panels installed for 5 KWp., 1493 kms. of aerial bunched cable laid down etc.
23	Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)	2400000	Power connection has been provided to 56658 nos. of households, 465 nos. PE village & 18 nos. SAGY villages. Augmentation of 54 nos. 33/11 KV Sub-stations has been made. 2 nos. 33/11 KV new Sub-stations have been made. Commissioning of 1380 nos. distribution transformers made.
24	Equity infusion to OPGC expansion project	1	To extend financial support to OPGC in carrying out works for Infrastructure development.
25	Power supply to the New Bank Branches of unbanked G.Ps	1	Funds released to CESU, NESCO & WESCO. Work on progress.
26	Sahaj Bijli Har Ghar Yojana (Rural) - Soubhagya	1500000	Under CESU & NESCO, 26782 nos. of households have been covered, stringing of 74.852 kms. 11 KV conductors, commissioning of 176 nos. of distribution transformers and LT line of 464.454 kms. Drawn.
27	Information, Education, Communication (IEC) Activities	3000	The funds are provided from 2017-18 onwards to improve Information, Education and Communication System
<b>NEW SCHEMES IN PIPELINE</b>			
28	DISCOMs IT System	200000	Which will to a long way in bringing down the AT & C loss and improving service delivery to the consumer of the State.
29	UMPP Bedabahal	897000	The work has been entrusted to Odisha Integrated Power Ltd (OIPL) a wholly owned subsidiary of Power Finance Corporation (PFC) Ltd.
30	Land Acquisition for Solar Park Project	1	To improve electricity in the State through Solar

**\*N.B: THE WORKS/ SCHEMES/ PROJECT-WISE ALLOCATION MADE IN THE DEPARTMENTAL BUDGET ARE TENTATIVE AND MAY VARY KEEPING THE PROGRESS OF THE WORK DURING THE COURSE OF THE FINANCIAL YEAR.**

## *Chapter III*

### *Reform Measures and Policy Initiative*

#### **3.0 Reform measures and policy initiatives**

##### **3.1 Change in design & delivery mechanism of existing schemes.**

Odisha is the first state in the country to initiate power sector reform with the enactment of the Odisha Electricity Reform Act, 1996. w.e.f 1.4.1996. Odisha Electricity Reform Act, 1995 (Odisha Act, 2 of 1996) notified SRO No.254/96, dated.1.4.1996 of Energy Department.

- OERC was established under section 3 (i) of the OER Act, 1996 and become functional since 1.8.1996. OERC Business & Conduct Governor under Notification No.797, dated.28.11.1996 of Energy Department.
- It has also unbundled the various entities under State Electricity Board and corporatized them. Transmission has been separated from GRIDCO with effect from 9.6.2005 vide Notification No.6892, dated.9.6.2005 of Energy Department. OPTCL has been notified for transmission of Power and related activities.
- Annual revenue requirement of State Load Despatch Centre has been filed separately for the year 2009-10.
- The licence of the erstwhile Reliance Infra Ltd which managed the DISCOMS namely WESCO, NESCO and SOUTHCO have been revoked vide Order dated 04.03.2015 of Hon'ble OERC in Case No.55/2013 with appointment of Chairman-cum-Managing Director, GRIDCO/OPTCL as Administrator of the said DISCOM Utilities.

##### **3.2 New Schemes introduced, if any**

“DISCOMs IT System” is a new schemes introduced for development of IT System in DISCOMs functioning in the State. Which will to a long way in bringing down the AT & C loss and improving service delivery to the consumer of the State. GRIDCO will act as the nodal implementing agency on behalf of three DISCOM Utilities such as NESCO, WESCO & SOUTHCO in procurement & installation of hardware, software and for appointment of system integrator. A bare minimum scheme has been worked out to provide the Metering, Billing and Collection (MBC) Solution to the above three DISCOM Utilities under the Scheme.

##### **3.3 Policy Reform, if any**

###### **(i) Reduction of AT & C loss**

The reform programme has resulted in a reduction of AT & C loss from 56.71% in Financial Year 1999-2000 to 30.57% in the Financial Year 2018-19. The Commission had approved AT & C loss at 22.14% for Financial Year 2018-19. Similarly, the Distribution loss has been reduced from 43.91% to 24.25 % for the period from 1999-2000 to Financial

Year 2018-19. The Commission had approved distribution loss at 21.35% for Financial Year 2018-19.

#### **(ii) Collection Efficiency**

The collection efficiency has increased from 77.19% in Financial Year 1999-2000 to 91.67% in Financial Year 2018-19. The Commission had approved collection efficiency of 99.00% for Financial Year 2018-19.

#### **(iii) Green tariff**

The Odisha Electricity Regulatory Commission (OERC) has come out with generic tariff for the renewable sector to reduce the carbon foot print in the state and enhance clean and green generation of power.

#### **(iv) Electricity Duty (ED) Reform**

- OED, Act 1961 has been amended as Odisha Electricity (Duty) Amendment Act, 2016. This has been done to include various changes, amendments in terms and terminologies, procedures in pursuance to enactment of Electricity (Act), 2003 and also to remove anomaly / ambiguity in existing OED Act, 1961 as well as to bring transparency.
- Provision for resolving disputes related to Electricity Duty has been kept in a three tier system to give better justice to the consumers.
- Provision for assessment of Electricity Duty in case of defective meters / no meter for generating stations.
- Provision for assessment of Electricity Duty by inspecting officer in case of consumers who are not maintaining / submitting records relating to generation and consumption timely / regularly.
- This amendment will revamp the collection process of Electricity Duty and generate more resources for the State.

