

ANNUAL CAPITAL BUDGET F.Y. 2016-17



Maharashtra State Electricity Distribution Company Ltd
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1. INTRODUCTION:-

1.1 Company Profile:

Consequent to the implementation of power sector reforms in the State of Maharashtra, where under, amongst others, the activities of generation, transmission, distribution and retail supply of electricity carried out by erstwhile MSEB have been restructured and transferred to three successor corporate entities, the function of distribution and retail supply of electricity has been vested with Maharashtra State Electricity Distribution Company Limited (MSEDCL).

MSEDCL is a registered Company under the companies Act 1956 engaged in the business of developing, operating and maintenance of distribution system for supplying electricity to the consumers in its area of supply.

As a distribution licensee, MSEDCL is carrying out the retail supply of power to the end users and maintain the wire business for supply of such power. MSEDCL is also engaged in the process of tying up generation capacity for a long / medium / short term power from the competitive sources and developing distribution infrastructure. It is also engaged in improving its technical and financial performance with reference to national benchmarks by adopting the best available practices and absorbing the best available technologies.

1.2 Operational Profile:

After the restructuring of MSEB into four entities, under the transfer schemes, the GoM had allocated MSEDCL, all the assets and liabilities concerning the distribution of electricity in the State of Maharashtra which includes 16 Zones consisting of all 33 kV, 22 kV, 11 kV, LT lines & associated network & sub-stations.

MSEDCL sources of power include thermal, hydro, gas and non-conventional sources. MSEDCL operates a vast network comprising of Lakhs of transformers and kilometres of lines as well as thousands of substations spread over 3.08 Thousand sq.km geographical area of Maharashtra covering 41,095 villages and 457 towns.

2. ANNUAL CAPITAL BUDGET 2016-17

A capital Budget can be used to analyse the economic viability of a business project lasting multiple years and involving capital assets. It is the process of allocating resources for major capital or investment expenditure. Capital Budgeting investments and projects are funded by raising of money through debt, equity or by use of retained earnings(excess cash surplus from company's present and past earnings).

2.1 Need for Capital Budget:

1. As large sum of money is involved which influence the profitability of the company, preparing capital budgeting is must.
2. As the long term funds are used to invest in assets which will enable company to maintain the level of operations as well as expand the operational capacity of company.
3. It ensures the project will be beneficial to the firm with respect to its use.

2.2 Need for Capital Expenditure :

The basic objective of incurring the capital expenditure is to upgrade the ageing and weak distribution network to desirable standards so as to provide better network reliability and sustainable performance. It has been therefore felt essential to take necessary measures, in order to meet the challenges thrown by the Electricity Act 2003 and rules made there under like Standard of Performance (SoP) regulation framed by Hon'ble MERC.

The Capital Expenditure also envisaged re-enforcement of the system to provide quality, security and availability of power supply to the consumers, to undertake system development to meet the load growth, achieving the targeted reduction in system losses, undertake automation and other improvement works to enhance customer service and fulfill social obligation such as electrification of un-served areas. The process of Budgeting for Capital Expenditure is essential for a company to operate and grow. As this involves very large expenditure capital spending within the budget is must.

The structure of Annual Capital Budget and expected expenditure for the F.Y. 2016-17 is broken down into several schemes and elaborated in subsequent paras.

Budget outlay for the year 2016-17 for capital expenditure towards ongoing projects, new additional projects, as well as expenditure of capital nature in respect of existing schemes is ascertained at Rs. 8446.00 Crs. which is as under:

Sr. No.	Particular	Rs. in Crs
A	Ongoing Schemes & Projects (Annexure A)	5761.20
B	New Projects & Schemes (Annexure B)	2320.80
C	General Assets & Procurement (Annexure B)	364.00
	Total	8446.00

3. Scheme wise details of Capex which are provided in following section.

3. A. Ongoing Schemes & Projects

1. Infrastructure (Plan –I):

The infrastructure inherited by MSEDCL from erstwhile MSEB is quite old, deteriorated and overloaded too. Therefore, it was necessary to take immediate measures, in order to meet the challenges thrown by the Electricity Act 2003. As such the MSEDCL upgraded the existing distribution Infrastructure network in 120 divisions across of Maharashtra through Infrastructure capital expenditure. The basic Objectives of the Infrastructure Plan Projects are to provide Reliable and Quality Supply of power, meet the Load Growth Demand ,reduce the Distribution Losses and transformer failure rate.

The benefits to the consumers from Infra Capex are:

- Increase in Reliability of Power due to reduction in system failure and improvement in Quality of Power Supply
- Reduction in forced Load Shedding due to overloading and transformer failure rate
- Enhancement in system capacity helps to release the connections
- Reduction in Increase in production capacity of agricultural enterprises & industries causing reduction in cost of production due to improved productivity, reduction in loss time and promotion in the growth & expansion of the activities.

The scheme is funded through 80% debt from Rural Electrification and Power finance corporation and balance funding of 20% as equity support from GOM.

The scheme was expected to be completed before 2015-16, however due to delay of certain activities and spill over works it is proposed to incorporate Rs. 490.30 Crs in the capital expenditure for the annual budget of 2016-17.

2. Infrastructure (Plan –II):

The Infrastructure Plan II scheme is basically formulated for various Capital works for releasing new connections to be taken up during the period 2013-13 and 2015-16. In this Plan load Growth up to 2015-16 has been considered. Infra Capex Plan Part II is prepared keeping in view the objectives of release of New Connections R, C, I as well as Ag upto 2014-15, Up-gradation of existing system , meeting Load Growth ,providing reliable & quality supply , reducing AT&C Loss and reduction in DTC Failure Rates.

The scheme is funded through 80% debt from Rural Electrification and Power finance corporation and balance funding of 20% as equity support from GOM.

The scheme is expected to be completed by 2017-18. It is proposed to incorporate Rs. 1505.00 Crs in the capital expenditure for the annual budget of 2016-17.

3. Gaothan Feeder Separation scheme (GFSS- I,II, III IV):

The Gaothan Feeder Separation Scheme involves segregation of Agriculture load and other category of load respectively on separate feeders. The existing feeder is treated as Agriculture Feeder and a separate new feeder is erected from Sub-station to Gaothan/Village. The existing feeder will get supply during off-peak period whereas new Gaothan Feeder will get supply particularly during evening and night hours.

The Scheme shall benefit MSEDCL over the long term in following ways:

- Reduction in load shedding particularly to Rural/Semi-urban consumers and thereby reducing the feeling of discrimination and discontent among rural consumers.
- Flattening of load curve in judicial way, Better Load Management.
- Better Energy Accounting for Ag consumption.
- System strengthening by improving the Infrastructure.
- Improvement in Reliability and Quality of power supply.
- Reduction in T&D loss as well as reduction in over drawl and power purchase

The scheme is funded through 80% debt from Rural Electrification and Power finance corporation and balance funding of 20% as equity support from GOM.

The scheme was expected to be completed before 2015-16, however due to delay of certain activities and incomplete works it is proposed to incorporate Rs. 128.00 Crs in the capital expenditure for the annual budget of 2016-17.

