



**Petition No. 06 of 2017(M)**

**In the Matter of Approval of CSPDCL Review Petition on Capital Investment Plan for FY 2016-17 to FY 2020-21**

**Chhattisgarh State Power Distribution Company Limited ... Petitioner**

**Present: Narayan Singh, Chairman,  
Arun Kumar Sharma, Member**

**ORDER  
(Passed 28/11/2017)**

1. This order is being passed against the review petition filed by the Chhattisgarh State Power Distribution Company Ltd. (hereinafter CSPDCL) for review of the Commission's order dated 26<sup>th</sup> March 2016 in P.No. 100/2015 (M) on Capital Investment plan for the Control period from FY 2016-17 to FY 2020-21.
2. After due verification, the review petition was registered on 02/02/2017 as Petition No. 06/2017(M).
3. As per the laid procedure, CSPDCL issued public notice for inviting comments and suggestions from stakeholders
4. CSPDCL published the approved gist in Dainik Navbharat, Raipur, Nai Duniya, Bilaspur and Central Chronicle, Raipur on 18/07/2017.
5. A technical validation session was held on 13/02/2017 to deliberate various issues.
6. During TVS, CSPDCL was asked to submit clarifications / additional information with a view to conduct prudent analysis of the proposals mentioned in the review petition. A notice for hearing, scheduled on 21/08/2017 in the office of the Commission, was published on 18/07/2017 in all editions of Navabharat and Central Chronicle and Nai Duniya, Bilaspur.
7. Neither any comment nor any objection was received from any stake holder, till the date of hearing in response to public notice published in news papers by CSPDCL on 18/07/2017.

8. Nobody including the petitioner attended the hearing on 21/08/2017.

9. In the original Capital Investment Plan, CSPDCL projected a total outlay of Rs 8260.25 Crores (including Government Funded Schemes, Partly or Fully CSPDCL Funded Schemes, Schemes Fully Funded by Consumer Contribution and Supplementary CIP for UDAY) for the MYT Control Period from FY 2016-17 to FY 2020-21. After examining the details and taking into consideration the relevant aspects, the Commission approved an amount of Rs 6073.03 Crores.

10. In this review petition, CSPDCL has requested to allow the balance amount of Rs 2187.21 Crores under the schemes described as “schemes for review before the Commission” in order to discharge their obligatory duties and achieve performance level during the control period from FY 2016-17 to FY 2020-21.

The Table below summarizes CSPDCL projections of Capital Investment, their approval and disallowance for the respective schemes:

**Table 1: Partly or Fully CSPDCL Funded Schemes - Projected Vs. Approval  
(Rs. Crores)**

Sr. No	Name of the Scheme	Status	FY 17	FY 18	FY 19	FY 20	FY 21	Grand Total
A	CSPDCL Partly or Fully Funded Schemes	Projections	968.86	1085.85	936.52	338.24	303.34	3632.81
		Approved	472.75	374.65	278.45	161.5	158.25	1445.6
		Disallowed	496.11	711.2	658.07	176.74	145.09	2187.21
1	Sub Transmission and System Improvement Scheme (ST&SI)	Projections	387.76	255.6	195.95	91.59	75.32	1,006.22
		Approved	240	110	70	45	35	500
		Disallowed	147.76	145.6	125.95	46.59	40.32	506.22
2	Loss Reduction including HVDS and feeder separation Schemes	Projections	223	288	274	100	80	965
		Approved	95	116	114	42	33	400
		Disallowed	128	172	160	58	47	565
3	ND Scheme (Obligatory)	Projections	80	85	90	95	100	450
		Approved	35	35	52	60	68	250
		Disallowed	45	50	38	35	32	200
4	UDAY Scheme - DT Metering in other than IPDS/RAPDRP area & Installation of Smart Meters(Other Than Ag)	Projections	178.8	337.6	277.6	0	0	794
		Approved	50	50	0	0	0	100
		Disallowed	128.8	287.6	277.6	0	0	694
5	EITC	Projections	81.85	101.45	80.1	30.6	25.6	319.6
		Approved	47.5	56.4	34.2	4.25	13.25	155.6
		Disallowed	34.35	45.05	45.9	26.35	12.35	164
6	Civil	Projections	17.45	18.2	18.87	21.05	22.42	97.99
		Approved	5.25	7.25	8.25	10.25	9	40
		Disallowed	12.2	10.95	10.62	10.8	13.42	57.99

11. Scheme wise submissions made by the petitioner and Commission's views based on the available data and information are summarized below:-

**I. Sub Transmission and System Improvement Scheme (ST&SI):**

**CSPDCL Submissions:**

The CSPDCL has submitted that Commission approved Rs. 500 Crores for the MYT Control Period as against proposed Rs. 1006.22 Crores. Sub transmission and system improvement scheme focuses on strengthening the sub transmission part of distribution system, to cater the growing demand in the distribution system and improvement in supply reliability.