### **3.4 Change in the composition of beneficiaries, if any**

Government of India has launched to provide funds under the scheme “SOUBHAGAYA” & State Government has kept funds as State Matching Share to provide electricity to all Economically Backward un-electrified households.

### **3.5 5T initiative for schemes (Newly introduced by Government of Odisha)**

#### **A. New Service Connection**

- (1) Pre-approved rates will be declared for release of new-connections on the basis of Contract Demand (load-KW).
- (2) Web based online portal / mobile based application will be developed for facilitating new service connections.
- (3) For new service connection, multiple agencies will be empanelled to give competitive choice to prospective consumers.

- (4) A Tatkal Scheme will be introduced for new connection for Domestic consumers, which will ensure quick service delivery.

**B. Payment of Electricity Bill**

Multiple payment avenues like Bank, Post Office, Mobile Wallet etc. will be made available for collection of electricity bills.

**C. Other Consumer Services – Deployment of Franchisee**

- (1) Large scale deployment of Franchisees will be implemented in a phased manner to increase private investment and to encourage efficiency in the sector.
- (2) Outsourcing of consumer services in ULBs through Franchisees will be done to give a competitive choice to consumers and to enhance the service quality.
- (3) A scheme for providing incentives to community based organizations (SHGs, Youth Clubs etc.) and PRIs (GPs) will be introduced for reduction of losses, reporting of theft and safety issues.

**D. Use of ICT**

- (1) Information & Communication Technology (ICT) shall be deployed in a large scale for energy billing and collection to give consumer's the ease of accessing services.
- (2) In rural areas, the Common Service Centres (CSCs) shall be utilized for delivery of IT based services.
- (3) Power quality related complaints are planned to be addressed through;
  - Call Centre / App / SMS based mechanism
  - Area based Franchisee agencies
- (4) Photo based Geo-tagged mobile application will be developed for reporting of Safety issues and rectification thereof.

**E. Licensing & Inspection to be replaced with Self-Certification**

To fast track inspection of electrical installation, consumers will be given an option to get the installations inspected by Chartered Safety Engineers and give a Self-Certification to the Department up to a designated voltage level.

**F. Employment Generation**

The services provided by the Energy Department and its' Utilities can provide new avenues for generating employment for local youth. This can be monitored so as to develop an index of employment for various services. Training and skill development will also be taken up aligned to the scope of employment.

**G. Transparency**

The interface with implementing agencies and contractors working for the Utilities will also be improved by bringing in transparency in the contract, regular passing of bills and setting up of formal grievance redressal mechanism for them.

**I. Teamwork**

The human resource set up of the Utilities will also be improved so as to provide for incentives for good work and dis-incentive for unprofessional conduct. Since the complex work of the Department requires Teamwork, it is imperative that the motivation level of the employees is maintained.

**J. Infrastructure Development in Major Cities**

The Power Transmission & Distribution infrastructure shall be improved in the major cities of Sambalpur, Rourkela, Berhampur and Balasore on the lines of SCRIPS scheme of Cuttack & Bhubaneswar. A Detailed Project Report (DPR) for the same shall be prepared at the earliest.

**K. IT backbone Infrastructure**

In order to kick-start the citizen centric delivery model, it is essential to set up in a time bound manner, a robust & futuristic IT backbone infrastructure for all the Utilities on a single platform. A detailed project report for the same shall be prepared in a month's time and put up to Government for further necessary action.



## Chapter IV

4.0 PAST PERFORMANCE OF PROGRAMMES & SCHEMESTABLE – 1

**Financial and Physical Performance for the year, 2017-18  
(Programme Expenditure)**

(Rs. in TRs)

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2017-18	Financial achievement for the year, 2017-18	Physical target for the year, 2017-18	Physical achievement for the year, 2017-18	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
1	Restructured Accelerated Power Development & Reform Programme (R-APDRP)	1054700	1054700	SCADA, System Meter Installation & Modem Installation in Bhubaneswar & Cuttack, GIS Survey in 12 Towns, Data Center and Customer Call Center, DR Center at STPI, Berhampur .	Approximately 100% completed against the sanctioned quantity (as per DPR) till 6.9.2018 of IT & SCADA.	
2	Rajiv Gandhi Grameen Vidyutikaran Yojana (SS) (RGGVY)	250000	250000	3144 nos. of un-electrified villages/ partially electrified villages and BPL Households will be taken up for electrification.	174 Un-electrified villages, 5856 Partially electrified villages & 1,40,643 BPL households have been electrified under the scheme.	
3	Biju Gram Jyoti Yojana (BGJY)	2000000	1999983	Purchase order for 3430 nos. Distribution transformer of different rating for 4 DISCOMs were made.	Delivery of 2000 nos. (approx.) distribution transformers have been made and the balance transformers are in the pipeline for delivery.	
4	Biju Sahranchal Vidyutikaran Yojana (BSVY)	100000	100000	861 nos. of slums/ ward/ hamlets will be taken up for electrification.	2734 nos. habitants have been electrified and 31284 nos. of BPL households charged on 31.3.2018.	
5	Energy Conservation	13611	12024	Energy Efficiency in Drinking Water Pumping System, in Building, in lift irrigation systems, in ULBs, in the Industry, domestic, dairy sector, SME clusters, in Thermal and Hydro Power Stations, Transmission and	Successfully conducted EC day with participation from school students from all the 314 Blocks and 30 Districts of Odisha. Winners of quiz competition among students were awarded. Various Odisha Energy	