4. LT Fixed Capacitor Scheme:

MSEDCL has undertaken the scheme for LT Fixed Capacitors Scheme in Agriculture dominated areas. The scope of this scheme covers installation of 25 KVar (21811 Nos.) & 30 KVar (21092 Nos.) LT APP Shunt Capacitors on 63 KVA & 100 KVA Distribution Transformers respectively.

Agricultural load is one of major category in agricultural predominant district. Currently operating power factor of distribution transformer supplying predominantly agricultural load is in range of 0.7 to 0.75. The Capacitor can be installed on secondary side of distribution transformers to improve operating power factor to 0.95. Improvement in power factor will lead to subsequent reduction in line losses and relieve distribution system to extent of reduction in KVA, thus resulting reduction in line and equipment loading and hence failure rate and hence improves voltage profile.

The Scheme shall benefit MSEDCL over the long term in view of the various advantages such as Local availability of reactive power for inductive loads, better and uniform voltage profile for consumer, heavy reduction in L.T losses, to improves system power factor, to reduces peak load feeder voltage drops, and to allow greater loads to be catered and improves life span of the equipment.

The scheme is funded through 90% debt funded by Rural Electrification corporation and balance 10% from internal accruals.

The scheme was expected to be completed before 2015-16, however due to delay of certain incomplete activities it is proposed to incorporate Rs. 10.00 Crs in the capital expenditure for the annual budget of 2016-17.

5. Single Phasing Scheme :

MSEDCL has implemented Single Phasing Project (SPP) especially for Agricultural (Ag) load management in mixed load areas.

The main objective of this scheme is to manage the three phase loads (Industrial & Agricultural loads) on the mixed load feeders. The scheme envisages supplying Single Phase rural lighting load through three nos. of single phase transformers. During the normal operation, the agricultural load continues to be supplied from the three phase transformers. On operation of the changeover switch, there will be no supply to the 3-phase load on the 11 kV distribution network whereas single phase supply is available to the lighting and fan load. On reversing changeover switch, normal 3-phase supply shall be restored.

The Scheme benefit to MSEDCL over the long term are minimizing the unrest among the rural consumers and the feeling of discrimination compared to urban consumers in respect of domestic supply, better load side Management, reduction in Over drawal and purchase of power during peak demand period, improved voltage profile, reliable power supply for lighting load (during evening and night times), restricting drawal by agricultural load (during day time),and reduction in losses.

The scheme was expected to be completed before 2015-16, however due to delay of certain activities and incomplete works it is proposed to incorporate Rs. 45.00 Crs in the capital expenditure for the annual budget of 2016-17. We have already received grant from GOM for this scheme.

6. Rajiv Gandhi Gramin Vidyutikaran Yojana:

Government of India (GoI) has launched in April 2005 an ambitious scheme “Rajiv Gandhi Gramin Vidyutikaran Yojana” (RGGVY).

This scheme has following policies:

- Provision of access to electricity to all households.
- Quality and reliable power supply at reasonable rates.
- Minimum lifeline consumption of 1 Unit per household per day as a merit by year 2012.
- Electrifying all villages as per census 2001 with new definition of village electrification.
- While providing power supply to 100% BPL (Below Poverty Line) Households no service connections cost to be recovered from such beneficiaries.

The scheme was expected to be completed before 2015-16, however for certain incomplete works it is proposed to incorporate Rs. 29.00 Crs in the capital expenditure for the annual budget of 2016-17.

7. Restructured Accelerated Power Development and Reform Programme (R-APDRP):

R-APDRP is GoI's initiative with focus on establishment of baseline data and fixation of accountability and reduction of AT&C losses through strengthening & up gradation of sub-transmission and distribution network and adoption of Information Technology during XI Plan. It is proposed to cover urban areas- Towns and cities with population of more than 30,000. The Project shall be taken up in Two parts Part 'A' and Part 'B'.

a. APDRP Phase –I :

The scheme was expected to be completed before 2015-16, however due to delay of certain incomplete activities it is proposed to incorporate Rs. 0.70 lakhs in the capital expenditure for the annual budget of 2016-17.

b. R APDRP Part A :

Part A shall include the projects for establishment of Base Line Data and IT applications for energy Accounting /Auditing and IT Based Consumer Service centres. Preparation of Base Line data for the project area covers consumer Indexing, GIS Mapping, metering of Distribution Transformers and Feeders, automatic Data Logging for all distribution Transformers and feeders, SCADA/DMS system (Only in the area having more than 4 Lakhs population annual input energy of the order 350 , asset mapping for entire distribution network at and below 11 kV network and include the DTs and feeders, LT lines, poles and other Distribution network equipment, adoption of IT applications for Meter reading, Billing and collection, energy accounting and auditing, MIS, redressal of Consumer grievances and establishment of IT enabled consumers service Centers.

Initially 100% funds for the approved projects shall be provided through loan from Government of India through nodal agency PFC.

The scheme was expected to be completed before 2015-16, however for of some incomplete works it is proposed to incorporate Rs. 20.00 Crs in the capital expenditure for the annual budget of 2016-17.

c. RAPDRP-Part B:

Part B shall include regular distribution strengthening and augmentation projects such as Renovation, modernization and strengthening of 11 kV level Substations, Transformers/Transformer Centres, Re-conductoring of lines at 11kV level and below, Load Bifurcation, Feeder Separation, Load Balancing, Aerial Bunched Conductors in thickly populated areas, HVDS (11kV), Replacement of Electromagnetic meters with Tamper proof electronic Meters, installation of capacitor banks and mobile service centres etc. In exceptional cases, where sub-transmission system is weak, strengthening at 33 kV or 66 kV levels also to be considered.

As per the R-APDRP program guidelines, 130 towns have been selected whose population is more than 30000 as per 2001 census.

Initially 100% funds for the approved projects shall be provided through loan from Government of India through nodal agency PFC/REC.

The scheme was expected to be completed before 2015-16, however due to incomplete works, for spill over and new works it is proposed to incorporate Rs. 692.70 Crs in the capital expenditure for the annual budget of 2016.17.

d. SCADA under R-APDRP Part A:

The scope of SCADA under R-APDRP Part B involves the following works, motorized Ring Main Units, numerical Relays for the protection of 11 kV feeders, Capacitors and Incomers, automatic voltage regulators, winding temperature oil indicators and oil temperature indicator for Power Transformers, and Breakers for 11 kV and 33 kV.

Initially 100% funds for the approved projects shall be provided through loan from Government of India through nodal agency PFC.

The scheme was expected to be completed before 2015-16, however certain projects remained incomplete. It is proposed to incorporate Rs. 72.00 Crs in the capital expenditure for the annual budget of 2016-17.

e. SCADA Part B (SCADA Enabling Components):

The installation of SCADA Enabling equipments in 8 towns with population of More than 4 Lakh and Annual energy Input more than 350 MU are selected for implementation of SCADA/ DMS project. The eligible towns are Amravati, Nasik, Pune, Malegaon, Sangli, Solapur, Greater Mumbai, and Kolhapur.