It is further submitted that existing total installed capacity of 33/11 kV substation as on 31<sup>st</sup> march 2015 is around 5500 MVA. The number of LT consumers in the last 5 FYs has grown by 5.39% whereas connected load in MW has increased by 9.15% on CAGR basis. With a load growth of 9.15% in each FY, total MVA capacity is estimated to reach 8520 MVA by the end of FY 2020-21. i.e. 1160 MVA under New Sub-stations, 742 MVA under Additional Xmers and 409 MVA under Capacity Augmentation as shown below:

**Table 2: Addition of Capacity (MVA) during the MYT Control Period**

<b>With load growth of 9.15% per year the required capacity of 33/11 KV S/S will be as follows</b>		
<b>Year</b>	<b>Projected capacity of S/S</b>	
2016-17	6003	
2017-18	6552	
2018-19	7152	
2019-20	7806	
2020-21	8520	
<b>New Work Proposed under ST&amp;SI Scheme</b>		
	<b>Nos</b>	<b>Capacity in MVA</b>
New S/S	290	1160
Additional Xmers	182	742
Cap Augmentation	221	409
<b>TOTAL</b>		<b>2311</b>

The remaining demand of 709 MVA may be met through New S/S being constructed under other schemes like IPDS/DDUGJY/ND (Contributory proposals under respective schemes is detailed under respective schemes). CSPDCL proposed to take the aforesaid details into consideration, and requested to approve Rs 1006.22 Crores against the earlier approval of Rs. 500 Crores for the MYT Control Period.

**Commission’s view:**

CSPDCL has not submitted any justification for construction of 290 numbers 33/11 KV new S/s and its impact on the system parameters as well as on the consumers in physical and financial terms.

It is noted that capacity addition of 709 MVA has already been approved by the Commission under IPDS and DDUGY schemes for execution in the present MYT control period. Further, in principle approval has also been given by the Commission for construction of 194 numbers 33/11 KV S/s including associated 33 KV and 11 KV lines with an estimated expenditure of Rs. 333.81 Crs.

CSPDCL has also projected augmentation of 221 numbers power transformers and installation of additional 181 numbers power transformers during the MYT control period. However, petitioner has neither given year wise fund requirement nor has provided details of works/ investment plan under the scheme.

In view of the above, the Commission, after due consideration, accords following approval:-

**Table 3: Approved ST & SI scheme for the control period FY 17 –FY-21**

**(Rs. In Crores)**

1	Sub Transmission and System Improvement Scheme (ST&SI)	Projections	387.76	255.6	195.95	91.59	75.32	1,006.22
		Approved	240	158	95	87	80	660

**II. Loss Reduction including HVDS and feeder separation Schemes: CSPDCL Submissions:**

CSPDCL has submitted that in order to follow the trajectory of loss reduction as specified in MYT Regulations, 2015 (Clause 71.3) given in table 4 below, they have planned to execute following T&D and AT&C Loss reduction schemes as well as loss trajectory for MYT period.

**Table 4: Trajectory for Distribution Loss**

Sr. No	Financial Year	Percentage
1	FY 17	22.0%
2	FY 18	21.0%
3	FY 19	20.0%
4	FY 20	19.0%
5	FY 21	18.0%

- Implementation of IPDS & DDUGJY, newly launched schemes of Gol;

- Feeder separation in rural area for irrigation load with HVDS under financial assistance from REC / other institutions;
- STN Scheme towards Sub-Transmission net-works system strengthening works with the financial assistance from REC/other financial institutions;
- AB cable laying works replacing bare conductor in theft prone area under assistance from REC / other institutions;
- Completion of balance work under ongoing R-APDRP Part-B scheme;
- Completion of balance work of ongoing HVDS schemes;
- Installation of AMR in consumer meter & feeder meters with CMRI facilities;
- Efficient meter reading & billing adoption with spot billing and IT implementation through use of SAP (ERP) modules;
- Bill collection through ATP, internet banking SBI ATM Card, Suvudha center in addition to department cash collection counter;
- Prevention of Energy theft & malpractice with the help of vigilance & (O&M) checking squad;
- Meters shifting from inside of premises to outside premises to prevent theft & malpractice;
- Effective disconnections in all category of consumer to improve collection efficiency;
- Revamp of LT distribution system;
- Replacement of conductors to reduce line loss;

CSPDCL has also stated that being a distribution licensee it carries a universal obligation to supply electricity and simultaneously casted with statutory duty to develop and maintain an efficient coordinated and economical distribution system in its area of supply as it is specified under Part VI of Electricity Act 2003. The power demand in the State is increasing and ensuring quality of supply is a burning issue and all these requirement compels utility to update its sub-transmission & distribution system. Disallowance of plan may adversely affect the future prospects and likely to cause inconvenience to consumers.