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2017-18	Financial achievement for the year, 2017-18	Physical target for the year, 2017-18	Physical achievement for the year, 2017-18	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
				Distribution System, Agricultural Demand Side Management, Capacity Building and Policy initiatives, Technical services towards engagement of consultant and Services for energy conversation cell, Seminars, awareness programme, Project Management Unit for Energy Conservation activities	Conservation Award for 2017 was given for energy efficiency initiatives in various categories such as Hospital, Airport, Hotel etc. As an appreciation of their work, Audit of Utkal and Ravenshaw University, Man Power Support to SDA (PMU).	
6	Construction of Shakti Bhawan (Building for Energy Department)	5013	4514	Procurement of furniture of STL Conference Hall, reception counter, offices and laboratory rooms	50.1 lakhs transferred to Works Department for supply of the furnishings/ furniture	
7	Procurement of equipment for Standard Testing Laboratory (STL)	1	0	Procurement of Electrical Testing Equipment	100%	token
8	Equity Share investment in OPTCL	500000	500000	18 nos. 400/220 KV, 220/132/33 KV, 132/33 KV Grid Sub-stations and associated transmission lines are proposed to be constructed in several district of Odisha such as Sambalpur, Puri, Balasore, Bargarh, Dhenkanal,	Out of 18 nos. Sub-stations and transmission line works, construction of Sub-stations at Bargarh new, Bhogarai, Tirtol and 132 KV Kuhei – Jaleswar line works have been completed. Construction of Sub-stations at Lapanga, Maneswar, Ghens,	Delay due to RoW Land acquisition etc.

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2017-18	Financial achievement for the year, 2017-18	Physical target for the year, 2017-18	Physical achievement for the year, 2017-18	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
				Ganjam, Sonepur, Cuttack, Keonjhar Malkangiri etc.	Godachhak, Kalimela, Keonjhar, Narasingpur, Satasankha are under progress.	
9	System Strengthening for Elephant Corridor	200000	200000	11 nos. Of Elephant Corridor is fixed in phase 3.	11 nos. Of completed, out of 11 nos. an amount of Rs.32.663 Crore in Phase-3 upto 31.3.2018.	
10	Underground cabling system for Grand Road, Puri Temple Area & Lingaraj temple area and other important sites.	1	0	0	0	token
11	Shifting of Transformer and allied Conductor located in Government Schools & Anganwadi Centres	118188	118188	5350 nos. of Shifting of transformers located in Schools and Anganwadi Centres are fixed during 2017-18	The 4489 nos. of Shifting of transformers located in Schools and Anganwadi Centres, out of 5350 nos. an amounting of Rs.27.27 Crore upto 31.3.2018.	
12	Dedicated Agriculture & Fishery Feeder	1	0	0	0	token
13	Construction of new 33/11 KV Sub-stations (Odisha Distribution System Strengthening Project)	7810000	7810000	229 nos. 33/11 KV Sub-stations to be charged	84 nos. 33/11 KV Sub-stations have been charged	Target could not be achieved due to RoW issue and clearance from statutory bodies like NHAI, Railways and Forest Authorities etc.
14	State Capital Region Improvement of power	2300000	2300000	Completion of Pratapsasan 220/132/ 33 KV Grid Sub-stations	220/132 KV Grid Sub-Station at Nuapada (Cuttack), 220 KV DC line from Bidanasi to Cuttack	

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2017-18	Financial achievement for the year, 2017-18	Physical target for the year, 2017-18	Physical achievement for the year, 2017-18	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
	system (SCRIPS)				completed. Major portion of 220/132/33 KV Pratapsasan Grid Sub-Station work completed.	
15	Radial to Ring Conversion Projects	400000	400000	132/33 KV Sub-stations at Atri and Nimapara – Kesura line completion.	132/33 KV Sub-stations at Atri and 132 KV LILO line from Nimapara – Kesura line to Pratapsasan Sub-station completed.	
16	Disaster Response Centre	300000	300000	Procurement of new ERS towers, DG Sets.	Procurement of 12 sets of new ERS towers, all DG sets, charging of 160 MVA transformer banks at Balasore and 40 MVA transformer at Narendrapur.	
17	Disaster Resilient Power System	400000	400000	Work under execution by OPTCL for creation of energy infrastructure having capability to combat natural calamities like cyclone, flood etc.		Creation of energy infrastructure having capability to combat the natural calamities like cyclone and Flood
18	Smart Grid	700000	700000	Completion of Chandaka B GIS, completion of OPGW, SCADA etc.	220/ 132 /33 KV GIS with SAS at Chandaka-B completed. OPGW, SCADA etc. are under progress	
19	Infrastructure Assistance to GEDCOL	100000	100000	Development of 16.4 MW Solar Plant on the un-utilised lands of OPTCL, 1000 MW Solar Park by GEDCOL, Replication of the Bhubaneswar – Cuttack Rooftop Project in 15 other cities in the State. The total Rooftop Project capacity is	Development of 4 MW Solar Rooftop Project on the non-residential Government buildings in Cuttack – Bhubaneswar is under progress. 225 KW capacity has been installed inside Utkal University Campus.	The work is under process to promote Green Energy in the State, Government of Odisha has established Green Energy Development Corporation Ltd (GEDCOL), a subsidiary of OHPC, which has