Activities covered under the scheme are Installation of equipments required for automation such as-

1. Ring Main Units
2. Numerical Relays for the Protection of 11 Kv feeders, Capacitors and incomers
3. Automatic Voltage regulators,
4. Winding Temperature Indicator and Oil temperature Indicator for Power Transformers.

25 % of the loan amount is funded through PFC and the Balance 75 % of the loan Amount is funded through REC.

The scheme was expected to be completed before 2015-16, however due to delay in completing the projects it is proposed to incorporate Rs. 68.00 Crs in the capital expenditure for the annual budget of 2016-17.

f. 66 kV Level Elimination Scheme:

MSEDCL has undertaken the scheme for elimination of 66 kV Level from EHV Sub-stations in Vidarbha region and converting the existing 66 kV Level system to 33 kV level. The major scope of the scheme includes conversion of existing 66/11 kV Substations to 33/11 kV Substations and existing 66 kV lines to 33 kV lines.

The main reason for carrying out this scheme due to the fact that 66 kV system has become outdated and the 66 kV equipments and spares are not available for maintenance. Further, 66 kV systems are not in existence anywhere in India except Maharashtra State, particularly in Vidarbha region. In order to maintain the quality and reliability of supply and also to standardize the system voltages, it is essential to convert 66 kV level into 33 kV level. The main objectives of the scheme are

- Standardization of system voltages.
- To ensure better quality and reliability of supply.

The scheme is funded through debt 90 % & Internal source 10%. It is financed by REC. The scheme is expected to be completed by 2016-17, for spill over works it is proposed to incorporate Rs. 45.00 Crs in the capital expenditure for the annual budget of 2016-17.

g. Smart Grid:

Amravati town and the congress Nagar Division under Nagpur town are selected for Implementation of the Smart Grid Pilot project. Activities covered under the scheme:

- Advanced Metering Infrastructure (AMI) for Residential, Commercial and Industrial Consumers
- Outage Management system (OMS) ; Integration with existing SCADA/ DMS
- Integrated Visualization and Analytics
- Demand Response
- Integration with existing legacy, RAPDRP Part A solutions and ERP applications
- Cyber Security

The DPR for Smart Grid Project in Amravati Town and Congress Nagar Division, Nagpur, amounting Rs 133.56 Crs and Rs 208.94 Crs respectively is submitted to MOP. It is proposed to incorporate Rs. 1.00crs the capital expenditure for the annual budget of 2016-17

8. Distribution Scheme :-

DPDC Schemes : After formation of the Maharashtra state in 1960, Government has adopted a policy of balanced development on the basis of District as a unit for formulation of Five year plans and Annual plans. For this purpose District Planning and development Council (D.P.D.C.) have been constituted in every District. The District Planning Committee has now been replaced by District Planning Committee Constituted as per article 243 Z.D. of the 74th Amendment of constitution. The Minister in charge of the district is chairman of the committee. The Collector of the district is member Secretary of this committee. All the matters are put in front of the District Planning Committee and are to be sanctioned by this Committee.

Every year GoM allocates funds under DPDC scheme for each district. There are three Plans under which GoM allocates funds viz. Non-Tribal, Tribal Sub-Plan (TSP-OTSP) & Special Component Plan. The details of each Plan are as under:

1. DPDC (Non- Tribal):

This scheme is executed for the benefit of the common people. The work of general electrification such as new connections and System Improvement work are carried out from this fund. The district wise yearly plan under this scheme is approved by GoM.

This scheme is executed in all districts of Maharashtra. The funds given are very less to release all type of connection as well as for system improvement work. Hence additional work is implemented through taking loan from funding agency such as REC, PFC through various other distribution schemes such as SPA:PE, P:IE, P:SI etc. Being circle wise allocation is less than Rs 10 Crs, the in-principle approvals from MERC has not obtained till date for this scheme.

Every year GoM allocates funds (Grants) under DPDC scheme for each district. It is proposed to incorporate Rs 200 Crs in the capital expenditure for the annual budget of 2016-17. Out of which is 98.55 crs is for spill over of work & remaining is Rs. 101.45crs for the year 2016-17.

2. DPDC Special Component Plan (SCP):

This is district wise yearly plan approved by GoM for benefit as well as economical development of Scheduled Caste & Nav Buddha beneficiaries. The main condition of this plan is that funds should be exclusively used for Scheduled Caste & Nav-Buddha beneficiaries. Since circle wise allocation is less than Rs 10 Crs, the in-principle approvals form MERC has not obtained till date for this scheme. The electrification of streetlight connection, release Ag connections to Scheduled Caste & Nav Buddha beneficiaries & associated infrastructure work are carried out through these funds.

The fund under this head is being released by GoM for fulfilling the social obligation. Hence there is no monitory benefit envisaged. But still scheme needs to be released to meet statutory obligation of Electricity Act 2003.

Every year GoM allocates funds (Grants) under DPDC SCP scheme in State Budget. It is proposed to incorporate the capital expenditure in the annual budget 2016-17 is Rs. 150.00 crs. Out of which is 62.35 crs is for spill over of work & remaining Rs. 87.65crs for new works in the year 2016-17.

3. DPDC Tribal Sub Plan (TSP+OTSP):

The objective of GoM for implementing this scheme is to fill gap of development between Tribal and non tribal area, to improve living status of Tribal peoples, to increase rate of social as well as economical development of Tribal peoples. The district wise yearly plan under this scheme is approved by GoM.

The electrification of un-electrified Tribal Wadi / Vastis, release of L&F as well as Ag connections to Tribal beneficiaries & associated infrastructure work are carried out through this fund. Being circle wise allocation is less that Rs. 10 Crs, the in-principle approval from MERC has not obtained till date for this scheme.

As present tariff of L& F as well as Agricultural category is much less than average cost of supply, there is no direct monetary benefit envisaged. But still scheme needs to be released to meet statutory obligation of Electricity Act 2003.

Every year GoM allocates funds (Grants) under DPDC scheme for each district. It is proposed to incorporate the capital expenditure in the annual budget 2016-17 is Rs. 155.00 crs. Out of which is 98.12 crs is for spill over of work & remaining is Rs. 56.88crs for the year 2016-17.

4. Ag. Backlog Scheme (Regional Imbalance):

The Indicator & Backlog Committee in March 1996 worked out the backlog in different areas (such as Education, Irrigation etc.) in various districts of Maharashtra State, taking average of state as a base for calculation of same. The I&B committee workout the backlog of Ag pump Energization based on Nos. of Ag pump sets energized & sown area in that particular district. On basis of report of I&B committee, 18 Districts were identified as Backlog district for Ag pump set energization. Till date backlog of Ag pump set energization has been completely remove from 12 districts. The backlog from Thane, Raigad, Ratnagiri, Gadchiroli, Chandrapur & Yavatmal District is still yet to be removed. Earlier, work of energization of Ag Pumps (thereby removing Ag. Backlog) in Backlog notified districts were carried out by MSEB by taking loan from Funding Agency. To expedite the work of Ag Pump energization in Backlog districts, GoM started allocating funds under Backlog Removal Scheme to MSEDCL from FY-2005-06 by way of Grant.