Further it is submitted that past performance under these schemes may not be considered as a yardstick to decide the future plans as it is a fact that even after several constraints, centrally financed scheme specifying conversion of grant into loan had been efficiently accomplished. Line loss target is placed as controllable factor under MYT Regulation and any benefit towards financial gains on account of overachievement is a pass

through to consumer. Disallowance of works under this head may deprive from such benefits as CSPDCL has to endeavor to achieve the targets of line loss under UDAY scheme.

CSPDCL has requested to approve Rs. 965.00 Crores as against an earlier approval of Rs. 400 Crores for the MYT Control Period.

**Commission's view:**

CSPDCL has not submitted any detailed plan for reduction in T&D and AT&C Losses. The schemes and measures described above do not cover volume of work and financial implications of the proposed investment. Surprisingly, CSPDCL has simply requested to approve Rs. 965.00 Crores as against earlier approval of Rs. 400 Crores for the MYT Control Period.

Vide letter No. 5229 dated 13/01/2017, MD, CSPDCL sought approval for separation of 330 numbers feeders under UDAY scheme stating that as per the MOU, Rs. 930 crore has been allocated for feeder separation work under UDAY scheme. Surprisingly the proposed UDAY scheme submitted by CSPDCL does not have any proposal for feeder separation.

Most of the schemes like IPDS, DDUGJY and RGGY etc. also aims at loss reduction and the Commission has already approved Rs. 400 Cr for these schemes. However, as directed in the order itself and even after several reminders, CSPDCL has not provided details regarding volume of work executed and the expenditure already incurred. The review petition also does not give details of works to be executed and year wise expenditure to be incurred.

In view of the above facts and in absence of any justifications for investments, it does not appear proper to approve the proposal under this head. It is felt that the amount already sanctioned by the Commission for the control period is sufficient for the works at anvil. However, the Commission will give a fresh opportunity to the petitioner to explain the technical and commercial significance of the full scope of the proposal under this head with associated economic benefit and to justify the estimated cost as well as other factors involved in the schemes and measures.

**III. ND Scheme (Obligatory): CSPDCL Submissions:**

The Petitioner submitted that the Normal development scheme predominantly covers the work required to build and maintain distribution

system comprising of 11 KV line, Installation of New Distribution X'mer & interlinking of LT / HT lines for power supply to existing consumers, Expenditure towards purchase of energy meters , encompasses some quality improvement initiatives such as distribution system strengthening, installation of distribution transformers and capacitors to provide quality, security and availability of power supply to the consumers. As per supply code clause 4.2, licensee shall bear the cost for strengthening / up gradation of the system for quality supply to the existing consumers which shall be recovered from the consumers through tariff.

The licensee has projected a cost of around Rs. 35 Crores for installing new meters against NSC under ND(O) Scheme in FY 2016-17 itself.

Year-wise expenditure as originally proposed by CSPDCL and already approved by the Commission are given below:

**Table 5: Year-wise expenditure as proposed by CSPDC (Rs. In Crores)**

	FY -17	FY -18	FY -19	FY -20	FY -21	Total
Proposed	80	85	90	95	100	450
Approved	35	35	52	60	68	250

Petitioner has stated that disallowance of cost under this scheme may likely to affect the efficiency of obligatory services or diversion of funds from other sources. Considering the facts explained above, the Commission is requested to consider approving Rs 450.00 Crores as against an earlier approval of Rs 250 Crores for the MYT Control Period.

**Commission's view:**

The licensee has projected a cost of around Rs 35 Crores for installing new meters against NSC under ND (O) Scheme in FY 2016-17 itself. The trend in increase in power demand as observed from the analysis of R-15 for FY 2015-16 and FY 2016-17 shows that the projection of prospective consumers is inflated. CSPDCL has not submitted any authentic data / actual expenditure incurred to meet the requirement of extension and up gradation of distribution system for supply on obligatory part as prescribed by the Commission under Miscellaneous charges as per Supply Code provisions 4.3, 4.5 & 4.56. The estimated expenditure of strengthening / up gradation of the System up to 11kv/LT level and system augmentation in case of existing consumers has not been submitted and as such the same is not allowed. It is observed that the amount already sanctioned (Rs. 250 Crores) by the commission for the control period appears to be sufficient for

the works and as such the proposal for approval of balance amount is hereby turned down. However, if it is found at a later stage that the licensee needs additional fund under this scheme, they may approach the Commission again with full justification.