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2017-18	Financial achievement for the year, 2017-18	Physical target for the year, 2017-18	Physical achievement for the year, 2017-18	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
				expected to be around 10 MW.		started operation from the Financial Year 2013-14
20	Equity Infusion to OHPC	190000	190000	For exploration of Manharpur and DIP side Manoharpur Coal Blocks allotted in favour of OCPL through Government Route .	It aims at promoting investment renewable energy projects and various green energy sources to develop and execute special renewable energy projects to generate and sell electric power anywhere in India.	Share Capital for Renovation of Hydro Power Plant.
21	Odisha Transmission System Improvement Project (EAP) (JICA)	200000	200000	The existing transmission system of OPTCL has to be strengthened to meet the electricity demand during the 13 <sup>th</sup> Plan period when generation capacity is expected to increase from the existing 5000 MW to 10900 MW (State Share)	Work is under progress. Out of total 9 packages, work orders have already been issued for package 5A, 7 & 8.	Tender has been floated for packages 4, 5 & 6. Consultants appointed for packages 1 & 3
22	Integrated Power Development Scheme (IPDS)	1000000	1000000	0	13792 nos. Poles erected, 33 KV line new & augmented 16.66 CKm, 11 KV line new & augmented 53.88 CKm, LT line new & augmented 17.06 CKm, 18.674 MVA DTRs installed. Trench work in progress in 3 out of 4 Sub-stations under CESU.	RoW issue, Non availability of shut down in time.
23	Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)	2000000	2000000	16 nos. of village have already been electrified out of the targeted 341 villages by 31.3.2017 after	9380 BPL households, 710 nos. Of PE villages and 33 nos. SAGY villages have been electrified. Augmentation of 54	RoW issue, Non availability of shut down in time.

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2017-18	Financial achievement for the year, 2017-18	Physical target for the year, 2017-18	Physical achievement for the year, 2017-18	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
				tender process is over.	nos. 33/11 KV Sub-stations, commissioning of 756 Distribution transformers done.	
24	Equity infusion to OPGC	3086928	3086928	Financial Support to OPGC in carrying out works for infrastructure development.	0	Share Capital investment in OPGC for Plant.
25	Power supply to the new Bank Branches of unbanked G.Ps	390	388	Power supply to the new Bank Branches of unbanked G.Ps as per arriving demand.	To provide power supply to the new bank branches of unbanked GPs as per arriving demand.	To provide power supply to the new bank branches of unbanked GPs, the Government has made a plan provision from 2017-18.
26	Optic Fibre System for G.P level Internet Connectivity.	1	0	0	0	token
27	Information, Education, Communication (IEC) Activities	3500	0	In order to improve information, education and communication systems.	In order to improve information, education and communication systems whenever required for sensitisation.	New Scheme
28	GPS Survey System	1000	1000	Development of electrical infrastructure so as to ensure effective and efficient supply of power.	Work in progress.	To prepare a need based action plan for future projects, GPS survey of electrical infrastructure is felt necessary.
29	Loan to OPTCL for infrastructure creation	1	0	0	0	token
30	Biju KBK	1	1	0	0	token
31	Odisha Renewable Energy Development Fund (OREDF)	400000	0	0	0	New Scheme

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2017-18	Financial achievement for the year, 2017-18	Physical target for the year, 2017-18	Physical achievement for the year, 2017-18	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
32	Special Programme for KBK Districts (RLTAP)	380000	379743	Construction of KV lines, VCB in Nabarangpur, Koraput, Malkangiri district.	Project are under process	

**TABLE – 2**

**Financial and Physical Performance for the year, 2017-18  
(Administrative & EOM Expenditure)**

(In TRs.)

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2017-18	Financial achievement for the year, 2017-18	Physical target for the year, 2017-18	Physical achievement for the year, 2017-18	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
1	2577-EIC (Elec.)-cum-PCEI (O)	6506	4661	Maintenance Expenditure	Maintenance Expenditure	
2	3004-CE-cum-Chief Electrical Inspector	3898	2747	Maintenance Expenditure	Maintenance Expenditure	
3	3005-SE-cum-Electrical Inspector Establishment	8127	6407	Maintenance Expenditure	Maintenance Expenditure	
4	3006-EE-cum-Deputy Electrical Inspector Establishment	4298	3772	Maintenance Expenditure	Maintenance Expenditure	
5	1336-Standard Testing Laboratory	5483	872	Maintenance Expenditure	Maintenance Expenditure	
6	0254-Department of Energy	6143	3490	Maintenance Expenditure	Maintenance Expenditure	

**N.B: Prepared basing on the surrender of saving available in this Section for the Financial Year 2017-18**

**TABLE – 3**  
**Financial and Physical Performance for the year, 2018-19**  
**(Programme Expenditure)**

(Rs. in TRs)

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2018-19	Financial achievement for the year, 2018-19	Physical target for the year, 2018-19	Physical achievement for the year, 2018-19	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
1	Restructured Accelerated Power Development & Reform Programme (R-APDRP)	1	0	SCADA, System Meter Installation & Modem Installation in Bhubaneswar & Cuttack, GIS Survey in 12 Towns, Data Center and Customer Call Center, DR Center at STPI, Berhampur	Approximately 100% completed against the sanctioned quantity (as per DPR) till 6.9.2018 of IT & SCADA.	
2	Rajiv Gandhi Grameen Vidyutikaran Yojana (SS) (RGGVY)	997224	744393		174 Un-electrified villages, 5856 Partially electrified villages & 1,40,643 BPL households have been electrified under the scheme.	
3	Biju Gram Jyoti Yojana (BGJY)	1500000	1499905	Procurement of 2877 nos. 100 KVA DTR, 1402 nos. 250 KVA DTR, 434 nos. 500 KVA DTR, 1700 nos. 16 KVA DTR for CESU, SOUTHCO, NESCO & WESCO.	2877 nos. 100 KVA DTRs delivered to the DISCOMs.	Delivery of 1836 nos. 250 KVA & 500 KVA DTRs in process.
4	Biju Sahranchal Vidyutikaran Yojana (BSVY)	100000	100000	861 nos. of slums/wards/ hamlets have been taken up for electrification	2734 nos. habitants have been electrified and 31284 nos. of BPL households charged on 31.3.2018	
5	Energy Conservation	10000	9345	Energy Efficiency in Drinking Water Pumping System, in Building, in lift irrigation systems, in ULBs, in the Industry, domestic, dairy sector, SME clusters, in Thermal and Hydro Power Stations, Transmission and Distribution	Successfully conducted EC day with participation from school students from all the 314 Blocks and 30 Districts of Odisha. Winners of quiz competition among students were awarded. Various Odisha Energy	



Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2018-19	Financial achievement for the year, 2018-19	Physical target for the year, 2018-19	Physical achievement for the year, 2018-19	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
				System, Agricultural Demand Side Management, Capacity Building and Policy initiatives, Technical Services towards engagement of consultant and services for energy conversation cell, Seminars, awareness programme, Project Management Unit for Energy Conservation activities	Conservation Award for 2018 was given for energy efficiency initiatives in various categories such as Hospital, Airport, Hotel etc. As an appreciation of their work, Audit of Utkal and Ravenshaw University, Man Power Support to SDA (PMU).	
6	Construction of Shakti Bhawan (Building for Energy Department)	1	0	Procurement of furniture of STL Conference Hall, reception counter, offices and laboratory rooms.	50.1 lakhs transferred to Works Department for supply of the furnishings/ furniture	token
7	Procurement of equipment for Standard Testing Laboratory (STL)	5001	4653	Purchase order amounting to Rs.24.63 lakh has been issued for procurement of Reference Standard & Phantom Load Kit. Tender Call Notice published for new CT & PT analyzer & decode resistance box total amounting to Rs.17.70 lakh.	Multifunction Calibrating Insulation Tests and one 0.01 class reference standard for energy meter were procured costing Rs.46,51,560/-.	
8	Equity Share investment in OPTCL	450000	450000	Completion of Goda Chhak, Keonjhar, Chikiti, Lapanga, Baragarh new, Ghens, Narasinghpur, Bhograi, Tirtol, Kuchei - Jaleswar line & Ib-Lapanga line works.	8 nos. projects namely Lapanga, Baragarh new, Ghens, Bhograi, Narasinghpur, Tirtol, Kuchei - Jaleswar line & Ib-Lapanga line works have been completed. Other works have been completed partially.	

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2018-19	Financial achievement for the year, 2018-19	Physical target for the year, 2018-19	Physical achievement for the year, 2018-19	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
9	System Strengthening for Elephant Corridor	200000	46232	11 nos. Of Elephant Corridor is fixed in phase 3.	11 nos. Of completed, out of 11 nos. an amount of Rs.32.663 Crore in Phase-3 upto 31.3.2018.	
10	Underground cabling system for Grand Road, Puri Temple Area & Lingaraj temple area and other important sites.	45001	45000	For underground cabling work at Ratha Danda, Baripada, Maa Samaleswari Temple & Lingaraj Ratha Danda, Bhubaneswar and that of Puri and Konark area.	Underground cabling work at Ratha Danda, Baripada to be completed by March, 2020 and other area has already been completed.	
11	Shifting of Transformer and allied Conductor located in Government Schools & Anganwadi Centres	122000	122000	5350 nos. of Shifting of transformers located in Schools and Anangwadi Centres are fixed during 2017-18	The 4489 nos. of Shifting of transformers located in Schools and Anangwadi Centres, out of 5350 nos. an amounting of Rs.27.27 Crore upto 31.3.2018.	
12	Dedicated Agriculture & Fishery Feeder	1	0	0	0	token
13	Construction. of new 33/11 KV Sub-stations (Odisha Distribution System Strengthening Project )	5000000	5000000	282 nos. 33/11 KV Sub-stations to be charged.	93 nos. 33/11 KV Sub-stations charged.	Target could not be achieved due to RoW issue and clearance from statutory bodies like NHAI, Railways and Forest Authorities etc.
14	State Capital Region Improvement of power system (SCRIPS)	1500000	1500000	Completion of 132 KV underground cable connectivity from 220/132/33 KV GIS grid Chandaka-B to 132/33 KV GIS Grid Unit-8. Completion of the 132 KV	132 KV underground cable connectivity from 220/132/33 KV GIS grid Chandaka-B to 132/33 KV GIS Grid Unit-8 completed and charged. Major works of the 132 KV underground cable	Work has been delayed due to non receipt of statutory permissions from different Government bodies in time.

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2018-19	Financial achievement for the year, 2018-19	Physical target for the year, 2018-19	Physical achievement for the year, 2018-19	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
				underground cable connectivity from 220/132/33 KV GIS grid Chandaka-B & 132/33 KV AIS grid Mancheswar-A to 132/33 KV GIS Grid Mancheswar. Laying down of 33 KV, 11 KV & LT underground cables in dedicated trenches in Bhubaneswar and Cuttack cities. Installation of 33 KV & 11KV circuits in Cuttack & Bhubaneswar cities.	connectivity from 220/132/33 KV GIS grid Chandaka-B & 132/33 KV AIS grid Mancheswar-A to 132/33 KV GIS Grid Mancheswar completed. Almost 95% scope of 33 KV, 11 KV & LT underground cables has been laid down in dedicated trenches in Bhubaneswar and Cuttack cities. In Cuttack & Bhubaneswar 6 nos. 33 KV circuits & 10 nos. 11 KV circuits have been completed and charged.	
15	Radial to Ring Conversion Projects	400000	400000	Completion of 132 KV line from Nuapatna to Banki.	132 KV line from Nuapatna to Banki completed on 28.08.2018.	Delay in achievement of the target in time is due to ROW issue.
16	Disaster Response Centre	400000	400000	0	One no. 40 MVA spare transformer charged at New Bolangir.	
17	Disaster Resilient Power System	350000	350000	Completion of 132/33 KV Sub-stations at Khuntuni and Chandbali.	132/33 KV Sub-station at Khuntuni charged on 31.05.2018 and another 132/33 KV Sub-station at Chandbali charged on 20.02.2019.	Creation of energy infrastructure having capability to combat the natural calamities like cyclone and Flood
18	Smart Grid	550000	550000	Completion of AMI, SCADA, OPGW etc.	AMI work completed. SCADA & OPGW works going on.	
19	Infrastructure Assistance to GEDCOL	100000	100000	For development of 16.4 MW Solar Plant on the unutilised lands of OPTCL. For development of	External transmission infrastructure for power evacuation will be constructed by OPTCL under GEC-	The work is under process to promote Green Energy in the State, Government