Ag pumps Energization in backlog districts is carried out along with other related work such as HT Line, LT line & DTC erection.

As the present tariff of Agricultural category is much less than average cost of supply; there is no direct monetary benefit envisaged. But still new Ag connections needs to be released to meet statutory obligation of Electricity Act 2003.

Every year GoM allocates funds (Grants) under Backlog Scheme in State Budget. It is proposed to incorporate the capital expenditure in the annual budget 2016-17 is Rs. 447.30 crs. Out of which is 188.58 crs is for spill over of work and remaining Rs. 258.72crs for new works for the year 2016-17.

5. Ag Special Package of Vidarbha & Maratwada:

GOM has specially sanctioned the fund for Electrification of Agricultural pumps in Vidarbha & Marathwada district under special Ag scheme.

Last year GoM allocated funds (Grants) under Ag Special Package of Vidarbha & Maratwada scheme in State Budget. It is proposed to incorporate Rs. 1070crs in the capital expenditure for the annual budget of 2016-17, out of which is 620 Crs is for spill over of work & remaining is Rs. 450 Crs for the year 2016-17.

6. SPA: PE (Special Project for Ag. Pump electrification):

This scheme is prepared to release Ag pumps in non-backlog districts. All the Ag. Pump related work such as HT Line, LT line & DTC erection are carried out in this scheme.

To Release of electricity connections to pending and forth coming Agricultural connections in Non-Backlog notified districts.

However from FY-2009-10, these schemes are being prepared for circle as whole resulting in scheme costing more than Rs. 10 Crs, hence categorised as DPR schemes. The in-principle approval for such schemes has been taken from MERC.

As present tariff of Agricultural category is much less than average cost of supply, there is no direct monetary benefit envisaged as approved by MERC while according in-principle approval to DPR schemes. But still Ag connections needs to be released to meet statutory obligation of Electricity Act 2003.

The scheme is funded through debt 90 % from REC & own fund 10%. The scheme is expected to be completed by 2016-17, however for some spill over works it is proposed to incorporate Rs. 68.80 Crs in the capital expenditure for the annual budget of 2016-17.

7. P:SI (Project for System Improvement):

This scheme is prepared to comply the statutory obligation section 57 of Electricity Act 2003 as well as to maintain quality of power supply as specify by SOP & to reduce technical loss. These schemes are prepared for to reduce the technical loss & improve voltage profile by strengthening the system by taking loan from REC Ltd.

The scheme is funded through debt 90 %from REC & 10% own fund. The scheme is expected to be completed by 2016-17. For ongoing and incomplete works it is proposed to incorporate Rs. 165.00 Crs in the capital expenditure for the annual budget of 2016-17.

8. Ag Metering :

As per MERC's order all 16,01,848 existing unmetered Agri. Consumers are to be provided meters up to March-2018. In pursuance of the order, vide B.R. no. 528 Dt. 14/10/2015, the scheme has been sanctioned. Scheme submitted to MERC for "In Principal " approval. Financial linkage from REC received. MERC approval is awaited.

The scheme is proposed to be funded through debt 90 %from REC & 10% own fund. It is proposed to incorporate Rs. 66.00 Crs in the capital expenditure for annual budget of 2016-17.

9. DDF Works :

DDF works are carried out on the request of consumer / applicant by receiving 100% estimated amount or 1.3% normative charges.

The scheme is funded through consumer contribution. It is proposed to incorporate Rs. 81.40crs in the capital expenditure for annual budget of 2016-17.

10. Evacuation & Evacuation wind generation :

Expenditure incurred on power evacuation arrangements for laying 33 KV lines, 33 KV bay & bus bar arrangements etc.. from Solar , Bagassee, Hydro Captive generators to point of evacuation, by promoter As per RE policy dt. 20.07.2015 of Govt. of Maharashtra.

The scheme is funded through Own (internal) fund of the company. It is proposed to incorporate Rs. 21 .00Crs in the capital expenditure for annual budget of 2016-17.

11. Nasik Sinhastha Kumbhmela & Elphanta Cave :

Special scheme for Sinhastha Kumbhmela at Nashik in 2015 and Electrification of Elephanta Islands is sanctioned by GOM. It is funded through Grants from GoM. It is proposed to incorporate Rs. 2.00 crs & 18.00 Crs in the capital expenditure in the annual budget 2016-17 for Nasik Kumbhmela & Elphanta cave respectively.

12. New Consumer /Connections:

Release of all catagories of new consumers's connections. Funds are proposed for procurement of energy meters, service wire & other service connection material at various levels.

Funds for this is collected from consumer as "Service Connection charges". It is proposed to incorporate Rs. 200.00 in the capital expenditure for annual budget of 2016-17.

13. Deogad Wind Power Project:

MSEDCL Board, vide BR No. 1218 dated 10.08.2010 had accorded approval for evacuation and commissioning of new wind power project at Deogad considering the approximate cost of project as Rs. 90.00 Crores.

The scheme is funded through Own (internal) fund of the company. It is proposed to incorporate Rs. 10.00 crs in the capital expenditure for the annual budget of 2016-17.

3.B. New proposed Schemes & Projects

I. Additional Infra –II:

The Mahavitaran (MSEDCL) has been entrusted the work of distribution of electricity in the State of Maharashtra. MSEDCL is implementing an ambitious Infra II project of creating the distribution infrastructure for meeting load growth and releasing new service connections, especially Ag paid pending, upto 2015-16. In addition to above, a separate provision for U & M of existing electrical infrastructure is also done in this project. The scope of Infrastructure works considered under Infra-II was insufficient to cope up with the Load growth and Backlog of Agriculture pumps energisation, particularly in the backward region of Vidarbha, Marathwada and Jalgaon Zone (Jalgaon, Nandurbar and Dhule Districts) . Hence, there is need of additional funds for these areas. It is useful for, strengthen the infra system, increase number of substations and DTCs, augmentation of existing capacity of substations, DTCs & Lines and Create redundancy in the distribution system. The total DPR cost is Rs. 1594 crores covering activities given below in area of Vidharbha, Marathwada Region and Jalgaon Zone

Sr. No.	Particulars	Unit	Scope
1	New Substations	Nos	111
2	Additional Power Transformers	Nos	111
3	Augmentation of Power Transformers	Nos	55
4	Distribution Transformers	Nos	9314
5	Aug. Dist. Transformers	Nos	8171
6	H.T. Lines	Km	7268
7	L.T. Lines	Km	4972
	Total DPR cost (Rs.)	Crs.	1593.61

The scheme of Rs. 1594 crs has been approved by Board & Govt. approval is under process. It is proposed to be funded as 60% grant from state & 40% loan from financial Institution. It is proposed to incorporate Rs 10.00 Crs initially in the capital expenditure for the annual budget of 2016-17 .