**IV. UDAY Scheme - DT Metering in other than IPDS/RAPDRP area & Installation of Smart Meters (Other Than Ag): CSPDCL Submissions:**

**The CSPDCL has submitted the following points regarding UDAY scheme**

The signing of the MoU will have significant benefits to CSPDCL, with the State government taking over 75% of the outstanding debt of the company as on September 30, 2015 and the balance debt reprised or issued as state guaranteed Discom's bond at coupon rates about 3% less than the average existing interest rate. Chhattisgarh State Government shall take over 75% of CSPDCL debt as on 30 September 2015 over two years - 50% shall be taken over in FY 16 and 25% in FY 17. The Government of India will not include the debt taken over by the Chhattisgarh Government as per the above scheme in the calculation of fiscal deficit of Chhattisgarh in the FY 16 and FY17.

Chhattisgarh Government will issue non-SLR including SDL bonds in the market or directly to the respective banks / Financial Institutions (FIs) holding CSPDCL debt to the appropriate extent.

Further, CSPDCL debt not taken over by the State Government shall be converted by the Banks / FIs into loans or bonds with interest rate not more than the bank's base rate plus 0.1%. Alternately, this debt may be fully or partly issued by CSPDCL as State Government guaranteed CSPDCL bonds at the prevailing market rates which shall be equal to or less than bank base rate plus 0.1%.

Chhattisgarh State Government shall take over the future losses of CSPDCL in a graded manner and shall fund them as follows:

**Table 6: Future Losses to be taken over by Chhattisgarh State Government**

Sr. No	Particulars	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21
1	Previous Year's DISCOM loss to be taken over by State	0% of the loss of FY 15	0% of the loss of FY 16	5% of the loss of FY 17	10% of the loss of FY 18	25% of the loss of FY 19	50% of the previous year loss

Under the UDAY Scheme, CSPDCL would be entitled for additional / priority funding through Deendayal Upadhyay Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS), Power Sector



Development Fund (PSDF) or other such schemes of Ministry of Power and Ministry of New and Renewable Energy. Further, it would also be supported with additional coal at notified prices and, in case of availability through higher capacity utilization, low cost power from NTPC and other Central Public Sector Undertakings (CPSUs).

As per the MoU, CSPDCL will bring about operational efficiency through several measures including up gradation of transformers, meters, smart metering of high-end consumers and reduction in transmission losses and increased power supplies in areas. Demand side interventions such as usage of energy-efficient LED bulbs, fans, air-conditioners and efficient industrial equipment though will help in reducing energy consumption. As per the agreement, CSPDCL needs to bring its AT&C losses to 15% in FY 2018-19 from present 22.50% in FY 2014-15.

To achieve operational targets which has been set to achieve under UDAY scheme, the Petitioner had identified two different schemes to carry out the overall investment in the distribution segment of the power sector during the control period as below:

#### **DT Metering in other than IPDS/RAPDRP area**

It would be a Compulsory Distribution Transformer Metering scheme to be taken by CSPDCL. It would help to track losses at DT level for taking corrective action & to achieve targets of loss reduction. The said scheme is to be completed by 30<sup>th</sup> June 2018. The physical target under DT metering in other than IPDS/RAPDRP area has been envisaged at 65870 numbers i.e. 26348 numbers in FY 17 and 39522 numbers in FY 18 respectively. The total expenditure envisaged during the control period is around Rs 100 Crores with a debt equity ratio of 80: 20.

#### **Installation of Smart Meters (Other Than Agriculture)**

The said scheme is for all consumers consuming above 200 units per month. CSPDCL has 880572 numbers of consumers having average consumption of above 200 units per month excluding AG pumps. As per MOU, the work of installation of Smart meters is to be completed by 31st December 2019 i.e. (above 500 units/month-31<sup>st</sup> December 2017 and balance by 31st December 2019). Installation of smart meters will be tamper proof and will allow remote meter reading thus helping reduce theft, implementation of DSM activities and consumer engagement. The physical target for installation of Smart Meters (other than Agriculture) has been

envisaged at 880572 numbers i.e. 175000 numbers in FY 17, 350000 numbers in FY 18 and 355572 numbers in FY 19 respectively. The total expenditure envisaged during the control period is around Rs 694 Crores with a debt equity ratio of 80: 20.

The cost for DT Metering in other than IPDS/RAPDRP areas is around 100.00 Cr. the Commission has approved only 100 Cr. towards DT Metering and installation of Smart Meters. In this light it may kindly be considered to install smart meters to the consumer installation having average consumption above 500 units. Expenditure required to meet this work is Rs. 226.05 Cr. The target date of accomplish the task is set as 31/12/2017.

CSPDCL requests that, the Commission may kindly consider expenditure of Rs. 326.05 Cr. towards DT Metering PLUS Smart metering for consumer having average consumption of above 500 units for its proper implementation and further amount under the Scheme can be approved upon Review of Performance after one year.