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2018-19	Financial achievement for the year, 2018-19	Physical target for the year, 2018-19	Physical achievement for the year, 2018-19	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
				1000 MW Solar Park by GEDCOL. Replication of the Bhubaneswar – Cuttack Rooftop Project in 15 other cities in the State. 10 MW Mandira Dam SHEP in Sundargarh.	II. DPR has been prepared and approved by CEA. Development of 65 nos. of 4 MW Solar Rooftop Project on the Government building in Bhubaneswar – Cuttack is implemented. Tendering for selection of EPC developer for 10 MW Mandira SHEP is under progress.	of Odisha has established Green Energy Development Corporation Ltd (GEDCOL), a subsidiary of OHPC, which has started operation from the Financial Year 2013-14
20	Equity Infusion to OHPC	490000	490000	OHPC has to pay to OCPL towards equity share as per agreement with OPGC at the ratio of 49:51.	Utilise the funds for exploration of Manoharpur and DIP side Manoharpur Coal blocks allotted in favour of OCPL through Government route and work is under progress.	Share Capital for Renovation of Hydro Power Plant.
21	Odisha Transmission System Improvement Project (EAP) (JICA)	440000	440000	The existing transmission system of OPTCL has to be strengthened to meet the electricity demand during the 13th Plan period when generation capacity is expected to increase from the existing 5000 MW to 10900 MW (State share)	Work orders have already been issued and the projects have been started.	Finalisation of tender in respect of 3 nos. packages under this scheme under process.
22	Integrated Power Development Scheme (IPDS)	1061700	1061700	Commissioning of new Sub-stations, capacity enhancement of 44nos. 33/11 KV PTR & 375 nos. distribution transformers, reconductoring of	2 nos. new Sub-stations commissioned, capacity enhancement of 44 nos. 33/11 KV PTR & 375 nos. distribution transformers,	RoW issues, Non availability of shut down in time.

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2018-19	Financial achievement for the year, 2018-19	Physical target for the year, 2018-19	Physical achievement for the year, 2018-19	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
				48 nos. 33 KV feeders, commissioning of 139 nos. of 11 KV new feeders, installation of new distribution transformers, 49728 nos. consumer meters, solar panels etc.	reconductoring of 48 nos. 33 KV feeders, commissioning of 139 nos. of 11 KV new feeders, installation of 772 nos. new distribution transformers, 49728 nos. consumer meter installed, solar panels installed for 5 KWp, 1493 kms. of aerial bunched cable laid down etc.	
23	Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)	1550776	1550776	To provide power connection to 56658 nos. of households, 465 nos. PE village & 18 nos. SAGY villages. Augmentation and construction of 33/11 KV Sub-stations. Commissioning of distribution transformers.	Power connection has been provided to 56658 nos. of households, 465 nos. PE village & 18 nos. SAGY villages. Augmentation of 54 nos. 33/11 KV Sub-stations have been made. 2 nos. 33/11 KV new Sub-stations have been made. Commissioning of 1380 nos. distribution transformers made.	RoW issues, Non availability of shut down in time.
24	Equity infusion to OPGC	2216800	1234200	To extend financial support to OPGC in carrying out works for infrastructure development	OPGC is now pursuing its expansion project comprising of 2X660 MW Power Plants in the same location i.e. ITPS and its own MGR system at an estimated project of Rs.10,165 Crore and both units have achieved its commercial operation.	Share Capital investment in OPGC for Plant
25	Optic Fibre System for G.P level Internet Connectivity.	1	0	0	0	token
26	Information,	33573	2844	To improve	For online	New Scheme

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2018-19	Financial achievement for the year, 2018-19	Physical target for the year, 2018-19	Physical achievement for the year, 2018-19	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
	Education, Communication (IEC) Activities			information, Education and Communication system.	monitoring of different schemes and programmes operating in the State for sensitisation of the consumers and public for awareness.	
27	Supply of LED Light	2250000	2250000	Supply of 3.84 crore nos. of 9 watt LED bulbs by M/s EESL.	3.50 crore 9 watt LED bulbs out of the total ordered quantity have been delivered for distribution to the consumers.	New Scheme
28	Saubhagya Yojana	2740300	2740300	Under CESU, electricity to be provided to 18782 nos. of households, stringing of 60.412 kms. 11 KV conductors, commissioning of 145 nos. of distribution transformers and stringing of 336.054 kms LT lines. Under NESCO, electricity to be provided to 8000 nos. of households, stringing of 14.44 kms. 11 KV conductors, commissioning of 31 nos. of distribution transformers and stringing of 336.054 kms LT lines.	Under CESU & NESCO, 26782 nos. of households have been covered, stringing of 74.852 kms. 11 KV conductors, commissioning of 176 nos. of distribution transformers and LT line of 464.454 kms. Drawn.	New Scheme

**TABLE – 4**  
**Financial and Physical Performance for the year, 2018-19**  
**(Administrative & EOM Expenditure)**

(In TRs.)