II. Deen Dayal Upadhyay Gram Jyoti Yojana:

The demand of electricity in rural areas is increasing day by day due to increase in customer base, changes in lifestyle and consumption pattern which requires continual strengthening and augmentation of distribution network. Hence Govt. of India launched Deen Dayal Upadhyay Gram Jyoti Yojana (DDUGJY) in rural areas for creation of infrastructure for distribution of energy.

Objectives Deen Dayal Upadhyay Gram Jyoti Yojana:

- i. Separation of Agriculture and Non-Agriculture Feeders facilitating judicious rostering of supply to agricultural & non agricultural consumers in rural areas.
- ii. Strengthening and Augmentation of Sub-transmission and Distribution Infrastructure in Rural Areas including metering at Distribution Transformers, Feeders and Consumer end.
- iii. Creation of infrastructure for connecting unconnected RHH including BPL beneficiaries in rural areas.
- iv. Modernization & strengthening of infrastructure in villages selected under Sansad Adarsh Gram Yojana (SAGY).

Provision of funds : 60% Grant Central Government.

10% Utility/ State Government/ loan from Financial Institution

30% Loan from FIs/ Banks

Additional grant of 50% of loan component i.e. 15% under the scheme will be released subject to achievement of milestones.

The work is to be completed within 24 months from the date of issue of LoA & the work is to be executed on turn key basis.

As per the guidelines of REC/ MoP, the District Electricity Committee (DEC) & State level standing Committee (SLSC) is formed by Govt. of Maharashtra GOM vide Govt. G.R. Dt.2.6.15 & 24.4.15 respectively.

As per the guidelines of REC/ MoP, the District wise DDUGJY DPRs are prepared in consultation with local MPs & MLAs & suggestions given by them are already incorporated after ensuring technical & financial feasibility of the work. Certificates from concerned MPs are obtained for the same.

DPRs amounting to Rs.2152.68 Crs have been approved under DDUGJY Scheme by MOP. The details of DPRs are as follows:

Sr. No.	Particulars	Amount (Rs. in Crs)
1.	Feeder Separation	700.00
2.	connecting unconnected RHH including BPL beneficiaries	448.79
3.	Strengthening and Augmentation of Sub-transmission and Distribution Infrastructure	984.92
4.	Sansad Adarsh Gram Yojana	18.97
Total Project Cost (DPR)		2152.68

Scope of work:

Sr. No.	Particulars	Unit	Details
1.	New Substations	Nos.	215
2.	Augmentation of substations	Nos.	52
3.	Additional power transformer	Nos.	48
4.	HT Line	kM	19417
5.	LT Line	kM	6218.4
6.	Distribution Transformers	Nos.	10924

It is proposed to incorporate Rs. 555.40 crs in the capital expenditure for the annual budget of 2016-17.

III. Integrated Power Development Scheme (IPDS) :

Government of India has launched Integrated Power Development Scheme (IPDS) for Urban area (Statutory Towns) only. The scheme aims at 24 X 7 Hrs Power supply for consumers, Strengthening of electrical distribution network & Reduction of AT&C Losses. The scheme includes works such as Erection and commissioning of Substations / switching stations, HT / LT lines, underground cables, DTCs, Solar Panels & other R&M works. The Scheme has been in principle approved. Sanctioned cost for MSEDCL is Rs 2300.43 Crs. Districtwise sanction from PFC (Nodal agency of GoI) is awaited.

Provision of funds :

- 60% Grant Central Government.
- 10% Utility/ State Government/ loan from Financial Institution
- 30% Loan from FIs/ Banks

Additional grant of 50% of loan component i.e. 15% under the scheme will be released subject to achievement of milestones.

The work is to be completed within 24 months from the date of issue of LoA & the work is to be executed on turnkey basis.

As per the guidelines of REC/ MoP, the District Electricity Committee (DEC) & State level standing Committee (SLSC) is formed by Govt. of Maharashtra GOM vide Govt. G.R. Dt.2.6.15 & 24.4.15 respectively.

It is proposed to incorporate Rs. 593.40crs in the capital expenditure for the annual budget of 2016-17.

IV. Solar Ag Pump ("ATAL" Solar Agricultural Pumping System) :

Design, manufacture, supply, transport, installation, testing and commissioning of AC / DC Solar Agriculture pump systems of 3, 5 & 7.5 hp capacity at the project sites of farmers in State of Maharashtra with comprehensive maintenance contract for 5 years on "Turnkey" Contract Basis. This being a pilot project initiated by Central Government.

Installation of 10000 Nos. of Solar Powered Agricultural Pump sets in Maharashtra :

In order to promote use of renewable source of energy, Ministry of New & renewable Energy (MNRE), Gol is promoting the Solar off Grid programme since last two decades. The Ministry of Power has announced Solar based Pumping Programme for FY-2014-15 vide letter No. 42/25/2014-15/PVSE Dt. 22.09.2014. The MNRE has decided total target of one Lac Solar Pump with initial financial support of Rs. 400 Crs for entire country.

In view of this, Industry, energy and Labour Department, GoM issued a GR of installation of 7540 Nos of Off grid Solar Ag pump in the state of Maharashtra vide no Solar Project-2014/C.No.219/Energy-7 dtd 27/03/2015.

MSEDCL & MEDA is entrusted for implementation of this project.

For effective and timely implementation of this project, A Steering committee under the Chairmanship of Hon. Principal Secretary (Energy) is formed. In the first meeting it is decided to float the for 10,000 Nos Solar Ag pumps.

For selection of Beneficiaries and allocation of Solar Ag pump within district, A district level committee is formed.

- **Beneficiaries Criteria**

- small & marginal farmers (having < 5 acres land) particularly in following area
- Suicide Prone Districts of Vidarbha region in Maharashtra i.e. Buldhana, Akola, Washim, Amaravati, Yavatmal & Wardha
- Remote & Tribal area, which are not yet electrified through conventional means.
- Beneficiaries who have availed benefit of "Well" under "Dhadak Sichan Yojana" of GoM.
- Farmers from villages which are not electrified through conventional source of energy (i.e. by MSEDCL).
- Farmers from villages which are not electrified yet due to NOC from forest Dept.
- Paid pending Ag. Consumers of MSEDCL, which cannot be electrified in near future due to technical constraints.

Funding:

- Total cost : Rs. 587 Crs
- 30% Grants Contribution of Central Govt (MNRE) : Rs.176.10 Crs
- 5% Grants Contribution of State Govt. : Rs.29.35 Crs
- 5% Contribution from Beneficiaries : Rs. 29.35 Crs
- Balance (60%) Contribution through Loan : Rs. 352.20 Crs

It is proposed to incorporate Rs. 587.00 crs in the capital expenditure for the annual budget of 2016-17.

V. DTC Metering :

Scheme sponsored by IR & QC Section. Scheme is under preparation and likely to be operative during FY 2016-17. It is proposed to incorporate Rs. 100.00 crs the capital expenditure for the annual budget of 2016-17. Funding for the same will be initiated from financial institution/ Banks.