**Commission's view:**

As per the MoU of Uday Scheme, CSPDCL shall have to improve its operational efficiency through several measures such as up-gradation of transformers, total metering, smart metering of high-consumption consumers, reduction in losses and uninterrupted power supplies in all areas. Demand side management measures such as usage of energy-efficient LED bulbs, fans, air-conditioners and efficient industrial equipment will also help in reducing energy consumption.

For DT metering the total expenditure envisaged during the control period is around Rs. 100 Crores with a debt equity ratio of 80:20. For this, the Commission has already approved Rs. 50 crore. The target for DT metering appears to be far away from the achievement as the said scheme is to be completed by 30<sup>th</sup> June 2018. Considering the overall importance of completing the DT metering works in other than IPDS/RAPDRP area, Commission has decided to approve Rs. 50 crore in addition to earlier approval of Rs. 50 crore.

The physical target for installation of Smart Meters (other than Agriculture pumps) has been envisaged at 8,80,572 numbers i.e. 1,75,000 Nos. in FY 17, 3,50,000 numbers in FY 18 and 3,55,572 numbers in FY 19 respectively. The total expenditure envisaged during the control period is

around Rs. 694 Crores with a debt equity ratio of 80: 20. As per tripartite MoU signed on 25<sup>th</sup> January 2016 between the State of Chhattisgarh, CSPDCL and the Central Government (MoP) for operational and financial turnaround of the utility, the targets needs to be achieved by FY 2018-19 to utilize the benefits of UDAY scheme. Even though an amount of Rs. 50 crores has been approved for installation of smart meters, the utility has not yet started the installation of the same. The utility has not submitted any relevant authentic data for examination and reviewing the case.

Commission has already approved provisionally an investment of Rs. 50 Crores for the FY 17. The Commission approves Rs. 50 Crores in addition to the amount already approved i.e. Rs. 50 crore for the installation of smart meters subject to review after one year.

#### **V EITC: CSPDCL Submissions:**

CSPDCL submitted that after implementation of the applications, most of the processes will be automated. There will be saving of manpower and time after the automation through the proposed applications which in turn may help in economy. The CSPDCL submitted the following points in the review petition and MD, CSPDCL carried out a detailed presentation on the applications proposed .

#### **A. Additional Storage in SAN for P10 (CSPDCL):**

Presently there is no space available in the SAN Storage to accommodate increased huge data due to growth in consumer base in LT/HT Billing. Also more space will have to be provided for installation of more AMRs and adding more areas in electrical infrastructure, viz HT/LT lines and S/S. Looking to the present and upcoming growth, CSPDCL proposed Rs 6.00 Crore to increase SAN Storage capacity right from this year.

#### **Commission's view:**

It is observed that if the storage capacity is not increased then it may not be possible to cater to the data arising due to increase in consumer base and installation of additional meters and AMRs. Considering the overall situation and possible consumer growth, an additional storage capacity shall be required to maintain the huge data base and, therefore, the proposal of Rs.6.0 Cr. for additional SAN Storage is approved

**B. SAP HANA for B/W:**

**CSPDCL Submissions:**

As the MIS reports of entire CSPDCL are mandatorily which is not possible through the prevailing BIW system as it was designed for only 20 towns under RAPDRP project. Hence a new technology “SAP HANA” was proposed to be implemented to get MIS reports expeditiously. Regulatory and Government compliance will be fulfilled in better way. However, Cost-Benefit in such type of projects cannot be quantified in terms of money but based on the useful MIS reports it will be beneficial for CSPDCL in long term.

Some of the CSPDCL reports for which SAP HANA will be beneficial are listed are R-15, Arrears Collection, New Connections of, consumer base Comparison (Urban/Rural), Assessed Unit Cases, Report Stop Defective Meter Report, Bill not Generated Report, Consumer Security Deposit at the end of the year (R-7), Non-Tariff Income (R-8), Income from miscellaneous charge (R-9), Circle Wise Collection Efficiency (R-11), Billing Demand Data LT/HT (R-12/R-13) etc. CSPDCL has requested to approve Rs 6.0 Crore for the same.

**Commission’s view:**

If SAP HANA for BW is implemented, then it would be possible to cater to mandatory requirements of various aggregated / consolidated MIS reports of CSPDCL at various management levels as well as reports will also be generated through system which are presently being prepared manually after extracting data from SAP: The Commission observes that the investment is reasonable and approves Rs. 6.00 Cr. as proposed.

**C. Other IT Project**

**(a) IT initiatives and system strengthening works including physical security, Surveillance, etc.: CSPDCL Submissions:**

Being strategic locations, it is proposed to establish Electronic Surveillance System at the campus of CS Power Companies at Danganiya Raipur with estimated cost of Rs. 50 Lacs. The project includes :

- (i) installation of Metal Detectors at Vidyut Sewa Bhavan and Load Dispatch Center

- (ii) installation of Surveillance cameras at the campus of CS Power Companies, inside Vidyut Sewa Bhavan, Load Dispatch Center, Network Center and Customer Care Center.
- (iii) Installation of Access Control at Main gate, Visitor Management System etc.