Sl. No	Name of the Schemes/ Programmes	Financial target for the year, 2018-19	Financial achievement for the year, 2018-19	Physical target for the year, 2018-19	Physical achievement for the year, 2018-19	Remarks/ Reasons for shortfall
1	2	3	4	5	6	7
1	2577-EIC (Elec.)-cum-PCEI (O)	4249	3469	Maintenance Expenditure	Maintenance Expenditure	
2	3004-CE-cum-Chief Electrical Inspector	4971	4345	Maintenance Expenditure	Maintenance Expenditure	
3	3005-SE-cum-Electrical Inspector Establishment	10924	7473	Maintenance Expenditure	Maintenance Expenditure	
4	3006-EE-cum-Deputy Electrical Inspector Establishment	11920	3728	Maintenance Expenditure	Maintenance Expenditure	
5	1336-Standard Testing Laboratory	4252	2115	Maintenance Expenditure	Maintenance Expenditure	
6	0254-Department of Energy	5783	3049	Maintenance Expenditure	Maintenance Expenditure	

**N.B: Prepared basing on the surrender of saving available in this Section for the Financial Year 2018-19.**

## Chapter V

### 5.0 Financial Review

Actuals for the year 2017-18, Budget Estimate and Revised Estimates for the year 2018-19, Budget Estimates for the Year 2019-20 in respect of schemes mentioned in chapter-two are mentioned below.

#### Financial Review

The statement regarding Financial Outlay under State Sector Scheme (Programme Expenditure) and Establishment, Operations and Maintenance (Administrative Expenditure) in both revenue and capital account for the financial years 2017-18, 2018-19 & 2019-20 and Statement regarding Surrender/ Savings during: 2017-18 are furnished below:

(Rs in TRs)					
Sl No	Name of the Schemes/ Programme	2017-18 Actuals	2018-19 (BE)	2018-19 (RE)	Financial Outlay (BE) 2019-20
1	Accelerated Power Development & Reform Programme (R-APDRP)	1054700	1	1	1
2	Rajiv Gandhi Grameen Vidyutikaran Yojana (SS) (RGGVY)	0	1250000	997224	2125000
3	Biju Gram Jyoti Yojana (BGJY)	1999983	750000	1500000	750000
4	Biju Saharanchal Vidyutikaran Yojana (BSVY)	100000	100000	100000	100000
5	Sahaj Bijli Har Ghar Yojana (Rural) – Soubhagya	0	1500000	2740300	1500000
6	“Ama Ghare LED Light” Karyakrama	0	1250000	2250000	100000
7	Energy Conservation	12024	30000	10000	30000
8	Procurement of Meter Testing equipment for STL	0	5001	5001	15000
9	System Strengthening for Elephant Corridor	200000	200000	200000	1000000
10	Equity Share investment in OPTCL	500000	450000	450000	550000
11	Underground cabling system	0	1	45001	40000
12	Shifting of Transformer located in school & Anganwadi Centres	118188	100000	122000	100000
13	Construction of Shakti Bhawan & STL Building	4514	1	1	1
14	Dedicated Agriculture & Fishery Feeder	0	1	1	0
15	GPS survey of Infrastructure	1000	0	0	0
16	Construction. of 33/11 KV Sub-stations	7810000	5000000	5000000	4430000
17	State Capital Region Improvement of Power System (SCRIPS)	2300000	1250000	1500000	3500000
18	Disaster Resilient Power	400000	350000	350000	1064300



Sl No	Name of the Schemes/ Programme	2017-18 Actuals	2018-19 (BE)	2018-19 (RE)	Financial Outlay (BE) 2019-20
	System				
19	Redial to Ring Conversion Project	400000	400000	400000	549500
20	Disaster Response Centre (DRC)	300000	400000	400000	613300
21	Smart Grid Project (SGP)	700000	550000	550000	147000
22	Infrastructure Assistance to GEDCOL	100000	100000	100000	100000
23	Equity Infusion to OHPC	190000	490000	490000	490000
24	EAP: Odisha Transmission System Improvement Project (JICA Project)	200000	440000	440000	500000
25	Integrated Power Development Scheme	1000000	1000000	1061700	1000000
26	Deen Dayal Upadhyay Gram Jyoti Yojana (DDUGJY)	2000000	2000000	1550776	2400000
27	Equity Infusion to OPGC	3086928	1916800	2216800	1
28	Power Supply to New Bank Branches of unbanked GPs	389	2000	0	1
29	Information, Education, Communication (IEC) Activities	0	3573	33573	3000
30	DISCOMs IT System	0	0	0	200000
31	UMPP Bedabahal	0	0	0	897000
32	Acquisition of Land for GEDCOL	0	0	0	1
33	Special Programme for Strengthening of Electric Supply System in KBK District (RLTAP)	379743	0	0	0
34	Optical Fibre System for GP level Internet Connectivity	0	1	1	0
	<b>Total</b>	<b>22857468</b>	<b>19537379</b>	<b>22482379</b>	<b>22204105</b>

**Abstract in Total**

(Rs. in TRs)

Sl No	Sector/Scheme	2017-18 (Actual)	2018-19 (B.E.)	2018-19 (R.E.)	2019-20 (B.E.)
1	2	3	4	5	6
1	State Sector Scheme (Programme Expenditure)	22857468	19537379	22482379	22204105
2	Establishment, Operations and Maintenance Expenditure (Administrative Expenditure)	879780	298056	311626	304731
<b>State Plan (PSU) Not routed through this Department Budget</b>					
	(a) OPTCL	7650000	10850000	10000000	10000000
	(b) OPGC	23923757	35000000	35000000	25000000
	(c) OHPC	225083	5000000	5000000	5000000