VI. Renovation & Maintenance of HT / LT (Drought Fund From Govt.) :

New Scheme is introduced by GOM for Renovation & Maintenance of HT / LT lines and Up-gradation & Modernization of existing 33/11kV S/stn works specifically in Vidarbha and Marathwada district. It is proposed to incorporate Rs. 450.00 Crs in the capital expenditure for the annual budget of 2016-17 GOM is giving Grant for the same

VII. Information Technology :

It is proposed to incorporate Rs. 25.00 crs in the capital expenditure for the annual budget of 2016-17 specially for implementation of SAP and other advanced techenques.

3.C. General Assets:- (Civil & MM Cell)

Under this heads following points are includes for the annual budget 2016-17

- a. For upcoming capital works such as Transformer Bhavan, Proposed Admn. Build., Compound wall, Shifting NABL & other ongoing capital works in the field Rs. 49.30Crs
- b. Purchase of land for new substation Rs.100 crs
- c. Furniture & fixtures like tables, chairs etc.& Computer peripheral .Rs. 14.70 crs .

Further MM Cell has also proposed Rs. 200 crs for capital expenditure for purchase of Meters & cables & various other materials for the annual budget of 2016-17.

A. Ongoing Schemes & Projects

Annexure A (Rs. in Crs)

Sr No.	Scheme Name	Spill Over of earlier year	Proposed Expenditure 2016-17	Proposed Total Expenditure 2016-17	Govt. Funding & Institutional Tie -up
1	Infra Plan Works-I	490.30	0.00	490.30	REC/PFC & GOM Equity
2	Infra Plan Works - II	0.00	1300.00	1505.00	REC/PFC & GOM Equity
a	Upgradation	0.00	102.00		
b	New Services Connection	0.00	103.00		
3	GFSS - I	9.00	0.00	9.00	Internal source or loan balance of particular scheme
4	GFSS - II	30.00	0.00	30.00	
5	GFSS - III	19.00	0.00	19.00	
6	GFSS IV	70.00	0.00	70.00	
7	LT Capacitor Phase I & II	10.00	0.00	10.00	
8	Single Phasing - Left out villages	30.00	0.00	30.00	
9	Single Phasing - I, II, III	15.00	0.00	15.00	
10	RGGVY	29.00	0.00	29.00	REC
II	APDRP				
a	Phase-I	0.70	0.00	0.70	REC
b	RAPDRP A	0.00	20.00	20.00	PFC
c	RAPDRP B	0.00	692.70	692.70	PFC
d	SCADA Part A	0.00	72.00	72.00	REC
e	SCADA Part B	0.00	68.00	68.00	REC
f	Elimination 66 KV Line	0.00	45.00	45.00	REC
g	Smart Grid		1.00	1.00	Internal Source
	Distribution Scheme				
1	DPDC / Non-Tribal	98.55	101.45	200.00	GOM Grant
2	DPDC / SCP	62.35	87.65	155.00	
3	DPDC / TSP + OTSP	98.12	56.88	150.00	
4	Ag Back log (Regional Imbalance)	188.58	258.72	447.30	
5	Special AG Package Vidarbha & Maratwada I & II	620.00	450.00	1070.00	GOM Grant
6	SPA:PE	68.80	0.00	68.80	REC
7	P:SI	165.00	0.00	165.00	REC
8	Agriculture Metering	0.00	66.00	66.00	REC
9	DDF works	0.00	81.40	81.40	Consumer Contribution
10	Evacuation	0.00	6.00	6.00	Internal Source
11	Evacuation Wind Generation **	0.00	15.00	15.00	
12	Nasik Sinhastha Kumbhmela	2.00	0.00	2.00	GOM Grant
13	Elphanta Cave	0.00	18.00	18.00	GOM Grant
14	New consumers/ Connections	0.00	200.00	200.00	Consumer Contribution
15	Deogad Wind Power Project	10.00	0.00	10.00	Internal Source
	Total (a)	2016.40	3744.80	5761.20	

Annexure - B

A. New projects & Schemes :-

(Rs In Crs.)

SR. No.	Scheme Name	Spill Over	Proposed Expenditure 2016-17	Proposed Total Expenditure 2016-17	Govt. Funding & Institutional Tie -up
I	Additional Infra-II	0.00	10.00	10.00	Proposed Loan from REC & GOM Grant
II	DDUGJY	0.00	555.40	555.40	
III	IPDS	0.00	593.40	593.40	
IV	Solar Ag Pump	0.00	587.00	587.00	Propose to fund through SBI
V	DTC Metering	0.00	100.00	100.00	Untied up
VI	Drought Fund from Govt.	0.00	450.00	450.00	Rs. 450 Crs Sanction By GOM
VII	IT Section	0.00	25.00	25.00	Internal Source
	Total (b)	0.00	2320.80	2320.80	

B. General Assets & procurement of Land :-

(Rs In Crs.)

SR. No.	Scheme Name	Spill Over	Proposed Expenditure 2016-17	Proposed Total Expenditure 2016-17	Govt. Funding & Institutional Tie -up
a	Purchase of land for New Substation	0.00	100.00	100.00	Internal Source
b	Civil Assets & Buildings	0.00	49.39	49.30	
c	Computers & Peripheral	0.00	14.70	14.70	
d	Meters & Cables	0.00	200.00	200.00	
	Total (c)	0.00	364.00	364.00	

Projection of Capital Expenditure for the year 2016-17 and sources of funds thereof

(Rs. in crs)

Sr No.	Project Title	Source of Fund								Proposed Budget 2016-17
		Spill over expd which is already tie-up pertains to last year	PFC	REC	Other Loan	GoM Equity	Grant	Consumer Contribution	Internal Source	
A	Infra & GFSS									
1	Infra Plan Works-I	490.30	0.00	0.00		0.00		0.00	0.00	490.30
2	Infra Plan Works - II			1204.00		301.00				1505.00
a	Upgradation & Modernization									
b	New Services Connection									
3	Additional Infra-II						10.00			10.00
4	GFSS - I	9.00								9.00
5	GFSS - II	30.00								30.00
6	GFSS - III	19.00								19.00
7	GFSS IV	70.00								70.00
8	Single Phasing I, II II	15.00								15.00
9	LT Capacitor Phase I, II & II	10.00								10.00
10	Single Phasing - Left out villages	30.00								30.00
11	DDUGJY			222.16			333.24		0.00	555.40
12	RGGVY			29.00	0.00				0.00	29.00
	Total (a)	673.30	0.00	1455.16	0.00	301.00	343.24	0.00	0.00	2772.70