**Commission's view:**

The proposal of Rs.0.5 Cr. as mentioned above shall not be covered under capital investment and it may be examined during approval under O&M head.

**(b) Cash Collection Module:**

**CSPDCL Submissions:**

CSPDCL has started following Electricity bill payment mode to avoid the standing in the long queues to pay bills as well as save their time.

- (i) Net Banking, Credit/Debit Cards,
- (ii) RTGS/NEFT
- (iii) ATP machines
- (iv) More than 1624 cash collection centers through Common service centre on Pre paid mode
- (v) More than 836 cash collection centre through franchises of M/s Pay point on Pre paid mode

Previously, it was planned to host the above software on the Desktop computer and after successful implementation, all these payment software will be hosted on server. As per plan, above payment software was hosted on Desktop computer and presently more than 11 Lacs customer pay their electricity bill per month through above payment mode and these numbers is increasing day by day. To improve the reliability and response time of the payment software, it is necessary to host the software on dedicated server with backup facility. Presently a major part of revenue is collected through different digital modes of bill payment In case of any failure, revenue collection will be seriously affected.

**Commissions view:**

To improve the billing and collection efficiency, the Commission approves the cost of the Servers / OS / DB amounting Rs.0.5 Cr.

**(c) Spot Billing:**

**CSPDCL Submissions:**

Presently spot Billing software is hosted on Desktop Computer and approximate 15.3 Lacs consumers bills are generated every month through Spot Billing and these numbers are increasing day by day. To improve the reliability and response time of the Spot Billing software, it is necessary to host the software on dedicated server with backup facility.

**Commission's view:**

For maintaining the reliability of spot billing data, it is found that existing Spot Billing applications shall be deployed on Servers. This will remove the risk of Spot Billing data lost or get corrupted as presently it is hosted on the PCs which are not a reliable mode for this purpose. The Commission approves cost of Rs.0.5 Cr. for the Servers/OS/DB

**(d) Mobile App:**

**CSPDCL Submissions:**

CSPDCL plan to have an app on Android/iOS platform linking live data of State Load Despatch Centre and also start following applications on mobile Apps for better consumer facilitation:-

- Electricity bill payment through internet, Debit/Credit card.
- Meter Reading, Billing, and Payment information.
- Intimation of Meter reading for billing with snap shot.
- Technical complaint registration.
- Commercial complaint registration.
- Status of on line new service connection.
- On line payment receipt.
- Outage information
- Power related information in the state.

The cost of the Servers/OS/DB will be around Rs.35 Lakhs and application development will be about Rs.15 Lakhs. CSPDCL submitted to approve the proposal of Rs.0.5 Cr.

**Commission's view:**

Mobile App will facilitate different customer care services to consumers on their mobile. In Digital India, most of the power companies have developed their Mobile App. Therefore, CSPDCL

shall also develop and facilitate Mobile App. to its consumers. Therefore, the proposal of Rs. 0.5 Cr. for additional SAN Storage is approved

**(e) IBMS in DC & DR:**

**CSPDCL Submissions:**

Integrated Building Management System (IBMS) is required for ensuring security and monitoring of cooling, power, loss due to rodent & water leakage in DC & DR. Order has been placed for Rs.1.61 Cr. Further it is submitted that there will be complete automation of the DC & DR management as most of the important information like temperature, loading, fire event etc will be available centrally on one place and requested to kindly consider investment of Rs.3.61 Cr for necessary systems, servers and software for the above.

**Commission's view:**

It is observed that If IBMS is not provided in DC & DR, then these Data centres will be prone to various hazards like fire, security etc. As such, we are of the view that treatment of such expenses as routine operation maintenance expense appears a better proposition. Accordingly, the proposal for approval as CAPEX is not considered.