**Statement Regarding Surrender/ Savings: 2017-18****(State Sector Schemes (Programme Expenditure))**

					(Rs. in Trs)
Sl. No	Head of Development (Schemes)	Budget Estimate 2017-18	Revised Estimate 2017-18	Surrender/ Savings	Remarks
1	2	3	4	5	6
1	Accelerated Power Development & Reform Programme (APDRP)	1054700	1054700	0	
2	Rajiv Gandhi Grameen Vidyutikaran Yojana (SS) (RGGVY)	1250000	250000	250000	REC did not release funds
3	Biju Gram Jyoti Yojana (BGJY)	600000	2000000	17	Actual requirement
4	Biju Sahranchal Vidyutikaran Yojana (BSVY)	50000	100000	0	
5	Budgetary Support to OHPC for providing equity capital to OCPL	190000	190000	0	
6	Odisha Transmission System Improvement Project (EAP) (JICA)	200000	200000	0	
7	Equity infusion for OPGC expansion project	1200000	3086928	0	
8	Optical Fibre System for GP Level Internet connectivity	1	1	1	Token
9	Energy Conservation	30000	13611	1587	Actual requirement
10	Shakti Bhawan (Construction of Building)	4001	5013	499	Due to lack of Administrative Approval
11	Procurement of equipment, furniture & fixture for Standard Testing Laboratory (STL) Building	10000	1	1	Actual requirement
12	System Strengthening for Elephant Corridor	200000	200000	0	
13	Share Capital investment to OPTCL	500000	500000	0	
14	Underground cabling	1	1	1	Token
15	Power Supply to New Bank Branches in unbanked GPS	1	390	1	
16	Shifting of Transformer located in School & College etc	100300	118188	0	
17	Dedicated Agriculture & Fishery Feeder	1	1	1	Token
18	GPS survey System	1000	1000	0	
19	Construction. of 33/11 KV Sub-stations	4810000	7810000	0	
20	Loan to OPTCL for infrastructure creation	1	1	1	Token
21	Biju KBK	1	1	1	Token

Sl. No	Head of Development (Schemes)	Budget Estimate 2017-18	Revised Estimate 2017-18	Surrender/ Savings	Remarks
22	State Capital Region Improvement of Power System (SCRIPS)	1500000	2300000	0	
23	Redial to Ring Conversion Project	400000	400000	0	
24	Disaster Resilient Power System	400000	400000	0	
25	Disaster Response Centre	100000	300000	0	
26	Smart Grid	200000	700000	0	
27	Infrastructure Assistance to GEDCOL	100000	100000	0	
28	Integrated Power Development Scheme (IPDS)	1000000	1000000	0	
29	Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)	2000000	2000000	0	
30	Special Programme for Strengthening of Electric supply system in KBK District (RLTAP)	380000	380000	257	
31	Odisha Renewable Energy Development Fund (OREDF)	400000	400000	400000	The Scheme will be implemented by Science & Technology Department
32	IEC Activities	3000	3500	3500	There is no advertisement by the Department
	<b>Total</b>	<b>16683007</b>	<b>23513336</b>	<b>655867</b>	
<b>Establishment, Operations &amp; Maintenance Expenditure (Administrative Expenditure)</b>					
1	2577-EIC (Ele.)-cum-PCEI	59008	59284	16603	Actual Expenditure
2	3004-CE-cum-CEI	15788	15938	6703	Actual Expenditure
3	3005-SE-cum-EI	51233	51544	19453	Actual Expenditure
4	3006-EE-cum-Dy.EI	107882	108354	30362	Actual Expenditure
5	1336-STL	22830	22868	7007	Actual Expenditure
6	0254-Energy Department	66829	66829	16797	Actual Expenditure
	<b>Total</b>	<b>323570</b>	<b>324817</b>	<b>96925</b>	

**N.B:** Prepared basing on the surrender of saving available in this Section for the Financial Year 2017-18

## Chapter VI

### 6.0 Gender and SC/ST Budgeting

#### 6.1 Gender Budgeting:

The schemes implemented for energy sector, benefit the community as a whole. Therefore, Gender component is not captured.

#### 6.2 Tribal Areas Sub-Plan (796-TSP):

Tribal Sub-Plan: As per 2001 census, the tribal population constitute 22.13% of the total population of the State. The budget provision under TSP for the benefit of the tribal people during 2019-20 under different schemes implemented through Department of Energy is given in the table below.

#### 6.3 Scheduled Caste Sub-Plan (789-SCP for SP):

There are 93 scheduled caste (SC) communities in the State. As per 2001 census, the SC population constitute 16.53% of the total population of the state. The Budget provision under Programme Expenditure for the SC component of the State Sector Scheme during 2019-20 is indicated below:

(Rs In TRs)			
Sl No	Sector/Scheme	TSP	SCSP
1	2	3	4
<b>State Sector Schemes</b>			
1	Rajiv Gandhi Gramin Vidyuti Karan Yojana (RGGVY ) (State Share)	150000	150000
2	Biju Gram Jyoti Yojana(BGJY)	200000	200000
3	Biju Saharanchal Vidyutikaran Yojana (BSVY)	30000	30000
4	Equity support to OPTCL	150000	150000
5	Shifting of Transformer & allied Conductor located in School and Anganbadi centres	30000	30000
6	Construction of new 33/11 KV Sub-Stations	1400000	1400000
<b>Total State Sector Schemes</b>		<b>1960000</b>	<b>1960000</b>