B	APDRP									
a	Phase-I								0.70	0.70
b	RAPDRP A		20.00							20.00
c	RAPDRP B			692.70						692.70
d	SCADA Part A		72.00							72.00
e	SCADA Part B			68.00						68.00
f	IPDS			237.36			356.04			593.40
g	Elimination 66 KV Line			45.00						45.00
h	Smart Grid								1.00	1.00
	Total (b)	0.00	92.00	1043.06	0.00	0.00	356.04	0.00	1.70	1492.80
C	Distribution									
1	DPDC / Non-Tribal	98.55					101.45			200.00
2	DPDC / TSP + OTSP	98.12					51.88			150.00
3	DPDC / SCP	62.45					92.55			155.00
4	Ag Back log (Regional Imbalance)	188.58					258.72			447.30
5	Special AG Package Vidarbha & Maratwada I & II	620.00					450.00			1070.00
6	SPA:PE	61.92							6.88	68.80
7	P:SI	148.50							16.50	165.00
8	Agriculture Metering			59.40					6.60	66.00
9	DDF works							81.40	0.00	81.40
10	Evacuation								6.00	6.00
11	Evacuation Wind Generation								15.00	15.00
12	Nasik Sinhastha Kumbhmela	2.00								2.00
13	Elphanta Cave	18.00								18.00
14	New consumers/ Connections							200.00	0.00	200.00

15	Deogad Wind Power Project								10.00	10.00
16	Drought Fund from Govt.						450.00			450.00
17	Solar Ag Pump				352.20		205.45	29.35		587.00
18	DTC Metering				100.00					100.00
	Total (c)	1298.12	0.00	59.40	452.20	0.00	1610.05	310.75	60.98	3791.50
D	Civil Section & MM Cell									
a	Purchase of land for New Substation								100.00	100.00
b	Civil Assets & Buildings								49.30	49.30
c	Computers & Pheriferial								14.70	14.70
d	Meters & Cables								200.00	200.00
E	IT Section								25.00	25.00
	Total (d)	0	0	0	0	0	0	0	389.00	389.00
	Grand Total (a+b+c+d)	1971.42	92.00	2557.62	452.20	301.00	2309.33	310.75	451.68	8446.00

ANNUAL REVENUE BUDGET F.Y. 2016-17



Maharashtra State Electricity Distribution Company Ltd
Regd. Off : Prakashgad, Anant Kanekar Marg,
Bandra (E), Mumbai- 400051

1. ANNUAL REVENUE BUDGET 2016-17

A Revenue Budget can be used to analyze the actual revenue for the year for the performance of the company within the budgetary provision.

Need for Revenue Budget:

- 1. As large sum of money is involved which influence the profitability of the company, preparing revenue budgeting is must.*
- 2. The very purpose of budgetary activity is to control the actual expenditure within the budget provision. It also ensures that the actual expenditure by all the concerned shall not exceed the budget provision.*

During the five/six years, MERC has not been allowing entire actual expenditure, while approving Tariff/Annual Revenue Requirements of the Company. As such Company is not able to recover the entire actual expenditure through tariff. According to MERC, certain expenditure such as Repairs and Maintenance, Administration and General expenditure etc are controllable.

Preparation of Revenue Budget:

As per Board resolution No.80 Dtd. 26th March 2014 the Revenue Budget of the Company for a particular financial year shall be as per the estimates for the relevant financial year considered in MYT petition filed by the Company with MERC from time to time effective from financial year 2014-15 and onwards.

The MYT for the period 2016-17 to 2019-20 is under consideration of MERC pending this Revenue Budget Estimates for the financial year 2016-17 are prepared on the lines of MYT petition and based on historical data estimate submitted by field offices .

In MYT petition the estimates for 'Operation & Maintenance Expenses' has been made on normative basis as laid down in the MYT Regulations, 2011. However, the estimates of O&M Expenses are bifurcated over the Employee Cost, Administrative & General Expenses and Repairs & Maintenance on the basis of estimation submitted by field offices based on historical data.

The gross amount of proposed budget expenditure for financial year 2016-17 is Rs. 62039.00 Crs. which includes power purchase of Rs 48659.00 Crs., Employee cost Rs.5494.00 Crs., Administration and General Expenses Rs. 771.00 Crs, Repairs and Maintenance Expenses of Rs. 1124.00 Crs etc.

The Revenue Budget allocated for the Repairs and Maintenance consists of 'Budget for local purchases and labour work' and 'Budget for H.O. Purchases'. The 'Budget for local purchases and labour work' is for field offices and 'Budget for H.O. Purchases' is for Material Management Cell.

Out of the above the Controllable expenses will be monitored, specifically, **Repairs and Maintenance Expenses of Rs. 1124.00 Crs and Administration and General Expenses Rs. 771.00 Crs.**

For allocation of these expenses amongst field offices a committee will be formed consisting of ED (Dist), CGM (C.F.), and CE Kalyan. The allocation of Administration and General Expenses, Repairs and Maintenance Expenses over the field offices will be made on the basis of the recommendation of the committee only after the approval of the CMD.

Initially only 75% of the proposed revenue Budget will be communicated to field offices and the balance budget may be circulated to the field offices only after the approval of Director (Finance) by taking review in the second quarter of the F.Y. 2016-17.

Chief Engineer of the Zone is authorize for the utilization by way of interchangeability to the extent of 10 % between different profit centers under same expense head, within the overall budgeted limit of Circle offices. Further, Director (Finance) to approve the Revenue budget monitoring mechanism and review of the revenue budget will be taken by the Director (Finance) in second half of the year. The overview of Annual Revenue Budget estimate is as under.

Budget Estimates

(Rs. In Crores)

Sr. No.	Particulars	Budget 2016-17
1	Revenue from sale of Power	57676
2	Other Income	758
(A)	TOTAL INCOME (1+2)	58434
3	Power Purchase (inclusive of Transmission charges)	48659
4	Operation & Maintenance Exp.	7389
(i)	Employee Cost	5494
(ii)	Administration & General Expenditure	771
(iii)	Repairs and Maintenance Expenditure	1124
5	Depreciation	2723
6	Interest and Finance Charges	2576
7	Other Debits	692
8	Income Tax / Wealth Tax	0.00
(B)	Total Expenditure (3 to11)	62039
12	Surplus/(Deficit)= (A-B)	(-)3605

(A) Income

(i) Revenue from sale of powers

The revenue from sale of power has been estimated at **Rs.57676** Crores which has been projected in the MYT petition submitted to MERC. (Above amount includes Rs. 56,689 Crs. Revenue from sale of power, Rs. 565 Crs. from Additional surcharge, Rs. 419 Crs. from Open access and Rs. 3 Crs. from wheeling charges) The same amount has been considered in the budget estimates (Sale of 98185 **MUs** * **Average 5.90 Rs/unit sale**). *The sales forecast is consistent with the load forecast prepared as part of the power procurement plan and is based on past data and reasonable assumptions regarding the future .*

It has been observed from the past experience that the historical trend method has proved to be a reasonably accurate and well accepted method for estimating the load, number of consumers and energy consumption. In light of the above, MSEDCL has estimated energy consumption for various customer categories primarily based on the CAGR trends during past years. Wherever it is observed that, the trend is unreasonable/unsustainable or considering the impact of open access on Industrial consumption, the growth factors have been corrected to arrive at more realistic projections.