The approved proposal of EITC for 2016-17 to 2020-21 is as under:-

**Table 7: Approved EITC for 2016-17 to 2020-21**

**(Rs. In Crores)**

Point No. and Name	Particulars	Requirement of Fund for the Year (Rs. in Cr)					Total (Rs. in Cr)
		2016-17	2017-18	2018-19	2019-20	2020-21	
A	Additional Storage in SAN for P10 (CSPDCL)	1.5	-	2.5	2.0	-	6.0
B	SAP HANA for BW	-	2.0	4.0	-	-	6.0
C	Other IT Project						1.5
	(a) initiatives and system strengthening works including physical security, Surveillance, etc	-	-	0	-	-	
	(b) Cash Collection Module	-	-	0.5	-	-	
	(c) Spot Billing	-	-	0.5	-	-	
	(d) Mobile App	-	-	0.5	-	-	
	IBMS in DC & DR	0	0				
<b>TOTAL</b>		<b>1.5</b>	<b>2.0</b>	<b>8.0</b>	<b>2.0</b>		<b>13.5</b>

**VI. Civil Construction: CSPDCL Submissions:**

CSPDCL submitted their investment plans in civil construction to cater to the growing requirements of the entire distribution business at different levels viz. across Circles, Divisions, Sub-divisions and

Distribution Centers. This also includes the work related to R-APDRP, FOC Centers and Centralized Consumer Recreation Centers etc.

The works to be undertaken are briefly outlined as mentioned below:-

- *Construction of zone office building ( New / Renovation old building) for fulfillment of requirement for installation of equipment for R-APDRP Scheme and providing accommodation to supervisory staff.*
- *Construction of SCADA building for installation of equipment's for R-APDRP Scheme and arranging accommodation for operating staff.*
- *Residential quarters for providing facilities to employees of CSPDCL at remote places to improve their working efficiency.*
- *Construction of Lineman Training Centre for providing Training to Line mans.*
- *Construction of Executive Hostel to provide accommodation to officers, who are required to come to the Head Quarters for obtaining training.*
- *Construction of Central Training Institute for providing training facilities to officers & employees.*
- *Construction of Distribution Centre building and arranging accommodation for the staff.*
- *Construction of Control Room building at 33/11 KV Substation to accommodate panels as per requirement.*
- *Construction of Administrative Office building for EDs/CEs for Raipur & Durg.*
- *Construction of SEs/EEs/AEs building for providing accommodation to officer as per prevailing requirement.*
- *Construction of Cement Concrete road, Culverts and Drains up to the control room and buildings.*
- *Construction of Welfare Centre building to provide facility to employee and their families.*
- *Construction of Customers Care Centre to provide facility to customers, which will ultimately help in bill collection.*
- *Construction of Hospital building to provide facilities to employees and their families.*
- *Construction of Area Stores shed, Area fencing / boundary wall for protection of valuable building properties, transformers, conductors, etc.*



CSPDCL further submitted that past performance under these schemes may not be considered as a yardstick to decide the future plans as the aforementioned works are critical to achieve performance Standards and Consumer satisfaction. CSPDCL requested to approve Rs 97.99 Crores as against an earlier approval of Rs 40.00 Crores for the MYT Control Period.

**Commission's view:**

The Commission observes that the amount already sanctioned and approved is sufficient for the civil works at anvil. As such the proposed capital expenditure of Rs Rs 97.99 Crores as against an earlier approval of Rs 40.00 Crores for the MYT Control Period is turned down.

**CSPDCL has submitted the Grounds for Review as follows**

**I. APTEL Judgment in Appeal No 84 of 2006 – KPTCL Vs. KERC**

The Petitioner has submitted that a licensee has authority to decide its plans of investment or improvement of system or expansion to meet demand of power within their area including up gradation and maintenance for a better supply in consultation with the stakeholders by specifying the precedence set in by APTEL in Appeal No. 84 of 2006 in the matter of Karnataka Power Transmission Corporation Ltd. Vs. Karnataka Electricity Regulatory Commission & others .Relevant part of the judgment is reproduced below:

*“Legislative has left it to the utilities to decide their plans of investment or improvement of system or expansion to meet demand of power within their area including up gradation and maintenance for a better and quality generation, transmission or supply as the case may be – KERC not acted reasonably or fairly by interfering with the internal, commercial management and domain of the transmission utility with respect to its commercial plan”.*

Further petitioner requested to consider the principles of law pronounced on this matter as a ground for review.

**II. Scheme-wise technical justification for extension & up gradation of distribution system stated under Para 2.0, which were not placed before Commission for consideration of Capital Investment Plan during 3<sup>rd</sup> MYT control period.**

The Petitioner would like to draw the kind attention of the Hon'ble Commission to the fact that a licensee has authority to decide its plans of investment or improvement of system or expansion to meet demand of power within their area including up gradation and maintenance for a better supply in consultation with the stakeholders. Hon'ble Commission may kindly consider the reasons for disallowance in light of the legal precedence set by Learned Tribunal in Appeal No. 84 of 2006.

**Commission's view:**

Regarding jurisdiction of State Commission for approving the capital investment plan of licensee, it may be fruitful to refer to decision of Honorable APTEL in Appeal no 46 of 2007 "Maharashtra State Electricity Distribution Co. Ltd. ... Versus Maharashtra Electricity Regulatory Commission". The observations and decision of Honorable Tribunal are as under:

***"We have gone through the judgment and we find that the judgment was written on the peculiar facts of that particular case. Thus, Tribunal specifically disapproved the procedure adopted by the KERC and laid down in what manner prudent check can be employed by a Regulatory Commission cannot impose any conditions or modifications of their own.***

***The basic difference between the cases of that of the KPTCL and the present one is that the Regulations specifically empowers the MERC to grant clearance with modifications and conditions as it may deem appropriate. In the case of KPTCL judgment, no such regulations have been cited or examined. "***

Clause 4.2, 7.2 (a) & 7.2 (b) iii of the Chhattisgarh State Electricity Regulatory Commission (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2015 read as follows :

***"4.2 The Multi-Year Tariff framework shall be based on the following elements for determination of Aggregate Revenue Requirement and expected revenue from tariff and charges for generating company, STU/ transmission licensee, SLDC, distribution wheeling business and retail supply business:***

- (a) Approval of capital investment plan for a period not less than the Control Period before the start of the Control Period;***
- (b) Mechanism for Truing up;***
- (c) Mechanism for pass through of uncontrollable items;***
- (d) Mechanism for sharing of gains or losses on account of controllable items:***
- (e) Determination of ARR and tariff for the control period.***

X

X

X

**7.1 The generating company, STU/ transmission licensee, SLDC and distribution licensee shall file petition for approval of the commission a capital investment plan by 31<sup>st</sup> October 2015. The capital investment plan should cover the entire control period, with details for each year of the control period.**

**“7.2 (a) The capital investment plan shall show separately, on-going projects that will spill over into the Control Period, and new projects (along with justification) that will commence in the Control Period but may be completed within or beyond the Control Period. The capital investment plan shall contain the scheme details, justification for the work, capitalization schedule, capital structure and cost benefit analysis (where applicable).**

**7.2 (b) iii) The distribution licensee shall submit a detailed sales/demand forecast, load forecast, power procurement plan, proposed measure to improve the quality of supply, metering plan, consumer services and loss reduction plan.”**

Clause No. 29 (3) &(4) of “CSERC (License) Regulation, 2004 Read as follows:

- 1. The licensee shall submit to the Commission, investment plans as a part of the business plan giving details of investment schemes to be undertaken during the concerned period for the approval of the Commission.**
- 2. The licensee shall demonstrate to the satisfaction of the Commission that:**
- 3. there is a need for such investments in transmission/distribution system and is contained in the investment plan; and**
- 4. the licensee has made techno economic analysis and environmental aspects of all viable alternatives to the proposal for investing in or acquiring new distribution/transmission system assets to meet such need.”**

According to judgment of Honorable Tribunal, the Commission can approve capital investment plan of the licensee following the procedure specified in the Regulations.

Accordingly, the Commission gave fair opportunity to the CSPDCL to explain the technical and commercial significance of the proposal submitted along with the associated economic benefit and justification of the estimated cost as well as other associated factors.

**Commission's Approval:**

**Table 8: Partly or Fully Funded Schemes of CSPDCL - Projected Vs. Approval (Rs Crores)**

Sr. No	Name of the Scheme	Status	FY 17	FY 18	FY 19	FY 20	FY 21	Grand Total
<b>A</b>	<b>CSPDCL Partly or Fully Funded Schemes</b>	<b>Projections</b>	<b>968.86</b>	<b>1085.85</b>	<b>936.52</b>	<b>338.24</b>	<b>303.34</b>	<b>3632.81</b>
		<b>Approved</b>	<b>474.25</b>	<b>474.65</b>	<b>311.45</b>	<b>205.5</b>	<b>203.25</b>	<b>1663.1</b>
1	Sub Transmission and System Improvement Scheme (ST&SI)	Projections	387.76	255.6	195.95	91.59	75.32	1,006.22
		Approved	240	158	95	87	80	660
2	Loss Reduction including HVDS and feeder separation Schemes	Projections	223	288	274	100	80	965
		Approved	95	116	114	42	33	400
3	ND Scheme (Obligatory)	Projections	80	85	90	95	100	450
		Approved	35	35	52	60	68	250
4	UDAY Scheme - DT Metering in other than IPDS/RAPDRP area & Installation of Smart Meters(Other Than Ag)	Projections	178.8	337.6	277.6	0	0	794
		Approved	50	100	0	0	0	150
5	EITC	Projections	81.85	101.45	80.1	30.6	25.6	319.6
		Approved	49	58.4	42.2	6.25	13.25	169.1
6	Civil	Projections	17.45	18.2	18.87	21.05	22.42	97.99
		Approved	5.25	7.25	8.25	10.25	9	40

12 Order accordingly

**Sd/-**  
**(Arun Kumar Sharma)**  
**MEMBER**

**Sd/-**  
**(Narayan Singh)**  
**CHAIRMAN**