The break-up of the past sales and the CAGR growth rates for different periods (5 years, 3 years and year on year) was considered. It may be noted that the 5 year CAGR growth rate is for the period between FY 2009-10 & FY 2014-15 while the 3 year CAGR growth rate is for the period between FY2011-12 & FY 2014-15 whereas year on year is for FY 2014-15 over FY 2013-14.

MSEDCL has witnessed a significant growth in the total Sales in the last five years. It is pertinent to note that since Jan 2011, MSEDCL has been able to considerably increase the availability of power, because of which the sales of MSEDCL has grown considerably. This is primarily due to the reduced load shedding and additional supply availability. Additional availability of power to the consumers resulted in uninterrupted supply of power to majority of consumers and hence resulted in considerable increase in the consumption and in turn the Sales of MSEDCL. The Consumer category wise CAGRs are considered for the FY 2016-17 .

(ii) Other Income

The other income has been estimated at **Rs. 758 Crores** which has been projected in the MYT petition submitted to MERC. The same amount has been considered in the budget estimates. MSEDCL has certain sources of non-tariff income viz. Interest on arrears of consumers, delayed payment charges, interest on staff loans and advances, sale of scrap, interest on investment, rebate on power purchase, etc. Annual increase of 5% over previous year is assumed for the heads covered under non-tariff income.

Accordingly, MSEDCL has not projected any Delayed Payment Charge and Interest on Delayed Payment in Non Tariff Income in line with MERC Regulation 36.3 of the MYT Regulation.

(B) Expenditure

(i) Purchase of Power

Rs. 44447 Crores (Purchase of 119356 **MUs at average cost of Rs.3.72 p.u.**) has been projected for power cost and Rs. 4212 projected towards Transmission Charges. This has been projected in the MYT petition submitted to MERC. The same amount has been considered in the budget estimates. The budgeted power purchase cost will be allocated to the field offices on the basis of input of power purchase furnished by Internal Reform Section.

Power Purchases Expenses

Sources of power:-

MSEDCL has primary sources of firm power viz. Maharashtra State Power Generation Company Limited (MSPGCL), Purchase from Central Generating Stations, JSW (RATNAGIRI), Mundra UMPP CGPL, Adani Power Ltd., RattanIndia (Previously IndiaBulls Ltd.) and Emco Power Ltd. etc.

In addition to the above sources, MSEDCL buys power from Sardar sarovar and Pench Hydro project, Non Conventional sources including co-generation, Wind power and surplus power from Captive plants. MSEDCL also purchase the power from the Power trading Companies, Power exchanges in case of increase in demand depending on the availability.

Assumptions for power purchase :-

The assumption of considered for purchase in MYT petition are considered in Budget estimate which are narrated below.

MSEDCL procures power from different sources on Merit Order Dispatch Principle for optimum utilization of the sources at least cost. For projection purpose, MSEDCL has considered the entire power available from all the tied-up sources during this period to meet the demand to the extent possible. Further, a realistic approach has been adopted in projecting the power purchase availability based on the actual availability and considering upcoming projects in the FY 2016-17.

For estimating the power purchase cost for the control period, merit order principles have been considered. While full fixed (capacity) charges have been considered for all the plants, the variable charges corresponding to the cheaper sources of power have been considered, whereas no variable charges have been considered in respect of energy not scheduled for power purchase (according to the merit order dispatch principles).

For power procurement from competitive bidding route, the tariff has been considered based on the rate quoted as per the terms of the PPA with the escalation based on the CERC rates, wherever applicable. However in case the CERC escalation rate is negative, no escalation has been considered for the respective cost.

Transmission Charges :

The transmission charges estimated at Rs. 4212 Cores in MYT petition. The same amount is considered in Budget estimate.

PGCL transmission charges are projected considering the Transmission Charges as well as Unified Load Dispatch & Communication (ULDC) Charges.

(ii) Employees Cost :

The gross employee cost of **Rs.5494 Crores** which has been projected in the MYT petition submitted to MERC. The same amount has been considered in the budget estimates. This has been estimated by considering 4% rise in Basic pay plus 13 % rise in Dearness allowances. The provisions for, gratuity leave encashment will be kept in the books of Head office. The budgeted other employees cost will be allocated to the field offices on the basis of data submitted by the field offices for the purpose of budget.

The employee expenses comprise the sub-heads of expenditure, i.e. Basic Salary, Dearness Allowance, Overtime, Other Allowances, Earned Leave Encashment, Staff Welfare and Other Expenses, Terminal Benefits, Provident fund contribution, Gratuity payments and Leave encashment on retirement.

The Projections are based on actual strength of employees of MSEDCL at present level, i.e. on the posts filled in.

(iii) Administration and General Expenses:

The gross Administration and General expenses of Rs.771 crores has been projected in the MYT petition submitted to MERC. The same amount has been considered in the budget estimates. This has been estimated by considering an average rate of 10 % increase over the actual expenditure of last year. The budgeted Administration and General expenses will be allocated on the basis of data submitted by the field offices for purpose of budget.

The Administration and general expenses comprise of broad sub heads of expenditure i.e. Rent, Rates and Taxes, Telephone and Postage , Conveyance and Travel, Electricity Charges, Security Arrangement, Printing and Stationary, Vehicle Hiring Expenses, Other Expenses including water charges, professional and consultancy fees, advertisement, vehicle running, office expenses and other miscellaneous expenses.

Considering the historical trend and inflation, an annual increase of about 10% per annum over previous year has been considered in most of the expenses heads for projection for the control period. However, in case of conveyance and travel, computer stationery expenses, advertisement expenses, freight on capital equipment, vehicle running and vehicle hire expenses an increase of 25% per annum has been considered for the control period because of increase in number of consumers, special recovery drive, theft detection drive, public

awareness etc. In case of rent, rate and taxes, an increase of 10% over previous year expenses has been considered.

(iv) Repairs and maintenance expenditure

Repairs and maintenance expenditure of Rs.1124 crores has been projected in the MYT petition submitted to MERC. The same amount has been considered in the budget estimates. This has been estimated by considering an average rate of 10% increase over the last year. This budgeted cost of R&M will be allocated to the field office on the basis of data submitted by the field office for the purpose of budget.

(v) Depreciation

The expenditure on depreciation does not require cash outflow hence the projected depreciation of Rs. 2723 Crores is has been calculated using the depreciation rates as per MERC (MYT Regulations), 2011.

(vi) Interest & Finance Charges

The interest and finance charges mainly consist of interest on long term loans, interest on short term loan for working capital & interest on security deposits of the consumers, incentives for prompt payment etc. Rs 2576 Crores has been projected in the MYT petition submitted to MERC. The same amount has been considered in the budget estimates. The budgeted amount will be allocated to the field offices including Head Office on the basis of data submitted for the purpose of budget.

The interest expenditure on account of long-term loans depends on the outstanding loan, repayments, and prevailing interest rates on the outstanding loans. Further, the projected capital expenditure and the funding of the same also have a major bearing on the long-term interest expenditure.

(i) Other Debits

The other debit of Rs. 692 Crs. has been projected in the MYT and the same has been consider for Budget.